

AASHTO FAST ACT REAUTHORIZATION Transportation Policy Forum White Paper

July 31, 2019

INTRODUCTION

The Fixing America's Surface Transportation (FAST) Act enacted in December 2015 represented the first comprehensive, long-term surface transportation legislation since 2005's SAFETEA-LU. The FAST Act continues to fulfill the Constitutional directive that investment in transportation is a core federal responsibility.

Yet at the same time, the FAST Act provides only a one-time and near-term—though absolutely necessary—reprieve when it comes to federal surface transportation funding. By not enacting a long-term funding source, the Highway Trust Fund (HTF) continues to remain at a crossroads. The HTF has provided stable, reliable, and substantial highway and transit funding for decades since its inception in 1956, but this is no longer the case. Since 2008, the HTF has been sustained through a series of General Fund transfers now amounting to \$140 billion.

Without a solution to this crisis, AASHTO estimates that states will see about a 40 percent drop in highway funding from FY 2020 to 2021. In the past, such similar shortfall situations have led to the possibility of a reduction in federal reimbursements to states on existing obligations, leading to serious cash flow problems for states and resulting in project delays. More alarmingly, due to a steeper projected shortfall in the Mass Transit Account, new federal transit obligations are expected to be zeroed out between FY 2021 and FY 2023. Simply put, this is a devastating scenario that we must do all we can to avoid. Beyond maintaining program levels, there has been broad consensus among states that additional federal funding and investment is warranted.

Beyond funding stability, after decades of adding layers of regulatory requirements on state transportation agencies, various aspects of the Moving Ahead for Progress in the 21st Century Act (MAP-21) and the FAST Act provided needed policy reforms. In the next surface transportation reauthorization, AASHTO recognizes the need to continue the momentum of MAP-21 and the FAST Act by making further efficiency gains on project delivery and providing increased flexibility for states. Every state DOT's priority is ensuring safety and serving as responsible stewards of taxpayer resources and both human and natural environments, all the while improving both mobility and accessibility for all residents and businesses.

WHITE PAPER PROCESS AND FORMAT

This white paper for AASHTO's FAST Act reauthorization was developed by the Transportation Policy Forum (TPF), which is charged with discussing and recommending policies related to legislation, regulation, and other policy matters to the AASHTO Board of Directors, including the Association's recommended positions on reauthorization of key transportation legislation and on ongoing topical issues of interest to state DOTs.

Representing the highest priority issues for reauthorization, this white paper is based on in-depth review and input from AASHTO's Modal Councils and Committees covering the following areas.

- Active Transportation
- Freight
- Highways and Streets
- Public Transportation
- Rail Transportation
- Connected and Automated Vehicles
- Data Management and Analytics
- Funding and Finance
- Operations
- Performance-based Management
- Planning
- Project Delivery: Engineering
- Project Delivery: Environmental Protection
- Research and Innovation
- Safety
- Transportation System Security and Resilience

Each issue in the white paper follows the format below, and is referenced in the official AASHTO reauthorization package.

- Issue title
- Current law, regulation, or policy; or none, where it doesn't exist
- Explanation of why the current policy is not working or why the current policy needs to be maintained or strengthened
- Recommendation to address the issue including:
 - Opportunities for innovation (e.g., technological, standardizing best practices, etc.)
 - Specific legislative language if readily available

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Funding and Finance (FF)

TIER 1

Issue FF-1: Increase Federal Funding

- Proposal 8-1 from the compilation of 16 policy white papers
- *Current Federal Policy:* The FAST Act authorized \$305 billion from both the HTF and the GF of the United States Treasury. It provided \$225 billion in HTF contract authority over five years for the Federal-aid Highway Program and \$61 billion over five years for federal transit programs. It also includes funding for highway safety, authorized general funding for rail, and increased emphasis on freight investments through new highway program elements supported by the HTF.
- *Issue:* Our nation is currently faced with aging infrastructure, a growing national population, and a major transportation funding shortfall. The American Society of Civil Engineers has identified a \$1.1 trillion funding gap for surface transportation between 2016 and 2025. It is essential to increase federal funding for surface transportation to sustain national and regional connectivity and mobility for people and business. The federal government must connect the nation. Reducing that role or proposing turn back of the system is not appropriate. The states cannot fund a dynamic and efficient national transportation system alone.
- *Recommendation:* Congress is urged to increase federal surface transportation funding significantly above the current FAST Act funding levels. Enhanced federal funding is required for both rural and urban areas of the country to improve the quality of life and to increase the nation's economic vitality, well-being, and competitiveness.

Issue FF-2: Stability of the Highway Trust Fund

- Combines 3-1 and 8-2 from the compilation of 16 policy white papers
- *Current Federal Policy:* N/A
- *Issue:* The HTF serves as the backbone of federal highway and transit programs and was once supported solely by user fees. This user fee has not increased in over 25 years, and thus is not nearly large enough to cover current costs, let alone the massive reconstruction efforts needed across our country. Since 2008, the HTF has been sustained by supplementing user fees through a series of General Fund transfers now amounting to \$140 billion. According to the Congressional Budget Office, annual HTF spending at current levels plus inflation is estimated to exceed receipts by \$16 billion in FY 2020, growing to \$23 billion by FY 2027. HTF revenues, mainly derived from fuel taxes, will continue to decline due to increased vehicle fuel efficiency and growing use of alternative fuel vehicles. Absent legislation, in FY 2021, the HTF is expected to experience a significant cash shortfall leading to an estimated 40 percent drop in highway obligations from the year before, or from \$46.2 billion to \$27.7 billion, and a near zeroing out of the Mass Transit Account.

The Highway Trust Fund (HTF) does not currently allow for continuity and consistency in the Federal-aid program, and solvency is the root of this issue. This program needs to grow to continue providing transportation projects that result in great benefits to our nation.

The challenges resulting from the continued threat of insolvency are many. In the short term, continuing resolutions release obligation limitation piecemeal throughout the year, causing state DOTs to have difficulty with the following: obligating projects in monthly lettings, leading to lettings with state funds and the build-up of large AC balances; and having enough state funds to let projects and make progress payments while awaiting obligation limitation to become available for federal reimbursement. In addition, having state funds unnecessarily tied up while waiting for federal funds

delays the ability to begin more projects using state dollars. In the long term, long-range transportation planning is difficult when future funding levels in the HTF are unknown because the DOTs must guess at the level of general fund transfers that may be approved. Additionally, state DOTs may be unnecessarily conservative in funding projects to avoid over-obligating funds that might have to be covered by the state in the event future federal reimbursement levels drop.

AASHTO has provided Congress with numerous alternative methods to fund transportation at the federal level. Between 2013 and 2018, 56 percent of the states passed legislation to increase their state gas taxes; we feel the time is right to take this action on a federal level to shore up the HTF. It is in the nation's best interest to provide funding through the HTF to cover our surface transportation infrastructure needs and ensure that the program becomes a dependable source of revenue for the next decade.

- *Recommendations:*
 - Congress must provide sustainable, certain, long-term funding to the HTF to support multi-year legislation. Such solutions would eliminate the need to use general fund monies to supplement the HTF.
 - Congress should continue to fund the development and implementation of revenue alternatives to the motor fuel tax, such as the Surface Transportation System Funding Alternatives Program, which was established under the FAST Act and provides \$95 million in federal share (for up to 50 percent of project cost) over five years to states to demonstrate alternative revenue methods that incorporate a user fee structure to maintain the long-term solvency of the HTF.

Issue FF-3: Prioritize Formula-based Federal Funding

- Proposal 8-3 from the compilation of 16 policy white papers
- *Current Federal Policy:* The Federal-aid Highway Program is a federally-assisted state program that is rooted in Article 1, Section 8 of the United States Constitution and confirmed by 23 U.S.C 145. Currently, approximately 90 percent of the federal highway program funds are distributed to the states by formula. This approach of emphasizing formula funds has a decades-long track record of success in supporting long-term capital improvements across the United States. This enables funds to be distributed to states in a stable and predictable manner and allows the federal program to efficiently deliver projects that have been identified and prioritized through the statewide and metropolitan planning processes.
- *Issue:* Recently, proposals have been advanced that would greatly increase the discretionary funding programs, with projects chosen by the federal government. These proposals combine the discretionary programs with requirements that states and others greatly increase their contributions or greatly leverage federal dollars. For a variety of reasons, many states cannot leverage funding beyond the current matching requirements. This makes it critical that Congress continue to recognize the importance of continuing the current prioritization of formula funding over discretionary funding. By using discretionary programs, the federal government must solicit applications and review them before awarding funds which delays the deployment of funds. In addition, not only are grant applications costly both in time and dollars, such grant dollars are uncertain by nature, preventing states from properly planning. This results in lost efficiency and added complexity to processes and project delivery. More funding for discretionary programs will likely result in an even lengthier processing timeframe, making them an inefficient way to increase investments in transportation infrastructure.
- *Recommendation:* Congress should continue to prioritize formula funding over discretionary funding. State and local governments have existing plans and processes in place and can put new federal formula funds to work promptly.

Issue FF-4: Eliminate Rescissions of Contract Authority

- Proposal 8-4 from the compilation of 16 policy white papers
- *Current Federal Policy:* Congress has used rescissions of highway contract authority as budgetary offsets. An \$856 million rescission in unobligated contract authority was enacted in June 2017 and a \$7.6 billion rescission is scheduled for July 2020 under the FAST Act. The \$7.6 billion rescission would be derived from Federal-aid Highway Program categories other than those that are exempt including: Highway Safety Improvement Program, Railway-Highway Crossing Program, and sub-allocated portions of the Surface Transportation Block Grant Program (STBGP). Non-exempt program dollars are required to be rescinded from unobligated balances remaining on that date on a proportional basis.
- *Issue:* Rescinding previously-authorized highway contract authority greatly impedes the flexibility of state departments of transportation to program federal dollars and could result in hard cuts to highway funding and seriously delay project construction.
- *Recommendation:* Congress is urged to repeal the scheduled FY 2020 rescission and avoid using rescissions of highway contract authority. However, if a rescission is imposed, no funding categories should be exempt. States should have the flexibility to choose among all the funding categories to rescind so they can reduce the negative impact of the rescission on transportation service and performance.

Issue FF-5: Funding Flexibility, Transferability and Innovation

- Combines 3-2, 8-6, 10-6 and 11-2 from the compilation of 16 policy white papers
- *Current Federal Policy:* The total amount of federal highway funding apportioned to a state is divided among the individual apportioned programs. To ensure the most effective use of federal funding, increased flexibility of and transferability between the various federal programs is necessary. Each program has rules that are not always flexible regarding how the funds may be used. Each program is governed by transferability provisions that are established in statute.
- *Issue:* AASHTO supports increased flexibility in programs and in transferring funding among the programs. Such reform would enable states to direct funding to better meet their needs, whether for preservation, capacity, safety or other needs. This flexibility in directing funds is especially important when overall funding is insufficient.

As some set-aside programs have strict guidelines for use or narrow purposes, these programs are often underspent. Limitations in the flexibility of set-aside programs prevent states from prioritizing projects based on state and local needs, as well as limits the ability of DOTs to maximize the use of available funding if a partner is not ready to begin a set-aside project (for example, MPO allocations). In the end, monies lapse and are lost.

Deploying funds productively is important to the states, and each state understands best how to meet both the national and state needs. States with programs meeting the intent of the various federal programs should have broad trust to spend their funding appropriately. The states would be able to make greater use of federal-aid programs if there were reductions in both the regulations pertaining to these programs and the sheer number of restrictive set-aside programs.

Also, many states have a long history with incorporating performance goals into their planning processes to guide state programming decisions. Concurrently, Congress has established national performance goals and the states are implementing the performance management regulations established by FHWA. Under this structure, states face constraints to align available funding with priority needs.

- *Recommendations:*
 - Examine federal transportation programs for need and applicability.
 - Provide increased flexibility and transferability between highway program funds.
 - Any program growth should be in the most flexible categories.
 - Authorize a pilot program that allows a limited number of states the option to treat all federal funds they receive during the pilot program years as having been apportioned to that state under the most flexible of the existing federal funding categories. The purpose of the pilot program is to demonstrate how states produce results toward state goals and needs using a flexible needs-based and outcome-oriented project prioritization and programming process. States that use performance indicators in their programming or project selection processes would be eligible to apply for the pilot program. The program would not eliminate statutory set-asides for geographic areas within such states or eliminate the applicability of federal performance requirements. Such a pilot would enable USDOT to consider the impact of the increased flexibility – positive, negative, or neutral – on results, including under the federal transportation performance management process. The proposed pilot program will provide practical, real-world experience that will help inform future policy making.

Issue FF-6: Preserve the Current Federal/State Matching Ratio Requirements

- Proposal 8-5 from the compilation of 16 policy white papers
- *Current Federal Policy:* While there are exceptions, 23 USC 120 generally requires most federal-aid transportation projects to have an 80 percent federal share and a 20 percent state matching share. This 80-20 federal/Non-federal funding share means federal support is focused on larger capital projects and leverages state and local dollars to be used for a much broader array of projects.
- *Issue:* This 80-20 federal/non-federal funding match has a proven track record of success. Many states have recently raised highway revenues. However, some states remain challenged to meet the 20 percent non-federal match requirements. States and local governments already provide approximately 75 percent of transportation funding for highways and transit. Achieving national goals require our federal partners to contribute an equitable share. There are significant needs for state and other non-federal transportation funding to operate and maintain the federal system as well as provide capital, operating, and maintenance funding for non-federal, state and local transportation systems. The current matching requirements allow state and local dollars to be used to match federal funds and also to be used for non-federal transportation investments.
- *Recommendation:* Maintain the current federal-state matching ratio requirements for projects and explore innovative match strategies (e.g., the sale of toll credits).

Issue FF-7: Provide Flexibility to Toll Federal-aid Highways

- Proposal 8-8 from the compilation of 16 policy white papers
- *Current Federal Policy:* In most cases, federal law (23 USC 301) restricts states from tolling Federal-aid Highways, which eliminates a potential source of revenue. The Interstate System Reconstruction and Rehabilitation Pilot Program (ISRRPP) was authorized under Section 1216(b) of TEA-21 to permit up to three existing Interstate facilities to be tolled to fund needed reconstruction on Interstate corridors that could not otherwise be adequately maintained or functionally improved without the collection of tolls.
- *Issue:* In some states, a portion of the transportation facilities cannot be adequately maintained or functionally improved without toll collection; however, federal law imposes restrictions on states from tolling Interstate routes.

- *Recommendation:* Provide increased tolling flexibility to states to maximize revenue-raising opportunities in light of federal funding challenges.

