AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS

AASHTO

TESTIMONY OF

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REGARDING

Connecting America: Improving Access to Infrastructure for Communities Across the Country

BEFORE THE

Committee on Commerce, Science, and Transportation of the United States Senate

ON

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INTRODUCTION

Chairman Thune, Ranking Member Nelson, and Members of the Committee, thank you for the opportunity to provide input on ensuring connectivity of people, goods, and information for every community across our Nation through infrastructure investment. My name is Carlos Braceras, and I serve as the Executive Director of the Utah Department of Transportation (UDOT) and as Secretary-Treasurer of the American Association of State Highway and Transportation Officials (AASHTO). Today, it is my honor to testify on behalf of the great State of Utah and AASHTO, which represents the State departments of transportation (State DOTs) of all 50 States, Washington, DC, and Puerto Rico.

I first joined UDOT as a registered professional engineer and a geologist. Prior to my appointment almost four years ago as the Executive Director, I served as the Deputy Director for twelve years with previous experience as Region Director, Major Project Manager, Chief Geotechnical Engineer and Chief Value Engineer. In addition to serving as AASHTO's Secretary-Treasurer, I am also the Chairman of the AASHTO Subcommittee on Design and the Chair of the Technical Working Group of the AASHTO Center for Environmental Excellence. I am also the current Vice Chair of the Intelligent Transportation Society of America.

My testimony today will emphasize five main points:

- Ensuring a strong federal role and investment in surface transportation;
- Critical importance of program funding, relative to financing, for rural areas;
- Opportunities to further cut the red tape in legislative and regulatory process;
- States' visible and important role in providing passenger rail service; and,
- Preparing for and harnessing significant technological advancements.

ENSURING A STRONG FEDERAL ROLE AND INVESTMENT IN SURFACE TRANSPORTATION

Throughout the history of our country, transportation has played an integral role in the success of our economy. States have done an admirable job of addressing transportation within their boundaries, but there is clearly a need for a cohesive national transportation system. Take for instance, AdvancePierre Food Services, whose plant in Oklahoma ships throughout the country to other plants and retailers. Their success would not be possible without an effective interstate transportation system. While AdvancePierre's plants may be in Oklahoma and other states throughout the country, Utah's transportation system needs to be able to support businesses such as this; nearly a quarter of the traffic on Utah's interstate system is commercial freight vehicles, carrying goods like AdancePierre's food products to Utah and through it. Just as AdvancePierre depends on a reliable, effective, well-maintained, and safe transportation system in Utah, the

businesses located in Utah also rely on effective national transportation system to move its products across this country and around the world.

This is just one example of how our entire nation—including residents and businesses of major metropolitan areas and rural areas alike—is well-served by a strong federal investment that improves surface transportation infrastructure in and across a large, Western states like ours. It drives home the point that our nation's transportation system is one of the key foundational elements necessary to ensure the economic vitality of our country.

The state departments of transportations (DOTs) have the utmost appreciation for your Committee's leadership, along with your Senate and House members in partner committees to shepherd the Fixing America's Surface Transportation (FAST) Act in December 2015. This legislation ensures stability in the federally supported passenger rail, freight, safety, highway, and transit programs through 2020. While the five years authorized under the FAST Act has given us a temporary reprieve—thanks to over $140 billion of General Fund transfers since 2008—from recurring deep cuts in obligations due to the $15 billion annual gap between Highway Trust Fund receipts and outlays, the case for maintaining a strong federal role and investment in transportation remains as important as ever.

For over one hundred years, we as a nation, have enjoyed the fruits of the federal government's highly successful partnership with state DOTs to build and maintain our surface transportation system. From the Federal-aid Road Act of 1916 establishing the foundation of a federally-funded, state-administered highway program that has been well-suited to a growing and geographically diverse nation like ours, federal investment in all modes of transportation have allowed states and their local partners to fund a wide range of projects that serve the interest of the nation as a whole. The federal surface transportation program's inherent flexibility defers project selection and investment decision-making to state and local governments based on extensive public input from local communities and businesses to address their needs and ensure goods get access to a larger market than ever before.

