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Whereas, America is poised to dramatically improve the national transportation network in ways that will improve the safety, mobility, health, and economic well-being of all Americans;

Whereas, From the very beginning of our developing nation, we have valued investment in our surface transportation infrastructure, starting with rivers, harbors, and post roads, and later taking major leaps through canals, the transcontinental railroad, and the Interstate Highway System;

Whereas, A safe, well-functioning, and resilient system is the foundation of a strong economy and quality of life benefits such as access to employment, education, recreational, and health services opportunities;

Whereas, Ensuring safety of Americans using our surface transportation system remains the foremost priority for each state department of transportation (state DOT), as 36,750 lives lost on our roadways and work zones in 2018—including pedestrians and users of motorized and non-motorized vehicles—is wholly and totally unacceptable;

Whereas, Every action that state DOTs take serves to provide the highest possible quality of life for all Americans by improving access, public health, and both built and natural environments;

Whereas, State DOTs strive to deliver the most effective and efficient surface transportation system that strengthens and grows the economy by increasing productivity, enhancing jobs and labor market accessibility, opening new markets for businesses, and optimizing supply chain efficiency for freight movement; and

Whereas, It is the interconnected national transportation system—with states as a principal owner and operator of a multimodal surface transportation infrastructure—that has enabled the United States to become the most vibrant and powerful nation in history; now, therefore, be it

Resolved, That AASHTO’s vision for policy recommendations are founded upon transportation serving as the key enabler for a higher purpose: to provide the safest system possible, highest possible quality of life, and most robust economic opportunities for every American;

Resolved, That a well-funded, multiyear surface transportation reauthorization on time by September 30, 2020, is absolutely necessary to actualize AASHTO’s reauthorization goals that serve Americans; and

Resolved, That given the strong bipartisan support from the American public for robust infrastructure investment, it is time for the President and Congress to take bold action on this consensus national priority.
AASHTO supports the following core policy principles for reauthorization of highway, transit, and other surface transportation programs:

1. **Ensure timely reauthorization of a long-term federal surface transportation bill**
   - Funding stability provided by federal transportation programs is absolutely crucial to meet states’ capital investment needs, which take multiple years to plan and construct.
   - A long-term transportation bill is needed so that there is no authorization gap upon FAST Act expiration in September 2020. Short-term program extensions cause unnecessary program disruptions and delays safety and mobility benefits to states and communities.

2. **Enact a long-term, sustainable revenue solution for the Highway Trust Fund**
   - Ensuring Highway Trust Fund solvency in supporting a six-year federal surface transportation bill that simply maintains current FAST Act funding levels, will require approximately $100 billion in additional revenues for the Highway Trust Fund.
   - To achieve a state of good repair, USDOT’s 2015 Conditions and Performance Report estimates highway and bridge needs at $836 billion and transit needs at $90 billion, which would require significant additional investment.
   - Federal funding solutions can draw upon the experience of 31 states that have successfully enacted transportation revenue packages since 2012.

3. **Increase and prioritize formula-based federal funding provided to states**
   - The current federal highway program optimally balances national goals with state and local decision making.
   - Formula-based transportation funding reflects the successful federal-state partnership by ensuring the flexibility necessary for each state to best meet its unique investment needs.
   - Congress should increase the formula-based program’s share of the Federal-aid Highway Program from 92 percent currently in the FAST Act.

4. **Increase flexibility, reduce program burdens, and improve project delivery**
   - Increase programmatic and funding flexibility to plan, design, construct and operate the surface transportation system.
   - Reduce regulatory and programmatic burdens associated with federal programs that are not part of the project approval process.
   - Modernize Clean Water Act, Clean Air Act, and Endangered Species Act processes to improve transportation and environmental outcomes and reduce delays.
   - To streamline and improve project delivery, states should be provided with opportunities to assume more federal responsibilities and the associated accountability.

5. **Support and ensure state DOT’s ability to harness innovation and technology**
   - Innovative approaches and technologies should be embraced to achieve a safer and more resilient, efficient and secure surface transportation system.
   - State DOTs, as infrastructure owners and operators, need the 5.9 GHz spectrum for transportation safety and connected vehicle deployment purposes.
   - Preserve state and local government authority to regulate operational safety of autonomous vehicles.
• Preserve state and local government authority to responsibly manage data collected from transportation technologies.
Whereas, Ensuring safety of the public we serve remains the foremost priority for every state department of transportation;

Whereas, 36,750 lives lost on our roadways and work zones in 2018—including pedestrians and users of motorized and non-motorized vehicles—though a reduction from 2017, is wholly and totally unacceptable;

Whereas, AASHTO strongly supports the Toward Zero Deaths national vision of a highway system free of fatalities through a sustained and accelerated decline in transportation-related deaths and injuries;

Whereas, To make the most significant reductions in traffic fatalities and serious injuries, states combine efforts from multiple safety disciplines to implement the most effective countermeasures in the most efficient manner;

Whereas, This involves combining resources—such as funding and data—from various agencies with a role in traffic safety, including infrastructure, law enforcement, public education, emergency medical services, and public health; and

Whereas, Surface transportation reauthorization should allow for sharing and combining resources to allow states the necessary flexibility to address their safety challenges; now, therefore, be it

Resolved, That states be allowed the flexibility to use a portion of the Highway Safety Improvement Program (HSIP) funds to invest in safety programs such as behavioral efforts, public awareness, education, enforcement, research, improving system resilience, and pilot or experimental projects, and also allow HSIP funds to be used for experimental, temporary installations such as testing the viability of protected active transportation lanes (Issue SF-1);

Resolved, That deploy safely cooperative and automated transportation technologies by sharing non-proprietary data generated by automobile manufacturers, technology developers, research organizations, and public agencies with the public and decision makers; increasing efforts to deploy existing proven automation technologies, and; revising outdated safety laws, regulations, and guidance when the data unequivocally demonstrates a technology’s ability to provide an equivalent or higher level of safety, while recognizing that 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 (Issue CAV-2);

Resolved, That states be provided 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-2);

Resolved, That Section 209 of the Passenger Rail Investment and Improvement Act of 2008 be clarified to exempt state and political subdivisions of states who sponsor but do not operate intercity passenger rail services from being classified as railroads or railroad carriers and thus subject to System Safety Program regulations intended for railroad operators (Issue RT-2);
Resolved, That the Federal Highway Administration continues to provide reviews and eligibility letters related to crash testing of roadside safety hardware for use on the nation’s road and highway system while working with AASHTO on developing new performance specifications for determining crashworthiness.

Resolved, That the current Public Transportation Agency Safety Plan exemption for Federal Transit Administration Section 5310 and 5311 providers be codified and provide funding to support implementation for systems receiving funding from the Section 5307 Urbanized Area Formula Program and have 100 or fewer vehicles in peak revenue service (Issue PT-3).
Whereas, Highway Trust Fund (HTF) revenues derived primarily from federal motor fuel taxes have been the core source of funding to support federal investments in surface transportation since 1956;

Whereas, The purchasing power of the HTF has been reduced by over fifty percent since 1993 mainly due to flat, per-gallon motor fuel excise taxes that have not been adjusted for 26 years;

Whereas, Since 2008, the HTF has been sustained through a series of General Fund transfers now totaling $140 billion;

Whereas, According to the Congressional Budget Office, in order to simply maintain current HTF spending levels adjusted for inflation after the Fixing America’s Surface Transportation (FAST) Act, Congress will need to identify approximately $100 billion in additional revenues to support a six-year bill through 2026;

Whereas, Despite substantial funding challenges facing transportation, the investment backlog for transportation infrastructure continues to increase, reaching $836 billion for highways and bridges and $90 billion for transit according to the US Department of Transportation;

Whereas, The lack of stable, predictable funding from the HTF makes it nearly impossible for state DOTs to plan large projects that need a reliable flow of funding over multiple years;

Whereas, Because states count on prompt payment from the federal government to be able to manage cash flow and pay contractors for work they have already completed, disruptions and delays in HTF reimbursements jeopardize the ability of states to pay contractors in a timely manner;

Whereas, Because contractors rely on prompt payment from the state to be able to pay their employees and suppliers, disruptions to federal funding have the potential to send unwelcome shockwaves throughout the transportation community and other industries indirectly supported by infrastructure investment—including countless number of small businesses that perform work on our nation’s highways, as they often don’t have the flexibility to wait for additional days or weeks for payment on the work they have already completed on a project; and

Whereas, Surface transportation reauthorization must ensure robust, long-term, and sustainable funding to meet national needs for economic competitiveness, connectivity, safety, and security; now, therefore, be it

**Resolved**, That a permanent solution for the HTF shortfall must be the foundation of surface transportation reauthorization in order to prevent significant planning and construction disruptions to highway and transit projects, to provide stable cash reimbursements to states for costs already incurred, and to ensure and enhance the national benefits of the federal surface transportation program including jobs, economic competitiveness, safety, personal mobility, efficient movement of goods, and improved quality of life;
Resolved, That any potential HTF revenue solution must include these core factors: derived from system use and the need for connectivity, dedicated to highway and public transit transportation improvements, and sufficient to support permanent growth in federal transportation investment;

Resolved, That it is time for policy makers to advance tangible solutions to the HTF’s structural revenue deficit and that potential mechanisms such as motor fuel tax increase and indexation, per-barrel oil fee, freight user charges, or a mileage-based user fee, while not all inclusive, would provide a foundation to preserve and strengthen the federal role in supporting a national surface transportation network;

Resolved, That Congress is urged to increase federal surface transportation funding significantly above the current FAST Act funding levels to address transportation infrastructure needs and to sustain national and regional connectivity (Issue FF-1);

Resolved, That Congress must provide sustainable, certain, long-term funding to the HTF to support multiyear legislation and continue to fund the development and implementation of revenue alternatives to motor fuel taxes (Issue FF-2);

Resolved, That rescissions of highway contract authority greatly impede the flexibility of state DOT programs’ federal dollars and Congress is urged to avoid using rescissions of highway contract authority as budgetary offsets (Issue FF-4);

Resolved, That proportional to highways, federal funding for public transportation and rail transportation should be strengthened and expanded through increases in formula-based program funding from the Mass Transit Account in the HTF plus commensurate increases for General Fund transit programs, all of which support both rural and urban areas to enhance regional and national economic competitiveness and community vitality (Issue PT-1); and

Resolved, That Congress should retain the current multi-tiered federal transportation research structure by maintaining the State Planning and Research program set-aside at two percent of core highway programs—of which 25 percent is dedicated to research, development, and technology transfer activities—and by maintaining the current level of effort for federal Research, Technology, and Education (RT&E) programs accounting for inflation (Issue RI-1).
Policy Resolution PR-6-19
Title: AASHTO Reauthorization Policy Theme 3: Maintain Current Program Structure

Whereas, The heart and soul of the Federal-aid Highway Program are the formula dollars supporting state and local investment decisions;

Whereas, This nation-building program, starting with the Federal-aid Road Act of 1916, established the foundation of a *federally-assisted State* highway program, and has been perfectly suited to a growing and geographically diverse nation like ours;

Whereas, The stable federal investment enabled by the Highway Trust Fund has allowed states and their local partners to fund state- and locally-critical projects that at the same time serve the interests of the nation as a whole;

Whereas, Congress recognized in the Moving Ahead for Progress in the 21st Century (MAP-21) legislation the need to consolidate a complex array of federal highway programs into a smaller number of broader programs, with the eligibilities generally continuing under such programs;

Whereas, This revised program structure has provided state DOTs with greater flexibility to deliver projects more efficiently, and it better supports data-driven investment decisions to meet performance targets established in MAP-21;

Whereas, The formula-based program framework built the Interstate Highway System and the National Highway System, the backbone of our national network of roads and bridges that drives our national economy; and

Whereas, Maintaining this core program structure remains the optimal approach for the next surface transportation legislation to serve all corners of our country by improving mobility and quality of life in urban, suburban, and rural areas; now, therefore, be it

*Resolved*, That Congress is urged to focus on maximizing federal formula-based dollars provided directly to states through the existing core formula programs by increasing the 92 percent share of formula dollars relative to all highway program funding under the FAST Act, rather than looking at approaches that can divert the federal government’s focus and role in the surface transportation program (Issue FF-3);

*Resolved*, That Congress should continue to prioritize formula funding over discretionary grant programs as state and local governments already have existing investment plans, programs, and processes in place and can put new federal formula funds to work promptly and effectively (Issue FF-3);

*Resolved*, That Congress must maintain the current balance of funding among highway, highway safety, and transit programs from the Highway Trust Fund and continue General Fund support for rail programs (Issue FF-8);

*Resolved*, That Congress should clarify that performance measures and the achievement of federal performance management targets are not related to apportioning or allocating federal funds among the states, and also clarify that federal performance management requirements

APPROVED BY THE AASHTO BOARD OF DIRECTORS – OCTOBER 9, 2019
were established to provide a source to communicate with decision makers and the public on the condition and investment needs of the national highway system as a whole (Issue PM-1);

Resolved, That Congress should reauthorize the Consolidated Rail Infrastructure and Safety Improvements Grant Program, State of Good Repair Grant Program, and the Restoration and Enhancement Grant Program above FAST Act levels, and support cross-border investment (Issue RT-1);

Resolved, That Congress should maintain the existing balance of authority among state DOTs, Metropolitan Planning Organizations, and rural planning organizations (Issue PL-1);

Resolved, That using current annually appropriated funding levels as a baseline for formula and discretionary funds, Congress should provide increased Highway Trust Fund formula and discretionary grants for buses and bus facilities, supplemented by General Funds where possible (Issue PT-2);

Resolved, That Congress should maintain the current federal-state matching ratio requirements for projects and further explore innovative match strategies such as the sale or exchange of toll credits (Issue FF-6);

Resolved, That while most projects require federal support in the form of direct funding, Congress should continue to support the federal financing tools currently provided and encourage new innovative financing approaches (Issue FF-11);

Resolved, That Congress should preserve the current maximum federal funding match ratios for public transit programs to ensure support for rural and urban communities, individuals with disabilities and seniors, and our nation’s transit infrastructure (Issue PT-4);

Resolved, That Congress should reauthorize funds for the Amtrak National Network and the Amtrak Northeast Corridor in order to continue efficient and effective passenger rail mobility (Issue RT-3); and

Resolved, That no new additional federal performance measures, associated performance management requirements, or other new complexities should be established or authorized (Issue PM-4).
Policy Resolution PR-7-19
Title: AASHTO Reauthorization Policy Theme 4: Improve Flexibility

Whereas, State DOTs are appreciative of the flexibility correctly provided in the federal program that supports the ability of states to select the right mix of projects to meet the unique investment needs of their own states;

Whereas, There is opportunity to make every federal dollar go even further by increasing flexibility because each federal program is still constrained by specific eligibility and transferability limitations;

Whereas, Increased program-level flexibility would enable states to target federal funding more effectively and efficiently to meet their needs, whether for preservation, capacity, safety, or other unmet needs; and

Whereas, For example, the suballocated portion of the Surface Transportation Block Grant Program (STBGP) remains underspent, with the latest available data showing 80 percent of total unobligated STBGP funds nationwide belonging in the suballocated portion even though it comprises 54 percent of total STBGP dollars provided in FY 2019, rising to 55 percent in FY 2020; now, therefore, be it

Resolved, That Congress should further increase flexibility within the STBGP by expanding the state DOTs’ 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, with this flexibility including each state’s ability to direct more of its own STBGP funding to their local partners—over and above suballocated STBGP funds—if they so wish (Issue FF-8);

Resolved, That Congress should allow for increased flexibility within and transferability between highway and transit program categories; increase the transferability of the current core formula highway programs; enable transferability from federal program categories with unobligated balances to allow for use of those funds; focus federal funding increases in the most flexible formula funding categories, and; 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, where 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 (Issue FF-5);

Resolved, That Congress should provide increased tolling flexibility to states to maximize revenue-raising opportunities in light of federal funding challenges (Issue FF-7), and further be it;

Resolved, That Congress should streamline federal requirements for transportation projects related to declared emergencies under the Emergency Relief (ER) program by conducting a comprehensive assessment to identify where improvements can be made to allow advance planning for ER project implementation to include a range of project strategies, efficiently administer program funds, and 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 National Environmental Policy Act (NEPA) review as part of the ER program as, 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, and; allow state DOTs to change order all federal requirements into a previously-let, state-funded project that did not contain the federal provisions, as requiring a new letting for emergency projects often delays emergency repairs and expecting states to include federal requirements in state-funded projects is unrealistic (Issue PEG-4);