Issue FF-8: Maintain the Current Balance of Funding Among Highways, Transit, and Highway Safety

- Proposal 8-7 from the compilation of 16 policy white papers
- *Current Federal Policy:* The Highway Trust Fund supports highway, transit, and highway safety programs. The FAST Act also added a new National Highway Freight Program (NHFP) and a new discretionary program entitled the Nationally Significant Freight and Highway Programs (now known as Infrastructure for Rebuilding America or INFRA) within the highway program. Additionally, the general fund supports rail programs.
- *Issue:* The current funding balance along with transferability and flexibility allows states to direct available funding to meet highway, safety, and transit needs. The most recent FHWA Conditions and Performance report estimated the highway backlog at \$836 billion and a transit backlog of \$90 billion. States need all available tools to address such a high level of need.
- *Recommendations:*
 - Maintain the current balance of funding among highways, transit and highway safety from the HTF and continue General Fund support for rail programs.
 - Further increase flexibility within the STBG Program by expanding the state departments of transportations' share of funding (which will be reduced to 45 percent by FY 2020 under the FAST Act) which can be used in any area within a state. This flexibility includes each state's ability to direct more of its own STBG program funding to their local partners, over and above sub-allocated STBG program funds, if they so wish.

Issue FF-9: Transportation Alternatives Set-aside in the Surface Transportation Block Grant Program

- Combines 1-2, 1-3, 3-3, 11-5 and 12-14 from the compilation of 16 policy white papers
- *Current Federal Policy:* 23 USC 133(h), 23 USC 206
- *Issue:* Although state DOTs use significant state resources to administer the Surface Transportation Block Grant Transportation (STBGP) set-aside for Transportation Alternatives (TA), state DOTs are not eligible recipients of TA funding. Similar programs, such as the Recreational Trails Program, allow states to be reimbursed for costs incurred in administering the program, up to seven percent of the apportionment made to the state each year (23 USC 206(d)(2)(H)), and one percent of Recreational Trails Program monies are returned to USDOT each year to administer the program (23 USC 133(h)(5)(B)). Thus, it is important that state DOTs be allowed to use a portion of the TA program funds for expenses associated with administering these funds.

The current prohibition of state DOT sponsorship/eligibility for TA funds hinders fund obligation as local government sponsors are often reluctant to use federal funding for small projects. As such, state DOTs should be able to sponsor local projects and receive project grants, at the request of the local agency.

Also, TA funding is available only for infrastructure-related and environmental projects. The Recreational Trails Program, however, includes eligibility for maintenance of existing trails and educational programs to promote safety and environmental protection.

Applying the full range of federal requirements to the much smaller Transportation Alternatives (TA) projects inhibits the efficient delivery of those projects. Often, 50 percent or more of TA funding is spent on preliminary engineering activities to meet federal requirements, leaving little money for project construction. In addition, local public agencies are typically unfamiliar with

federal processes, which slows down project delivery. Simplifying the federal requirements for TA projects would greatly expedite project delivery.

Also, the current TA set-aside is a fixed dollar amount. This fixed amount does not allow the TA program to grow throughout time as do other percentage-based programs.

Finally, core programs with 80-, 90-, or 100-percent federal-aid participation greatly free-up state dollars that can be used on local projects without the typically restrictive federal rules. This increases the buying power of those dollars, and allows them to be used with greater efficiency. States should have the ability to select the level of federal, state, and local funding participation in order to extend the reach of their limited transportation dollars and to use them in the most efficient and effective ways possible. Established participation percentages may require a state or local agency to set aside dollars in anticipation of letting specific federal projects, which ties up those funds while waiting for the project to be let (preventing other projects from being let sooner using the funds that are being set aside for match). Some local entities wait years to build up enough funds to match a needed transportation project, but if let as a 100%-federal-share project it could be let without waiting for local funds to become available. With this added flexibility, state DOTs could tailor the federal/state/local funding split to specific situations and projects and further maximize the use of all available funding sources.

- *Recommendations:*
 - State DOTs should be reimbursed for eligible costs incurred in administering the TA program, up to seven percent of the apportionment made to the state each year.
 - Allow states to receive TA funding and administer TA projects, at the request of a local agency.
 - Allow TA funds to be used for non-infrastructure programs that focus on preservation, safety, public education, enforcement, and/or public outreach.
 - Develop a Task Force consisting of state DOTs and local transportation agency representatives to make recommendations to USDOT on streamlining federal processes and expediting project delivery for TA projects.
 - Change the TA set-aside from a specific dollar amount to a percentage so that the TA set-aside funding is tied to increases/decreases in overall transportation funding.
 - Allow transportation agencies to choose the level of federal share for set-aside programs.

TIER 2

Issue FF-10: Reduce and Simplify Regulations, Requirements, Data Collections, and Process to Expedite the Process

- Proposal 8-10 from the compilation of 16 policy white papers
- *Current Federal Policy:* Preserve useful program and policy reforms and support additional opportunities to streamline and simplify the federal surface transportation programs.
- *Issue:* Notwithstanding efforts by AASHTO, current federal surface transportation programs are subject to significant requirements and processes. Appropriate reduction of such requirements will save money, increase efficiency, and allow more funding to be used to improve transportation services. Many of the requirements are tied to finance and funding. There are financial process difficulties caused by federal funding uncertainty in the fiscal constraint and financial planning provisions related to the State Long Range Plan, the Statewide Transportation Improvement Program, the Asset Management Plan, and Performance Management.
- Under the current uncertain federal funding conditions, performance management, asset management, and financial planning requirements have far less value for decision making and risk is multiplied. If federal transportation appropriations are not known at the beginning of the federal fiscal year, financial planning, financial forecasting, programming, performance, and asset

management are adversely affected. This is further accentuated if these decision systems use financial optimization methods over long timeframes. Many of the financial planning and forecasting requirements are associated with the statutory language “reasonably expected to be available.” For such purposes it is critical to know both ‘how much funding and when the funding will reasonably be available.’

- *Recommendations:*
 - Define “reasonably expected to be available.”
 - Fiscal constraint and other financial requirements in planning and programming should be imposed for no more than the STIP timeframe. States should have the option to do financial estimates for longer periods, if desired.

Issue FF-11: Support for Financing Tools

- Proposal 8-9 from the compilation of 16 policy white papers
- *Current Federal Policy:* Title 23 authorizes a number of beneficial transportation financing tools, including the Transportation Infrastructure Finance and Innovation Act (TIFIA), Grant Anticipation Revenue Vehicles (GARVEEs), State Infrastructure Banks (SIBs), and Private Activity Bonds (PABs).
- *Issue:* While not a substitute for adequate funding, states need access to financing tools to help maximize the value of existing resources, particularly when federal funding is insufficient.
- *Recommendation:* While most projects require federal support in the form of direct funding rather than financing incentives, Congress should continue to support the financing tools currently provided and support new innovative financing tools.

Public Transportation (PT)

TIER 1

Issue PT-1: Retain, Strengthen and Expand the Federal Program for Public Transportation; Retain the Mass Transit Account within the Highway Trust Fund

- Proposal 4-1 from the compilation of 16 policy white papers
- *Current Federal Policy:* The FAST Act authorized \$61.1 billion for transit programs with funding provided from both the Mass Transit Account (MTA) of the Highway Trust Fund (HTF) and the General Fund (GF). As of FY 2020, annual HTF outlays are estimated to exceed receipts by \$16 billion in FY 2020, growing to more than \$23 billion by FY 2027.
- *Issue:* Public transportation provides personal mobility that significantly contributes to national goals and policies in support of global economic competitiveness, energy independence, environmental sustainability, congestion mitigation and emergency preparedness. Also, on an individual user basis, public transportation saves money, reduces the carbon footprint of households and provides people with choices, freedom and opportunities.
- *Recommendations:*
 - Commensurate with increases in overall transportation funding, increase federal funding for both rural and urban area public transportation services to enhance regional and national economic competitiveness and promote community vitality.
 - Prioritize increases in formula-based program funding, including funding to address bus and rail modernization and rural transit, while also providing funds for the general fund non-formula New Start/Small Start program.
 - Implement a long-term sustainable revenue strategy that (1) addresses the insolvency of the federal Highway Trust Fund; (2) preserves a separate Mass Transit Account; (3) proportionately grows the highway and transit programs and mitigates the current infrastructure deficit; and (4) supports new transformative infrastructure investments.
 - Increase the flexibility and transferability of federal highway and transit funding.

Issue PT-2: Maintain and grow the Bus/Bus Facility formula and discretionary program

- Proposal 4-3 from the compilation of 16 policy white papers
- *Current Federal Policy:* 49 U.S. Code § 5339(a)(b)
- *Issue:* Section 5339 in MAP-21 created a new hybrid (formula/discretionary) Bus and Bus Facilities grant program. The increased weight given to formula funds was consistent with AASHTO policy emphasizing formula funds. The FAST Act change replaced the previous Section 5309's 100 percent discretionary Bus and Bus Facilities program and provided funding to address extraordinary needs for the rehabilitation and replacement of buses and bus-related equipment; and to rehabilitate existing or construct new bus-related support facilities, transfer stations, and intermodal facilities. In FY2018, \$366 million was awarded in general fund discretionary program funds out of a request of \$2.2 billion. This oversubscription shows the strong need to maintain and grow the overall bus and bus facilities program, both its formula and discretionary components.
- *Recommendation:* Using current federal appropriated funding levels as a baseline for formula and discretionary funds, provide increased Highway Trust Fund formula and discretionary general fund funding. Direct USDOT to consider industry comments, including comments of state DOTs, on criteria for discretionary grants.

TIER 2

Issue PT-3: Support the Goals of Safety Management Systems (SMS), the Public Transportation Agency Safety Plan (PTASP), and State of Good Repair (SGR)

- Proposal 4-4 from the compilation of 16 policy white papers
- *Current Federal Policy:* 49 U.S. Code § 5329 outlines USDOT's mandate to implement a public transportation safety program with numerous components including the National Public Transportation Safety Plan, Safety Certification Training Program, Agency Safety Plan and the State Safety Oversight Program. In 2018, FTA issued a final rule implementing the Public Transportation Agency Safety Plan.
- *Issue:* The Public Transportation Agency Safety Plan (PTASP) final rule requires those transit agencies affected by the rule to incorporate SMS policies and procedures into final Safety Plans. While state DOTs support the federal goals of Safety Management Systems (SMS), PTASP, and State of Good Repair, without authorizing a source of funding for implementation, an unfunded mandate has been created and imposed upon states and their sub-recipients. The PTASP final rule defers FTA Sections 5310 and 5311-only providers from having to comply with the new rule. Reauthorization is an opportunity for Congress to eliminate this uncertainty by formally exempting FTA Sections 5310 and 5311 providers from the requirements.
- *Recommendation:* Codify the current the PTASP exemption for FTA Section 5310 and 5311 providers and provide funding to support implementation for systems receiving funding from the Urbanized Area Formula Program (49 USC 5307) and have "100 or fewer" vehicles in 'peak' revenue service.

Issue PT-4: Maintain the Current Maximum Federal Funding Match Ratios for Public Transit Programs to Support Rural and Urban Communities, Individuals with Disabilities and Seniors and Our Nation's Transit Infrastructure

- Proposal 4-2 from the compilation of 16 policy white papers
- *Current Federal Policy:* 49 U.S. Code § 5307, 5309, 5310, 5311, and 5339
- *Issue:* On a national basis, state and local financial support for public transportation services far exceed the current federal support. Nonetheless, the current federal share is essential to ensure that current services are retained. As such, the federal government should not shift additional costs to states/local governments by reducing the current level of federal participation in operating and capital projects. Congress should honor the existing federal shares authorized for transit operating and capital programs, including the transit New Start program. Lowering the federal share for projects also makes it more difficult to compete for discretionary or flexible highway funds, especially those subject to the Metropolitan Planning Organization process.
- *Recommendation:* Preserve the current federal/non-federal matching ratio requirements for federal-aid-eligible transit projects.

Issue PT-5: Reauthorize the Transit Cooperative Research Program

- Proposal 4-7 from the compilation of 16 policy white papers
- *Current Federal Policy:* 49 U.S. Code § 5312 - Public transportation innovation
- *Issue:* Research conducted through the Transit Cooperative Research Program (TCRP) and directly by the FTA remains a high priority for states. These activities promote best practices and facilitate the deployment of new technologies, thereby enhancing increases in operational efficiency. In support of these efforts, TCRP, as outlined under "§ 5312 Public transportation innovation" of the 2015 FAST Act, should be reauthorized.
- *Recommendation:* Preserve and enhance funding to support the Transit Cooperative Research Program.

Issue PT-6: Congress Should Direct the Government Accountability Office to Study Streamlining the Federal Transit Grant Approval Process

- Proposal 4-6 from the compilation of 16 policy white papers
- *Current Federal Policy:* None
- *Issue:* State DOTs are required to submit a unified program of projects to FTA to authorize the use of funds for a wide range of activities. The program of projects may include routine and recurring activities such as the replacement of bus and bus-related equipment as well as more complex activities, including but not limited to construction of new facilities or deployment of new technologies. Frequently, approval of routine and recurring activities in a grant are held up while FTA works through issues pertaining to new initiatives. To speed project delivery and reduce delays in the procurement of routine and recurring activities, AASHTO is proposing that GAO review and provide recommendations on streamlining/expediting the current approval process.
- *Recommendation:* Direct the Government Accountability Office to study the federal transit grant approval process for routine and recurring procurements (e.g., buses), provide recommendations to Congress and USDOT on effective strategies for streamlining existing processes/practices, and work with the stakeholder community to take action and implement the study's recommendations.

Freight (FR)

TIER 1

Issue FR-1: Expand the Extent of both the Primary Highway Freight System and National Multimodal Freight Network

- Combines 2-1 and 11-8 from the compilation of 16 policy white papers
- *Current Federal Policies:*
 - 23 USC 167, *National Freight Policy*
 - 49 USC 70103, *Interim National Multimodal Freight Network*
- *Issue:* The definition and limitations of the Primary Highway Freight System (PHFS), National Highway Freight Network (NHFN) and the National Multimodal Freight Network (NMFN) will not allow states to attain the comprehensive goals set forth in MAP-21 and the FAST Act and do not take into account the geographic and economic differences in states, including the challenges of rural, large, land-based states and other concerns of states. The PHFS network currently consists of 41,518 centerline miles, including 37,436 centerline miles of Interstate and 4,082 centerline miles of non-Interstate roads. The designation of PHFS roads in various states has resulted in a limited and disconnected network. The ability of a state to designate some additional mileage to the NHFN as critical urban and rural corridors still leaves an unduly limited and disconnected network. For the NMFN, the current draft network is limited and does not include all of the National Highway System (NHS) roads nor critical rural and urban transportation links. Since states are required to complete state freight plans, which must then be approved by USDOT, a framework exists to identify and define the freight network in any given state.
- *Recommendations:*
 - Expand eligibility of the National Highway Freight Program to include all of the NHFN. Eliminate the 2% rule so states can spend funds on any NHFN route (to include Critical Urban Freight Corridors and Critical Rural Freight Corridors).
 - Expand the PHFS to include all Interstate System roadways regardless of how much freight funding a state receives. Freight program eligibility should include all Interstates by default.
 - Remove restrictions on state authority to add mileage to the PHFS, NHFN and NMFN, including but not limited to mileage caps on critical urban and critical rural corridors.
 - Add eligibility to use funds on any portion of a state’s multimodal freight network as defined in a state’s freight plan.