Based on the federal surface transportation program's track record of success, we recommend if you and the President deliver a significant infrastructure package in the coming months, any increase in federal funds should flow through the existing program structure rather than expending scarce time and energy on untested new approaches. We are well-prepared to work with Congress to take advantage of our strong, productive partnerships with local governments to deliver on a major infrastructure initiative.

CRITICAL IMPORTANCE OF PROGRAM FUNDING, RELATIVE TO FINANCING, FOR RURAL AREAS

As I noted, the federal surface transportation program supports communities located in urban, suburban, and rural areas across our nation. In rural areas, the transportation network specifically:

- Serves as a safe and reliable route for truck and personal traffic between other states and between major metropolitan areas, advancing interstate commerce and mobility;
- Serves the nation's agriculture, ethanol production, energy extraction, and wind power industries, which are located largely in rural areas;
- Provides access to scenic wonders like Arches, Bryce Canyon, and Zion National Parks in Utah, and many other great national parks, monuments, and forests located in rural states;
- Is a lifeline for remotely located and economically challenged citizens, such as those living on tribal reservations;
- Enables people and business to access and traverse vast tracts of federally-owned land, and;
- Facilitates military readiness.

States with the greatest land area tend to be in the west. To illustrate distance, a driver traveling from Washington, DC, to Boston, Massachusetts, could drive the same distance in Utah or Nevada and still be in the same state. Additionally, many western states are some of the most highly urbanized states in the nation, in fact five of the ten most urbanized states are in the west. In Utah, nine out of ten residents live in urban areas. Many other western states share those same characteristics with highly urbanized populations and large, sparsely populated rural areas in between. A strong national transportation network connects these urbanized areas across vast distances, ensuring that all communities in the United States have access to a safe and efficient transportation system.

We recognize that investment dynamics for rural areas differ significantly and fundamentally due to vast distances, sparse population density, lower volume of traffic, and a large proportion of federal lands, in Utah, 65 percent of our land is owned by the federal government. Under these circumstances, direct federal funding and grants based on formula apportionments can best meet the mobility and quality-of-life needs not only throughout the West, but also in rural communities elsewhere in the country. And if our rural communities thrive, our country as a whole thrives.

This means that financing tools that leverage existing revenue streams—such as user fees and taxes—are typically not viable, as the sole tool, in rural areas at the project level. We in Utah, and many of our state DOT peers, certainly appreciate the ability to access capital markets to help speed up the delivery of much-needed transportation improvements. But we also recognize the inherent limitations of financing; the vast spectrum of publicly-valuable transportation projects that nevertheless cannot generate a sufficient revenue stream through tolls, fares, or availability payments to service debt or provide return on investment to equity holders.

The state DOTs continue to support a role for financing and procurement tools such as public-private partnerships (P3s) given their ability to not only leverage scarce dollars, but to also better optimize project risks between public and private sector partners best suited to handle them. There are limited means to monetize non-revenue producing assets, like what Connecticut has done through its long-term rest area concession. But we maintain that financing instruments in the form of subsidized loans like TIFIA, tax-exempt municipal and private activity bonds, infrastructure banks, and tax code incentives are simply not enough to meet most transportation infrastructure investment needs.

OPPORTUNITIES TO FURTHER CUT THE RED TAPE IN LEGISLATIVE AND REGULATORY PROCESS AND REQUIREMENTS

After decades of adding layers upon layers of legislative and regulatory oversight for transportation, thanks to your leadership, both the FAST Act and the Moving America for Progress in the 21st Century Act (MAP-21) have instituted major programmatic and policy reforms. However, there exists still further opportunity to improve the efficiency and effectiveness of transportation programs and project delivery while remaining responsible stewards of both human and natural environments.