Resolved, That in regards to administration of the Transportation Alternatives (TA) set-aside within STBGP, 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; have the flexibility to receive TA funding and administer TA projects on behalf of a local agency at their request, and; be allowed to use TA funds for non-infrastructure programs that focus on preservation, safety, public education, enforcement, and/or public outreach. In addition, Congress should call for 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 overall transportation funding changes, and; allow transportation agencies to choose the level of federal share for set-aside programs (Issue FF-9);

Resolved, That Congress should expand eligibility of the National Highway Freight Program to include all of the National Highway Freight Network (NHFN); eliminate the two-percent rule so states can spend funds on any NHFN route to include Critical Urban Freight Corridors and Critical Rural Freight Corridors; expand the Primary Highway Freight System (PHFS) to include all Interstate System roadways regardless of how much freight funding a state receives, as freight program eligibility should include all Interstates by default; remove restrictions on state authority to add mileage to the PHFS, NHFN and National Multimodal Freight Network (NMFN), including but not limited to mileage caps on critical urban and critical rural corridors, and; add eligibility to use funds on any portion of a state’s NMFN as defined in a state’s freight plan (Issue FR-1);

Resolved, That Congress should reform the formula-based National Highway Freight Program 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, and; remove the ten percent multimodal cap to provide flexibility for states when investing in multimodal freight projects identified in the state’s freight investment plan and to invest more in multimodal projects if appropriate for that state, and; eligibility should include multistate proposals and projects for regions and corridors to improve national freight intermodal connectivity (Issue FR-2);

Resolved, That the Nationally Significant Highway and Freight Projects discretionary program (also known as INFRA) should be reformed by removing or increasing 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 NMFN as defined in a state’s freight plan, and; minimize annual changes to INFRA criteria for consistency in grant applications and award (Issue FR-3);
Resolved, That the flexibility in the use of the Congestion Mitigation and Air Quality Improvement (CMAQ) program funds should be increased by: increasing flexibility and decreasing restrictions on the use of CMAQ funds for Intelligent Transportation System and transit operations as long as such investments continue to demonstrate net air quality benefits; requiring obligation of CMAQ funds in PM 2.5 nonattainment and maintenance areas only when it is determined that the nonattainment issue results from transportation activities, and; making explicit that technology deployments such as Connected and Automated Vehicles (CAV) are eligible for funding under CMAQ (Issue PL-4);

Resolved, That preventive maintenance projects should be allowed to be conducted outside of the federal transportation planning or allow for a general statement of preventive maintenance work in the Statewide Transportation Improvement Program to enable needed flexibility in applying the most appropriate treatments at the best time and in the best locations, and; allow states to assume the authority to determine that a preventive maintenance project meets the applicable criteria for federal reimbursement (Issue PEG-9); and

Resolved, That Section 6(f) of the Land and Water Conservation Fund Act should be amended 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, which would allow broader flexibility as to the method used to compensate for impacts to parkland while requiring approval from the National Park Service (Issue PEP-8).
Policy Resolution PPR-8-19
Title: AASHTO Reauthorization Policy Theme 5: Reduce Program Burdens

Whereas, States are responsible for administering the Federal-aid Highway Program established under the foundation of a national program that is a federally-assisted State program according to Title 23 Section 145;

Whereas, Regulations are intended to provide consistency and direction in the administration of the Federal-aid Highway Program;

Whereas, Current federal surface transportation programs remain subject to significant requirements and processes—established over time—that can exert unnecessary burdens on transportation agencies;

Whereas, Many regulations have been promulgated without direct ties to federal statute, and these incremental changes, when taken together, amount to significant increases in time, cost, and complexity to the delivery of transportation projects across the country;

Whereas, There is a well-recognized need to reduce and simplify regulations and other requirements with the goal of reducing cost, increasing efficiency, and expediting the process to deliver needed transportation projects to the American public;

Whereas, The numerous planning, programming, performance-management, asset-management, and investment documents in the areas of highways, transit, freight, rail, safety, and others have a wide variety of durations, update cycles, and requirements that have become overly complex, duplicative, and confusing to the state DOTs, leading to reduced efficiency and efficacy in the decision making process;

Whereas, Performance management regulations have created a data-intensive environment where state DOTs are required to collect, store, analyze, and report significantly more data and information than ever before, and the cost associated with these data collection efforts are significantly greater than estimated by the Federal Highway Administration (FHWA);

Whereas, Fiscal constraint requirements imposed by the FHWA impede the ability of state DOTs to develop and deliver transportation projects by requiring that National Environmental Policy Act (NEPA) approvals only be made on projects coming from a fiscally constrained Statewide Transportation Improvement Program (STIP) or metropolitan Transportation Improvement Program (TIP), even though it is impractical to estimate cost and include a project in a fiscally-constrained STIP or TIP until the NEPA process is complete, as the NEPA process helps define the project;

Whereas, The timing of the fiscal constraint determination can be especially challenging for large public-private partnership (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;

Whereas, State DOTs are committed to implementing a transportation performance management program but are concerned the established minimum condition levels for certain asset classes could force a state DOT to implement a “worst first” approach to managing their assets;

Whereas, The inconsistent and impractical application of the Buy America Act to surface transportation projects across the country has led to delays, increased costs, and increased administrative burdens on both state governments and private entities such as utility companies;

APPROVED BY THE AASHTO BOARD OF DIRECTORS – OCTOBER 9, 2019
Whereas, There are numerous federal approvals required in the standard Stewardship and Oversight Agreement that are not called for or allowable by statute, such as a state’s standard specifications, pavement design policy, value engineering policy and procedures, liquidated damage rates, and quality assurance program;

Whereas, The FAST Act legislated exemptions for overweight emergency vehicles and overweight heavy-duty tow and recovery vehicles on our highway system that will waste money on unnecessary highway signs, increase the standard legal loading on these bridges resulting in reduced longevity, and confuse the traveling public, when the existing system of states’ permit authority could designate appropriate routes, reduce costs for state and local governments, protect bridges, and continue to facilitate prompt movement of emergency and tow vehicles when necessary;

Whereas, Formal adoption by the US Departments of Justice and Transportation of the Public Rights-of-Way Accessibility Guidelines (PROWAG) is needed to address accessibility for people with disabilities within the unique conditions and constraints of the public right-of-way, as without formal adoption, states are being forced through litigation to implement suboptimal accessibility solutions that were adopted previously for vertical construction, known as the ADA Accessibility Guidelines (ADAAG);

Whereas, The current annual schedule for federal compliance reviews of states’ bridge and tunnel inspection programs does not allow sufficient time to implement corrective actions before the next year’s audit period commences, resulting in redundant reviews and a lack of opportunity for meaningful improvement before the next review takes place;

Whereas, Federal rules in 23 CFR 750.707(d)(3) and (d)(5) create expensive, time-consuming processes for relocating or providing just compensation for removal of “nonconforming” billboards, when a minor modification to the regulation could significantly reduce time and cost without adverse impacts to the scenic environment;

Whereas, The antiquated Bonus Act of 1958 is incongruent with the Highway Beautification Act (HBA) in many aspects, causes problems for state DOTs in their regulation and control of outdoor advertising signs along the Interstate, and costs federal dollars to relocate or compensate for loss along sections of roadway that are no longer state highways; and

Whereas, The courts are requiring states to waste precious transportation dollars demonstrating conformity to air quality standards that have been superseded by more stringent updates to the National Ambient Air Quality Standards (NAAQS); now, therefore, be it

Resolved, That AASHTO recommends continuing the progress made in the Moving Ahead for Progress in the 21st Century (MAP-21) Act and the FAST Act to reduce the layers of regulatory burden that have accumulated onto the state DOTs, with the goal of increasing the efficiency and effectiveness of every transportation dollar;

Resolved, That Congress should amend 42 USC 7506 to require conformity by transportation agencies only to the most recent standard for a given pollutant in the National Ambient Air Quality Standards (NAAQS) when a new standard is established (Issue PEP-4);

Resolved, That Congress should rescind the FAST Act provisions concerning emergency vehicles and heavy-duty tow vehicles (23 USC 127(m) and (r)) or at least allow states to accommodate these vehicles, through permitting and other methods (Issue PEG-6);
Resolved, That Congress should direct USDOT to implement a more practical application of the Buy America Act for transportation projects, including: reinstating a reasonable waiver process; implementing an exemption for utility companies that are required to relocate their facilities as part of a transportation project; implementing an exemption for research-related equipment and materials for transportation research projects; and ensuring timely consideration and consistent application of the law across the country to ensure that transportation projects are progressing without significant delays (Issue PEG-1);

Resolved, That states should be authorized to approve modifications to various state policies and procedures listed in the standard Stewardship and Oversight Agreement without preapproval by FHWA, subject to FHWA’s ongoing oversight of the state’s compliance with federal requirements, and reviews of these changes should be conducted no more frequently than every two years (Issue PEG-3);

Resolved, That Congress should also direct FHWA to: identify and implement ways to reduce the burden associated with the development of performance measures by providing additional financial resources to state DOTs beyond simple funding eligibility or flexibility; reduce the scope of data collection, analysis, and management required by state DOTs; and ensure that state DOTs are only held accountable for those assets within their control (Issue PM-2);

Resolved, That in order to better address the financial process difficulties caused by federal funding uncertainty in the fiscal constraint and financial planning provisions related to planning, programming, asset-, and performance-management, the description of when funding can be “reasonably expected to be available” should be defined broadly, and fiscal constraint and other financial requirements in planning and programming should be imposed for no longer than the STIP timeframe (Issue FF-10);

Resolved, That to allow adequate time to implement and evaluate current performance-based planning regulations included in 23 CFR § 450, Subpart B, Congress should make no changes or additions in the current and upcoming reauthorization cycles (Issue PL-3);

Resolved, That Congress should direct the Secretary of USDOT to review the effect that the minimum condition levels for both condition of interstate pavements and NHS bridges have had on the ability of state DOTs to implement an asset management approach;

Resolved, That Congress should authorize the adoption in regulation of the Public Rights of Way Accessibility Guidelines to ensure that transportation projects most appropriately accommodate people with disabilities (Issue PEG-7);

Resolved, That Congress should direct FHWA and the Federal Transit Administration (FTA) to update their joint environmental and planning regulations (23 CFR Part 771 and Part 450), and direct the US Environmental Protection Agency (EPA) to make corresponding changes to its transportation conformity regulations which would provide state DOTs with the flexibility to complete the NEPA process with approval conditioned on making an air quality conformity and fiscal constraint determination before proceeding to construction (Issue PL-2);

Resolved, That Congress should direct FHWA to remove fiscal constraint regulatory requirements that are not compelled by statute and reduce the burden associated with them through such methods as applying them to fewer decision points and shortening applicable time frames (Issue PL-2);
Resolved, That Congress should direct FHWA to place federally-required financial plans on a consistent four-year cycle with the STIP; to make consistent the duration, update cycle, and content of numerous planning documents required of state DOTs, and; to eliminate redundancy among and allow consolidation of these and other planning documents to reduce administrative burdens on the state DOTs (Issue PL-5);

Resolved, That Congress should establish a new pilot program that would require bus manufacturers to directly provide a single certification to the Federal Transit Administration demonstrating compliance with Buy America and Altoona Test requirements (Issue PEG-1);

Resolved, That FHWA’s annual compliance reviews of states’ bridge and tunnel inspection programs be extended to two years or more to allow time for the meaningful implementation of improvements and corrections recommended in the previous cycle (Issue PEG-8);

Resolved, That federal laws and regulations be amended to allow for the relocation of “nonconforming” billboards when impacted by a highway project to reduce the cost and time associated with compensating the permit holder or locating a new conforming location (Issue PEG-13); and

Resolved, That Congress should amend applicable laws related to the antiquated outdoor advertising control regulations of the Bonus Act of 1958, which causes problems for state DOTs in their regulation and control of outdoor advertising signs along the Interstate, effectively allowing states to exit the program without penalty (Issue PEG-14).
Policy Resolution PR-9-19
Title: AASHTO Reauthorization Policy Theme 6: Improve Project Delivery

Whereas, Modernizing processes and procedures related to the development and delivery of transportation projects would greatly improve and expedite project delivery and reduce costs, all the while protecting and enhancing built and natural environments;

Whereas, Notable examples of modernizing project delivery include assignment of federal authorities to states ready and equipped to handle such responsibilities, allowing states appropriate exemptions from process requirements and/or creating categorical determinations for routine projects with minor impacts improves project delivery, and programmatic approaches that group multiple similar projects;

Whereas, The Federal Transit Administration (FTA) approval of routine and recurring activities in a grant, such as the replacement of buses, are often held up while FTA works through issues pertaining to new initiatives;

Whereas, Right-of-way procurement and utility relocations are consistently one of the top reasons for delay in transportation project delivery and additional flexibilities would provide cost savings and time reductions;

Whereas, Restrictions and delays imposed on transportation agencies by railroad owners, either intentionally or unintentionally, significantly affect the timely delivery of transportation projects;

Whereas, Requiring air quality conformity determinations be made every time a Metropolitan Planning Organization (MPO) updates or amends its long-range transportation plan or Transportation Improvement Program (TIP)—even those that are likely to have minimal impact on air quality—is a source of unnecessary project delay;

Whereas, Requiring participating agency concurrence in developing project schedules and any changes that shorten the schedule greatly delays project delivery;

Whereas, The lack of recovery plans or outdated recovery plans for species listed as threatened or endangered creates numerous challenges for project sponsors in addressing these species as there is no guidance regarding species recovery goals or acceptable mitigation tools; and

Whereas, Permitting requirements under Section 404 of the Clean Water Act for the discharge of dredged or fill material into “waters of the United States” can be a significant burden on transportation project development, especially for minor maintenance and construction activities; new, therefore, be it

Resolved, That Congress should authorize any federal agency to apply a categorical exclusion (CE) that has been adopted by any other federal agency (Issue PEP-1);

Resolved, That USDOT should establish a set process and reasonable timeline—including templates or model agreements—for acquiring right-of-way from federal agencies to promote fairness and to speed up project delivery (Issue PEG-2);

Resolved, That Congress should direct the US Environmental Protection Agency (EPA) to amend the transportation conformity regulations 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 (Issue PEP-3);

Resolved, That the right-of-way acquisition process should be streamlined by: allowing state procurement procedures to be used on federal-aid projects; allowing protective purchases with preliminary engineering funding; increasing the waiver valuation threshold, or removing the threshold; removing the 4(f) restriction on the Early Acquisition process; allowing states the option to use the “short form” for appraisals; and allowing states to voluntarily assume some or all of the Federal Highway Administration’s (FHWA) responsibilities for approval of right-of-way acquisitions (Issue PEG-2);

Resolved, That Congress should eliminate the requirement to obtain “concurrence” from other agencies in NEPA project schedules, and clarify that posting on the dashboard satisfies the requirement to maintain and update the project schedule under Section 139 (Issue PEP-5);

Resolved, That FHWA should be directed to amend its National Environmental Policy Act (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 (Issue PEG-10);

Resolved, That Congress should require establishment of consistent requirements, commitments, and time frames 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 (Issue PEG-11);

Resolved, That Congress should require USDOT to establish template or model agreements for standard activities conducted by the state DOTs in railroad rights-of-way (and vice versa), and provide guidance on the establishment of agreements for special or more complex activities (Issue PEG-11);

Resolved, That Congress should direct the Government Accountability Office to study the federal transit grant approval process for routine and recurring procurements and provide recommendations to Congress and USDOT on effective strategies for streamlining existing processes and practices, and USDOT must work with the stakeholder community to take action and implement the study’s recommendations (Issue PT-6);

Resolved, That Congress should allow delegation of the US Army Corps of Engineers (Corps) permitting responsibility to a state DOT for a subset of projects (Issue PEP-6);

Resolved, That Congress should require the US Fish and Wildlife Services (USFWS) to establish activities-based exemptions from the Endangered Species Act (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 (Issue PEP-7);

Resolved, That Congress should Require USFWS and the National Marine Fisheries Service 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 (Issue PEP-9);

Resolved, That Congress should create an alternative process allowing approval of Section 404 permit for a surface transportation project through programmatic agreement that ensures no-net-loss at watershed level, in lieu of making a Least Environmentally Damaging Practicable Alternative (LEDPA) determination at the project level (Issue PEP-10);
Resolved, That Congress should direct USFWS 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 (Issue PEP-11); and