TIER 2

Issue FR-2: Expand Eligible Activities through National Highway Freight Program

- Combines 2-2 and 9-4 from the compilation of 16 policy white papers
- *Current Federal Policies:*
 - FAST Act Section 1116; 23 USC 167 establishes a National Highway Freight Program (NHFP) that funds activities that “must contribute to the efficient movement of freight on the [NHFN] and be identified in a freight investment plan included in [the state’s freight plan.]”
 - FAST Act Section 1105; 23 USC 117 establishes the Nationally Significant Freight and Highway Projects (NSFHP) program to provide financial assistance—competitive grants, currently now known as Infrastructure for Rebuilding America (INFRA) grants, or credit assistance— “for nationally or regionally significant freight and highway projects.”
- *Issue:* The use of the nation’s transportation system for freight is increasing, and with it the need for integrated solutions to better move freight throughout the country. Currently, no more than 10% of

NHFP formula funding may be used for intermodal, freight rail, or water transportation. Integrated freight management solutions, freight safety programs, and research supporting future investments should be codified as eligible for NHFP and INFRA funds in new surface transportation reauthorization legislation.

- *Recommendations:*
 - Reform the National Highway Freight Program, both the formula program to states and the discretionary program (INFRA), to more clearly include eligibility for investment in integrated freight technology, management and operations strategies and solutions, freight safety programs (including for emergency responders), and research supporting future investments.
 - Remove the 10% multimodal cap to provide flexibility for states to use discretion in determining the amount of NHFP formula funding to go toward multimodal freight projects identified in the state's freight investment plan and to invest more in multimodal projects if appropriate for that state. Eligibility should include multi-state proposals and projects for regions and corridors to improve freight intermodal connectivity.

Issue FR-3: Changes to Infrastructure for Rebuilding America (INFRA) Discretionary Grant Program

- Proposal 2-3 from the compilation of 16 policy white papers
- *Current Federal Policy:* FAST Act Section 1105; 23 USC 117
- *Issue:* The FAST Act established a new discretionary grant program for Nationally Significant Freight and Highway projects. Grant eligibility is limited to highway projects on the NHFN, highway or bridge projects on the NHS, railway-highway grade crossing or grade separation projects, or intermodal or rail projects, including those within the boundaries of public or private freight facilities. Under the FAST Act, not more than \$500 million in aggregate of the \$4.5 billion authorized for INFRA grants (previously known as FASTLANE grants) over fiscal years 2016 to 2020 may be used for grants to freight rail, water (including ports), or other freight intermodal projects that make significant improvements to freight movement on the National Highway Freight Network.
- *Recommendations:*
 - Reauthorize the program and remove or increase the caps used for grants to freight rail, water (including ports), or other freight intermodal projects.
 - Add eligibility to use funds on any portion of a state's multimodal freight network as defined in a state's freight plan.
 - Minimize annual changes to the Infrastructure for Rebuilding America (INFRA) Discretionary Grant Program for consistency in grant applications and award criteria.

Issue FR-4: Reinstate the National Cooperative Freight Research Program

- Proposal 2-5 from the compilation of 16 policy white papers
- *Current Federal Policy:* To maximize the effectiveness of state DOTs' research and training activities, FHWA carries out or funds a host of activities necessary to support a vibrant nationwide research and training program including research administration, communication, coordination, conferences, and partnerships with other national and international organizations.
- *Issue:* Throughout its history, a core element of the FHWA Research, Development, and Technology Transfer's (RD&T) mission has been to promote innovation and improvement in the highway system. Over the last decades, this critical mission element has developed into a broad array of research and technology activities covering the spectrum of advanced research, applied research, technology transfer, and implementation. The National Cooperative Freight Research Program, however, was last authorized under SAFETEA-LU. MAP-21 and the FAST ACT provided much more emphasis on freight, while simultaneously reducing funding for freight research at the national level. States are

concerned that freight research needs are not being met solely through the National Cooperative Highway Research Program (NCHRP). A dedicated national freight research program is needed.

- *Recommendation:* Reestablish the NCFRP to provide research products to assist states in their delivery of freight transportation projects with funding beyond the amount prescribed for the federally-managed Research Technology & Education programs and State Planning & Research funded programs.

Rail Transportation (RT)

TIER 1

Issue RT-1: High-speed, Intercity, Passenger, and Freight Rail Grants

- Proposal 5-3 from the compilation of 16 policy white papers
- *Current Federal Policy:* 49 USC §11301, §11302, §11303
- *Issue:* A total of \$2.2 billion is authorized for FY 2016 – 2020 for rail funding in the FAST Act through the Consolidated Rail Infrastructure and Safety Improvements Grant (CRISI, §11301), The Federal-State Partnership for State of Good Repair Grant Program (SGR, §11302), and the Restoration and Enhancement Grant Program (R&E, §11303). The bullets below highlight authorized fund amounts, program eligibility requirements, and recommended language to support cross-border investment as state DOTs need the ability to expand the grant funds over the border in Canada to enhance intercity passenger rail service:
 - The Consolidated Rail Infrastructure and Safety Improvements Grant Program authorizes \$1.1 billion for projects that aim to enhance safety, efficiency and reliability of passenger and freight rail transportation systems. There is broad project eligibility that focuses on capital, regional and corridor planning, research, workforce development, training projects, and environmental analyses including plans or analyses that would extend services into Canada.
 - The Federal-State Partnership for State of Good Repair Grant Program authorizes \$997 million for capital projects to replace or rehabilitate qualified railroad assets and ultimately reduce the current state of good repair backlog. Projects may include enhancements to commuter rail service. However, each project, at a minimum, must demonstrate enhancements to intercity passenger rail service or assets. The eligible activities include capital projects to replace existing assets in-kind or with assets that increase capacity or service levels; ensure that service can be maintained while existing assets are brought into a state of good repair; and bring existing assets into a state of good repair.
 - The Restoration and Enhancement Grant Program authorizes \$20 million each year from FY2016 – 2020 for operating assistance to initiate, restore, or enhance intercity passenger rail service. The grants are limited to three years of operating assistance per route and may not be renewed. It is recommended that the program priorities include new frequencies on pre-intercity passenger rail corridors and service restoration expansion into Canada.
- *Recommendation:* Reauthorize the Consolidated Rail Infrastructure and Safety Improvements Grant Program, State of Good Repair Grant Program, and the Restoration and Enhancement Grant Program at no less than FY19 funding levels and support cross-border investment.

TIER 2

Issue RT-2: States as Railroads

- Proposal 5-1 from the compilation of 16 policy white papers
- *Current Federal Policy:* 49 U.S.C §270
- *Issue:* The System Safety Program works to improve railroad safety through structured, proactive processes and procedures developed and implemented by railroads. It applies to “Railroads that operate intercity or commuter passenger train service on the general railroad system of transportation and railroads that provide commuter or other short-haul rail passenger train service in a metropolitan or suburban area (as described by 49 USC 20102(2)), including public authorities operating passenger train service.” (49 USC §270.1) State DOTs are committed to safety, service quality, and reliability of the rail network; however, it is important to clarify that states, and political

subdivisions of states, who sponsor but do not operate intercity passenger rail services, are not railroads nor are they railroad carriers. This clarification is critical as states do not need to endure additional regulatory burdens as they endeavor to utilize the rail mode as part of the nation's multimodal transportation network.

- *Recommendation:* In 2017, Senator Deb Fischer (R-NE) introduced the Railroad Advancement of Innovation and Leadership with Safety (RAILS) Act. Section 225 of the bill includes language that clarifies that states are not rail carriers if they do not operate a rail service. AASHTO recommends the language be incorporated into reauthorization:

SEC. 225. APPLICABILITY TO STATES.

Not later than 180 days after the date of the enactment of this Act, the Secretary shall revise part 270 of title 49, Code of Federal Regulations, to exclude a State, or a political subdivision of a State, that provides equipment, track, right-of-way, or financial support for intercity passenger service pursuant to section 209 of the Passenger Rail Investment and Improvement Act of 2008 (division B of [Public Law 110-432](#); [49 U.S.C. 24101](#) note) if such State or political subdivision does not directly operate such service.

Issue RT-3: Amtrak National Network and Amtrak Northeast Corridor

- Proposal 5-2 from the compilation of 16 policy white papers
- *Current Federal Policy:* 49 USC §11101
- *Issue:* In December 2015, for the first time in U.S. transportation legislation history, Amtrak reauthorization was included as part of the federal surface transportation bill. A total of \$8.05 billion of funding is authorized for Amtrak grants for FY2016 – 2020. The FAST Act departs from the previous Amtrak funding allocation method of capital and operating grants and now provides funding that corresponds with Amtrak's main business lines – the Northeast Corridor and the National Network. A total of \$2.596 billion is authorized for Amtrak projects along the Northeast Corridor and \$5.454 billion for projects along the Amtrak National Network. Amtrak operates a nationwide rail network, serving more than 500 destinations in 46 states, the District of Columbia and three Canadian provinces, on more than 21,400 miles of routes. It is essential to maintain federal financial support sufficient to enable the operation of the long distance passenger train network at least at current levels, which would help ensure that many states and regions are connected to the rail and transportation system and maintain a national passenger rail network. It is also important to maintain federal financial support for Amtrak's Northeast Corridor as it is the busiest railroad in North America, with approximately 2,200 Amtrak, commuter and freight trains operating over some portion of the Washington-Boston route each day.
- *Recommendation:* Reauthorize funds for the Amtrak National Network and the Amtrak Northeast Corridor in order to continue efficient and effective passenger rail mobility.

Connected and Automated Vehicles (CAV)

TIER 1

Issue CAV-1: The Future of Transportation Includes Connected and Automated Vehicles

- Proposal 6-2 from the compilation of 16 policy white papers
- *Current Federal Policy:* None
- *Issue:* While there has been significant focus on automated vehicles (AV) and the benefits they may bring, there has been less attention on a future that includes connected vehicles (CV). Establishing a strong foundation for AVs requires ensuring robust connectivity for V2V and V2I communication. State and local agencies are committed to leading, supporting, and fostering the testing and deployment of these new technologies. To date, 33 locations in the US are deploying CV technologies under sponsorship of USDOT and seventeen locations are deploying the technologies without sponsorship from USDOT. Combined, this represents 72,000 vehicles on the road and 65,000 devices installed on the infrastructure.

To further these efforts, AASHTO is supporting a national traffic signal phasing and timing (SPaT) challenge, which is challenging state and local public sector transportation infrastructure owners and operators to achieve deployment of dedicated short-range communications (DSRC) 5.9 GHz infrastructure with SPaT broadcasts in at least one corridor or network (approximately 20 signalized intersections) in each of the 50 states by January 2020. As of August 30, 2018, at least 26 states have committed to the challenge. More than 200 signals are broadcasting SPaT and more than 2,000 additional signals are planned. States and local transportation agencies have invested millions of dollars in DSRC, and they do not want that investment to be wasted. However, the lack of federal direction regarding communications between V2V and V2I communication standards, including whether to use DSRC, 5G, or both for communications, is creating uncertainty among state and local agencies. This uncertainty slows the advancement of this technology and future integration into our fleet and facilities.

- *Recommendations:*
 - Require USDOT to ensure that its effort to establish a nationwide standard for V2V safety communications continues unimpeded such that other connected vehicle applications can be developed and deployed.
 - Require using the DSRC spectrum for connected vehicle applications. Also, require that DSRC be used solely for vehicle-to-everything (V2X).
 - While DSRC is the only viable technology available now to support V2X applications, any standards development that occurs now should not impede technological innovation and implementation in the future.
 - Require the federal government to lead development of a universal, seamless approach to security management and CV communication through standardization and appropriate research and technology demonstration programs. This will enable states to better understand when and how to make appropriate investment decisions.

Issue CAV-2: Safely Deploy Cooperative and Automated Transportation Technologies

- Combines 1-1 and 6-1 from the compilation of 16 policy white papers
- *Current Federal Policy:* None
- *Issue:* With the emergence of cooperative and automated transportation (CAT), the highest priority for AASHTO and state DOTs is the safety of transportation system users. It is estimated that over 90 percent of fatal vehicle crashes are a result of human error, some of which could be significantly

mitigated through CAT technologies. CAT has the potential to positively influence the safety of vehicle occupants, transportation maintenance and construction workers, bicyclists, and pedestrians. There is however a recognition that innovative technology is inherently accompanied by uncertainties, which increases risk and makes the safety of these new technologies paramount. Although connected and autonomous vehicles are currently emerging, there are other existing, proven automated technologies, such as headlamp designs, that should be increasingly deployed while connected and autonomous vehicles are being developed and tested.

- *Recommendations:*
 - Additional data must be developed, collected and analyzed on the safety of connected and automated vehicles, including data regarding the ability of vehicles to detect and stop for pedestrians and bicyclists. Non-proprietary data generated by automobile manufacturers, technology developers, research organizations, and public agencies should be shared with the public and decision makers.
 - While CAT technologies are being developed and tested, increase efforts to deploy existing proven automation technologies.
 - Government regulators and lawmakers should revise and/or remove outdated safety laws, regulations and guidance when the data unequivocally demonstrates a technology's ability to provide an equivalent or higher level of safety. However, the legislative and regulatory framework that reflects the mix of vehicle styles, ages and technologies throughout the transition to new technologies should be kept in place.

TIER 2

Issue CAV-3: Provide Additional Funding and Flexibility to Deploy CAV Technologies and Accommodate CAV Vehicles

- Proposal 6-5 from the compilation of 16 policy white papers
- *Current Federal Policy:* None
- *Issue:* States are struggling to find the fiscal resources to maintain their current infrastructure, so having to invest in new technology to retrofit existing roads, bridges and other infrastructure to accommodate CAVs will be difficult with current funding. Consequently, benefits will not accrue unless states can afford to make the necessary investments. There are a number of test bed and pilot connected vehicle programs taking place where there is much learning about CV hardware deployment. As with all technology, costs can change rapidly as the new developments occur.

State DOTs know considerably less about the cost of ensuring automated vehicles being able to operate on the roadways. Currently, state DOTs (and other infrastructure owners) are uncertain, at least at a detailed level, which roadway characteristics are critically important to the safe and efficient operation of AVs: pavement condition, signage, detailed GPS base maps, or striping. We know some of the developers' needs in a general way as industry has filed comments at USDOT identifying the importance of signage, lane marking, and striping. In fact, one state has responded to this concern by going from 4-inch to 6-inch stripes to help the technology developers with their sensors and lane departure warning systems. Other states, however, are not as willing to modify their lane striping widths because this is seen as a major investment. Further, there is uncertainty whether or under what circumstances replacing pavement marking for purpose of AV deployment is a capital investment (eligible under FHWA programs) or a maintenance activity and not eligible for reimbursement.

- *Recommendations:*
 - Make the deployment of connected and automated vehicle infrastructure needs eligible for funding beyond the historical aspect of funding only capital expenses to include maintenance activities necessary to the proper and safe operation of CAVs.

- Flexibility is needed in the federal-aid procurement rules as they relate to both the purchase, installation, and maintenance of CAV technologies by a state DOT. The procurement and maintenance of CAV equipment is not the same as procurement for a more traditional civil infrastructure project and other considerations need to be made. States need flexibility in procuring the services and equipment needed to install and maintain the computer technology assets.
- Provide additional federal funding for building new testbeds and maintaining existing ones to allow industry and technology developers to test their hardware and applications on such testbeds. This will enable infrastructure owners and technology developers to better understand each other's requirements, resulting in better standards and better infrastructure.