First, Congress should encourage the USDOT to implement provisions in both MAP-21 and FAST Act to remain consistent with congressional intent. A recent example of a problematic USDOT regulatory action is the onerous and unanticipated requirement regarding metropolitan planning organization (MPO) coordination. Although state DOTs and MPOs already exemplify the kinds of coordination sought, the new regulation is anticipated to impose costly requirements with no benefits. In addition, AASHTO supports implementing statutorily authorized performance management frameworks for highway safety, bridge and pavement, system performance, and freight before further measures are considered and added. Several years ago, I led an international delegation of U.S. experts where we visited with six national and regional governments that were considered advanced in the area of performance measures and management. One of the universal key takeaways was that fewer, high-level measures were more effective to move the transportation vision toward accomplishing the goals of the national or regional governments.

Second, to build on the successful policy reforms in MAP-21 and FAST Act based on bipartisan support, AASHTO asks for the opportunity to continue improving the project delivery process. California, Florida, Ohio, Texas, and—as of the beginning of this year—my state of Utah are participating in the National Environmental Policy Act (NEPA) assignment program made available to all states in MAP-21. Based on our collective experience, some specific changes that will make this program increasingly efficient and more attractive to the states include simplifying the assignment application and audit process, allowing states to assume all of the responsibilities of USDOT with respect to engineering and other activities related to environmental review, consultation, permitting or other action required under any federal environmental law for project review or approval, and allowing states in this program to be

solely responsible for the development of their policies, guidance and procedures so long as federal laws and USDOT requirements and guidance are met. Other expediting measures include decoupling fiscal constraint requirements from NEPA approval to allow construction-ready projects to proceed through environmental reviews and progress as money becomes available; ensuring that the statutory authority provided to adopt planning decisions in the NEPA process includes all of the flexibility previously provided in the planning regulations; and providing flexibility in developing project review project schedules and programmatic categorical exclusion agreements.

Beyond NEPA, many opportunities exist to streamline project delivery through updates to the Endangered Species Act, Section 4(f) reviews for historic sites, the Land and Water Conservation Fund Act, and transportation air quality conformity under the Clean Air Act. AASHTO is happy to work with you to provide specific recommendations for improvement in any of these areas. We also look forward to continued collaboration with USDOT's Build America Bureau. This would build upon our robust existing partnership through AASHTO's Center for Excellence in Project Finance by closely engaging with the Bureau's Federal Infrastructure Permitting Dashboard that was created under your leadership in the FAST Act.

Finally, to build on the current flexibility in the Federal-aid Highway program, Congress should consider authorizing a "Consolidated Funding" pilot program. This pilot program would build on the program consolidation efforts made in MAP-21 by treating all core funding provided to a State DOT under the National Highway Performance Program, Surface Transportation Program, and Highway Safety Improvement Program as a single, consolidated apportionment. States would only be eligible to participate in the program once they had an established performance management system that demonstrates a system of metrics and performance measures that assist and guide the state in the decision-making process to federal program funding received through the pilot program. Under such a pilot program, suballocations to MPOs and other local government entities can remain unaffected. Utah is ready to step forward to pilot such a program and I am convinced that we will be able to demonstrate that we will be able to better meet both the transportation goals of this country and those of Utah, by allowing states to use the money on "right activity at the right time". I also believe that it would allow for increased transparency, so the public can see a better connection between their investment and outcomes achieved. I encourage Congress to seek additional opportunities to continue moving the federal highway and safety programs toward performance and outcome-based programs that emphasize results rather than adherence to "process."

At the same time, I encourage Congress to restore state flexibility to allow limited use of Highway Safety Improvement funds to address driver behavior programs that improve roadway safety and help us achieve our shared goal Toward Zero Deaths. State DOTs engineer roads to be as safe as possible, and that includes providing drivers with a margin of error; when they make a mistake, the roadway must give them an opportunity to recover. However, national studies demonstrate that the critical cause for crashes is attributable to driver behavior in 94 percent of crashes. While it's important that we continue to engineer and construct roads to be safer, states should also have some program flexibility to work with our safety partners to educate drivers on the most deadly driver behaviors.