Resolved, That Congress should expand exemptions from Clean Water Act 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 (Issue PEP-12).
Whereas, Dramatic change is taking place with the merger of technology between the car, truck, and other vehicles—and with physical transportation infrastructure—we will enable unprecedented improvements to safety and mobility through the emergence of Cooperative Automated Transportation (CAT);

Whereas, CAT has been defined as all modes of transportation working together to improve safety, mobility, and operations efficiency through interdependent vehicle and systems automation and information exchange;

Whereas, Infrastructure Owners and Operators (IOOs) including state DOTs play a fundamental role in advancing, operating, and maintaining the physical and digital infrastructure necessary to support CAT solutions;

Whereas, Development and deployment of CAT, and also unmanned aerial systems (UAV) or drones, are great examples of transformational technological developments currently taking place at an exponential pace; and

Whereas, State DOTs must remain at the forefront of developing and implementing the smartest and most technologically advanced ways to improve safety, mobility, and efficiency in our transportation system; now, therefore, be it

Resolved, That Congress must continue our nation’s commitment to improving transportation safety by reserving the 5.9 GHz wireless spectrum for this critical purpose, as connected vehicles (CV) utilizing Vehicle-to-Everything (V2X) communication in this “safety spectrum” will save lives by creating a seamless, cooperative environment that significantly improves the safety of our transportation system; and by requiring the federal government to lead the development of a universal, seamless approach to security management and CV communication through standardization and appropriate research and technology demonstration programs which will enable states to better understand when and how to make appropriate investment decisions (Issue CAV-1);

Resolved, That Congress should not allow the Federal Communications Commission to issue a one-size-fits-all federal preemption including uniform “shot clocks” and application fee caps in order to provide wireless and wireline broadband access—including 5G small cell nodes—in transportation rights-of-way and other assets owned and operated by state and local governments, but rather encourage state DOTs and technology companies to consult with one another on the best methods to extend broadband deployment especially to underserved areas, and; 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-1);

Resolved, That Congress should establish a pilot program—modeled on FHWA’s Special Experimental Project (SEP)-15 and SEP-16—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, which would include appropriate safeguards—including interagency consultation and public notice and involvement—to ensure adherence to federal environmental laws, regulations, and policies (Issue PEP-2);

Resolved, That states should be provided with broader control when utilizing existing federal funding sources on transportation system management and operations (TSMO) and related activities given the rapid expansion and use of TSMO strategies and technologies in a constrained budgetary environment (Issue OP-2);

Resolved, That Congress should 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-12);

Resolved, That Congress should allow cooperative automated transportation infrastructure needs to be eligible for funding beyond traditional eligibilities focused on capital expenses by including maintenance activities necessary for proper and safe operation of CAT; provide further flexibility in the Federal-aid procurement rules as they relate to both the purchase, installation, and maintenance of CAT technologies by a state DOT, and; 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, which will enable infrastructure owners and technology developers to better understand each other’s requirements, resulting in better standards and better infrastructure (Issue CAV-3); and

Resolved, That Congress should provide funding for, expand research in, and facilitate the deployment of CAT technology to enhance mobility alternatives for individuals that may be unable to use or are not served by traditional public transportation services (Issue CAV-4).
Whereas, To build, maintain, and expand its vast multimodal transportation system, our nation has long committed to and relied on the fruits of research—including innovations in planning, materials, construction methods, system operation, organizational effectiveness, and many other areas;

Whereas, Innovation and research allow state agencies to efficiently and effectively deliver a safe, reliable, and sustainable transportation system while continuously improving facilities and services;

Whereas, While the federal government’s support and funding for transportation research has been steady over many decades, by any measure—across industries or across countries—our nation invests very modest resources in transportation research and innovation;

Whereas, A substantial return on investment from smarter, better, and longer-lasting transportation can easily be documented with factors such as more durable infrastructure and improved operations, and;

Whereas, Additional benefits extend far beyond those that are easily quantified, including lives saved, an environmentally responsible transportation system, and improved quality of life for our citizens whose daily lives depend on the efficient movement of people and goods; now, therefore, be it

Resolved, That Congress should invest $1 million for scoping a third Strategic Transportation Research Program, which would better equip state DOTs to adapt and fully integrate technology and innovation into the transportation network that they own and operate (Issue RI-2);

Resolved, That Congress should reauthorize the Transit Cooperative Research Program which promotes best practices and facilitate the deployment of new technologies, thereby enhancing increases in operational efficiency (Issue PT-5); and

Resolved, That Congress should reestablish the National Cooperative Freight Research Program to assist states in their delivery of freight transportation projects with funding beyond the amount prescribed for the federally managed Research, Technology, and Education programs and State Planning and Research-funded programs (Issue FR-4).
Policy Resolution PR-13-13
Title: Actions to Reduce Impediments to Interstate Commerce Harmonizing Requirements for Truck Permits – Phase II

WHEREAS, The nation’s highway system is central to economic growth, job creation and the performance of the U.S. economy, and a key contributor to American competitiveness in the global marketplace;

WHEREAS, Highways the volume of freight on highways is large and growing;

WHEREAS, Trip time and reliability are critical in today’s “just-in-time” economy;

WHEREAS, It is essential that steps be taken to guarantee that the movement of freight on highways is as efficient as possible;

WHEREAS, Measures to improve the efficiency of freight transportation require close collaboration between government and business;

WHEREAS, States are responsible for the issuance of permits to allow the movement of shipments that exceed standard limits for weight or dimension;

WHEREAS, These shipments have grown in number and importance in recent years, especially in sectors critical to security and the growth of the economy;

WHEREAS, Unintended and unnecessary differences in requirements for oversize/overweight permits can result in delays to the industry resulting in increased product cost to the end user;

WHEREAS, Unintended and unnecessary differences in requirements for oversize/overweight permits can result in delays in the delivery of emergency response and relief shipments;

WHEREAS, Since 1937, the AASHTO Subcommitte on Highway Transport has maintained the Guide for Vehicle Weights and Dimensions;

WHEREAS, The Subcommitte on Highway Transport has identified certain truck permit procedures and requirements that can be harmonized among states without compromising safety or infrastructure preservation;

WHEREAS, Harmonizing truck permit requirements among states will improve customer service, reduce costs, and increase efficiency in state government;

WHEREAS, The AASHTO member states are committed to harmonizing permit procedures and requirements between states, among states in regions, and on multi-state corridors;

WHEREAS, The AASHTO Board of Directors established a truck oversize/overweight permit harmonization initiative to focus initially on several requirement categories (PR-3-12);
WHEREAS, The Subcommittee on Highway Transport made significant strides towards achieving consensus on these initial requirement categories at its 2013 Annual Meeting in Wilmington, North Carolina;

WHEREAS, The Subcommittee on Highway Transport continues its work on these initial requirement categories, henceforth known as Phase I; now, therefore be it

RESOLVED That by this resolution the AASHTO Board of Directors continues its oversize/overweight permit harmonization initiative through the inclusion of the following requirement categories (consistent with the AASHTO Guide for Vehicle Weights and Dimensions):

- Number of Valid days allowed on single trip permits
- Permit Amendments
- Holiday Restrictions
- Type and size of Escort Vehicles
- Escort Requirements for Overheight Loads and Overheight Loads with other Dimensions; and be it further

RESOLVED That the Subcommittee on Highway Transport will identify additional candidates for truck oversize/overweight permit harmonization, coordinate with private sector shippers and carriers, and present additional initiatives to SCOH for submission to the AASHTO Board of Directors for implementation.
WHEREAS, Effective Transportation System Management and Operations (TSM&O) is a major component of addressing highway system congestion, safety, and reliability; and

WHEREAS, The effectiveness of TSM&O can be significantly improved through technical leadership, sharing of best practices, research, and professional education and training to practitioners, policymakers, and researchers provided through a dedicated National Operations Center of Excellence (NOCoE); and

WHEREAS, In light of the success of similar services provided by the AASHTO Center for Environmental Excellence and the AASHTO Center for Excellence in Project Finance, the Board of Directors on May 7, 2013, adopted resolution PR-2-13, directing the Subcommittee on Systems Operation and Management (SSOM) to work with the Federal Highway Administration (FHWA), the Institute of Transportation Engineers (ITE), and the Intelligent Transportation Society of America (ITSA) to complete a business plan and develop an agreement on scope, content, and a sustaining business model for a NOCoE; and

WHEREAS, The SHRP2 Reliability research program has completed several products including a Knowledge Transfer System web portal that is foundational to the establishment of a NOCoE and will function as the center’s actively managed website; and

WHEREAS, The SHRP2 Reliability research program is developing a mechanism of Regional Operations Forums to enhance the continued development of national peer networks that will both support and benefit from a NOCoE; and

WHEREAS, The American Association of State Highway and Transportation Officials (AASHTO), ITE, ITS America executed a Memorandum of Understanding (MOU) on August 30, 2013, to establish a NOCoE and to develop an actively managed website; and

WHEREAS, SSOM worked with FHWA, ITE, and ITS America to complete a business plan to establish the NOCoE, which includes a market analysis, governance structure, recommended staffing, and a financial plan calling for financial or other in-kind services from FHWA and other association partners; and now therefore be it

RESOLVED, That initial service offerings of the NOCoE will consist of a technical service program with an actively managed website that includes a series of webinars, workshops, summits, and other activities designed to both promote and improve best practices for systems operation and management for practitioners, policymakers and researchers; and therefore be it

RESOLVED, That the NOCoE will over time establish other programs and a suite of support activities in three distinct areas including transportation systems management and operations; freight operations; security and emergency management; and a NOCoE staff devoted to developing and delivering the technical service portion of the program; and therefore be it

RESOLVED, That initial funding support for the NOCoE will come from FHWA and AASHTO; and therefore be it

RESOLVED, That SSOM is requested to approve the establishment of an Operations Technical Service Program at its annual meeting in Nashville, Tennessee; and therefore be it

APPROVED BY THE AASHTO BOARD OF DIRECTORS – MAY 30, 2014
RESOLVED. That the Standing Committee on Highways request that the AASHTO Board of Directors approve the establishment of the Operations Technical Service Program at its 2014 spring meeting; and be it further

RESOLVED. That the solicitation for the Operations Technical Service Program will be prepared and distributed to all member departments as part of the AASHTO annual TSP solicitation process requesting a $15,000 annual contribution per member department for support with at least 20 members participating in the initial solicitation; and finally be it

RESOLVED. That the NOCoE will expand member DOT support for the Operations technical service program and other offerings beyond the initial assumption of participation by participating departments to ensure that the initial subscription level for the TSP is consistent with the proposed NOCoE budget.
Policy Resolution PR-2-14
Title: Adoption of the Toward Zero Deaths National Strategy as the Updated AASHTO Strategic Highway Safety Plan

WHEREAS, AASHTO developed and adopted its first Strategic Highway Safety Plan (SHSP) in 1997 with input from numerous highway safety stakeholders and updated the SHSP with new data 2005; and

WHEREAS, in 2009 AASHTO resolved to develop an updated SHSP (PR-06-09); and

WHEREAS, highway fatalities and injuries continue to be at unacceptable levels of human and economic loss, with over 33,000 fatalities and over 2.3 million injuries in 2012; and

WHEREAS, a growing number of AASHTO member departments and multiple partners, including other associations, agencies, and advocacy groups, have adopted a vision of moving toward zero traffic deaths on the U.S. transportation system; and

WHEREAS, AASHTO has participated in the development of the Toward Zero Deaths National Strategy on Highway Safety since the beginning of the effort in 2009, and in 2011 adopted a resolution to continue to support the national Toward Zero Deaths effort with the intent of adopting the National Strategy as the updated AASHTO SHSP (PR-1-11); and

WHEREAS, the Toward Zero Deaths National Strategy on Highway Safety is based on input from members and numerous safety stakeholders with diverse expertise, builds on the existing AASHTO SHSP, and expands to include traffic safety culture and additional key safety areas; and

WHEREAS, the Toward Zero Deaths National Strategy on Highway Safety is a tool to unite safety stakeholders such as AASHTO and its members and partners; and

WHEREAS, the Toward Zero Deaths National Strategy on Highway Safety is also a tool that state departments of transportation, AASHTO, and other stakeholders can use to enhance their safety performance management activities but does not require the state departments of transportation or stakeholders to adopt specific targets for their individual programs;

NOW, THEREFORE, BE IT RESOLVED, AASHTO approves the Toward Zero Deaths National Strategy on Highway Safety as its updated Strategic Highway Safety Plan; and

BE IT FURTHER RESOLVED, that AASHTO commits to support and implement the Toward Zero Deaths National Strategy on Highway Safety as its vision of a highway system free of fatalities and will work to use the National Strategy to guide its highway safety efforts to the extent practical for the Association and for member departments with the understanding that not all members will adopt a zero-based goal or vision or the National Strategy, or implement every safety countermeasure or program discussed in the National Strategy; and

BE IT FURTHER RESOLVED, that the Standing Committee on Highway Traffic Safety and Subcommittee on Safety Management will continue to develop and lead AASHTO’s implementation activities and will coordinate with other AASHTO committees and subcommittees as well as member departments and external partners with implementing the Toward Zero Deaths vision.
WHEREAS, The AASHTO Board of Directors adopted Policy Resolution PR-12-13 titled MAP-21 Surface Transportation Reauthorization Policy Resolution on Research on October 21, 2013; and

WHEREAS, Continual improvement, fueled by research and innovation, is critical for State DOTs to provide world-class transportation services to their customers; and

WHEREAS, The transportation community gains tremendous benefits from research efforts in terms of lives saved, more durable infrastructure, and improved operations; and

WHEREAS, Sufficient funding is needed for FHWA to carry out research, technology, and implementation activities of national importance in all areas of transportation, including structures, pavements, planning, environment, policy, operations, safety, implementation of the second Strategic Highway Research Program (SHRP2), and research and innovation support; and

WHEREAS, The need for workforce training continues to grow as transportation agencies experience increasing retirements and as new expectations and practices emerge. Cuts to the federal training and professional development program will significantly reduce the ability of State DOTs to provide training for employees; and

WHEREAS, The Federal Highway Administration’s Turner-Fairbank Highway Research Center has been a valuable resource for State DOTs, providing expert advice and training in many areas, as well as services such as laboratory testing to investigate new approaches to address challenges such as corrosion, durability, and performance of transportation materials and products; and

WHEREAS, States have received federal technical and funding assistance to address challenges such as alkali-silica reactions, which could have cost of tens of millions of dollars in costly bridge repairs but instead has led to mitigation programs including application of sealers and monitoring of structures; and

WHEREAS, Early results from the implementation of products from the second Strategic Highway Research Program demonstrate that deployment incentives that offset the risk associated with implementing new processes and technologies encourage adoption of innovative practices, and that early adopters resolve deployment issues, which facilitate smoother deployment by other agencies; and

WHEREAS, A reduction in research funding will significantly slow the development and adoption of strategies that hold great promise for significantly improving traveler safety, mobility, and environmental performance, such as intelligent transportation systems (ITS) and Connected Vehicle technology, which has the potential to address up to 82% of automobile crashes involving unimpaired drivers through driver advisories, driver warnings, and vehicle and/or infrastructure controls; and

WHEREAS, AASHTO supports the continuation of funding for research programs through the Highway Trust Fund, and

WHEREAS, AASHTO disagrees with assertions that States would be able to compensate for a cut in federal research funding by using formula funds, which are already overcommitted and spread too thinly over a large number of needs; and

WHEREAS, With the transportation system under increasing fiscal pressures, research is needed now, more than ever, to efficiently and effectively address the complex issues of aging infrastructure, technological advancements, social and environmental context, and increased demands, now therefore be it
RESOLVED, That the AASHTO Board of Directors supports the continuation of full funding of the federal research program from the Highway Trust Fund at $400 million per year, including funding of all six major programs at FY2014 levels; and further be it

RESOLVED, That the AASHTO Board of Directors approves this resolution and direct AASHTO staff to communicate this need to members of Congress and other transportation advocates.
Policy Resolution PR-5-14
Title: Supporting Action to Ensure the Solvency of the Highway Trust Fund and Prompt Enactment of a Long-term Surface Transportation Legislation

WHEREAS, the Highway and Transportation Funding Act of 2014 enacted on August 8, 2014, provided a general fund transfer of $10.8 billion to preserve Highway Trust Fund solvency only through May 2015, and general fund transfers amounting to $61.9 billion will have been necessary to support federal highway and transit program investment between 2008 and 2015; and

WHEREAS, the Highway Trust Fund continues to experience a deficit between receipts and baseline outlays averaging $15 billion per year, which is estimated to accumulate to a total of $157 billion by 2024 according to the Congressional Budget Office; and

WHEREAS, federal funding supports nearly half of all highway and transit capital investment around the nation that underpins economic development, improves quality of life, and supports jobs in every community and Congressional district; and

WHEREAS, the failure to increase the Highway Trust Fund revenues or provide additional general fund support by May 2015 would result in jeopardizing surface transportation programs and projects at the beginning of the peak construction season; and

WHEREAS, uncertainty and volatility in planning and construction activities—including equipment and labor resource management—due to the instability of the federal program would once again impose heavy opportunity costs on productivity and employment, including layoffs, deferred investment, and project delays; and

WHEREAS, in addition to cessation in new federal funding commitments, the Highway Trust Fund insolvency in mid-2015 could threaten the states’ ability to pay contractors in a timely manner for work already completed on much-needed transportation projects;

NOW, THEREFORE BE IT RESOLVED, that Congress must act promptly to ensure the solvency of the Highway Trust Fund and enact a long-term surface transportation authorization bill prior to expiration of the Highway and Transportation Funding Act in May 2015 in order to prevent significant planning and construction disruptions to highway and transit projects, to provide stable cash reimbursements to states for costs already incurred, and to ensure the continuation of the many benefits of the federal surface transportation program, including jobs, economic competitiveness, safety, and personal mobility and quality of life; and

BE IT FURTHER RESOLVED, that the AASHTO Board of Directors approve this resolution in order to direct AASHTO staff to continue assisting Congress in adopting a stable, long-term funding solution for the federal surface transportation program in consultation with the broader transportation stakeholder community.