Issue CAV-4: Expanding Research Grants and Funding to Explore Mobility Opportunities Through Connected and Automated Vehicle Technology

- Proposal 4-9 from the compilation of 16 policy white papers
- *Current Federal Policy:* None
- *Issue:* State DOTs hope that the Federal Transit Administration's Strategic Transit Automation Research (STAR) plan results in greater innovation and improvements in transit service delivery to urban and rural communities and for those most in need of mobility assistance. Connected and Automated Vehicle (CAV) technology deployment is an unprecedented opportunity to improve service delivery. Notwithstanding, state DOTs are looking to FTA to research, test and safety deploy these emerging technologies. FTA research should also include an assessment of the impact of CAVs on labor; opportunities to retrain existing employees and train the employees needed in the future to maintain and support these technologies; and assess the infrastructure needed to support deployment. State partnerships with FTA are critical to success of the STAR plan's implementation.
- *Recommendation:* Provide funding for, expand research in, and facilitate the deployment of CAV technology to enhance mobility alternatives for individuals that may be unable to use or are not served by traditional public transportation services.

Operations (OP)

TIER 1

Issue OP-1: Wireless and Wireline Broadband Deployment

- *Current Federal Policy:* The Federal Communications Commission’s rule entitled, “Accelerating Wireless and Wireline Broadband Deployment by Removing Barriers to Infrastructure Investment”
- *Issue:* Broadband deployment is an important aspect of economic growth in many different regions, both urban and rural. In addition to wireline broadband, current wireless broadband deployments are focused on 5G small cell nodes which require significantly more infrastructure in terms of antennas and placement of those antennas. The FCC in October 2018 issued a rule that aims to speed up the deployment of small cell facilities or nodes—including on highway rights-of-way—by telecom companies to support the rollout of 5G mobile broadband. The impact of this rule to state and local governments is a strict federal preemption on how states can manage small cell deployment on properties they own since the order creates a nationwide “shot clock” to provide a time limit on state and local government processing of applications for small cell deployment. In addition, there is a hard cap on fees that can be charged for such applications, and only on a one-time basis.

State DOTs are critical partners in any future endeavors regarding 5G small cell and broadband deployment. However, state DOTs have limited resources and personnel and many states have existing state statutes governing installation of equipment in a highway right-of-way. A one-size-fits-all "shot clock" for small cell deployment application approval or requiring the accommodation of broadband deployment on every highway project—which will require ongoing access for operations and maintenance—can undermine safety and restrict the ability to carefully consider each application and installation appropriately.

- *Recommendation:*
 - Congress should not require state DOTs to provide broadband access as part of every highway project, but rather encourage state DOTs and technology companies to consult with one another on the best methods to extend broadband deployment to underserved areas.
 - Given the unique nature of highway projects in each state, state DOTs should be provided full flexibility to explore innovative partnerships with technology companies as part of broadband deployment.

Issue OP-2: Strengthen Eligibility for Investments in Transportation System Management and Operations (TSMO) and Related Technology

- Proposal 9-1 from the compilation of 16 policy white papers
- *Current Federal Policy:* Eligibility for funding TSMO and related technology from the National Highway Performance Program (NHPP), Surface Transportation Program (STP), Surface Transportation Block Grant (STBG) Program, Congestion Mitigation and Air Quality Improvement (CMAQ) Program, and the Highway Safety Improvement Program (HSIP).
- *Issue:* The use of TSMO strategies and technologies is expanding. The states have dramatically increased the use of TSMO and it is difficult to continue to increase investment in TSMO due to overall budgetary constraints. Additionally, funding is sometimes split by planning partner region (e.g., controlled by a Metropolitan Planning Organization, or MPO) when the states would like to use

it statewide.

- *Recommendation:* States should have broader control to use existing funding sources on TSM&O activities.

Issue OP-3: Public Safety Radio Communication Spectrum

- Proposal 9-7 from the compilation of 16 policy white papers
- *Current Federal Policy:* 47 CFR 90, Private Land Mobile Radio Services “states the conditions under which radio communications systems may be licensed and used in the Public Safety, Industrial/Business Radio Pool, and Radiolocation Radio Services.”
- *Issue:* Specific radio frequency bandwidths are reserved for public safety use through §90.16 Public Safety National Plan, §90.19 Nationwide Public Safety Broadband Network, and §90.20 Public Safety Pool. However, there are interested parties who want to reassign portions of these bandwidths for commercial wireless purposes. DOTs use the Low band to UHF radio spectrum (42 MHz through 800 MHz Bands) and microwave systems (1GHz through 23 GHz) for their normal daily activities and for incident and emergency response.
- *Recommendation:* These frequencies should remain dedicated to public safety. More than half of the state DOTs utilize FCC §90 regulated wireless services for last-mile ITS device communications – including variable message signs (VMS), closed circuit television (CCTV) cameras, road weather information systems (RWIS), and highway advisory radios (HAR) – all of which are critical parts of traveler information and traffic incident management systems. Furthermore, as connected and automated vehicles (CAVs) become more prevalent, the need for vehicle-to-infrastructure (V2I) communications increases. AASHTO, as well as several member states, have previously filed comments supporting this position in FCC dockets.

Performance-based Management (PM)

TIER 1

Issue PM-1: Federal Funding Apportionment Should Not Be Tied to Target Achievement

- Proposal 10-1 from the compilation of 16 policy white papers
- *Current Federal Policy:* The Federal-aid Highway Program is a federally-assisted state program that is rooted in Article 1, Section 8 of the United States Constitution and confirmed by 23 U.S.C 145. Currently, approximately 90 percent of the federal highway program funds are distributed to the states by formula. This approach of emphasizing formula funds has a decades-long track record of success in supporting long-term capital improvements across the United States. This approach enables funds to be distributed to states in a stable and predictable manner and allows the federal program to efficiently deliver projects that have been identified and prioritized through the statewide and metropolitan planning processes.
- *Issue:* 23 CFR 490 implemented the new performance management statute so that state DOTs are required to establish performance targets for federal performance measures and report on how they have made progress on achieving those targets. Current performance management regulations—correctly—do not require tying making substantial progress towards meeting the federal performance management targets to federal funding apportionment.
- *Recommendations:*
 - Ensure performance measures and the achievement of federal performance management targets are not related to apportioning or allocating federal funds among the state DOTs.
 - Clarify in legislation that the federal performance management requirements were established to provide an authoritative source to communicate with decision makers and the public on the condition of the national highway system as a whole and be part of a larger story to communicate the unmet transportation needs, and will not be related to apportioning or allocating federal funds among the state DOTs.

Issue PM-2: Performance Management Regulations Should Be Improved to Reduce the Burden on State DOTs, Including Data Collection

- Combines 10-3, 11-7, and 7-1 from the compilation of 16 policy white papers
- *Current Federal Policy:* 23 CFR § 490, *National Performance Management Measures*
- *Issue:* State DOTs have only recently begun to understand and appreciate the resources required of them to implement the federal performance management regulations. First, there is the direct and indirect cost of setting performance targets for the federal performance measures. In some cases, such as the safety measures, state DOTs were already collecting and analyzing the required data and it was not a heavy lift to address the new federal safety performance management regulations. However, for other performance measures, specifically system performance, the state DOTs are now required to collect, manage, and analyze a significantly larger data set; calculate performance measures that are new to the industry; and establish targets having little or no historical trend data. While the NPMRDS data from FHWA may be free, the resources required to analyze it requires real effort and specialized expertise.

Second, there is the burden placed upon state DOTs to be held accountable for assets they do not own or manage but must set targets for. For example, state DOTs are responsible for meeting targets for all NHS bridges and pavement condition regardless of who owns and maintains the asset. In some cases, the state DOT has no control over establishing the targets for these assets and must incorporate them into the state-based targets. However, the state DOT is held accountable for

target achievement and not the asset owner. Additionally, rural states are now required to report on congestion on rural highways, including very low volume routes that could become congested only due to extreme weather, unusual accidents or other non-routine events. In this case, the resources required to conduct the analysis are a misdirection of planning effort.

The performance management provisions place much more burden on the state DOTs to coordinate with many other transportation agencies regarding the development of planning documents, establishing targets and assessing performance. While the incremental changes required by the various performance management provisions may seem small, taken all together, the amount of additional work is significant and costly.

Finally, the new performance management regulations create a data-intensive environment where state DOTs are having to collect, store, analyze, and report significantly more data and information. Implementation of the national-level performance measures has been dependent on the availability of quality data and many state DOTs and MPOs have determined that the cost associated with the data collection is significantly more than estimated by FHWA.

- *Recommendations:*
 - Identify and implement ways to reduce the burden associated with the development of performance measures (including collecting and setting targets) for current performance measures:
 - Provide additional financial resources to state DOTs to analyze data.
 - Require that less data be collected and do not require reporting on targets on certain less critical roadways such as low volume roads.
 - Assess data collection requirements and recommend the elimination of non-useful data.
 - Require that state DOTs are only held accountable for those assets within their control.
 - Consistent with recommendation Issue 6-1, look for opportunities to reduce the scope and/or amount of data required to be collected and handled by state DOTs, including but not limited to:
 - Use a collaborative approach to develop more consistent and/or streamlined or simplified data collection, analysis, and management practices. FHWA should work collaboratively with state DOTs to establish less burdensome methodologies for collecting data related to implementation of the planning and performance management requirements in MAP-21.
 - Allocate additional funding (from accounts other than apportionments for programs) to state DOTs specifically to mitigate the cost of data collection, analysis and management.
 - Create legal safe havens as appropriate to facilitate sharing of data across safety organizations without concerns for the legal and litigation concerns associated with 23 USC 409 and 23 USC 148(h)(4).
 - Add eligibility to use funds on any portion of a state's multimodal freight network as defined in a state's freight plan.
 - All proposed data policy and legislative requirements must provide sufficient resources beyond simply providing for federal eligibility or flexibility to use existing transportation funds.

TIER 2

Issue PM-3: Minimum Condition Levels for National Highway System (NHS) Bridges and Pavements Could Encourage a Worst-First Asset Management Approach

- Proposal 10-5 from the compilation of 16 policy white papers
- *Current Federal Policies:*
 - 23 USC § 119, National Highway Performance Program
 - 23 CFR § 515, Asset Management Plans

- *Issue:* Current federal law requires states utilize and document an asset management plan for the NHS. State DOTs must also manage the transportation system well beyond the designated NHS. One of the principles of asset management is to focus on reducing life cycle costs, not on addressing the “worst first” for the transportation network. FHWA’s current guidance states that a successful asset management program “must have moved away from a ‘worst first’ investment strategy, and instead have adopted investment principles that are based on life cycle costing and incorporate life-cycle planning principles.” Current federal law set minimum condition levels for NHS bridges in poor condition and also requires USDOT to establish a minimum condition level for Interstate System pavement. If the minimum conditions are not met, the state would be required to redirect certain funds to improve those conditions until the minimum conditions are met.

A core principle of transportation asset management is to provide the right treatment at the right time in the life cycle of the asset. This may mean the option not to treat the worst item or segment first may be the most cost-effective for the system. State DOTs are concerned that the minimum condition requirements for NHS bridges and Interstate System pavement may force state DOTs into adopting a worst-first approach to asset management.

- *Recommendations:*
 - Eliminate the minimum condition requirements written into law for both NHS bridges and Interstate System pavement.
 - If the minimum condition requirements are not eliminated, do not use the achievement of meeting the minimum condition requirements for NHS bridges or Interstate System pavement as the basis for apportioning or allocating federal funds among state DOTs.
 - Ensure that the minimum condition requirements for NHS bridges and Interstate System pavement do not force a state DOT to adopt a “worst first” approach to asset management.

Issue PM-4: Continue to Focus on Implementation of the Performance Management Regulations

- Proposal 10-2 from the compilation of 16 policy white papers
- *Current Federal Policies:*
 - 23 USC § 134, *Metropolitan Transportation Planning*
 - 23 USC § 135, *Statewide and Nonmetropolitan Planning*
 - 23 CFR § 490, *National Performance Management Measures*
 - 23 CFR § 515, *Asset Management Plans*
- *Issue:* The new and updated performance management regulations were developed and published over a six-year time period beginning in 2013 and ending in 2018 with the publication of the final rule regarding 23 CFR § 490, *National Performance Management Measures, Subpart H* and FTA Safety final rule in July 2018. State DOTs are currently working to implement the first required aspect of these provisions, which is to establish targets for the federal performance measures, incorporate those targets into the planning process, and report on progress towards achieving targets. The first comprehensive report document for the first reporting cycle will not be developed and published until CY2022 at the earliest. AASHTO has recommended that no consideration be given to changes to existing regulations that would increase requirements until after at least two full reporting cycles in order to give the state DOTs time and experience in addressing the regulations. To the extent a state or an MPO wants to pursue any additional steps in performance management, it is free to do so without additional federal rules or statutes.
- *Recommendations:*
 - No new additional federal performance measures, associated performance management requirements, or other new complexities should be established.

- Any changes made to existing performance management regulations should reduce the burden of performance measurement and management on state DOTs, rather than increase burdens.

Planning (PL)

TIER 1

Issue PL-1: Maintain the Existing Balance of Authority among State DOTs, MPOs, and Rural Planning Organizations

- Proposal 11-3 from the compilation of 16 policy white papers
- *Current Federal Policies:*
 - 23 USC § 134, *Metropolitan Transportation Planning*
 - 23 USC § 135, *Statewide and Nonmetropolitan Planning*
- *Issue:* The FAST Act generally maintained the balance of authority as updated in MAP-21 with the option of state DOTs to establish Rural Planning Organizations and to maintain the existing relationships between state DOTs and MPOs. The performance management regulations implemented in 23 CFR § 490 added some additional requirements for state DOTs and MPOs to work more closely together in terms of establishing performance targets and incorporating those targets into the various short- and long-range plans. However, the performance management regulations did not make any significant changes to the balance of authority between the state DOTs and MPOs.
- *Recommendation:* Maintain the existing balance of authority among state DOTs, MPOs, and rural planning organizations.