STATES' VISIBLE AND IMPORTANT ROLE IN PROVIDING PASSENGER RAIL SERVICE

The state DOTs commend your leadership in consolidating the passenger rail title as part of the FAST Act, making this legislation a true surface transportation bill. Your action enables many states to further invest in modern passenger rail services that provide the traveling public with more transportation choices and relieve highway and airport congestion in a safe, environmentally responsible way.

Under Section 209 of the Passenger Rail Investment and Improvement Act (PRIIA), a state-supported routes program now includes 18 states and other entities under 19 operating agreements for financial support of 26 short-distance routes defined as those less than 750 miles. To protect the taxpayer's investment in passenger rail and ensure high-quality and on-time train service, states have diligently implemented the PRIIA requirement to negotiate stakeholder agreements before federal funding could be released. Performance-based and quantifiable measures such as trip times, reliability and the frequency of service are included in these agreements. Because much of the passenger service in the United States rides on rails owned by private railroads, the rights of these stakeholders to continue to maintain and improve their own service have been incorporated into these agreements.

In FY 2015, states' partnership with Amtrak, the Federal Railroad Administration (FRA), and host railroads have resulted 14.7 million passenger trips, with five corridors topping at more than a million trips. A specific example of improvements in passenger rail travel under this program can be seen in increasing maximum train speeds up to 110 mph wherever possible on the Chicago-Detroit and Chicago-St. Louis corridors, as supported by the Illinois and Michigan DOTs. As additional track and signal work is completed, more segments will experience speed increases resulting in trip time reductions of nearly an hour on both corridors.

Some obstacles remain to ensure effective support for intercity passenger rail between states. The FRA's System Safety Program (SSP) needs to be revised to disallow service sponsors from being classified as railroads. This is due to the fact that service sponsors are planning entities and thus are not organized, nor staffed, with railroad-qualified personnel needed to fulfill requirements of the SSP rule. The state DOTs believe that service sponsors do not have the legal authority to compel host railroads, nor Amtrak, to comply with the SSP rule and designating service sponsors as railroads exposes service sponsors to other, broader railroad operating requirements for which public agencies are ill-equipped. We believe determining service sponsors as railroads is not based on sound data nor will it in any meaningful way improve safety.

PREPARING FOR AND HARNESSING SIGNIFICANT TECHNOLOGICAL ADVANCEMENTS

I believe that we are at an inflection point in Transportation that is as significant as when the engine was merged with the horse and buggy, today it's the merger of technology with the car and truck as we know it. This will change the way we move goods, services and people on our roads

and highways. In the future, I view data as the new asset that will dramatically enhance public safety, save lives on our roadways, improve mobility, enhance program and operational efficiency, and create jobs. It is important now more than ever, that we maintain relationships from local, state and federal levels to ensure our transportation system is not a bottleneck of continued innovation.

Governments will need to build, redesign, and adapt roads, highways, and bridges to the autonomous and connected vehicle. Traditional investments include providing better lighting, consistent roadway design, better signage; these investments are especially needed on rural roads. Spectrum for vehicle-to-infrastructure systems using Dedicated Short Range Communications needs to be preserved, and rural broadband expanded. The National Highway Traffic Safety Administration also must move forward with industry on the proposal to establish a Federal Motor Vehicle Safety Standard for vehicle-to-vehicle communications (V2V). Cooperative V2V and vehicle-to-infrastructure (V2I) safety systems are needed to support fully automated vehicles, supported by robust research and deployment. Institutional capacity and workforce skills will need to be upgraded to operate, maintain and secure new smart roads and intelligent vehicles

Promising potential abounds when it comes to the use of drones, or Unmanned Aerial Vehicles (UAVs). As of this past year, AASHTO identified 17 state DOTs conducting research regarding the use of UAVs. The aircraft have assisted state DOTs with bridge inspections, accident clearance, surveying and identifying, monitoring and mitigating risks posed by landslides, rockslides and flooding.