APPROVED BY THE AASHTO BOARD OF DIRECTORS – NOVEMBER 24, 2014
Policy Resolution PR-6-14
Title: Preserving and Sustaining the Principle of a Federally-funded, State-administered Federal-aid Highway Program

WHEREAS, the principle of a federally-assisted, state-administered highway program rooted in the United States Constitution has remained essential in delivering a safe, economic, efficient, and environmentally-sound national system since its commencement under the Federal-Aid Road Act of 1916 and through major augmentation under the 1956 act; and

WHEREAS, states own, operate, and maintain 100 percent of the Interstate Highway System and over 95 percent of the miles on the National Highway System, where 80 percent of truck traffic and a majority of all travel occur on state-owned facilities; and

WHEREAS, shifting federal money away from states to local governments will increase the likelihood of providing federal funding for projects that reflect no clear federal interest and will make it more difficult for states to pursue critically important larger projects; and

WHEREAS, the current transportation planning and programming process reflects an extensive decision-making role played by metropolitan planning organizations and cities comprised of local elected officials that identify projects of significant importance to a region and its constituent localities; and

WHEREAS, the current transportation planning and programming process also provides extensive opportunity for local officials and communities to consult and inform states of their priorities, and these priorities are taken into account in statewide plans along with other considerations, including interstate mobility for people and goods; and

WHEREAS, as traditional stewards and sponsors of transportation projects, state departments of transportation possess the unique expertise and familiarity with federal statutory and regulatory requirements associated with project design, procurement, and construction—all of which tend to be highly complex for larger projects found in metropolitan areas;

NOW, THEREFORE BE IT RESOLVED, the AASHTO Board of Directors supports maintaining the core principle of a federally-assisted, state-administered highway program, where the federal government is responsible for defining national policies and the state DOTs are responsible for program and project delivery; and

BE IT FURTHER RESOLVED, the AASHTO Board of Directors continues to support the valuable role metropolitan planning organizations and local governments play in the transportation planning and programming process; and

BE IT FURTHER RESOLVED, the Federal-aid Highway Program must preserve the current share of total highway program funding in MAP-21 provided to states via apportioned core programs without any diversions to locally-administered discretionary grant programs or a relative proportional increase in urbanized area sub-allocations.

APPROVED BY THE AASHTO BOARD OF DIRECTORS – NOVEMBER 24, 2014
WHEREAS, The Federal Aviation Administration (FAA) and Airport Improvement Program (AIP) funding is set to expire on September 30, 2015; and

WHEREAS, Congress is expected to introduce legislation to reauthorize the FAA and Airport Improvement Program in the 114th Congress; and

WHEREAS, Airport infrastructure funding is imperative to maintaining essential safety and capacity improvements; and

WHEREAS, Passage of multi-year Airport Improvement Program Authorization is important for long-term planning for both general aviation and commercial aviation; and

WHEREAS, Congress should pass a multi-year Airport Improvement Program through the existing revenue mechanism at the maximum levels that can be sustained by the Airport and Airway Trust Fund; and

WHEREAS, Congress should continue innovative financing methods such as state infrastructure banks, state revolving loan funds and should restore tax exempt financing for airport revenue bonds; and

WHEREAS, Congress should contribute general fund revenue for FAA administration and operations and maintain AIP funds for airport improvements and transportation connectivity; and

WHEREAS, Congress should maintain, at the minimum, the FAA matching share for an eligible AIP project at 90 percent of the project cost; and

WHEREAS, Congress should continue to fund the non-primary airport grant program; and

WHEREAS, Congress should reauthorize the Essential Air Service Program and the Small Community Air Service Development Program; and

WHEREAS, Congress should continue the State Block Grant Program for voluntary participation by all qualified states and provide administrative funding eligibility to implement the program; and

WHEREAS, Congress should increase the cap and allow for more flexibility of the Passenger Facility Charge to include intermodal access projects; and

WHEREAS, Congress should consider additional steps to expedite the environmental process while preserving all environmental protections; now, therefore, be it

RESOLVED that the American Association of State Highway and Transportation Officials urges Congress to pass a multi-year Federal Aviation Administration (FAA) and Airport Improvement Program (AIP) reauthorization legislation, which provides critical capital funding to increase safety and capacity at our nation’s commercial and general aviation airports.
Policy Resolution PR-8-14
Title: Passenger Rail Reauthorization

WHEREAS, the House Transportation and Infrastructure Committee in the U.S. House of Representatives reported to the full chamber legislation relating to improving passenger rail transportation across the United States; and

WHEREAS, in FY2014 forty-eight percent of Amtrak ridership was on state-supported rail corridors, and this legislation sought to ensure that states had a greater role in decisions affecting these routes; and

WHEREAS, continuing a strong federal-state partnership is essential to delivering many passenger rail services; and

WHEREAS, greater transparency in Amtrak accounting and providing states information to assist Amtrak in reducing costs and making data-driven decisions are key elements to growing and improving passenger rail service; and

WHEREAS, the authorization and appropriation of a State-Supported Route Advisory Committee would be beneficial in managing the application of Section 209 of the Passenger Rail Investment and Improvement Act (PRIIA) of 2008; and

WHEREAS, it is also 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; and

WHEREAS, streamlining environmental reviews and accelerating project delivery will promote consistency across U.S. Department of Transportation’s modal administrations to ensure that rail projects continue to advance and investment is made in a timely manner to develop service options that will boost economic development and job formation; and

WHEREAS, providing states the eligibility for passenger rail grant funding to invest in planning and capital infrastructure improvements that will help to improve safety and on-time performance, increase frequency and reliability, and provide a program of projects that will continue to advance intercity passenger rail in the Northeast Corridor, State Supported Routes and long distance service; and

WHEREAS, the reauthorization of the Next Generation Equipment Committee (NGEC), Section 305 of PRIIA 2008, a partnership between states, Amtrak, the Federal Railroad Administration, and industry, has developed standard sets of equipment specifications necessary for passenger rail equipment; and

WHEREAS, the need for continued funding to the National Cooperative Rail Research Program (NCRRP), which is administered by the Transportation Research Board (TRB), is important to maintain problem solving efforts on issues impacting intermodal operations, technologies, and other areas; and

WHEREAS, the federal government should fund the state of good repair needs on all of the Northeast Corridor (NEC) infrastructure; and

WHEREAS, the initiatives for partnership funding authorization along with Railroad Rehabilitation and Improvement Financing (RRIF) should expand to allow all states that seek to make improvements in their passenger rail service to continue; and

APPROVED BY THE AASHTO BOARD OF DIRECTORS – NOVEMBER 24, 2014
WHEREAS, AASHTO supports the goals for station development at Amtrak owned stations, local and privately owned stations and to develop public private partnerships to generate revenue that can support passenger rail operations; and

NOW, THEREFORE BE IT RESOLVED, that AASHTO looks forward to working with the leadership and members of both the U.S. Senate and the U.S. House of Representatives as they advance passenger rail legislation.
WHEREAS, The AASHTO Accreditation Program (AAP) was established in 1988 as a means of formally recognizing the competence of testing laboratories to perform specific tests on construction materials, and

WHEREAS, CFR Title 23, Part 637 required that all State DOT Central Materials Laboratories be accredited by the AAP by 1997, and

WHEREAS, All State DOT Central Materials Laboratories met the accreditation requirements through the AAP; which continues to serve AASHTO and the State DOT members soundly, and

WHEREAS, State DOTs have direct input into the quality and operation of the AAP, which gives the State DOT’s confidence in the continued quality and operations of the AAP, and

WHEREAS, Many State DOTs are now using outside consultants to perform construction materials testing, which requires consultant laboratories to be Accredited for certain testing, and

WHEREAS, FHWA has recognized other accreditation entities as comparable to the AAP through the National Cooperation for Laboratory Accreditation (NACLA) “Recognition Procedure”, and

WHEREAS, The SOM Executive Committee, has researched the components and details of the NACLA “Recognition Procedure” requirements and the operations of the ‘recognized’ entities, and

WHEREAS, The SOM Executive Committee has concluded that the NACLA procedure does not ensure that accreditation bureaus that are comparable to the AAP; and

WHEREAS, These concerns related to the quality and thoroughness of the NACLA procedures and process were documented in a formal letter from the SOM to the Federal Highway Administration; now therefore be it

RESOLVED, The AASHTO Board of Directors expresses support for the recognition of the quality and accountability of the AASHTO Accreditation Program (AAP); and recommends State DOT members to continue to support and specify the AAP for their quality assurance program purposes.
WHEREAS, The safety of highway workers is of paramount importance to every state highway transportation agency, and

WHEREAS, State agency personnel must take into consideration all aspects of the work environment while assessing the overall safety risk to our employees, including work zone hazards created by live traffic, and

WHEREAS, AASHTO/FHWA bridge standards related to rail height have, for the most part, resulted in several hundred thousand existing bridges being constructed around the country with current bridge rail heights at or near 32 inches, and

WHEREAS, OSHA fall protection regulations for work on and around bridges appear to require that bridge rail heights be approximately 42 inches or greater in order for the fall hazard to be considered mitigated, and

WHEREAS, If the bridge rail height is less than 42 inches, OSHA regulations appear to be interpreted that highway workers must stay at least 6 feet away from the rail or mitigate the fall hazard, and

WHEREAS, OSHA fall protection regulations appear to be written around vertical construction activities and do not appear to take into account the multitude and complexity of issues surrounding work on existing bridges including the hazards presented by live traffic in work zones, and

WHEREAS, Every state agency has a multitude of bridge-related maintenance, inspection and construction activities that occur on a daily basis that are non-static and short duration in nature and require employees to work along and across bridges and be closer than 6 feet to the rail, and

WHEREAS, Examples of non-static, short duration activities include, but are not limited to, bridge inspection, river/channel assessments, pavement condition inspection, bridge joint inspection, scupper cleaning, debris removal and cleanup, incident response activities (often in conjunction with law enforcement), accident clean up, catch basin cleaning, bridge cleaning, sweeping, minor pothole patching/crack sealing, vegetation control, asphalt paving and chip seal construction and inspection, and general access and egress across a bridge, and

WHEREAS, Several states are being directed by their respective Department of Labor and Industries (or similar) to ensure that fall protection is provided for non-static short duration type of activities described above on existing structures that have rail heights less than 42 inches, and

WHEREAS, The cost to retrofit the rail height of the hundreds of thousands of existing bridges around the country that have rail heights less than 42 inches would be significant, and

WHEREAS, Employee injury statistics from virtually every DOT clearly indicate that accidents associated with employees involved in traffic-related work zone accidents far exceed fall from height accidents, and

WHEREAS, Unlike static bridge operations, it is not clear how fall protection could otherwise be provided for non-static short duration activities without unduly increasing the risks associated with exposure to live traffic and the fall hazard; and

WHEREAS, Performance measures are a key component to effectively manage toward a Program objectives, and

APPROVED BY THE AASHTO BOARD OF DIRECTORS – NOVEMBER 24, 2014
WHEREAS, Employee injury statistics associated with current AASHTO/FHWA bridge standard are nearly zero incidents; now therefore be it

RESOLVED, That the Board of Directors request that AASHTO convene a team from OSHA, FHWA, AASHTO Subcommittees as appropriate (e.g. Bridges and Structures, Construction, Design, and Traffic Operations), as well as representation from member states to address the interpretation of current fall protection regulations as they relate to existing bridges and non-static short duration maintenance, inspection and construction activities and determine the most appropriate approach moving forward; and, therefore be it further

RESOLVED, That the results of the team be published and then distributed consistently across the national transportation system.
Policy Resolution PR-11-14
Title: Concerns with Possible New Federal Requirements Regarding Training and Certification for Bridge Coating and Corrosion Control Activities on Eligible Bridge Projects

WHEREAS, Legislation ordered reported by the Senate Committee on Environment and Public Works includes proposed new federal requirements regarding training programs and certifications for contractors engaging in certain bridge coating and corrosion control activities on federally assisted bridge projects; and

WHEREAS, States have been and are actively engaged, in consultation with industry representatives, in advancing the safety and longevity of bridges, including through efforts to improve already cost effective corrosion prevention and mitigation strategies; and

WHEREAS, The U.S. Department of Transportation, through administration of grant programs, could address concerns regarding federal assistance for preventive maintenance, rehabilitation, repair and other investment in bridges, including as to use of protective coatings and corrosion control work;

WHEREAS, A majority of States currently require a certification regarding the undertaking, on bridge projects, for one or more of the activities proposed to be newly regulated, and States also work to advance the safety and longevity of bridges through additional means, such as design and construction specifications, material certification and selection and coatings and treatment requirements, whether implemented through state law, regulation, bid and contract requirements, or other means;

WHEREAS, States find the performance of contractors conducting the activities proposed to be regulated to be acceptable or better;

WHEREAS, States are not aware of particular concerns with bridge corrosion prevention and mitigation practices that may have been a basis for the proposed legislation;

WHEREAS, The proposed legislation would, nonetheless, appear to authorize the development of a very wide range of regulatory requirements, including potential regulation regarding –

- Selection of materials and coatings,
- Design,
- Training of employees applying coatings and other treatments,
- Undefined “best practices” for handling hazardous materials and prevention of “environmental degradation” issues that can be addressed, as necessary, through other statutory authorities, and
- Unclear requirements as to whether a contractor employs “industry respected inspectors” to “ensure funds are used in the interest of taxpayers”.