Issue PL-2: Fiscal Constraint and Related Environmental Requirements

- Combines 11-4 and 13-9 from the compilation of 16 policy white papers
- *Current Federal Policies:*
 - 23 USC § 134, *Metropolitan Transportation Planning*
 - 23 USC § 135, *Statewide and Nonmetropolitan Planning*
 - Various FHWA Guidance
- *Issue A:* Update laws, regulations and/or guidance so that “fiscal constraint” requirements do not impede the ability of state DOTs to develop and deliver transportation projects. Programming of federal transportation dollars is based on the four-year window through the STIP. FHWA has decided, by interpretation, to impose a duplicative fiscal constraint requirement, not included in statute or rule, on completing the National Environmental Policy Act (NEPA) process for a project. Specifically, FHWA has interpreted that, to receive NEPA approval, a project must come from a fiscally-constrained STIP or Transportation Improvement Program (TIP). [See FHWA website, “Transportation Planning Requirements and Their Relationship to NEPA Process Completion.”] Yet it is impractical to estimate cost and include a project, or even a phase of a project (such as preliminary engineering), in a fiscally-constrained STIP or TIP until the NEPA process is complete, as that process helps define the final project (and in some cases, the NEPA process results in a no build decision). Thus, the fiscal constraint requirement for projects undergoing NEPA review creates instability in the STIP or TIP, as an overestimate of costs keeps other projects out of the STIP or TIP and an underestimate results in excess projects being included in the fiscally-constrained STIP or TIP, at least until the NEPA process is completed and any adjustment made. USDOT should revise its current practice and allow the completion of the NEPA process for a project regardless of whether the project or a phase of it is included in a fiscally-constrained STIP or TIP. This will expedite environmental review. It will not violate the principle of fiscal constraint because, even with this recommended change, the project cannot advance to construction unless it is in a fiscally-constrained STIP or TIP. In addition, for projects located in air quality nonattainment and

maintenance areas, FHWA must make an air quality conformity determination (i.e., a finding that the project conforms to the state’s plan for achieving federal air quality standards per 42 USC 7506(c)). The conformity determination, in turn, requires a finding that the project is included in a “fiscally constrained” metropolitan transportation plan and transportation improvement program (TIP). 40 CFR 93.108. These findings are required prior to completion of the NEPA process under current EPA and FHWA regulations and guidance. This requirement creates a Catch-22 for many large projects; without NEPA approval, it is difficult to confirm funding sources, but the NEPA process cannot be completed until funding sources are identified. The timing of the fiscal constraint determination can be especially challenging for large P3 projects and other innovative-finance projects, where funding and financing plans are not (and cannot be) resolved until after the NEPA process is complete.

- *Recommendation:* Allow flexibility to complete the NEPA process with approval conditioned on making an air quality conformity and fiscal constraint determination before proceeding to construction. This approach would not change any substantive requirements related to fiscal constraint and project-level conformity; it merely changes the timing of making these determinations. This change would be implemented with legislation directing FHWA and FTA to update their joint environmental and planning regulations (23 CFR Part 771 and Part 450), and directing EPA to make a corresponding change to its conformity regulations.
- *Issue B:* Reconsider more broadly the extent of “fiscal constraint” requirements. In addition to the recommendation made above (#4a), the entire concept of “fiscal constraint” regulation in planning warrants reconsideration. Simply, a state cannot spend or obligate more funds than it has. Programming of federally funded transportation projects is subject to “fiscal constraint” rules which are a complex set of rules measuring projects against budget resources at multiple points in the planning process. Fiscal constraint of TIPs and STIPs by year is not required in statute but is required by USDOT rules. States, MPOs and transit agencies should be allowed to develop and implement STIP plans based on realistic financial assumptions. The complex technical “fiscal constraint” rules are not what prevent excessive spending, rather it is the limited resources that keep spending in check. The rules, however, limit flexibility and impose excessive requirements, especially when they must be applied in the context of unpredictable rescissions and delayed appropriations. Federal decision makers need to reduce the inflated workload for USDOT as well as for regulatory-burdened states.
- *Recommendations:*
 - Reexamine fiscal constraint requirements and reducing them, such as by applying them to fewer decision points and shortening the applicable timeframes.
 - Remove fiscal constraint regulatory requirements that are not compelled by statute and by reconsidering statutory requirements, such as by shortening the applicable time period to one where resources can reasonably be anticipated, such as the four-year STIP cycle.

TIER 2

Issue PL-3: Do Not Increase Any Regulatory Burdens Related to Planning but Rather Look for Opportunities to Reduce Burdens and Unnecessary Requirements While Maintaining a Thorough Planning Process

- Combines 11-1, 11-7, and 7-1 from the compilation of 16 policy white papers
- *Current Federal Policies:*
 - 23 USC § 134, *Metropolitan Transportation Planning*
 - 23 USC § 135, *Statewide and Nonmetropolitan Planning*
 - 23 CFR § 490, *National Performance Management Measures*
 - 23 CFR § 515, *Asset Management Plans*

- *Issue:* The new and updated performance management and performance-based planning regulations were developed and published over a six-year time period beginning in 2013 and ending in 2018 with the publication of the final rule regarding 23 CFR § 490, *National Performance Management Measures, Subpart H*. As of May 2018, state DOTs are now required to implement the performance-based planning process articulated in the updated 23 CFR § 450, Subpart B, *Statewide and Nonmetropolitan Transportation Planning and Programming*. Further, state DOTs are currently in the middle of completing the first aspect of performance management provisions requiring them to establish targets for the federal performance measures, incorporate those targets into the planning process (Statewide Transportation Improvement Program [STIP] and Long Range Transportation Plan [LRTP]), and report on making progress towards achieving targets. The first comprehensive report documenting the first reporting cycle will not be developed and published until CY2022 at the earliest. AASHTO has long cautioned against complicating changes to these regulations until after at least two reporting cycles to give the state DOTs time and experience in addressing the regulations. As set forth more fully in this paper, AASHTO opposes any complicating changes or additions to the updated performance-based planning regulations and would welcome opportunities to simplify or eliminate processes and requirements, reduce administrative and regulatory burdens, expedite project and program delivery, and increase state flexibility. This can be done while leaving in place a thorough planning process. The new performance-based planning regulations create a data-intensive environment where state DOTs are having to collect, store, analyze, and report significantly more data and information. Implementation of the national-level performance measures has been dependent on the availability of quality data and many state DOTs and MPOs have determined that the cost associated with the data collection is significantly more than estimated by FHWA
- *Recommendations:*
 - AASHTO opposes any complicating changes or additions to the updated performance-based planning regulations included in 23 CFR § 450, Subpart B. There should be time to implement and evaluate recent changes.
 - Within that framework, AASHTO would welcome opportunities to simplify processes and requirements, reduce administrative and regulatory burdens, expedite project delivery, and increase state flexibility.
 - To the extent a state wants to pursue any additional steps related to improving its performance-based planning process, it is free to do so without additional federal rules or statutes.
 - Look for opportunities to reduce the scope and/or amount of data required to be collected and handled by state DOTs, including but not limited to:
 - Use a collaborative approach to develop more consistent and/or streamlined or simplified data collection, analysis, and management practices. FHWA should work collaboratively with state DOTs to establish less burdensome methodologies for collecting data related to implementation of the planning and performance management requirements in MAP-21.
 - Allocate additional funding (from accounts other than apportionments for programs) to state DOTs specifically to mitigate the cost of data collection, analysis and management.
 - Create legal safe havens as appropriate to facilitate sharing of data across safety organizations without concerns for the legal and litigation concerns associated with 23 USC 409 and 23 USC 148(h)(4).
 - Add eligibility to use funds on any portion of a state’s multimodal freight network as defined in a state’s freight plan.
 - All proposed data policy and legislative requirements must provide sufficient resources beyond simply providing for federal eligibility or flexibility to use existing transportation funds.

Issue PL-4: Make More Flexible the Projects that can be Funded through the Congestion Mitigation and Air Quality (CMAQ) Improvement Program

- Proposal 11-6 from the compilation of 16 policy white papers
- *Current Federal Policy:* 23 USC 149
- *Issue:* The projects eligible for CMAQ funding are limited by a variety of conditions. For example, prior to MAP-21, FHWA guidance set a three-year cap on the use of CMAQ funds for operating assistance. Updated guidance allows new transportation services (e.g., transit and passenger rail services, traffic operation centers, etc.) to “taper down” the last year of operating assistance over two additional years (i.e., to spend 3 years of operating assistance over a 5-year period). Beyond five years, operating costs are not eligible for CMAQ funding.
- *Recommendation:* Increase the flexibility in the use of CMAQ funds, including:
 - Increase flexibility and decrease restrictions on the use of CMAQ funds for ITS and Transit operations. Allow states to continue to use CMAQ for these projects as long as they continue to demonstrate net air quality benefits.
 - Require obligation of CMAQ funds in PM 2.5 non-attainment and maintenance areas only when it is determined that the non-attainment issue results from transportation activities.
 - Make explicit that technology deployments such as Connected and Automated Vehicles are eligible for funding under CMAQ.

Issue PL-5: Streamline, Simplify and Make Consistent the Development and Updating of the Multitude of Transportation Plan Documents and Performance Based Planning Documents Currently Required of States

- Combines 2-4, 11-9, 10-4 from the compilation of 16 policy white papers
- *Current Federal Policies:*
 - 49 USC Section 70202, *State Freight Plans*
 - 23 USC Section 119, *National Highway Performance Program*
 - 23 USC Section 135, *Statewide and Nonmetropolitan Planning*
 - 23 CFR Section 515, *Asset Management Plans*
- *Issue:* Certain federal surface transportation programs are subject to significant planning requirements and processes. In particular, certain planning documents require a financial plan tied to a certain number of years in the future. For example, the Statewide Transportation Improvement Program (STIP) under 23 USC Section 135 requires a fiscally-constrained four-year program of projects. The State Freight Plan under 49 USC Section 70202 requires a five-year financial plan for the projects listed in it. The asset management plan regulations impose a non-statutory ten-year financial plan requirement for the projects listed in it. Currently, the significant uncertainty associated with federal funding results in the financial planning requirements associated with the STIP, State Freight Plan, and asset management plan have far less value for decision-making with risk and uncertainty being multiplied.

In addition, the new performance management provisions and updated performance-based planning provisions have required state DOTs to develop, update, and modify a host of transportation planning documents. What began with the Intermodal Surface Transportation Efficiency Act (ISTEA) in 1991 simply as a short range plan (STIP) and long range plan (LRTP) has mushroomed into a family of plans that focus on different topics, durations, update cycles, and level of detail. It appears many of these planning documents have now conflated long-term visionary planning documents with short-term implementation plans. For example, several federal plans mandating states must complete are required to be updated every four or five years. These include Freight, Rail, and Safety. In the case of Freight and Rail, the requirements also call for a list of

planned investments over the next four- or five-year period. Freight, for example, required the inclusion of a project list—the same list as a programming document of the STIP. It makes little sense that states are required to list programmed projects in two different places and requires valuable resources (time and money) to develop two different plans with similar information.

- *Recommendations:*
 - AASHTO recommends all financial plan requirements associated with any federally-required plan be consistent with the four-year duration that has been historically required of the STIP. Any longer duration would be at the election of a state DOT.
 - Performance management regulations should be improved to reduce the unfunded mandate burden on state DOTs.
 - Make consistent the duration, updating cycle, and content of numerous planning documents required of state DOTs and eliminate redundancy among these documents.
 - Allow states to consolidate these and other plans as needed and appropriate to reduce the burden.

Project Delivery—Engineering (PEG)

TIER 1

Issue PEG-1: Buy America

- Combines policies 12-8, 4-5, 9-5, and 14-6 from the compilation of 16 white papers
- *Current Federal Policy:* 23 USC 313, Buy America; 23 CFR 635.410, Buy America Requirements
- *Issue:* The Buy America provisions of the Surface Transportation Assistance Act of 1982, 23 USC 313, state that the Secretary of Transportation “shall not obligate any funds authorized to be appropriated to carry out the Surface Transportation Assistance Act...unless steel, iron, and manufactured products used in such project are produced in the United States.” While state DOTs support the tenets of the Buy America Act, they need a more common-sense application of the provisions in law and regulation to ensure project delivery is not delayed. Currently, there is no consistent guidance from FHWA at a national level, which leaves states and FHWA Division Offices to interpret the rules, often varying widely from state to state. Without specific guidance, states can be left with a strict interpretation, meaning that every single nut, bolt, washer, tie wire, etc., has to meet Buy America; and in many cases, the documentation does not exist to track the origins of those items, so states end up spending vast amounts of time on very small items.

In addition, components of specialty equipment used on movable bridges, cranes, ferries, bridge inspection equipment, bridge preservation work, research, etc., often contain parts not produced in the United States, and transportation agencies are not a large enough market to compel the companies producing this equipment to comply with Buy America. In one state, the inability to find American producers combined with the extreme delay in receiving waiver responses has resulted in a shift in focus away from extremely beneficial projects, such as purchasing sweeping and flushing equipment (CMAQ), to other types of work. The effectiveness of the nation’s surface transportation program is dependent on the availability of construction materials and equipment, some of which is sourced through global supply chains; thus, the Administration’s approach to reauthorization needs to address the competing needs of supporting American producers and the impact of increased delays in project delivery and the associated costs in terms of the safety and efficiency of the transportation system.

Another problematic issue is related to the application of Buy America to utility relocations. Buy America should not apply to compensable utility relocations, as relocations are an entitlement provided by CFR. Forcing utility companies to comply with Buy America delays relocations for highway projects because transportation work is a small portion of their business, and many utility companies have existing contracts with national and international suppliers that do not allow them to purchase materials elsewhere.

Also the Buy America requirements have had the unforeseen consequence of limiting DOTs’ abilities to carry out innovative research and testing of preassembled products or equipment not readily available within the United States. The waiver process outlined in the above law and regulation is an impractical burden for the DOTs to carry out and has resulted in less innovative product testing and research. On April 17, 2018 FHWA granted a [Buy America Waiver for 955 vehicles](#) and equipment for 151 state DOT projects requested in 2016. In that waiver, the Agency acknowledged that “...FHWA is aware that in today’s global industry, vehicles are assembled with iron and steel components manufactured all over the world. The Agency also understands the difficulty of identifying vehicles that have 100 percent components made in the U.S.” This same finding could be said for assembled specialty items in the research and laboratory equipment industry.

Finally, the Buy America program mandates, according to 49 CFR 661 (§ 661.13 Grantee responsibility), that all funding recipients of the Federal Transit Administration (FTA) purchasing vehicles must verify that the manufacturer has complied with Buy America program requirements, including pre- and post-award inspections. However, prior to transferring ownership of the vehicle(s), bus manufacturers must also submit to the Model Bus Testing Program or the Altoona Test (49 CFR Part 665).

- *Recommendations:*
 - USDOT should improve the Buy America definition, waiver application, exceptions, policies, and processes to ensure timely consideration and consistent application of the law across the country to reduce costs to state transportation projects.
 - Implement the exceptions to Buy America proposed previously by FHWA in federal rulemaking, and reinstate the waiver process to ensure transportation projects are progressing without significant delays.
 - Implement an exemption from Buy America for utility companies that are required to relocate their facilities as part of a transportation project.
 - Implement an exemption from Buy America for research-related equipment and materials for transportation research projects.
 - Establish a new pilot program that would require the manufacturer to directly provide a single certification to the Federal Transit Administration demonstrating compliance with Buy America and Altoona Test requirements.