State DOTs strongly believe that the overall benefits will be seen with autonomous vehicles that are also connected with other vehicles and the infrastructure on which they operate. AASHTO is a founding member of the V2I Deployment Coalition, on which I also serve, along with the Institute of Transportation Engineers and the Intelligent Transportation Society of America, and various transportation industry representatives. This began as a concept to create a single point of reference for stakeholders to meet, discuss and collaborate on V2I deployment related matters. And several states have already taken the initiative to develop policies to accelerate convergence of connected and autonomous vehicles and define industry interactions for full deployment.

For example, in Utah, the state legislature adopted HB 373 allowing UDOT to conduct a connected vehicle technology testing program on its roadways. We partnered with Peloton Technology to test a system which facilitates platooning of two-tractor-trailer rigs on a stretch of I-80. Both drivers continue to steer the trucks but an automated system controls acceleration, responds instantly to changes in speed of the front truck located 50 feet ahead, and respond to road hazards up to 800 feet away. The efficiency of air flow results in a savings of about five percent for the front truck and ten percent for the rear truck. States such as Florida, Michigan and Nevada have taken the initiative of policy changes and the state level, coupled with new guidance and standards at the national level, to effectively prepare for technological advancements that will provide a greater overall public value in the future.

Another area that has seen rapid gains is the use of "big data," which refer to volume (large amounts of data), variety (different data being combined), and velocity (the speed at which new data is being produced and added to the analysis), used to analyzed computationally to reveal patterns, trends, and associations, especially relating to traffic patterns, human behavior, and interactions. A great example can be seen in 17 states—including Utah—partnering with the Waze, a popular driving app. Under its Connected Citizens Program, there has been increased and ongoing partnership between Waze and various governmental agencies to share publicly-available incident and road closure data to facilitate smoother movement of vehicles and people.

An important component to advance roadway technology is the ability to create a digital highway with fiber optics to make our roads smarter and safer, benefiting surrounding communities, including underserved rural areas. In Utah, we believe this is best accomplished through P3s and streamlining federal regulations that provide maximum flexibility to states, which have enabled Utah to successfully support expansion of service provider networks. The property value of linear highway corridors is a major incentive enabling P3s. These partnerships began in the late 1990s when a change in federal law allowed the states to accommodate longitudinal access of telecommunications facilities within interstate rights-of- way under certain conditions. Utah changed our state law to allow companies to lease or barter in-kind for this access. These successful P3s have enabled us to significantly expand highway operations over large, remote expanses of the state as well as enabling private providers to expand their service in both urban and rural areas. The Utah DOT deploys conduit and fiber with every road project that makes sense and coordinates road projects with any telecommunication company that wants to partner. Through these partnerships Utah has realized over 2,500 combined private and public miles of fiber, conduit and circuit, with a total value of almost $75 million to the public.

Federal policies need to support P3s such as these by carefully considering the uniqueness of each partnership. The ability to be flexible is what makes these partnerships possible. Rigid regulations or mandates can remove the very flexibility that is needed, complicating implementation and adding unnecessary additional system costs.

CONCLUSION

State DOTs are absolutely committed to meeting the transportation needs of rural America and the policies required to help move people, goods, and information safely and efficiently across the United States. This week, literally as I speak, hundreds of state DOT leaders from all corners of our country are just a couple of blocks away attending AASHTO's 2017 Washington Briefing. Over the next couple of days, most of them will be on the Hill meeting with their Congressional delegations advocating for the reaffirmation of a strong federal-state partnership to address our surface transportation investment needs.

I want to thank you again for the opportunity to testify today, and I am happy to answer any questions that you may have.