WHEREAS, States have concerns that additional certification, training and other requirements will increase the costs of bridge coating and corrosion control activities;

WHEREAS, States also have concerns that, particularly in the near term, new certification, training and other requirements would complicate and delay project delivery, result in a shortage of qualified contractors, and have other negative impacts; and

WHEREAS, States are concerned that the legislation appears to vest the proposed new regulatory authority in two agencies, rather than one, which could result in needless confusion when expertise regarding bridge safety and preservation resides in the U.S. Department of Transportation;

APPROVED BY THE AASHTO BOARD OF DIRECTORS – NOVEMBER 24, 2014
WHEREAS, The adverse impact on cost and project delivery of any unnecessary new requirements would be exacerbated if any new requirements are not governed by a delayed effective date or ability to phase in compliance over a reasonable number of years after promulgation of any needed final rule; and now therefore be it

RESOLVED, That AASHTO finds that the proposed new federal requirements and regulatory authority regarding training programs and certifications regarding certain bridge coating and corrosion control activities are not necessary and that these matters should continue to be left to the discretion of the States; be it further

RESOLVED, That AASHTO strongly supports efforts to ensure the safety of the transportation infrastructure, promote timely and cost effective delivery of bridge projects and preserve and enhance the longevity of bridges, including through use of coatings and other measures to prevent or control corrosion, and supports continued efforts by States and the U.S. Department of Transportation to disseminate information regarding best practices in these areas; be it further

RESOLVED, That AASHTO would support a USDOT conference, whether or not required by statute, to review issues in bridge corrosion prevention and control and related training, for the purpose of dissemination of information regarding best practices in order to improve the already excellent performance of States in these areas; and be it further

RESOLVED, That if the Congress should instead, choose to legislate in the areas of bridge corrosion prevention, control, and mitigation, the legislation should be recast to focus on such specific issues of concern as may be identified, if any, and authorize the USDOT to develop appropriate regulations, after consultation with States, that would not take effect immediately but after an appropriate delay in the effective date or pursuant to an appropriate phase in of requirements.
Policy Resolution PR-1-15
Title: Alignment of the Robert T. Stafford Disaster Relief and Emergency Assistance Act (Stafford Act) with Congressionally Authorized Transportation Planning, Design and Delivery Processes

WHEREAS, There have been more than 670 federal disaster declarations between calendar years 2009 and 2013; in 2012 alone, there were a total of 133 disaster events resulting from weather events, causing about $881 billion in damages; and

WHEREAS, No region of the Country has been spared the harmful effects of severe storms, flooding or landslides on transportation infrastructure; and

WHEREAS, The Robert T. Stafford Disaster Relief and Emergency Assistance Act of 1988 (Stafford Act) provides the authority for the federal government to provide assistance to states during declared major disasters and emergencies; and

WHEREAS, The Stafford Act provides grants to affected governments for the temporary and/or permanent repairs for eligible work performed on eligible transportation infrastructure and retrofitting transportation infrastructure to withstand future natural disasters, as long as such work is not covered by any other federal program; and

WHEREAS, The Federal Emergency Management Agency (FEMA) coordinates administration of disaster relief resources and assistance to states under the Stafford Act; and

WHEREAS, Title 23 and Title 49 of the United States Code, detail the federally-required transportation project planning, design and delivery processes that states must use on federally-aided transportation projects, including but not limited to the National Environmental Policy Act of 1969 (NEPA), historic preservation, section 4(f), protections for water, wetlands and wildlife, and public participation requirements; and

WHEREAS, The Stafford Act does not specifically permit FEMA to accept the congressionally authorized transportation project planning, design and delivery processes and standards of other federal agencies that would normally have jurisdiction over the transportation infrastructure being repaired, replaced or retrofitted notwithstanding a federal disaster declaration; this requires the State Departments of Transportation (DOTs) to undertake project delivery processes and build to standards that are inconsistent with what are typically required, causing administrative, labor, and cost burdens to the State DOTs.

WHEREAS, the Sandy Recovery Improvement Act (SRIA) and accompanying Disaster Relief Appropriations Act were signed into law in 2013 and SRIA authorizes several significant changes to the way FEMA can deliver federal disaster assistance; and

NOW, THEREFORE BE IT RESOLVED, The Stafford Act should be amended to require that FEMA accept USDOT project-related processes in an emergency; and

APPROVED BY THE AASHTO BOARD OF DIRECTORS – MAY 15, 2015
**BE IT FURTHER RESOLVED,** That Congress should direct FEMA and the U.S. Department of Transportation to work to improve the alignment of their disaster recovery programs and develop additional resources for states on accelerating project delivery for transportation infrastructure being repaired, replaced or retrofitted with Stafford Act funding; and

**BE IT FURTHER RESOLVED,** That Congress should direct FEMA and the U.S. Department of Transportation to review and recommend which streamlining provisions included in the Sandy Recovery Improvement Act (SRIA) of 2013 and the accompanying Disaster Relief Appropriations Act of 2013 should be made permanent for transportation infrastructure being repaired, replaced or retrofitted with Stafford Act funding; and

**BE IT FURTHER RESOLVED,** That the Resilient and Sustainable Transportation Systems (RSTS) Steering Committee has received concurrence from AASHTO’s Special Committee on Transportation Security and Emergency Management and requests that the AASHTO Board of Directors approve this resolution and direct AASHTO staff to communicate this need to members of Congress and other transportation advocates.
Policy Resolution PR-2-15  
Title: Supporting Action to Ensure Enactment of a Long-term Surface Transportation Bill Reflecting AASHTO’s Reauthorization Priorities

WHEREAS, the Surface Transportation and Veterans Health Care Choice Improvement Act of 2015 enacted on July 31, 2015, provided a general fund transfer of $8.1 billion to ensure short-term Highway Trust Fund solvency and extended the authorization of the federal highway, transit, and highway safety programs through October 29, 2015; and

WHEREAS, the Highway Trust Fund continues to experience a deficit between receipts and baseline outlays averaging $15 billion per year, which is estimated to accumulate to a total deficit of $169 billion by 2025 according to the Congressional Budget Office; and

WHEREAS, federal funding supports nearly half of all highway and transit capital investment around the nation that underpins economic development, improves quality of life, and supports jobs in every community and Congressional district; and

WHEREAS, the failure to increase the Highway Trust Fund revenues or provide additional general fund support in Fiscal Year 2016 would result in jeopardizing surface transportation programs and projects; and

WHEREAS, uncertainty and volatility in planning and construction activities—including equipment and labor resource management—due to the instability of the federal program would once again impose heavy opportunity costs on productivity and employment, including layoffs, deferred investment, and project delays; and

WHEREAS, in addition to cessation in new federal funding commitments, the Highway Trust Fund insolvency in 2016 could threaten the states’ ability to pay contractors in a timely manner for work already completed on much-needed transportation projects;

WHEREAS, the principle of a federally-assisted, state-administered highway program rooted in the United States Constitution has remained essential in delivering a safe, economic, efficient, and environmentally-sound national system for over 100 years;

WHEREAS, the Moving Ahead for Progress in the 21st Century Act (MAP-21) established a performance management system predicated on States having the flexibility and the federal funding necessary to achieve performance targets;

NOW, THEREFORE BE IT RESOLVED, that Congress must act promptly to ensure the solvency of the Highway Trust Fund and enact a long-term surface transportation authorization bill in order to prevent significant planning and construction disruptions to highway and transit projects, to provide stable cash reimbursements to states for costs already incurred, and to ensure and enhance many national benefits of the federal surface transportation program including jobs, economic competitiveness, safety, personal mobility and quality of life;

BE IT FURTHER RESOLVED, that Congress maintains the core principle of a federally assisted, state-administered highway program and provides at least the current share of total highway program funding provided to the states via apportioned core programs;

APPROVED BY THE AASHTO BOARD OF DIRECTORS - September 28, 2015
BE IT FURTHER RESOLVED, that Congress preserve the fundamental program and policy reforms in MAP-21 and provide states increased flexibility needed to meet performance targets and address transportation challenges that vary from state to state; and

BE IT FURTHER RESOLVED, that the AASHTO Board of Directors approves this resolution in order to encourage Congress to adopt a long-term surface transportation authorization bill consistent with AASHTO’s reauthorization priorities.
Policy Resolution PR-1-16
Title: Congratulating the President-elect and the Vice President-elect and Offering
AASHTO's Expertise and Advice to the New Administration on Infrastructure Investment
and Improvement Initiatives

WHEREAS, the President-elect, in campaigning for office, advocated prompt action to increase
investment in America’s infrastructure, particularly including its transportation infrastructure;

WHEREAS, the American Association of State Highway and Transportation Officials
(AASHTO), the association of the departments of transportation of the 50 states, the District of
Columbia, and the Commonwealth of Puerto Rico, has long recognized the great value to the
people and economy of the United States of a modern, safe, and efficient multimodal
transportation infrastructure and system, including highways, bridges, transit, railroads, airports
and aviation facilities, and waterways; and

WHEREAS, AASHTO and its member departments have vast policy and technical expertise
with respect to transportation infrastructure investment as indicated in part by AASHTO guides
and manuals being recognized as standards around the world and in many cases officially
recognized in the Code of Federal Regulations, by AASHTO member departments serving as
the principal agencies planning for and delivering transportation projects to the American public,
and by a number of AASHTO member department officials having served as key leaders at the
U.S. Department of Transportation, including as Secretary of Transportation, Deputy Secretary
of Transportation, Federal Highway Administrator, Federal Aviation Administrator, and Federal
Railroad Administrator; now, therefore, be it

RESOLVED, that AASHTO congratulates Donald J. Trump and Michael R. Pence on their
election as President and Vice President of the United States;

BE IT FURTHER RESOLVED, that AASHTO hereby advises the President-elect and the Vice-
President-elect and their representatives that AASHTO is ready and eager to provide them the
Association’s expertise and advice regarding the development and implementation of
transportation infrastructure investment and improvement initiatives both during the transition
period and under the new Administration; and

BE IT FURTHER RESOLVED, Copies of this resolution shall be promptly provided to the
President-elect and the Vice-President-elect and their representatives.
Policy Resolution PR-2-16
Title: Role of FHWA in MASH Implementation and Crash Test Reviews

WHEREAS, The sunset dates for NCHRP 350 hardware were jointly developed between AASHTO and FHWA, and with significant outreach to additional stakeholders, including private industry and academia; and

WHEREAS, These dates were established with the assumption, as stated in the implementation agreement, that FHWA "will continue its role in issuing letters of eligibility of highway safety hardware for federal-aid reimbursement"; and

WHEREAS, Historically, as part of its role in determining whether to issue a letter of approval/acceptance/eligibility, FHWA has also provided technical expertise to the roadside safety community; and

WHEREAS, In addition to reviewing crash tests to confirm a lab's assessment of the test results, FHWA staff have provided guidance to states, manufacturers, and laboratories regarding technical details of performing tests; and

WHEREAS, FHWA's continued technical support is critical to the success of the roadside safety community in meeting the sunset dates delineated in the joint agreement; and

WHEREAS, Without technical support being provided to those developing roadside hardware, including an approved test matrix that, if passed by a device, will lead to a positive eligibility determination, manufacturers and laboratories have slowed or stopped their development and testing to MASH standards; and

WHEREAS, At least most states do not have the technical expertise needed to conduct reviews of crash tests to determine appropriate use of roadside hardware, and the AASHTO Technical Committee on Roadside Safety does not have the time, expertise, nor jurisdiction to determine eligibility for use on the NHS; and

WHEREAS, No other organization besides FHWA has the expertise, capacity, or objectivity needed to serve in this role; and

WHEREAS, Due to the lack of assistance and technical expertise that has traditionally been provided by FHWA to manufacturers, laboratories, and state practitioners, AASHTO is not confident that appropriate MASH-approved hardware will be available by the sunset dates agreed to in the joint agreement.

NOW, THEREFORE, BE IT RESOLVED, AASHTO requests that FHWA reaffirm its role, as agreed to in the joint implementation agreement, of providing objective technical expertise and resources to the roadside safety community and issuing eligibility determinations for safety hardware on the NHS.

APPROVED BY THE AASHTO BOARD OF DIRECTORS – NOVEMBER 15, 2016
WHEREAS, The U.S. Department of Transportation’s (DOT) National Highway Traffic Safety Administration (NHTSA) has released an advance notice of proposed rulemaking (ANPRM) to create a new Federal Motor Vehicle Safety Standard (FMVSS) to require vehicle-to-vehicle communication capability for light vehicles; and

WHEREAS, The automobile manufacturers are preparing the hardware and software components that will achieve vehicle-to-vehicle (V2V) communications using Dedicated Short Range Communications (DSRC) in anticipation of the proposed rulemaking, with some deployments as early as the 2017 model year; and

WHEREAS, The DSRC capabilities being developed by the automobile manufacturers for vehicle-to-vehicle communications can also be leveraged and expanded to enable a two-way communication that is capable of delivering data and information from the roadside to the vehicle and from the vehicle to the roadside (commonly referred to as vehicle to infrastructure [V2I] Applications); and

WHEREAS, A number of V2I Applications have been identified and defined in detail in the USDOT Connected Vehicle Reference Implementation Architecture (CVRIA) that will provide safety, mobility, and environmental benefits once they are deployed and a network of DSRC equipped automobiles are operational; and

WHEREAS, The USDOT has asked the American Association of State Highway and Transportation Officials (AASHTO), the Institute of Transportation Engineers (ITE), and the Intelligent Transportation Society of America (ITSA) to work together to create and manage the Vehicle-to-Infrastructure Deployment Coalition (V2I DC) as a single point of reference for stakeholders to meet and discuss V2I deployment related issues; and

WHEREAS, Through various funding sources, including USDOT, state, and local funding, there have been multiple pilot deployment sites that have demonstrated the functionality and benefits of V2I Applications in multiple locations throughout the United States; and

WHEREAS, Beyond the pilot deployments and a limited number of early adopter deployment sites, the majority of state and local infrastructure owners and operators have not yet begun large scale deployment of V2I Applications even though solutions are now available to problems that were hindering deployments.

WHEREAS, The automobile manufacturers are developing at least three V2I applications and are looking for some indications from the infrastructure owners and operators about the timeline for deploying the roadside infrastructure to support V2I applications; and
WHEREAS, Most infrastructure owners and operators have corridors of signalized intersections that are interconnected and use modern controllers to coordinate signal timing along the corridor; and

WHEREAS, The “signal phase and timing” (SPaT) message is relatively simple to deploy and fundamental to a number of V2I applications, and can be obtained from a traffic signal controller via a standard query protocol and can be broadcast by most DSRC roadside devices as a standardized data message; and

WHEREAS, The SPaT broadcasts are typically accompanied by the broadcast of the map data message (MAP), and global positioning system (GPS) correction information as standardized by the Radio Technical Commission for Maritime Services (RTCM), to enable vehicle equipped applications to interpret the SPaT information being broadcast; and

WHEREAS, The SPaT, MAP, and RTCM functionality can be deployed in phases, but are all identified as necessary to support communication with vehicles for the purposes of V2I Applications; and

WHEREAS, Deploying the SPaT, MAP, and RTCM data message broadcasts in a number of locations around the country will provide state and local transportation agencies with a tangible first step for deploying V2I Applications, promote future more advanced V2I applications, and demonstrate a commitment to the DSRC-based V2I deployments that are needed by automobile manufacturers; and

WHEREAS, The net result of deploying SPaT will be to accelerate V2I application deployment by the automobile manufacturers, the private sector, and the public sector; now therefore be it

RESOLVED, That AASHTO is challenging the state and local public sector transportation infrastructure owners and operators to cooperate together to achieve deployment of DSRC infrastructure with SPaT, MAP, and RTCM broadcasts in at least one corridor or network (approximately 20 signalized intersections) in each of the 50 states by January 2020 (referred to as the “AASHTO SPAT Challenge”); and therefore be it

RESOLVED, That the AASHTO-led V2I Deployment Coalition, AASHTO Highways Subcommittee on Transportation Systems Management and Operation (STSMO) Connected and Automated Vehicle Working Group, AASHTO Highways Subcommittee on Traffic Engineering (SCOTE), and National Operations Center of Excellence (NOCoE) will develop resources and lead implementation of the SPaT Challenge with public sector transportation agencies; and therefore be it further

RESOLVED, SCOH approves this resolution and forwards it to the AASHTO Board of Directors for final approval and implementation.
WHEREAS, Congress introduced legislation to reauthorize Water Resources Development Act (WRDA) in the 114th Congress;

WHEREAS, Water infrastructure funding is imperative to maintaining essential capacity and maintenance improvements;

WHEREAS, Passage of WRDA is important for long-term planning for America’s ports and waterways;

WHEREAS, Water transportation must be continually recognized, supported, and developed as a vital element of the national multimodal transportation system and that American trade with the rest of the world is projected to continue strong growth and requires substantial investment to support that growth;

WHEREAS, Congress should expend expeditiously the Harbor Maintenance Trust Fund and the Inland Waterway Trust Fund for their legislated purposes;

WHEREAS, Congress should consider strategies to increase investment without placing particular waterways at a competitive disadvantage as revenues collected in the Inland Waterway Trust Fund are inadequate to meet the construction and maintenance needs of the locks and dams on the inland waterways;

WHEREAS, Congress should extend the authorization period for Donor and Transfer Ports to be eligible for funding from the Harbor Maintenance Trust Fund;

WHEREAS, Congress should continue creative, innovative approaches to funding, and project execution required to meet projected freight demands of the coming years;

WHEREAS, the American Association of State Highway and Transportation Officials is supportive of increasing the federal cost share from 50 percent to 75 percent for deepening projects between 45 feet and 50 feet;