Issue PEG-2: Right of Way Acquisition

- Combines 3-5, 12-3, 12-2, 12-20, 13-10 from the compilation of 16 white papers
- *Current Federal Policy:* 23 USC 108; 23 USC 106; 23 CFR 710
- *Issue:* Right-of-way procurement is consistently one of the top reasons for delay in transportation project delivery. While many changes to laws and regulations as part of MAP-21 and the FAST Act have improved and streamlined the acquisition process, additional flexibilities could still provide benefit, including cost savings and delay reductions. Section 108 of Title 23 allows right-of-way to be acquired for a transportation project, under certain conditions, prior to completion of the NEPA process for the project itself. FHWA’s right-of-way regulations (23 CFR Part 710) impose restrictions that are not required by the statute, in particular an absolute prohibition on early acquisition of property protected by Section 4(f)—i.e., any historic property, and publicly owned land within a park, recreation area, or wildlife or waterfowl refuge. This prohibition applies regardless of whether the Section 4(f) status of the property (e.g., its eligibility for the National Register of Historic Places) was known at the time the property was acquired, and the regulations allow no flexibility for FHWA to make exceptions. As a result, inadvertent acquisition of Section 4(f)-protected properties can permanently deprive a project of eligibility for federal funding.
- *Recommendations:*
 - Streamline the right-of-way acquisition process in numerous areas to simplify the process and speed acquisition without compromising the rights of the property-holder, including: allowing state procurement procedures to be used on federal-aid projects; allowing protective purchases with preliminary engineering funding (to be returned if not utilized in final design); increasing the waiver valuation threshold, or removing the threshold with the only qualifier being whether the assignment is complex or not; removing the 4(f) restriction on the Early Acquisition process (23 CFR 710.501) as it will better align itself with the Advance Acquisition process and a 4(f) review will still be conducted through the required acquisition-specific NEPA review; allowing states the option to use the “short form” for appraisals, which is quicker and less expensive.

- New legislative authority should be established for states to voluntarily assume some or all of FHWA's responsibilities for approval of right-of-way acquisitions, subject to the same legal protections that currently apply to the right-of-way acquisition process.
- USDOT should establish a set process and timeline, to include templates or model agreements, for acquiring right-of-way from federal agencies to promote fairness and speed up project delivery.

Issue PEG-3: Reduce Federal Regulation of State Policies and Procedures through Reduction of Requirements, Less Frequent Reviews, and Delegation

- Proposal 12-7 from the compilation of 16 policy white papers
- *Current Federal Policy:* Stewardship and Oversight Agreements
- *Issue:* Attachment B to the standard Stewardship and Oversight Agreement requires FHWA review and approval for many state policies and procedures, such as a state's standard specifications; pavement design policy; value engineering policy and procedures; liquidated damage rates; quality assurance program; and other matters. Attachment B also requires, in some cases, pre-approval of changes in such state policies and procedures even though statute does not call for pre-approval. Many of these FHWA reviews of state policies are annual and many of these requirements, including pre-approval of changes, are not specified by statute. These requirements should be reduced and made on a less frequent basis than annually.
- *Recommendation:* States should be authorized to approve modifications to these procedures without preapproval by FHWA, subject to FHWA's ongoing oversight of the state's compliance with federal requirements. Attachment B's requirements should be reduced by authorizing states to modify their policies and procedures without pre-approval, with review of those changes conducted no more frequently than every two years.

Issue PEG-4: Emergency Relief (ER) Program

- Combines 12-5 and 16-3 from the compilation of 16 policy white papers
- *Current Federal Policy:* 23 USC 125, Emergency Relief; 23 CFR 668, Emergency Relief Program
- *Issue:* Certain federal requirements slow the delivery of projects using Emergency Relief funds in declared emergencies. More flexibility is needed with regard to contract requirements as well as with environmental and right-of-way reviews, as damage is often limited to repair of existing facilities to pre-damage condition, which in essence is replacing a previously-approved project. In addition, requiring a new letting for emergency projects often delays emergency repairs while expecting states to include federal requirements in state-funded projects. Thus, for ER projects, state DOTs should be allowed to change-order all federal requirements into a previously-let, state-funded project that did not contain the federal provisions. Finally, reimbursement of ER funds can be onerous and lengthy.

Current procedures require unnecessarily lengthy and inefficient administrative burdens on states, with reimbursement of ER funds typically taking two to three years. System disruptions are increasing and it is important for the ER program to be structured and administered as efficiently as possible.

- *Recommendations:*
 - Streamline federal requirements for transportation projects related to declared emergencies. Conduct a comprehensive assessment of the ER program to identify where improvements can be made to: 1) allow advance planning for ER project implementation to include a range of project strategies, 2) efficiently administer program funds, and 3) return the system to

functional operation as quickly as possible and provide opportunities to incorporate resilience strategies into project design.

- Allow ER projects to include actions that increase the resilience of the replacement project to future hazards.
- Allow ER funds to be used for actions outside of the right-of-way and/or for other strategies that improve the resilience of the damaged asset and/or facility.
- Allow more flexibility with contract requirements and NEPA review as part of the ER program. For example, emergency projects should receive expedited clearances or waivers for environmental, right-of-way, and railroad certifications in order to recover from a disruption.
- Allow state DOTs to change-order all federal requirements into a previously-let, state-funded project that did not contain the federal provisions. Requiring a new letting for emergency projects often delays emergency repairs, while it is unrealistic to expect states to include federal requirements in state-funded projects.

TIER 2

Issue PEG-5: Roadside Hardware

- Proposal 12-9 from the compilation of 16 policy white papers
- *Current Federal Policy:* FHWA procedures for reviewing crash tests and issuing federal-aid eligibility letters.
- *Issue:* FHWA has proposed to cease issuing federal-aid eligibility letters for roadside hardware as of December 31, 2019. The potential termination of these letters greatly impacts how the state DOTs will approach the certification process going forward. State DOTs are committed to upgrading roadside hardware systems to the latest, safest standards in the Manual for Assessing Safety Hardware (MASH), and to providing a safe environment for errant vehicles on our roadsides. However, as the states and AASHTO have worked to implement a joint agreement made with FHWA in 2015 and meet the deadlines for transitioning to MASH-compliant devices, FHWA has announced that it is stepping back from its traditional role of reviewing crash tests and providing “eligibility letters” for roadside safety hardware. This is a concern for most states, as they have relied on these letters to certify compliance with the crash-test standards. In addition, if individual states took on this role of reviewing and certifying crashworthy devices for use on the nation’s roadways, the result could be as many as 50+ individual interpretations, leading to inconsistencies from state to state and increased costs from manufacturers who must now seek approvals from multiple entities.
- *Recommendation:* Ensure that FHWA continues to oversee the review and approval process for crash testing roadside safety hardware for use on the nation’s road and highway system.

Issue PEG-6: Emergency and Tow Vehicles

- Proposal 12-6 from the compilation of 16 policy white papers
- *Current Federal Policy:* FAST Act, Sec. 1410, Interstate Weight Limits; 23 USC 127, Vehicle Weight Limitations—Interstate System, subsections (m) and (r)
- *Issue:* The FAST Act increased the maximum gross vehicle weight allowance of an emergency vehicle on the Interstate System (and routes that provide reasonable access to the Interstate System) to 86,000 pounds and exempted heavy-duty tow and recovery vehicles (regardless of weight) from Federal Interstate weight limits. These vehicles can create greater load effects in certain bridges than the previous legal loads. If not appropriately rated and posted (i.e., restricted), bridge safety, serviceability, and durability may be compromised by these vehicles. States recognize the safety and mobility benefits of facilitating prompt movement of emergency and tow vehicles. However, in most states these two new weight-limit exemptions are not subject to state permit authority and are

considered “unrestricted” exceptions; thus, every state is now required to reevaluate the load rating for all Interstate bridges (and those that provide access to the Interstate) and post restrictions on those bridges that cannot safely carry these new maximum unrestricted vehicle loads.

An unintended consequence of the FAST Act is that hundreds—or potentially thousands—of bridges *in each state* now must be load-rated for the higher limits and “posted” with any applicable load restrictions. Furthermore, while the provision for emergency vehicles includes a stated maximum gross vehicle weight of 86,000 pounds and requirements as to axle limits, the heavy-duty tow and recovery vehicle provision does not state a weight limit and allows for the unspecified weight of a towing and towed vehicle combined, making it impossible for states to determine how to load rate the bridges and determine which ones must be posted. The unexpected additional costs associated with load-rating and posting thousands of bridges will cause financial burdens on state and local transportation agencies. Additionally, posting load restrictions on thousands of bridges on the nation’s Interstate System (and reasonable access roads) will likely create confusion among drivers that could affect the safety of the traveling public and operators of said emergency and heavy-duty tow and recovery vehicles. If these vehicles were to be subject to state permit authority, states would be able to designate appropriate routes, reducing the number of posted bridges, reducing costs for state and local governments, protecting bridges, and continuing to facilitate prompt movement of emergency vehicles to the scenes of emergencies and prompt clearance of disabled vehicles from roads.

- *Recommendation:* Rescind the FAST Act provisions concerning emergency vehicles and heavy-duty tow vehicles (23 USC 127(m) and (r)) and allow states to accommodate these vehicles as they have done successfully prior to the FAST Act, through real-time permitting or other methods. Another option is to modify 23 USC 127 (m) and (r) to allow states to apply for FHWA authority to use a permit system for subsection (m) and subsection (r) vehicles over 80,000 lbs gross vehicle weight.

Issue PEG-7: Adoption of Public Rights-of-Way Accessibility Guidelines (PROWAG)

- Combines policy issues 1-5 and 12-1 from the compilation of 16 policy white papers
- *Current Federal Policy:* 28 CFR 36
- *Issue:* The Americans with Disabilities Act strives to ensure access to the built environment for people with disabilities. To facilitate this access, the US Access Board is responsible for developing and updating design guidelines known as the ADA Accessibility Guidelines (ADAAG), which focus primarily on facilities. These guidelines are adopted in regulation and used by the US Department of Justice and the US Department of Transportation in setting enforceable standards that the public must follow. However, ADAAG is intended for vertical (buildings and facilities) rather than horizontal (sidewalks and street crossings) construction, which has created uncertainty in transportation agencies regarding ADAAG application. In addition, several state DOTs are being required, as the result of litigation, to implement suboptimal accessibility solutions that were truly intended for buildings, not transportation facilities.

As such, the Access Board determined more than a decade ago that additional guidance was necessary to address conditions and constraints unique to public rights-of-way. The Access Board collaboratively developed guidelines for facilities within the public rights-of-way – the Public Rights-of-Way Accessibility Guidelines (PROWAG) – which address transportation-specific issues, including access for blind pedestrians at street crossings, wheelchair access to on-street parking, and various constraints posed by space limitations, roadway design practices, slope, and terrain. Adoption of PROWAG in regulation would provide transportation agencies with solid, researched solutions for accessibility within their transportation corridors and ensure consistency across the country in the application of accessibility features within the streetscape.

- *Recommendation:* Finalize, in regulation, the Public Rights of Way Accessibility Guidelines (PROWAG).

Issue PEG-8: Federal Bridge Inspection Program Audit

- Proposal 12-4 from the compilation of 16 policy white papers
- *Current Federal Policy:* FHWA Bridge Inspection Program Audit Cycle
- *Issue:* Currently, FHWA performs a formal audit of each state’s Bridge Inspection Program on an annual basis. The state DOTs receive FHWA’s assessment, including compliance ratings for each of the 23 federal metrics, at the end of the calendar year in which the audit was performed. The state DOT response, including Plans of Corrective Action and Improvement Plans, are due back to FHWA in February or March of the following year, meaning the inspection cycle for that year could be as much as a quarter of the way completed by the time corrections are put into place. Such a schedule does not allow sufficient time to implement corrective action before the following year’s audit period commences. If FHWA moved to a two-year audit cycle, state DOTs would have sufficient time to implement Plans of Corrective Action and Improvement Plans before the next audit cycle begins.
- *Recommendation:* Modify FHWA’s audit cycle of states’ bridge inspection programs to two years (or more) to allow time for the meaningful implementation of improvements and corrections recommended in the previous cycle.

Issue PEG-9: Preventive Maintenance

- Combines 12-13 and 12-19 from the compilation of 16 policy white papers
- *Current Federal Policy:* 23 USC 135, Statewide and Nonmetropolitan Transportation Planning, subsection (f)(8); 23 USC 116, Maintenance, subsection (e)
- *Issue:* Including preventive maintenance projects in the STIP and State Transportation Plan slows down the application of maintenance techniques to the road system. Delays caused by the STIP process can lead to pavements deteriorating past the point at which a given maintenance process is a viable improvement.

Under 23 USC 116(e), a state may use Federal-aid highway funds for a preventive maintenance project “if the state demonstrates to the satisfaction of the Secretary that the activity is a cost-effective means of extending the useful life of a Federal-aid highway.” Because this is a statutory requirement, FHWA cannot currently assign to states the authority to determine that a preventive maintenance project qualifies for federal reimbursement.

- *Recommendations:*
 - Allow preventive maintenance projects to be conducted outside the STIP process. Alternately, allow for a general statement of preventive maintenance work in the STIP to promote needed flexibility in applying the most appropriate treatments at the best time and in the best locations.
 - Allow states to assume the authority to determine that a preventive maintenance project meets the applicable criteria for federal reimbursement. This change would require an amendment to 23 USC 116(e).

Issue PEG-10: Relocation of Utilities

- Combines 12-17 and 13-8 from the compilation of 16 policy white papers
- *Current Federal Policy:* 23 USC 123, Relocation of Utility Facilities
- *Issue:* Utility relocations are a common source of delay in project schedules. Utility relocations tend to be time-consuming because they often require other regulatory approvals and involve property acquisition outside the transportation right-of-way. Utility relocations required for FHWA-approved projects also become subject to Buy America requirements, which may create further delays if

compliant products are not readily available. In addition, utility relocations require extensive coordination and agreement with the utility companies, which generally are responsible for carrying out the relocations. To avoid project delays, it would be highly beneficial to allow utilities to begin relocating utilities before the NEPA process for the transportation project is complete. However, under FHWA's NEPA regulations, construction work on the project, including the utility relocations, generally is not allowed to begin until after the NEPA process is completed. 23 CFR 771.113(a.)

- *Recommendation:* Direct FHWA to amend its NEPA regulations to allow utility relocations to begin prior to NEPA completion, with appropriate limitations to ensure the integrity of the NEPA process, and allow federal funds to be used for such relocation. Appropriate limitations would include (1) treating the utility relocation as a separate federal action, so that it's subject to its own NEPA review before the utility relocation occurs; (2) allowing the utility relocation to occur only after a preferred alternative has been identified in the NEPA process for the transportation project, and prohibiting the utility relocation itself from being considered as a factor in approving an alternative; and (3) if federal funds are used for the utility relocation, requiring the state to reimburse those funds to FHWA if the transportation project is not approved and implemented within a defined time period (e.g., 20 years). This flexibility would apply to a utility relocation using an Environmental Impact Statement, Environmental Assessment, or Categorical Exclusion.

Issue PEG-11: Coordination with Railroads

- Proposal 12-15 from the compilation of 16 policy white papers
- *Current Federal Policy:* 23 CFR Part 646, Subpart B, Railroad-Highway Projects
- *Issue:* Restrictions and delays imposed on transportation agencies by railroad owners, either intentionally or unintentionally, significantly affect the timely delivery of public works projects, including pedestrian, bicycle, road and highway projects. Obtaining fair and equitable railroad agreements as well as ensuring the commitments are made in a timely manner are often a struggle and adds time and cost to these projects.
- *Recommendation:* Establish, or authorize USDOT to establish, consistent requirements, commitments, and timeframes across all public and private railroad owners to facilitate transportation work within and across railroad rights of way, and provide USDOT the authority to enforce those provisions with the railroads. Require USDOT to establish template/model agreements for standard activities conducted by the state DOTs in railroad right-of-way (and vice versa), and provide guidance on the establishment of agreements for special or more complex activities.

Issue PEG-12: Drones/Unmanned Aircraft Systems (UAS)

- Proposal 12-16 from the compilation of 16 policy white papers
- *Current Federal Policy:* 14 CFR 107, Small Unmanned Aircraft Systems
- *Issue:* Current restrictions on the use of drones are impeding the development of significant potential beneficial uses in such areas as preliminary design, right of way, bridge inspection, safety, and operations. The full potential of this continually evolving technology is not being realized, in part because regulation is unable to keep pace with the developing technology. Current restrictions include where and when drones can be flown, the amount of pre-planning needed, and the inability to fly over traffic. An example of a currently restricted use is the documentation of a crash site, which would allow for quicker clearing of the incident and potentially reduce secondary crashes.
- *Recommendation:* Expand flexibilities for transportation agencies to use drones in broader applications and with fewer restrictions when reasonable safety measures can be accommodated to help realize the full potential of this continually evolving technology.

Issue PEG-13: Outdoor Advertising: Nonconforming Signs

- Proposal 12-11 from the compilation of 16 policy white papers
- *Current Federal Policy:* 23 CFR 750.707, Nonconforming Signs, subsections (d)(3) and (d)(5)
- *Issue:* Typically, when a highway project necessitates the relocation of an outdoor advertising sign (i.e., billboard), the sign is allowed to be moved perpendicularly off the right-of-way using relocation assistance funds. This move does not require a new outdoor advertising permit, and the sign owner is “made whole.” However, under current federal regulations, “nonconforming signs” (e.g., billboards greater than 825 sq. ft.) are treated differently and cannot be similarly moved. Rather, for nonconforming signs, a new *conforming* location has to be found or just compensation (i.e., paying for the “total loss” of the sign) must be paid to the permit holder. This is a time-consuming, costly, and contentious process: and the cost of nonconforming sign removal can be in the hundreds of thousands of dollars. In addition, for signs on a Scenic Byway or All American road, the law doesn’t allow for reconstruction or relocation, only maintenance and upkeep. The unintended consequence is that federal law is protecting these nonconforming signs, which are personal property of private companies, essentially in perpetuity. However, case law indicates that outdoor advertising sign permits are a privilege, not a right, and there is no fundamental right for them to be seen from the Interstate. Thus, the solution is to change the above-mentioned federal regulations to allow for the movement of a nonconforming sign perpendicularly off the right-of-way by indicating that such movement is not considered a “new location” (since the mile marker does not change) and that the sign can only be moved in-kind, hence preserving their nonconforming structure status. This would allow highway projects to move forward at less cost.
- *Recommendation:* Revise federal law/regulation to allow the relocation of nonconforming billboards to essentially the same “location” perpendicular to the right-of-way, with permission from the landowner, when impacted by a highway project.

Issue PEG-14: Outdoor Advertising: Bonus Act Program

- Proposal 12-12 from the compilation of 16 policy white papers
- *Current Federal Policy:* 23 USC 131, Control of Outdoor Advertising, subsection (j); 23 CFR 750.713, Bonus Provisions
- *Issue:* There are 23 state DOTs that must still comply with the antiquated outdoor advertising control regulations of the Bonus Act of 1958. The Bonus Act is incongruent with the Highway Beautification Act (HBA) in many aspects and disrupts national uniformity in the erection and maintenance of outdoor advertising of signs/displays in areas adjacent to the Interstate: a basic program objective of the HBA. Applying the tenets of the Bonus Act often requires a state DOT to regulate outdoor advertising on sections of roadway that are no longer state highways. Additionally, the relocation of outdoor advertising signs as a result of highway projects within those sections of roadway that have been transferred to the local jurisdictions cost federal dollars to relocate and compensate for loss. States that voluntarily participated in the Bonus Act (for an additional ½ of 1 percent of funding) are currently afforded only one avenue of exit from the program: the repayment of federal funds received during the early years of the program, as is stated in Bonus Act agreements signed between state DOTs and FHWA. It is understood that an FHWA Division Office administrative waiver could nullify the Bonus Act stipulations on a case-by-case basis (unless a nationwide blanket waiver was issued). However, it is recommended that federal law and regulations be amended so that the remedy would apply to all states seeking an exit from the Bonus Act agreement, which is outdated and causes problems for state DOTs in their regulation and control of outdoor signs along the Interstate.

- *Recommendation:* Allow states to exit the Bonus Act Program without penalty. The following sections should be amended:
 - Section 131(j) of Title 23, United States Code, should be amended by striking “shall be entitled to receive the bonus payments” and all that follows through “provided in this section” and by inserting “shall no longer be bound by such agreement.”
 - 23 CFR 750.713 should be amended by striking § (j) and by inserting, “Specifically provides that any state which had entered into a bonus agreement before June 30, 1965, will no longer be bound by such agreement.”

Project Delivery—Environmental Protection (PEP)

TIER 1

Issue PEP-1: Make All Categorical Exclusions Available for Use by Any Federal Agency

- Proposal 13-3 from the compilation of 16 policy white papers
- *Issue:* Under current NEPA regulations, each federal agency adopts its own list of categorical exclusions (CEs) applicable to actions that the agency carries out. If multiple federal agency approvals are needed for the same project, and only one agency has an applicable CE, then that agency can issue as CE, but the other federal agencies must prepare an EA - slowing down the process unnecessarily. An existing law—49 USC 304—allows any USDOT agency to use any other USDOT’s agency’s CE, but this authority has two important limitations: (1) applies only to “multimodal projects,” which are defined as projects that require approval from two or more USDOT agencies, and (2) it does not apply to agencies outside the USDOT. These restrictions are unduly limiting.
- *Recommendation:* Amend 49 USC 304 or enact new legislation authorizing any federal agency to apply a CE that had been adopted by any other federal agency; this authority would make CEs interchangeable among all federal agencies. For example, the Corps could apply a CE from FHWA’s CE list. If this change is not made, Congress should at least amend 49 USC 304 to allow any USDOT agency to use any other USDOT agency’s CE, regardless of whether the project is “multimodal.”

Issue PEP-2: Establish Project Delivery Innovation Pilot Program

- Proposal 13-7 from the compilation of 16 policy white papers
- *Issue:* The NEPA process requires compliance with a host of other federal environmental laws, each of which is implemented by separate regulations, under the jurisdiction of different agencies. Streamlining the NEPA process alone will not be successful without also streamlining compliance with the other federal laws that also must be addressed as part of the same process. Yet efforts to amend or improve those other laws have not been successful, at least to date. Because other federal environmental laws are subject to complex and prescriptive regulations, agencies are highly restricted in their ability to even consider innovative practices that could yield “win-win” solutions for infrastructure development and the environment. One possible solution is to borrow from the “SEP-15” model used by FHWA - an experimental program that allows the agency to waive certain requirements on a project-specific basis as a way to test innovative approaches, which can inform future changes to the agencies’ regulations. This same flexibility should be provided to other agencies.
- *Recommendation:* Establish a pilot program, modeled on SEP-15, that would allow USDOT modal administrations and federal environmental agencies to waive or otherwise modify their own requirements to develop innovative practices to streamline project delivery and achieve positive environmental outcomes. The flexibility provided under this framework would include appropriate safeguards—including interagency consultation and public notice and involvement—to ensure adherence to federal environmental laws, regulations, and policies. For example, all federal agencies required to consult on a project would need to agree to the inclusion of the project in the pilot program, consulting resource agencies would need to determine that equal or improved environmental outcomes would be achieved, and no agency would be allowed to override or modify requirements that fall within another agency’s authority.

Issue PEP-3: Allow Programmatic Air Quality Conformity Determinations

- Proposal 13-12 from the compilation of 16 policy white papers
- *Issue:* Currently, air quality conformity determinations must be made when an MPO updates or amends its plan or TIP, regardless of whether the changes being made are likely to have any material effect on air quality. In addition, conformity determinations are required for every project (with the exemption of certain ‘exempt’ projects), even when there is no realistic chance that the project will cause the region to violate applicable air quality standards.
- *Recommendation:* Direct EPA to amend the transportation conformity regulations (40 CFR Part 93) to allow USDOT, in consultation with EPA, to make programmatic conformity determinations that can be relied upon as the basis for demonstrating conformity for individual plans, programs, and projects. The programmatic conformity determinations could be made at a national, state or local level. Conditions could be specified in the regulations so that the programmatic determinations can be used only for plans, programs, and projects that meet specified criteria. If emissions budgets are exceeded, the state and MPO would need to resume making individualized conformity determinations.

Issue PEP-4: Require Air Quality Conformity Only for the Current Air Quality Standards

- Proposal 13-11 from the compilation of 16 policy white papers
- *Issue:* As required by the Clean Air Act, the EPA periodically reviews and updates the National Ambient Air Quality Standards (NAAQS), typically by replacing an old standard with a new, more stringent standard. When a new NAAQS is adopted, EPA issues rules for transitioning to the new standard. In a recent court decision, *South Coast v. EPA*, the U.S. Court of Appeals struck down an EPA rule that provided for the transition from the 1997 ozone standard to the stricter 2008 standard. The court held that even though the 1997 standard had been revoked and replaced by a stricter standard, states and MPOs were still required to continue making conformity determinations for the revoked 1997 standard. This decision will result in wasteful effort of demonstrating conformity to plans for achieving an air quality standard that has already been met.
- *Recommendation:* Require that when a new standard is established for a pollutant, transportation agencies only need to conform to the most recent standard for that pollutant. This would require an amendment to 42 USC 7506.

TIER 2

Issue PEP-5: Enhance Role of Lead Agency in Managing the NEPA Process

- Proposal 13-1 from the compilation of 16 policy white papers
- *Issue:* Section 139 requires lead agencies to prepare a “coordination plan” when an Environmental Impact Statement (EIS) or Environmental Assessment (EA) is prepared and requires the plan to include a “schedule for completion of the environmental review process for the project.” Section 139 requires both the initial schedule and any changes that “shorten” the schedule to be adopted by the lead agency with “concurrence” of all participating agencies and the project sponsor. As amended by the FAST Act, Section 139 now also requires the “status and progress” of all projects requiring an EA or EIS to be posted on the Permitting Dashboard; this requirement ensures that a current schedule showing key project milestones is posted on the Dashboard.
- *Recommendation:* Eliminate the requirement to obtain “concurrence” from other agencies in project schedules, and clarify that posting on the Dashboard satisfies the requirement to maintain and update the project schedule under Section 139. Retain the existing requirement for lead agencies to consult with participating agencies and the project sponsor in setting the schedule, for project schedules to be consistent with applicable legal requirements, and for schedules to be

posted on the Dashboard. If disagreements arise about schedules, they can be resolved through elevation to the Council on Environmental Quality (CEQ) and/or the Permitting Council. These changes will help to ensure efficiency, flexibility, and transparency in setting project schedules, while minimizing the risk of bogging down the process over scheduling issues.

Issue PEP-6: Section 404 of the Clean Water Act: Allow Delegation of Section 404 Permitting Authority for Transportation Projects

- Proposal 13-19 from the compilation of 16 policy white papers
- *Issue:* Under existing law, the Corps is responsible for issuing Section 404 permits, subject to EPA's oversight and veto authority. The Corps has authority to delegate its permitting responsibilities to a state, but this is an all-or-nothing proposition; the state's only option is to take on the entire program, a major burden. As a result, most states are reluctant to take on this responsibility (to date, only New Jersey and Michigan have done so). By contrast, the NEPA assignment program established under 23 USC 327 allows FHWA to assign all or a portion of its environmental responsibilities within a state; the scope of assignment under that program is determined by negotiation between FHWA and the state. To date, six states are participating in the NEPA assignment program and several more are considering it. The flexibility allowed under the NEPA assignment program should be extended to the Section 404 program.
- *Recommendation:* Allow delegation of Corps permitting responsibility to a state department of transportation for a subset of projects or activities as agreed by the Corps and the state, e.g., just for transportation projects. Providing this flexibility would encourage states to take over Section 404 permitting for at least a portion of the projects currently handled by the Corps, reducing the burden on the Corps' staff, while also promoting greater efficiency in the processing of permits for major public projects.

Issue PEP-7: Provide a Framework for Exempting Endangered Species Act Projects with Minor Effects

- Proposal 13-21 from the compilation of 16 policy white papers
- *Issue:* Section 7 of the ESA requires consultation for all federal actions with the potential to affect threatened and endangered species, and Section 10 of the ESA prohibits the taking (including incidental taking) of endangered species without a permit or incidental take authorization provided through Section 7 consultation. The existing statute and regulations do allow for exemptions or categorical determinations to be made for routine projects with minor impacts. By contrast, such flexibility is provided under other environmental laws - for example, Categorical Exclusions under NEPA and findings of *de minimis* impact under Section 4(f). Similar flexibility can be achieved through Programmatic Agreements under the ESA, but the negotiation of PAs is a lengthy process and where PAs exist, they often do not cover all of the species affected by a particular project.
- *Recommendation:* Amend 16 USC 1536 to require the Services to establish activities-based exemptions from the ESA, which would avoid the need for Section 7 consultation and incidental-take permits for specific types of routine activities, such as road maintenance projects. The availability of such exemptions could be limited to projects carried out by public agencies, such as state DOTs, where the state has committed to participate in ecosystem-scale efforts to protect and promote recovery of listed and other sensitive species.

Issue PEP-8: Allow Alternatives to Providing "Replacement Parkland" under Section 6(f)

- Proposal 13-16 from the compilation of 16 policy white papers
- *Issue:* Section 6(f) and Land and Water Conservation Fund Act (LWFC) prohibits the conversion of property acquired or developed with LWCF grants to a non-recreational purpose without the

approval of the National Park Service. Section 6(f) further directs NPS to approve such conversion only if the converted area is replaced with parkland of equal fair market value, location, and usefulness. These Section 6(f) requirements apply to the entire park for which an LWCF grant was received, even if the grant was used only for a small portion of the park. Consequently, where conversions of Section 6(f) lands are proposed for highway projects, no matter how small the conversion, replacement lands are necessary. Often, local officials would prefer for the state to make improvements to the existing property rather than finding replacement property, which could be at a different site; however, Section 6(f) specifically requires replacement parkland.

- *Recommendation:* Amend Section 6(f) of the LWCF to allow flexibility for a public agency acquiring Section 6(f)-protected parkland to compensate for those impacts through enhancements to the existing park or other enhancements acceptable to the parkland owner. This mitigation method would still require approval of the National Park Service; but would simply allow broader flexibility as to the method used to compensate for impacts to parkland.

Issue PEP-9: Require Interim Guidance to Be Issued at Time of Species Listing, and then a Full Recovery Plan

- Proposal 13-10 from the compilation of 16 policy white papers
- *Issue:* The ESA requires recovery plans for all species listed as threatened or endangered. However, for most listed species, recovery plans are out of date or have not been developed. This creates numerous challenges for project sponsors in addressing threatened or endangered species as there is no guidance regarding species recovery goals or acceptable mitigation tools.
- *Recommendation:* Amend 16 USC 1533 to require Fish and Wildlife Services (FWS) and National Marine Fisheries Service (NMFS) to issue interim guidance at the time of listing of a threatened or endangered species, and then to issue a full recovery plan within 12 months of listing. The interim guidance would include general species recovery goals and acceptable species survey protocols and mitigation. The Services, federal action agencies, and project sponsors would be required to use the interim guidance in making effect determinations and in determining appropriate measures to avoid, minimize, and mitigate for impacts to the species. The interim guidance would remain in effect until the full recovery plan is developed and approved.