WHEREAS, Congress should consider legislative changes to address current Corp regulations to allow states and other non-federal sponsors to proceed with navigation projects that receive a positive benefit-cost analysis in the US Army Corps of Engineers Chief’s Report, and Congress should ensure that guidelines in place at the commencement of a State sponsored feasibility study remain in force throughout the life of the study; now, therefore, be it

RESOLVED, that the Association urges the 114th Congress to pass a Water Resources Development Act reauthorization legislation, which authorizes critical projects and establishes water resource policy for the nation’s ports, waterways and marine system.
Policy Resolution PR-1-17
Title: Ensuring Enactment of a Robust and Prudent Infrastructure Package for Transportation

WHEREAS, Article I, Section 8 of the United States Constitution states it is the duty of the federal government to provide support for a national transportation system; and

WHEREAS, historical federal investment in transportation through the development of post roads, canals, railroads, highways, and airways has created jobs and underpinned robust economic growth in all parts of the nation; and

WHEREAS, the FAST Act's authorization of $305 billion for federal highway, highway safety, transit, and passenger rail programs has provided near-term funding stability and relief to states; and

WHEREAS, the Congressional Budget Office estimates that in order to simply maintain current investment levels for federal highway and public transportation programs in 2021 after expiration of the FAST Act, the Highway Trust Fund would need $96 billion in additional revenues to support a five-year bill or $120 billion to support a six-year bill; and

WHEREAS, recurring cash shortfalls to the Highway Trust Fund will once again create uncertainty and lead to disruptions in states delivering their transportation programs, ultimately impacting safety, economic development, and quality of life; and

WHEREAS, President Trump has publicly stated that the United States ranks 12th in the Global Competitive Index in infrastructure and that traffic delays cost the Economy more than $50 billion annually, and

WHEREAS, the American Society of Civil Engineers identified a $2 trillion funding gap between 2016 and 2025 for all forms of infrastructure composed of $1.1 trillion for surface transportation, $42 billion for airports, $15 billion for inland waterways and marine ports, and $29 billion for rail; now, therefore, be it

RESOLVED, that as a cornerstone of his Administration's policy agenda, President Trump honors his commitment to shepherd and enact a major infrastructure package this year; and be it further

RESOLVED, that at a minimum, the infrastructure package addresses the funding shortfall in the Highway Trust Fund with a long-term and sustainable revenue solution, and be it further

RESOLVED, that the infrastructure package focuses its budgetary support on transportation infrastructure given the essential nature of federal funding and oversight compared to other asset classes; and be it further

APPROVED BY THE AASHTO BOARD OF DIRECTORS - MAY 25, 2017
**RESOLVED**, that while opportunities exist to expand private participation in the provision of infrastructure, recognize that most transportation projects do not generate a revenue stream and therefore requires federal support in the form of direct funding rather than financing incentives that encourage borrowing or utilizing private capital; and be it further

**RESOLVED**, that wherever possible, traditional federal authorities be assigned to states to expedite and streamline project delivery without sacrificing fundamental principles associated with current federal requirements; and be it further

**RESOLVED**, that priority be given to transportation investments that secures our nation’s economic future for the long-term through multi-decade improvements in productivity and quality of life, instead of “shovel-ready” projects which are best suited for a recessionary economic environment; and be it further

**RESOLVED**, that the existing federal program structure—including highways, transit, and rail—be utilized since it would enable investments to flow to every area of the country.
Policy Resolution PR-2-17
Title: Urging Congress to Maintain Consistent Support for Federal Transportation Investments by Ceasing Budgetary Reliance on Highway Contract Authority Rescissions

WHEREAS, In December 2015, Congress successfully passed the Fixing America’s Surface Transportation (FAST) Act, the first long-term surface transportation authorization in a decade, which signaled its commitment to ensure predictable, stable federal funding between 2016 and 2020;

WHEREAS, despite the $305 billion in highway, highway safety, transit, and passenger rail funding authorized by the FAST Act for five years, investment backlog for transportation infrastructure continues to increase, reaching $836 billion for highways and bridges and $122 billion for transit according to the 2015 Conditions and Performance Report by the US Department of Transportation, and the American Society of Civil Engineers has identified a $1.1 trillion funding gap for surface transportation between 2016 and 2025; and;

WHEREAS, at the same time, the House Appropriations for Transportation-Housing and Urban Development for fiscal year 2018 contains an $800 million rescission of unobligated highway contract authority carried only by the state departments of transportation, and the Senate appropriations does not include a comparable provision; and

WHEREAS, rescinding unobligated highway contract authority is a budgetary artifice that at best impedes the flexibility of state departments of transportation to meet their individual infrastructure needs, and disrupts transportation planning and timely delivery of projects; and

WHEREAS, at worst, cumulative rescissions may result in hard funding cuts when combined with the $856 million rescission enacted in June 2017 based on fiscal year 2017 appropriations and the $7.6 billion rescission scheduled for July 2020 under the FAST Act; and therefore now be it

RESOLVED, Congress is urged to repeal the $800 million rescission as currently contained in the House Appropriations bill for fiscal year 2018; and be it further

RESOLVED, Congress is urged to repeal the $7.6 billion rescission scheduled for July 2020 under the FAST Act; and be it further

RESOLVED, if an acceptable budgetary resource or “pay-fors” to prevent these rescissions cannot be found and Congress retains the currently proposed rescissions, it is urged to provide maximum flexibility to state departments of transportation by allowing rescinded contract authority to be derived from every federal highway and transit program category, and by removing onerous requirements that require proportional rescissions across affected program categories; and be it further

RESOLVED, in the future, authorizing and appropriations committees in Congress are urged to consistently support federal investment in transportation by ceasing its reliance on highway contract authority rescissions as an off-set for unrelated programs.

APPROVED BY THE AASHTO BOARD OF DIRECTORS - SEPTEMBER 28, 2017
WHEREAS, the Fixing America’s Surface Transportation (FAST) Act enacted in December 2015 continues to fulfill the Constitutional directive that investment in transportation is a core federal responsibility with its authorization of $305 billion for federal highway, highway safety, transit, and passenger rail programs from 2015 to 2020, and;

WHEREAS, Highway Trust Fund revenues derived from federal motor fuel taxes have been the primary source of revenue to support federal investment in surface transportation investment since 1956, and;

WHEREAS, since 2008, the Highway Trust Fund has been sustained through a series of General Fund transfers now totaling $140 billion, and;

WHEREAS, according to the Congressional Budget Office, the Highway Account of the Highway Trust Fund will require $124 billion in additional revenues and the Mass Transit Account will require an additional $47 billion to remain solvent through fiscal year 2029;

WHEREAS, in order to simply maintain the current Highway Trust Fund spending levels adjusted for inflation after the FAST Act, Congress will need to identify $89.9 billion in additional revenues for a five-year bill through 2025 and $114 billion for a six-year bill through 2026, and;

WHEREAS, Highway Trust Fund revenues are declining with increasing vehicle fuel efficiency;

WHEREAS, according to the U.S. Department of Transportation’s (USDOT) 2015 Conditions and Performance Report to Congress, highway and bridge needs backlog reached $836 billion and transit needs backlog reached $122 billion;

WHEREAS, a number of solutions to fix the Highway Trust Fund to ensure sustainable, certain, and long-term funding have been developed including recommendations from the National Surface Transportation Infrastructure Finance Commission and the National Surface Transportation Policy and Revenue Commission;

WHEREAS, one example of a solution to fix the Highway Trust Fund in the near-term is a federal motor fuels tax increase that may include indexing;

WHEREAS, a further example of a solution to fix the Highway Trust Fund is taxing a barrel of oil which builds off the model of the motor fuel tax, but would shift collection from individuals to producers of oil;

WHEREAS, another example of a solution to fix the Highway Trust Fund is a freight-based user fee that would capture the impact from the movement of goods across the nation’s transportation system;
WHEREAS, an example of a possible long-term solution to fix the Highway Trust Fund could be a mileage-based user fee on vehicle travel that would insulate the Highway Trust Fund from revenue dilution stemming from increased vehicle fuel efficiency and would be a continuation of the existing user-based protocol that ensures users financially contribute to the maintenance and improvement of the transportation system from which they directly benefit;

NOW, THEREFORE BE IT RESOLVED, that a permanent solution for the Highway Trust Fund shortfall must be the foundation of any federal infrastructure initiative and/or the scheduled reauthorization of the FAST Act in 2019 or 2020 in order to prevent significant planning and construction disruptions to highway and transit projects, to provide stable cash reimbursements to states for costs already incurred, and to ensure and enhance the national benefits of the federal surface transportation program including jobs, economic competitiveness, safety, personal mobility, efficient movement of goods, and improved quality of life, and further be it;

RESOLVED, that any potential Highway Trust Fund solution must include these core principles: derived from system use and the need for connectivity, dedicated to highway and public transit transportation improvements, and sufficient to support permanent growth in federal transportation investment, and further be it;

RESOLVED, that it is time for policy makers to advance tangible solutions to the Highway Trust Fund’s structural revenue deficit and that the alternatives listed above, while not all inclusive, would provide a foundation to preserve and strengthen the federal role in supporting a national surface transportation network.
Whereas, The American Association of State Highway and Transportation Officials (AASHTO) and the Federal Highway Administration (FHWA) jointly developed an implementation agreement to transition roadside safety devices from compliance with NCHRP Report 350 to compliance with the Manual for Assessing Safety Hardware (MASH);

Whereas, States desire to transition to MASH-compliant devices to improve safety on our nation’s highways;

Whereas, There is a need to ensure national consistency in the implementation of MASH;

Whereas, The last sunset date in the implementation agreement is December 31, 2019;

Whereas, There are a number of device categories that have zero or a limited number of MASH-compliant devices;

Whereas, This limited number of devices may not provide the functionality needed by a state;

Whereas, It is our understanding that some testing facilities have up to a 2-year backlog for tests, and that they will not be able to complete the testing of safety devices in the timeframe required by the states to comply with the implementation agreement;

Whereas, FHWA has indicated a desire to discontinue the issuance of eligibility letters, which states have depended on as an indication of crashworthiness;

Whereas, Most states do not have the resources and depth of technical expertise needed to conduct reviews of crash tests to determine the crashworthiness of roadside hardware;

Whereas, The AASHTO Technical Committee on Roadside Safety as a volunteer committee does not have the resources, in-depth expertise, nor jurisdiction to assume FHWA’s role in reviewing crash test results;

Whereas, AASHTO explored the development of an unbiased, third-party review program with two independent organizations to provide the technical support and quality assurance reviews of crash test reports previously performed by FHWA;

Whereas, Both independent organizations withdrew themselves from consideration after several months of negotiations, and neither AASHTO nor FHWA has been able to identify an organization that is willing to fill the national-level technical assistance and review functions previously filled by FHWA; and

Whereas, It is critical that AASHTO and the states continue to pursue the goals of safety and innovation on our transportation system, while recognizing that additional flexibility in meeting the implementation deadline is needed; now, therefore, be it
Resolved, That AASHTO recommends that FHWA continue to provide for the review of crash test results and issuance of eligibility letters until such time as a new process has been jointly developed;

Resolved, That states be allowed to continue to use NCHRP 350-compliant devices when a MASH 2016 compliant device does not exist to address the situation or a MASH 2016 compliant device exists but does not meet the state’s given needs or project conditions;

Resolved, That when a single MASH 2016-compliant device is available that meets a state’s needs, the state may use that device;

Resolved, That FHWA will not require states to use MASH 2016-compliant devices that are not suitable for their state;

Resolved, That AASHTO and FHWA will explore shifting MASH 2016 from a manual to a performance-based specification as soon as feasible; and

Resolved, That the AASHTO Board of Directors urges FHWA headquarters to clearly communicate in writing its decision-making processes and decisions with states to ensure FHWA Division Offices are consistently implementing MASH in a practical manner.
Policy Resolution PR-13-19
Title: Increasing the Flexibility of the National Highway Performance and Emergency Relief Programs to Improve Resiliency

Whereas, Changes in sea-levels and the increased frequency and severity of extreme weather events have adversely impacted every region of the United States;

Whereas, Many states and cities are implementing bold initiatives to improve transportation infrastructure resiliency;

Whereas, Even without considering the impacts of sea level rise and extreme weather events, the American Society of Civil Engineers estimates that failure to make necessary investments in infrastructure will cost the United States 2.5 million jobs and $4 trillion in Gross Domestic Product between the period of 2016 through 2025;

Whereas, According to the National Oceanic and Atmospheric Administration, in 2017, there were 16 weather and climate disaster events across the United States totaling $306 billion in cumulative loses;

Whereas, Developing climate resilient infrastructure will assist to ensure the economic security of the United States; now, therefore, be it

Resolved, That Congress is urged to amend existing federal-aid highway programs to provide states the flexibility to address resilience;

Resolved, That Congress should amend the National Highway Performance Program (23 USC 119) to add eligibility for the construction, reconstruction, restoration, rehabilitation, and preservation of a Federal-aid highway or bridge not on the National Highway System provided the activity supports measures to increase the resiliency of critical transportation infrastructure;

Resolved, That Congress should amend the Emergency Relief Program (23 USC 125) to allow the Secretary to determine the following activities to be eligible for Emergency Relief program funding if there are economic justifications that the betterment will reduce the risk of future reoccurring damages:

(i) raising roadway grades
(ii) relocating roadways to higher ground or away from slide prone areas or away from natural threats
(iii) stabilizing slide areas
(iv) stabilizing slopes
(v) installing riprap
(vi) lengthening or raising bridges to increase waterway openings
(vii) increase channel cross-section and maintain channel conveyance toward stream equilibrium (i.e. vertical channel stability)
(viii) maximize adjacent floodplain function with benching, berm removal, and/or increases in channel bed elevation
(ix) increasing the size and number of drainage structures
(x) replacing culverts with bridges and replacing bridges with bridges with increased flow capacity
(xi) installing seismic retrofits on bridges
(xii) adding scour protection at bridges
(xiii) adding spur dikes
(xiv) installing air convection embankments, thermosiphons, or insulation to delay or prevent thawing of permafrost
(xv) adaptive engineering
(xvi) material modifications
(xvii) other as approved by the Secretary.
Policy Resolution PR-14-19
Title: Ensuring Development of the Transportation Workforce of the Future

Whereas, State Transportation Departments strive to develop safe, efficient, economical, and sustainable multi-modal transportation networks;

Whereas, Developing this multimodal network into the future will require an increasingly diverse and differently skilled workforce, particularly as new technology, such as connected and autonomous vehicles rapidly emerge;

Whereas, To attract and retain a robust and skilled workforce, states must have the resources to develop and provide training and educational opportunities that encourage a transportation career path in the public sector; and

Whereas, To ensure a strong and skilled transportation workforce, the federal government must maintain, and even increase, funding for training and educational programs aimed at retaining existing employees as well as expanding the pool of future workforce candidates; now, therefore, be it

Resolved, That Congress should maintain the existing levels of funding available for workforce development and training in the FAST Act and expand eligibilities in other appropriate funding program areas; and

Resolved, That Congress should recognize that each state has unique workforce educational and training needs and allow flexibility in using these funds.
Title: Urging Congress to Repeal the FAST Act’s $7.6 Billion Rescission of Highway Contract Authority

Whereas, In December 2015, Congress successfully passed the Fixing America’s Surface Transportation (FAST) Act, the first long-term surface transportation authorization in a decade, which signaled its commitment to ensure predictable, stable federal funding between 2016 and 2020;

Whereas, Despite the $305 billion in highway, highway safety, transit, and passenger rail funding authorized by the FAST Act for five years, investment backlog for transportation infrastructure continues to increase, reaching $836 billion for highways and bridges and $90 billion for transit according to the US Department of Transportation;

Whereas, The FAST Act includes a $7.6 billion rescission of unobligated highway contract authority scheduled for July 1, 2020;

Whereas, Unobligated balances of contract authority represent commitments to the states from the Highway Trust Fund and have provided states with the flexibility to apply the obligation limitation to each state’s needs and top priority highway programs;

Whereas, The FAST Act rescission requires states to cut their share of highway contract authority in a proportional manner across core highway program categories regardless of the relative balance contained, which ignores states’ funding priorities reflected in the balance;

Whereas, Rescinding unobligated highway contract authority is a budgetary gimmick that impedes the flexibility of state departments of transportation to meet their individual infrastructure needs and disrupts timely delivery of projects; and

Whereas, States preparing for this rescission due to a lack of Congressional action to repeal is already delaying project construction and also delaying the mobility, quality of life, and economic benefits provided by these projects to communities across the nation; now, therefore, be it