Issue PEP-10: Allow Programmatic Approach to Compliance with Section 404(b)(1) Guidelines

- Proposal 13-18 from the compilation of 16 policy white papers
- *Issue:* Section 404 of the Clean Water Act requires the U.S. Army Corps of Engineers to comply with EPA regulations—the “Section 404(b)(1) Guidelines”—when issuing Section 404 permits authorizing projects that impact wetlands and other waters under the Corps’ jurisdiction. The Guidelines require, among other things, that the Corps only issue a permit for the practicable alternative that causes the least impact to aquatic resources; this is the so-called ‘LEDPA’ requirement. In practice, inter-agency disagreements over interpretations of the LEDPA requirement are a frequent source of project delays. When applied rigidly, this requirement can effectively force the choice among alternatives to be based solely on small differences in wetland impacts, rather than a comprehensive and balanced comparison of impacts on all types of natural resources and communities.
- *Recommendation:* Create an alternative process allowing approval of Section 404 permit for a surface transportation project to be approved pursuant to programmatic agreement with a state that ensures no-net-loss at watershed level, in lieu of making a LEDPA determination at the project level.

Issue PEP-11: Allow Project Sponsors to Serve as “Non-Federal Representatives” in Formal Consultation

- Proposal 13-22 from the compilation of 16 policy white papers
- *Issue:* Section 7 of the ESA allows a “designated non-federal representative,” typically the project applicant, to “conduct informal consultation and/or to prepare any biological assessment” on behalf of the federal action agency. See 50 CFR 203.02 and 402.08. This designation allows a project applicant, such as a state DOT, to initiate the Section 7 consultation process and perform much of the work that would otherwise need to be conducted by the federal action agency, such as FHWA. Under current regulations, the designated non-federal representative’s role is limited to informal consultation. This constraint creates inefficiencies with no offsetting benefits. Federal agencies should have the flexibility to designate a non-federal representative to serve during both informal and formal consultation.
- *Recommendation:* Direct the Services to amend the Section 7 regulations to allow a “designated non-federal representative” to act on behalf of the federal action agency during both informal and formal consultation. This change would promote streamlining by ensuring continuity in agency relationships throughout the consultation process rather than forcing a mid-course change when the process transitions from informal to formal consultation. It would also avoid bottlenecks that can occur when the federal agency’s staff resources are limited, or where officials with necessary expertise are not located in the project area. This change would not alter the Services’ role; it would simply allow a project applicant to consult directly with the Service in all stages of consultation rather than force the federal action agency to serve as an intermediary.

Issue PEP-12: Section 404 of the Clean Water Act: Streamline Section 404 Compliance for Routine Road Maintenance Activities

- Proposal 13-17 from the compilation of 16 policy white papers
- *Issue:* Many transportation projects require permits under Section 404 of the Clean Water Act for the discharge of dredged or fill material into “waters of the United States.” Section 404 permitting requirements can be a significant burden on transportation project development, especially for minor maintenance and construction activities that only impact man-made wetlands located adjacent to roads.
- *Recommendations:* Expand exemptions from Section 404 permitting for routine maintenance projects with minor impacts and streamline the use of Nationwide Permits for projects that remain subject to Section 404 as follows:
 - Clarify and expand exemptions in the Corps’ regulations (33 CFR Part 325) for activities involving maintenance and/or construction of roadside ditches, emergency activities, and impacts on wetlands within the highway median or operational right of way.
 - Expand opportunities for using non-reporting national and regional permits to greatly reduce timeframes for obtaining Section 404 permits.
 - Modify permitting requirements so that projects that require a relocation of a roadside ditch that also carries a Water of the US will not require mitigation above and beyond the replacement of the roadside ditch, assuming no loss of channel occurs.

Research and Innovation (RI)

TIER 2

Issue RI-1: Increase Research, Technology & Education Program Funding Levels

- Proposal 14-1 from the compilation of 16 policy white papers
- *Current Federal Policy:* The FY 2018 funding request for the Federal Research, Technology & Education Program (RT&E) was [\\$418 million, which is the same amount requested for FY 2017](#), and is a slight increase from FFY16's \$415 million. The program is anticipated to remain constant for FY 2019 as well, essentially representing a reduction in overall program funding due to inflation and other cost increases. *23 U.S.C 505(b)(1) Minimum Expenditures on Research, Development, and Technology Transfer Activities* establishes funding for state research programs, separately from the abovementioned federally-managed RT&E funded programs, by mandating a minimum of 25 percent of each state's SP&R funding be dedicated to their respective research programs.
- *Issue:* The FAST Act reduced the flexibility of MAP-21 funding by designating three new efforts to be funded from several federal research funding sources, including Highway Research and Development (R&D) funds, the Technology and Innovation Deployment Program (TIDP), and/or the Intelligent Transportation Systems Research program. These efforts include:
 - A competitive grant program to deploy advanced transportation and congestion management technologies (\$60 million per year), which is a competitive grant program open to local agencies and research institutions;
 - Competitive grants to states to demonstrate user-fee-based alternative revenue mechanisms to ensure the long-term solvency of the Highway Trust Fund ([STSFA](#) \$15 million in FY 2016, \$20 million per year thereafter); and
 - [A study by the Transportation Research Board on needed upgrades and repairs to the Interstate Highway System](#) to meet the demands of the next 50 years (up to \$5 million for FY2016).

In addition, USDOT is authorized to use up to \$10 million per year to develop, use, and maintain datasets and data analysis tools to assist state and Metropolitan Planning Organization performance management activities. (This was requested in the GROW AMERICA legislative proposal from the Obama Administration, but was not intended to be funded from R&D.)

Because these new activities are mandated in the research title of the FAST Act without a commensurate increase in the overall funding, funding for existing federal research programs have effectively been reduced. After accounting for the three research funding emphasis areas newly specified by Congress, the FAST Act reduces the level of discretionary funding in the R&D, TIDP, and ITS programs by approximately 25 percent, or from about \$292.5 million per year to about \$232.5 million per year.

Assuming the Advanced Transportation and Congestion Management Technologies Deployment Program (ATCMTD) is continued, \$678 million per year (including five percent average annual inflation projected to 2024) is necessary for state DOTs to participate in research and advancing technology solutions to support and improve the transportation system at state and local levels. If the other two suballocated programs are reauthorized, then additional funding would be needed to administer these programs.

If the national formula funding were to change in the future, the impacted SP&R funds would need to be accounted for in another way in order to maintain the overall minimum amount of \$678 million necessary for the RT&E program.

- *Recommendations:*
 - Maintain the State Planning and Research program in its current, formula-based configuration and continue the 25 percent set-aside for research, development, and technology transfer

activities in order for state DOTs to continue their commitments to research and implementation of innovative transportation technologies and processes across the country.

- To maintain the current level of effort for federal RT&E programs, a budget level consistent with the current proportioning of funding is requested. Specifically, to account for inflation, reduced program flexibility, and increased project delivery costs since FY2016, a minimum budget of \$678 million per year for RT&E is requested.

Issue RI-2: Recommend Third Strategic Transportation Research Program

- Proposal 14-5 from the compilation of 16 policy white papers
- *Current Federal Policy:* The Strategic Highway Research Program (SHRP) and SHRP2 were widely supported national research efforts with no future Strategic Transportation Research program mandated going forward.
- *Issue:* Since the early 1980s, Congress has mandated two national studies of strategic highway transportation research needs. The original SHRP was initiated in response to a 1986 TRB Special Report titled *America's Highways: Accelerating the Search for Innovation*. This five-year, \$150 million program focused on highway infrastructure needs for better materials and asphalt mixes, longer-life pavements, cost-effective maintenance procedures, and chemical control of snow and ice on highways. This program has a major positive impact on our ability to construct and preserve the nation's roadway infrastructure.

In 2001, TRB once again responded to a Congressional mandate and published *Strategic Highway Research – Saving Lives, Reducing Congestion, and Improving Quality of Life*. The resulting SHRP2 looked at cost-effective ways to preserve infrastructure but ventured more into operational changes that would provide safer roads with adequate capacity and reliable travel times. Resulting products from SHRP2 included: cost-effective bridge designs for faster, longer-lasting replacement; pavement preservation techniques for high-traffic roadways; methods to improve operations and extend highway capacity; innovative strategies for managing large, complex projects; behavioral studies for safer transportation facilities; and training for fast, multi-agency incident response. A large-scale implementation effort ensured that the state DOTs would benefit from these research results.

In 2018, as technology is rapidly changing and impacting transportation more than ever, it is time to take the next step forward and address the major issues that are affecting the transportation system today in order to adapt and fully integrate technology and innovation into the transportation network. Potential focus areas include: advancing connected and autonomous technologies; incorporating safety-related technologies; addressing infrastructure resiliency; and meeting the needs of multimodal connectivity.

- *Recommendation:* AASHTO recommends Congress allocate \$1 million for scoping a third Strategic Transportation Research Program.

Safety (SF)

TIER 1

Issue SF-1: Allow Non-infrastructure Eligibilities under the Highway Safety Improvement Program

- Combine 1-4, 14-2, 15-1, and 16-4 from the compilation of 16 policy white papers
- *Current Federal Policy:* 23 USC 148
- *Issue:* The FAST Act (Section 1113) restricted Highway Safety Improvement Program (HSIP) eligibility and eliminated the ability to use HSIP funds for public awareness, education efforts, infrastructure and infrastructure-related equipment to support emergency services, and enforcement of traffic safety laws that are identified in the states' Strategic Highway Safety Plans. Also, preventative actions that reduce the risk of future disruptions should be eligible for HSIP funding. These changes are inconsistent with the intent of state Strategic Highway Safety Plans, which contain a multidisciplinary approach to reducing fatalities and serious injuries on all public roads. There should also be additional flexibility to use HSIP funds for experimental, temporary installations such as testing the viability of protected active transportation lanes. The lack of flexibility in safety project selection in the HSIP program, particularly non-infrastructure related activities, stifles innovative safety improvements that lead to crash reductions and reduced highway fatalities.
- *Recommendations:*
 - Allow states to use a portion of HSIP funds for non-infrastructure safety programs such as behavioral efforts, public awareness, education, enforcement, research, improving system resilience, and pilot or experimental projects.
 - Allow HSIP funds to be used for experimental, temporary installations such as testing the viability of protected active transportation lanes.

TIER 2

Issue SF-2: Opportunity to Take Corrective Action

- Proposal 15-3 from the compilation of 16 policy white papers
- *Current Federal Policy:* Financial penalties for noncompliance with federal requirements are imposed without an opportunity for states to enact legislation that corrects the issue.
- *Issue:* Injuries and fatalities associated with driving under the influence continues to be a serious concern, which is why states continue to strengthen state laws and policies to effectively address impaired driving. Failure to adhere to those specific federal requirements can result in a significant financial penalty against the state highway program. Due to the complexity of federal laws and regulations, coupled with the nuances associated with state laws, states can inadvertently fall out of compliance with federal requirements. Administration of current federal regulations neither provides states with informed advanced notification, nor an opportunity to take corrective action prior to imposition of financial penalties. As a result, states may not be aware of compliance issues and are unable to take corrective action before penalties are applied.
- *Recommendation:* Provide states with a reasonable opportunity to take corrective action to bring themselves back in compliance with federal impaired driving requirements prior to the imposition of financial penalties to the state highway program.

Issue SF-3: Data Protection

- Proposal 15-2 from the compilation of 16 policy white papers
- *Current Federal Policy:* 23 USC 409 does not explicitly protect safety partner agencies from discovery when coordinating with the state DOT to analyze and report safety data.
- *Issue:* Under changes outlined by MAP-21 and the FAST Act for US 23 148, state highway agencies are required to work with other state and regional safety agencies and organizations in the development of the Strategic Highway Safety Plans, Highway Safety Improvement Programs, and safety performance targets. This differs from the past. The entities include, but are not limited to Highway Safety Offices, transit agencies, partner safety organizations (e.g., health data and safety data linkages) and Metropolitan Planning Organizations. To adequately perform analyses and identify and prioritize safety improvements, data from multiple disciplines, including public health, must be incorporated. 23 USC 409 does not currently provide protection from discovery for the agencies that state DOTs will collaborate with. It is assumed the privilege does already exist, but without specific language in the code or guidance from FHWA, state DOTs' ability to collaborate on analyzing and reporting safety data as openly as possible among the numerous safety partners will be limited. Similarly, this issue exists with data used for public transportation agency safety plans.
- *Recommendation:* Explicitly protect partner agencies' data from discovery when used for safety analysis, reporting, and implementation of safety programs. The intent of this proposed clarification is not to limit availability of data to the general public. Suggested wording:

Notwithstanding any other provision of law, reports, surveys, schedules, lists, or data compiled or collected for the purpose of identifying, evaluating, ~~or~~ planning or reporting the safety enhancement of potential accident sites, hazardous roadway conditions, or railway-highway crossings, pursuant to sections 130, 134, 135, 144, and 148 of this title or for the purpose of developing any Strategic Highway Safety Plan, Highway Safety Improvement Program or highway safety construction improvement project which may be implemented utilizing Federal-aid highway funds shall not be subject to discovery or admitted into evidence in a federal or state court proceeding or considered for other purposes in any action for damages arising from any occurrence at a location mentioned or addressed in such reports, surveys, schedules, lists, or data. This bar to discovery and admissibility shall apply even if such information was originally created or held by an entity for some other purpose.

Transportation System Security and Resilience (TSSR)

TIER 2

Issue TSSR-1: National Transportation System Security and Resilience Plan

- Proposal 16-1 from the compilation of 16 policy white papers
- *Current Federal Policy:* None
- *Issue:* Federal legislation has required the development of a National Freight Plan, a National Aviation Plan and a Critical Infrastructure Protection Plan, but no national plan exists for transportation system security or resilience. The intent of such a plan would be to identify the risks to the nation's transportation system from a range of sources, the types of physical, operational, institutional and technology strategies that might be considered by national and state transportation agencies, the effect of those strategies on improving the efficiency and effectiveness of the transportation system, and recommendations on how such strategies can be funded.
- *Recommendation:* USDOT, DHS and other relevant agencies should be directed, in collaboration with states, transportation system operators, local jurisdictions and users of the transportation system, to develop a National Transportation System Security and Resilience Plan. This plan should identify the major natural and human-caused threats to transportation system performance; the limitations current laws and rules impose on addressing security and resilience; the institutional structure for planning and designing for, responding to and recovering from disruptions; proposed analysis methods that could be used by transportation agencies to assess vulnerabilities and risks; and the types of strategies to enhance system resilience. The Plan would not impose requirements upon states or authorize any federal official to impose requirements upon states, but would be available to state DOTs for their consideration as they implement federal transportation planning statutes and rules.