Resolved, That Congress is urged to repeal the $7.6 billion rescission scheduled for July 1, 2020 under the FAST Act as soon as possible; and

Resolved, That in the future, authorizing and appropriations committees in Congress are urged to consistently support federal investment in transportation by ceasing its reliance on highway contract authority rescissions as a budgetary offset for unrelated programs.
Whereas, The safety and mobility of the nation’s transportation system will be greatly improved by the emergence of Cooperative Automated Transportation (CAT);

Whereas, CAT has been defined as all modes of transportation working together to improve safety, mobility, and operations efficiency through interdependent vehicle and systems automation and information exchange;

Whereas, Infrastructure Owners and Operators (IOOs) play a fundamental role in advancing, operating and maintaining the physical and digital infrastructure necessary to support CAT solutions;

Whereas, Advancement of connected infrastructure, data, management and operations supporting CAT solutions is best developed through interoperability and consistency in CAT deployments and IOOs consolidating and communicating their intentions and value of CAT in effectively managing mobility and safety in operating the transportation system;

Whereas, Advancement of connected infrastructure, data, management and operations supporting CAT solutions and interoperability and consistency in CAT deployments is best developed through the establishment of broad and flexible IOO Guiding Principles for Connected Infrastructure (Guiding Principles);

Whereas, The adoption of Guiding Principles will be of immediate benefit to IOOs as they continue to address the Federal Communications Commission (FCC) review of the status of the 5.9GHz band currently reserved for transportation applications;

Whereas, AASHTO, working in collaboration with the Institute of Transportation Engineers (ITE) and Intelligent Transportation Society of America (ITS America) with input from subject matter experts from other interested associations have developed the following Guiding Principles (with expanded detail in Attachment A):

1. Automation: Support increased vehicle automation to improve traveler safety, mobility, equity and efficiency
2. Data: Achieve a connected vehicle ecosystem that enables reliable, secure V2I data exchanges in order to support cooperative automated transportation to improve traveler safety, mobility, equity and efficiency
3. Telecommunications: Protect and utilize the 5.9 Gigahertz (GHz) spectrum designated for “operations related to the improvement of traffic flow, traffic safety and other intelligent transportation service applications” (FCC)
4. Operations: Develop CAT strategies that enhance existing transportation system operational capabilities to improve traveler safety, mobility, equity and efficiency
5. Collaborations: Collaborate and communicate with OEMs and mobility service providers in the planning, testing, and demonstrations of CAT applications to support eventual interoperability and to achieve positive impacts on safety, mobility, equity and efficiency; and
Whereas, These Guiding Principles reinforce the CAT safety, development and demonstration, robust connectivity, data and collaboration analysis and recommendations contained in the AASHTO FAST Act Reauthorization White Papers; now, therefore, be it

Resolved, That AASHTO, ITE and ITS America continue to work in collaboration on the utilization of these Guiding Principles in order to improve traveler safety, mobility, equity and efficiency; and

Resolved, That AASHTO adopts these Guiding Principles to further the advancement of connected infrastructure, data, management and operations supporting CAT solutions and interoperability and consistency in CAT deployments to improve traveler safety, mobility, equity and efficiency.
We are at a crossroads for our Nation’s transportation systems. Federal, state, local agencies and the public must decide the future funding course for our nation’s transportation system at a time when there is little bipartisan agreement on fiscal policy matters. While there appears to be widespread agreement on a continued federal role in transportation, there is no clear consensus on the future extent of that role and the source of funding for continued investment even at reduced levels.

The U.S. Congressional Budget Office projects that both the Highway and Transit Accounts of the Highway Trust Fund will have insufficient revenues to continue funding at current levels, and in fiscal year 2015 new highway and transit program commitments will crash from about $51 billion to virtually zero. At the federal level, there is political reluctance to increase taxes or fees to fund transportation. Some State and local governments have been successful in generating support for new funding mechanisms for transportation infrastructure investment, but these do not supplant the need for a continued strong federal role in funding our future transportation infrastructure. Increased investment at all levels of government and from the private sector is needed.

Sustained public support for investment in our nation’s transportation system may only be possible with a clear demonstration and understanding of the value of transportation to safety, the quality of our daily lives and economic prosperity.

AASHTO, AGC and ARTBA agree to undertake a joint initiative to recommend that State DOTs and their contractor and construction industry partners commit to a sustained effort to demonstrate value to our customers -- transportation system users and beneficiaries - employing these and other data driven decision-making strategies such as:

- **Communicate on a frequent, transparent and broad basis -- before, during and after projects.** Communication plans and strategies for major and minor construction projects, regardless of how potentially disruptive do much toward connecting with customers. Effective communications with customers helps to manage expectations and build understanding.

- **Document and convey to the public the specific user benefits that result from transportation investments.** Describing the benefits that customers will see from investments can help the public make a better connection to return on investment in terms that have meaning to them – e.g., economic development opportunities; reducing daily commute times in a corridor; providing a wider, safer, more visible roadway; improving an intersection to make left hand turns more safe and reduce wait times.

- **Demonstrate accountability with transparency to build trust.** Give public and businesses easy access to clear details about how federal and state money is being spent and how new funds would be spent. Ensure that funds are being used as promised. Strive to operate at peak efficiency.

- **Display and promote the deployment and use of technologically advanced equipment and tools.** Customers express greater support for investment in modernized services, systems and facilities that yield faster, smarter, safer travel.

- **Demonstrate value to the users of the system with innovations, the use of technology, on-time performance, partnering and quality in the delivery of projects.**

APPROVED BY THE AASHTO BOARD OF DIRECTORS – OCTOBER 21, 2013
Title: Best Practices for Accelerating Transportation Project Construction

Much discussion has taken place over the past few years about ways to accelerate transportation project delivery. Much of that emphasis has focused on procurement/delivery methods, permitting and environmental review. While all of these areas remain significant, it is important to also look at ways to speed construction delivered through the traditional design-bid-build method. The key result of acceleration is minimizing the time impact to customers – transportation system users and beneficiaries.

At the outset, there must be a clear communication of project goals and commitments in order to balance contractor efficiency and customer expectation. Acceleration cannot be viewed as resulting in cost escalation or as causing a reduction in quality or in safety.

The following ideas have been identified as possible areas where acceleration can be achieved. The Joint Committee recommends that state DOTs consider incorporating the following procedures into their traditional construction programs:

- Allowing up to a 60 day window, at the contractor’s option, between contract award and Notice to Proceed (NTP). This will allow the contractor to obtain critical approval of submittals, including, for example: the 90 day schedule, Storm Water Pollution Prevention Plan (SWPPP), Traffic Control Plan, and other submittals required before construction is allowed to begin. This necessitates that the owner have the CM or engineer in place at contract award for the review of these submittals.

  Functions that should also take place during the window:
  o Use safety and constructability conferences post bid but prior to construction start up to identify any concerns or alternative construction approaches.
  o Order of long lead items like pipe, mechanical equipment, traffic poles, others.
  o Allow the contractor to submit ideas for Value Engineering for review before suggested changes could cost the project time or money.
  o Consider innovative maintenance of traffic by using contractor input into traffic control phasing, lane closure and full closure. Communication with the public may allow more freedom for closures to speed construction.

- Using end result or performance related specifications. “Means and methods” are the contractor’s way to control and accelerate the project. Encourage more reliance on contractor quality control combined with new technologies for owner quality assurance. Consider use of: digital plans, stringless/stakeless construction methods, intelligent compaction computer measurements, submitting reports and records digitally and implementation of electronic documentation for construction projects where appropriate.

- Allowing contractor flexibility in mobilization and start up dates. Specify end date or number of days for construction completion but not when to start. This will improve efficiency by allowing more flexibility for contractors to schedule the work to allow non-stop prosecution of the project.

- Streamlining the decision making process. Make resolving issues an important priority by empowering the most practical level among all contract parties. This is a key component of partnering. More broadly, where partnering has been allowed to lapse or has become so routine as to be meaningless it should be revitalized.

- Programming adequate funding to allow the project to proceed.

Finally, Congress and federal agencies should remove regulatory burdens – relating to other areas of public policy – that make accelerated construction more difficult.
The 2012 federal surface transportation law, the “Moving Ahead for Progress in the 21st Century Act” (MAP-21), features a number of policy reforms intended to shorten the timeframe for the review and approval of transportation improvement projects. Some provisions streamline the environmental process itself, while others provide states and project sponsors with opportunities to assume new roles in that process. The Joint Committee believes the streamlining provisions in MAP-21 are among the most important – and potentially most impactful – in the new law. We also believe that these provisions should be implemented expeditiously and retained. There is potential for significant improvements in transportation project delivery if all parties use these provisions to their maximum effect.

These reforms include the following:

- **Expanded use of categorical exclusions** (CEs) through the addition of new classes of projects that will automatically qualify for CE status. Approval of CE-eligible projects, which have little or no environmental impact, can be years faster than those requiring full environmental impact statements.

- **Enhanced predictability in the review and approval process** by setting firm deadlines for regulatory decisions by participating agencies and shortening time limits for filing lawsuits in response to those decisions.

- **Improvements to the environmental impact statement (EIS) process**, including a relief mechanism to get delayed EISs on a firm schedule, and paperwork streamlining for final EISs and records of decision.

- **Designation of the U.S. Department of Transportation (USDOT), or its appropriate modal administration, as the lead agency** for all federal-aid transportation projects, to alleviate inter-agency conflict and delay. MAP-21 also includes a dispute resolution mechanism when needed among agencies.

- **Encouraged use of more programmatic agreements** to address in advance the common issues found in environmental reviews.

- **Allowing better integration and less duplication between the planning and environmental review processes**, and allowing some acquisition of property before initiation of the review process.

- **Delegation of the federal government’s role** in the environmental review process to interested states.

The three organizations urge the U.S. Department of Transportation to finalize the MAP-21 Environmental Streamlining Regulations expeditiously. Additionally, the three organizations strongly encourage the U.S. Department of Transportation and state departments of transportation to work with other federal agencies and stakeholders to remove legal obstacles to utilize these reforms.

Moreover, the Joint Committee encourages Congress to apply similar streamlining principles to the other transportation modes by including equivalent provisions in future reauthorization legislation affecting those modes.

APPROVED BY THE AASHTO BOARD OF DIRECTORS – OCTOBER 21, 2013
The 2012 federal surface transportation law, the “Moving Ahead for Progress in the 21st Century Act” (MAP-21), creates a National Freight Policy designed to improve the condition and performance of the national freight network. The relevant provisions of the law encourage the prioritization of freight improvement projects within the federal-aid highway program. They also reinforce the federal government’s constitutional responsibility to provide a national transportation system that facilitates interstate commerce.

MAP-21’s freight-related provisions require the U.S. secretary of transportation to establish a national freight network, develop a strategic freight plan, formulate new and improved metrics to assess freight-related transportation projects, urge states to develop freight plans of their own, and incentivize freight improvement investments by offering a greater federal share for these projects.

A further provision encourages each state to establish a freight advisory committee, which is to serve as a discussion forum for freight-related transportation decisions in the state, coordinate regional freight priorities with other organizations, promote information-sharing between the public and private sectors, and help develop the state freight plans desired under MAP-21. These advisory committees are to include representatives of ports, shippers, carriers, freight-related associations, the freight industry workforce, state DOTs and local governments.

The Joint Committee believes the freight advisory committees should also include representatives of the transportation design and construction industries in their ranks, reflecting the industry’s critical role in the planning, designing and building of freight-related projects. Besides providing their expertise during the policy-making process, industry representatives will also serve as strong advocates for enacting the freight improvement plans devised by these state advisory groups. The fact that the recently announced U.S. Department of Transportation’s National Freight Advisory Committee includes significant representation from the transportation construction industry reinforces this belief. Accordingly, AASHTO, ARTBA and AGC intend to educate their respective member-agencies and chapters about this provision, and encourage them to work together at the state level to identify and include these industry representatives among the participating stakeholders.
AASHTO-AGC-ARTBA Joint Committee
Joint Position Statement JPS-1-14
Title: The Importance of the Federal Surface Transportation Program to State Economies
Joint Discussion Paper

Our national, federally-supported surface transportation network exists to provide access—for workers to jobs and workforce to businesses; for shipments of materials and products between businesses; and for customers to products and services. Virtually every trip made using our network involves an economic transaction of some sort. Collectively, these transactions are what determine the health of a state’s economy and the resulting quality of life for its citizens. The fact that 75 percent of the value and 82 percent of the weight of all the materials, products and foodstuffs shipped in the U.S. annually are delivered by truck underscores the importance of our highway and transit network not just to our national economy, but also to each state’s economy.

U.S. Department of Transportation data show that, on average by value, almost 40 percent of the products produced in one state are purchased by customers in other states—with most of this economic activity occurring beyond their neighboring states (state data attached). The federal surface transportation investment program exists to facilitate this interstate connectivity between businesses and their customers across state lines and globally. The program ensures that the roads and transit systems most important for workforce and customer mobility, intermodal freight shipments and tourism in every state are maintained and improved to meet demand in a sustained, coordinated manner.

The program provides federal dollars to states principally for investments in their share of the 160,000-mile National Highway System (NHS), which includes only four percent of the nation’s road mileage, but accommodates more than 75 percent of heavy truck traffic. The NHS also facilitates 90 percent of all tourism traffic in the nation, which supports, on average, 11 percent of employment within a state.

Over the past 10 years, the federal program has provided, on average, 52 percent of all capital investment made by the states in their most important highway and bridge infrastructure. This ranges, by state, from 35 to 87 percent (illustrative map attached). Clearly, without this level of sustained federal investment, the integrity of the NHS—and the success of individual state economies dependent on it—would be put at risk.

In its own right, the federal surface transportation investment program creates and sustains significant employment in every state, both directly and indirectly. It supports an estimated 1.25 million jobs with a payroll of $77 billion that generates $741 million for state tax bases.

The AASHTO-AGC-ARTBA Joint Committee believes educating the public on how their contributions to federal investments in a national surface transportation infrastructure program benefit their livelihood and their state’s economy is essential to building political support for the expanded federal investment necessary to fund needed improvements in all states. It urges its member organizations to make this a research, communications and advocacy priority.

APPROVED BY THE AASHTO BOARD OF DIRECTORS - NOVEMBER 24, 2014
Motor vehicle manufacturers and leading communications technology firms have been aggressively pursuing research and development programs to introduce connected/autonomous—or “intelligent”—vehicles to the world’s fleet. Such an innovation has enormous potential for roadway safety, traffic management, maximization of system capacity and, perhaps, implications for roadway design/construction and future highway funding.

This vision will become a reality. Auto manufacturer Mercedes-Benz is already marketing semi-autonomous features with its 2014 S-Class vehicles. Toyota has a driverless vehicle pilot project operating at the San Diego Airport. Several manufacturers are now producing and selling vehicles that can include technology assisted steering and breaking. Google launched an effort in 2009 to develop the technology necessary to bring autonomous motor vehicles (AV) to the market by 2017 and currently has an extensive on-road test in progress. So, although the ultimate scenario of completely connected or autonomous vehicle fleets may be decades away, there are near term benefits and opportunities.

Public policymakers are beginning to prepare for this development. Four state legislatures have enacted laws relating to autonomous driving, another dozen states have such legislation under consideration. At the federal level, the National Highway Traffic Safety Administration released a preliminary statement of policy in May 2013. To date, much of the private, federal and state research in this area has been on the operational aspects of AV transportation.

To reach its full potential, a connected/autonomous vehicle must communicate not only with other vehicles, but also with “hard” infrastructure facilities. The safe and seamless integration of these vehicles into the roadway network requires the engagement now of those in both the public and private sectors who are responsible for planning, designing, constructing and managing it. Since 2004, AASHTO has been engaged in a Connected Vehicle Executive Leadership Team with automakers (OEMs), technology suppliers, NHTSA and FHWA to discuss technology developments and deployment issues.

The AASHTO-AGC-ARTBA Joint Committee believes its member organizations should work closer together to advance federal and state policies that ensure that the integration of CVs/AVs into the nation’s road network is done with safety as the top priority. This includes advocating that:

- Vehicle-to-vehicle (V2V), vehicle-to-heavy construction equipment (V2HCE), and vehicle-to-infrastructure (V2I) technologies are developed and implemented that make roadway work zones safer;
• Low technology roadway infrastructure improvements that facilitate safer driving through V2I interactions—such as reflective devices, striping and markings—are compatible with all AVs systems and are integrated expeditiously into the roadway network at all levels as it is constructed and repaired; and
• Federal support is given to fast-track research to determine how to best retrofit existing roadway—and design and construct future facilities—to ensure the safe transition of CVs/AVs into a network that must also accommodate non-connected and non-autonomous passenger vehicles and trucks.

The Joint Committee further urges its member organizations to advocate that entities that profit from the introduction and integration of AVs into the roadway network share in the cost of the public infrastructure improvements necessary to accommodate such vehicles.

Nearer term, the AASHTO-AGC-ARTBA Joint Committee recommends active collaboration at the state and national level, including:

• ARTBA and AGC nominating representatives for the Connected Vehicle Deployment Coalition to represent infrastructure construction matters and consider influences on the design and construction of roadways and bridges.
• Seeking opportunities for utilizing current in-vehicle intelligence and other technologies to enhance the safety of highway work zones, including a Joint Committee-sponsored workshop session on this topic at the 2015 meeting of the AASHTO Subcommittee on Construction.
Telling the transportation story to the general public is not easy. Transportation is taken for granted. It is there when you need it and DOTs have done such a good job keeping the transportation system running, despite chronic underfunding, that most people don’t see where there are inadequacies and need for improvement. It is particularly difficult to sell the need for transportation upgrades to the X generation and the millennials who grew up with an existing road system that generally meets their needs. Even more difficult to convey to the public is the need for funding increases and raising the revenue that supports it. The general attitude is, “I support transportation and want some improvements but the government has plenty of my tax dollars and they should take money from things I don’t support and put it into transportation.”

Social media, including Facebook, Twitter and YouTube, are of course some of today’s most efficient, economic and impactful ways to get a message across to the general public. Transportation advocates should make better use of social media to tell the transportation story.

Many state DOTs, AASHTO, AGC, ARTBA and other transportation groups who advocate the need for transportation investment are already active in the social media sphere. More cooperative and coordinated efforts would be helpful.

The AASHTO-AGC-ARTBA Joint Committee recommends the three organizations undertake the following initiatives:

- Form a work group of their respective communications professionals to develop message threads and a coordinated protocol for sharing content for distribution via the AASHTO, AGC and ARTBA social media platforms. The initial meeting will be held at the 2014 AASHTO Subcommittee on Transportation Communications.
- Develop and conduct a webinar for members of all three groups on the use of social media, before the end of 2014.
- Share data bases of social media contacts so that advocacy outreach efforts can reach a far wider audience.
- Develop a joint social media advocacy strategy that includes the use of banner ads, YouTube videos, advocacy messages and a moderator to develop content, follow trends and respond to third party messages.
- Develop additional factoids that give snippets of transportation related information in small enough messages to be useful on twitter.
- Examine the possibility of purchasing a data base of consumers and target them with transportation reauthorization messages.
- Target members of Congress with social media messaging, including news accounts of transportation problems and successes.
Transportation infrastructure is one of the key enablers that allow communities, states and the nation to compete for job growth and economic development. High-functioning physical infrastructure, including transportation assets, that meets future demands will be critical in ensuring that the American economy creates and sustains good jobs and a secure future. When transportation systems operate efficiently, they add value through better accessibility to markets, employment and additional economic development, and by creating economic and social opportunities and benefits. When transportation systems are deficient in terms of condition, capacity or reliability, they can have an economic cost such as reduced or missed development opportunities and lower quality of life. At the aggregate level, efficient transportation services reduce costs in many economic sectors, while inefficient transportation increases these costs. One good example of costs is the simple statistic that 30% of perishable goods are lost in transportation due to congestion and other system deficiencies.

The nation is now at a crossroads in the terms of the future structure for and level of investment in surface transportation. State DOTs and the transportation construction community must engage with the direct beneficiaries of efficient transportation systems— the business and manufacturing community— in advocating the need for a continued, strong federal commitment to investment in transportation. Most recently a group of major U.S. companies “that rely on an integrated, efficient and effective transportation system to grow (our) businesses and remain competitive in the global economy” came together to form the Alliance for American Competitiveness. These are companies that create and sell goods in the global marketplace and that help businesses connect with customers across the U.S. and throughout the world. They recognize the positive economic return from investment in transportation infrastructure and the economic imperative for continued commitment to investment. The leaders of five major companies—Caterpillar, BNSF Railway, Dow Chemical, Honeywell, and UPS— are taking their message directly to Congress and the public. But they cannot carry the message alone.

It is recommended that:

- State DOTs and their construction industry partners work collaboratively to broaden the base and engage transportation system users and beneficiaries in sustaining the momentum of executive-level commitment and supporting efforts to advocate for continued federal transportation investment; and

- State DOTs and their construction industry partners work to engage and collaborate with regional and state coalitions representing the interests of transportation system beneficiaries.
The transportation infrastructure industry, both on the public and private side face significant challenges attracting, developing and training the work force of the future. Projected increases in retirements of the baby boom generation, competition for workers from other industries, and the difficulty in recruiting women and minorities are challenges to transportation work force development. Others factors specifically for the construction industry include the dismantling of the public vocational and technical education programs, declining participation in union apprenticeship training and an increasing focus on college preparatory programs at the high school level. Concerns about job continuity due to uncertainty about federal funding also undermines the effort to recruit workers to the transportation infrastructure industry.

It is in the best interest of the transportation infrastructure community to encourage more individuals to pursue careers in this industry. It is critical to develop a skilled and diverse transportation work force across a broad range of both professional and skilled transportation careers: engineers, planners, construction workers, welders, equipment operators, truck drivers, estimators and others. The joint committee identified some initiatives around the country by either the construction industry or the state DOTs to promote transportation careers, however, there seemed to be little coordination.

Some of the initiatives that AASHTO, FHWA, AGC and ARTBA could cooperate on include:

Promote public relations initiatives such as the “Go Build” programs in Alabama, Georgia and other states and similar programs aimed at raising awareness to careers in the transportation infrastructure industry.

Promote Transportation and Construction Career days to introduce the younger generation to the available careers and benefits of working in the modern transportation construction field.

Cooperate in promotion of Youth/Millennial Mentoring Programs within private companies and at DOTs.

Encourage creation of Internships in DOTs and private sector companies.

Work jointly to make AASHTO TRAC program a success including consideration of financial support.

Encourage charter schools with construction and technical skill curriculum.

Encourage partnerships between apprenticeship programs and institutes of higher education.

Work with veteran organizations that provide training and career direction.

Promote inclusion of horizontal construction in existing construction management programs that currently tend to emphasize vertical construction skills.

Encourage Congress to extend on-the-job training (OJT) and supportive services funding without limiting states’ flexibility in accessing and using these funds.
Promote and engage in student competition programs sponsored by the ASCE and other organizations.

The joint committee believes that the transportation work force needs of today and the future will play an important part in addressing the Nation’s transportation infrastructure needs. The joint committee therefore recommends that AASHTO, FHWA, AGC and ARTBA look for opportunities to work cooperatively on initiatives that promote the industry, encourage the youth to select transportation as a career choice and make the available educational opportunities more transportation friendly.
In the current era of constrained and uncertain funding at all levels of government, the ability to successfully demonstrate the value of transportation investment to taxpayers hinges on the collective credibility of the state departments of transportation (state DOTs) and their contractor and construction industry partners. Credible organizations are understood to be responsive, to be trustworthy, to have strong relationships with key decision-makers, and to have demonstrated accountability. In the transportation investment context, there is no more crucial barometer of accountability than effective use of allocated funds using a transparent project prioritization process and efficient project delivery.

Reflecting the federally-assisted, state-administered philosophy behind the federal transportation program, the planning and programming process throughout the country is underpinned by the long-range plans at the statewide, metropolitan, and rural level, which provide the holistic vision and policy platform. These blueprints then seed the statewide and metropolitan Transportation Improvement Programs that identify and fund specific projects for the upcoming four years.

Selection of transportation projects that deliver maximum safety, economic, mobility, and social value, requires frequent and extensive public involvement and consultations with stakeholder groups. These opportunities for input represent a foundational element of the transportation planning process.

State-specific mandates and considerations, which may include mode-specific plans and legislative directives, are also addressed through this planning process. As to be expected, there is great diversity in the extent of legislative involvement and authority in the process of selecting and approving projects across states. In some states, the legislature actively reviews or approves state DOT plans or programs, often as part of the budget and appropriations process.

MAP-21’s initiation of a performance-based federal transportation program will enhance decision-making on projects through a consistent business practice that better links organizational goals and objectives to resources and results.

The AASHTO-ARTBA-AGC Joint Committee believes the progress made under MAP-21 in the project selection process must be maintained. As such, the Joint Committee recommends the three organizations to continue improving the project selection process by:

- Clearly articulating assumptions used behind both subjective and technical elements of projects, and better linking them to overarching transportation policy goals;
- Clearly illustrating not only the job creation benefits of investment in transportation projects in the shorter term, but also the broader and enduring economic benefits of investment gained at the regional, statewide, and national level;
- Clearly defining, making available, and publicizing the state department of transportation’s goals and the plans and programs developed to meet those goals;
- Supporting development and adoption of innovative technology in data collection and processing, coupled with consideration of analytical tools that better illustrate project benefits and costs, especially in the context of safety and the state and regional economy;

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• Strengthening each state’s transportation asset management plan, which is based on a strategic and systematic process of operating, maintaining, and improving physical assets to identify a structured sequence of maintenance, preservation, repair, rehabilitation, and replacement actions to achieve and sustain a desired state of good repair over the lifecycle of the assets at minimum practicable cost; and,

• Enhancing the credibility and value proposition behind each and every transportation project by engaging the public and decision-makers with easy-to-understand messages and accessible, state-of-the-art communication platforms.
State Departments of Transportations (DOTs) and construction industry practitioners have made great strides in the past several years incorporating various technology applications into their routine operations and this development will continue to expand. FHWA's third round of Every Day Counts includes e-Construction as an initiative to promote more rapid adoption of an electronic process for standard contract administration and implementation.

Some of the benefits of greater use of technology on highway and transportation construction projects can include: improved collaboration between contractors, subcontractors, and suppliers with state DOTs leading to better communication, greater consistency, higher quality, faster completion and reduced administrative costs.

Some of the technology being pursued include:

Transfer of electronic plans and electronic contract specifications and special provisions.
Mobile devices, software and applications for field inspection and data collection.
Data hosting services (data clouds, share sites, virtual review rooms).
Electronic review and approval processes (digital signatures/reviews).
Communications tools (e-mail, text, social media, and smart phones).
Radio frequency identification (RFID) tags for resource tracking.
Asset management, electronic as-built drawings and quality assurance records.

The challenge for making these technology developments more widely and conveniently used is in adopting practices that allow this to happen. Compatibility of different software packages is one of the challenges that must be addressed as is the development of best practices. The joint committee identified some areas where cooperation between AASHTO, FHWA and the construction industry could lead to faster and more seamless adoption of e-construction and recommends the following:

1. States are encouraged to convene a forum to look at ways to expand and enhance the use of the state DOTs’ electronic administrative platform for use by contractors in developing bids, submitting reports, managing administrative requirements, submitting invoices and other functions.

2. Some compatibility issues related to the AASHTOWare Site Manager software have been identified. As AASHTO moves to adopt a web based version of Site Manager to allow for better collaboration, industry input would help ensure that contractor concerns are addressed. Where state DOT’s use software other than AASHTOWare, such compatibility issues should be addressed in the convened forums.

3. Sharing of electronic 3-D models continues to be a challenge in some states. While third-party vendors have made considerable progress in compatibility in this area, a renewed initiative to identify the reasons for the reluctance to share this data and recommendations for addressing these concerns should be undertaken within the forums; and referred to the Joint Committee as appropriate.
4. Field use of mobile devices can provide significant benefits in getting decisions made on specifications and other project related questions. A list of best practices for the use of mobile devices in the field should be developed by the states and compiled and shared by region to speed adoption of their use.

5. Protocols for use of electronic signatures across the whole project development and e-construction process should be developed like that supported in AASHTOWare Project Construction & Materials™.
WHEREAS, the current extension of the authorization legislation for the federal surface transportation programs expires October 29, 2015; and

WHEREAS, federal-aid funding remains critical to state-level capital investment in highways and bridges, averaging 52 percent of that state investment in recent years; and

WHEREAS, continued short-term extensions will continue to result in project delays and cancellations because of the uncertainty in federal-aid funding, resulting in higher costs and delay of improvements affecting safety, efficiency and economic development; and

WHEREAS, some state transportation agencies may delay payments on contracts for transportation improvement projects if the U.S. Department of Transportation delays reimbursements from the Highway Trust Fund; and

WHEREAS, uncertainty in Federal investment will interrupt careers and opportunities in transportation infrastructure industries; and

WHEREAS, the U.S. Senate passed its version of a six-year reauthorization bill (the “DRIVE” Act) in July with broad bipartisan support; now, therefore, be it

RESOLVED, That the AASHTO-AGC-ARTBA Joint Committee and its component associations urge the U.S. House of Representatives to consider and pass a well-funded, six-year surface transportation reauthorization bill as soon as possible, in order to facilitate the process which will result in agreement on and passage of a final version of the bill by each house; and be it further

RESOLVED, That the AASHTO-AGC-ARTBA Joint Committee and its component associations urge the president to sign this legislation expeditiously when it is passed by Congress.
Partnering in the construction industry began in the late 1980s in response to the growing amount of construction disputes that ended in litigation. The objective of construction partnering is to improve communication between a project’s owner, the design professionals, the contractor(s), and other key project stakeholders to create a cooperative project environment with a team committed to understanding one another. In this environment, the team works together to develop and follow processes and procedures which will optimize the successful completion of the project. Executive level commitment and participation are critical to a partnering program’s success.

By developing mutually agreed upon project and partnership success goals and by monitoring the achievement of these goals for the duration of the project and developing an agreed upon process for resolving disputes should they arise, the net result is reduced project costs, expedited project delivery times, improved project quality and elimination of change orders and claims.

In the past 30 years, partnering has grown. Twenty-four of the 50 state transportation programs have adopted Partnering as an important process to improve outcomes. Several state transportation departments require a partnering process by specification. Some have expressed concern, however, that after 30 years of utilization and because it has become a routine practice in construction partnering may have it lost its effectiveness.

In discussion around the country it was apparent that both state DOTs and the construction industry believe that partnering, whether through a formal process or as a standard part of the construction process, is still an effective means for speeding decisions, limiting and resolving disputes and generally enhancing project completion.

The Joint Committee is interested in working cooperatively to encourage a new emphasis on partnering and to update the principles of partnering based on current project delivery methods. Some opportunities to accomplish this include:

Federal Highway Administration (FHWA) has identified construction partnering as one of innovations of interest for round four of the Every Day Counts initiative. AASHTO, AGC and ARTBA should look for opportunities to participate in the regional summits planned by FHWA on EDC implementation to encourage creative ways to revitalize and expand on the use of partnering.

The Nevada DOT, in cooperation with FHWA, has scheduled a conference titled; “Innovative and Effective Partnering Practices” which will look at the use of partnering in alternative delivery systems but also at new approaches to partnering on traditional design-bid-build projects. AASHTO, AGC and ARTBA should promote participation in this April 4-6, 2017 conference with our collective memberships and look for ways to participate in the conference program. The three groups should also help disseminate the conference’s content afterward, and schedule related sessions at their own respective meetings, especially for emerging professionals who may be less familiar with partnering principles.

NCHRP project 19-10 is underway to develop the 2nd edition of AASHTO's Partnering Manual. The manual will update the current manual to include design-build and other alternative delivery methods but will be quantifying the costs and benefits of partnering in terms of time, cost, safety, and quality. The three organizations should use the release of this document to encourage more wide spread use of partnering principles.

The Joint Committee recommends that AASHTO and FHWA survey the states on partnering practices and encourage states to participate in the April conference on Innovative and Effective Partnering Practices.
Risk allocation affects both project delivery and cost. Getting it right is paramount.

A long-standing and oft-repeated principle of sound risk allocation is that risks should be assigned to the parties best able to manage them. Successful and equitable risk allocation during all phases of a project can minimize its total cost and the potential for disputes during construction.

Contractors price risk and contingencies according to the complexity of the project. Assigning inappropriate risk to contractors can inflate bid levels and increase project costs.

The risk allocation process carries wide-ranging implications. If the owner-agency’s risk assessment for a project differs significantly from that of the contracting community, then bids or proposals for that project may come in well outside the budget or time frame estimated by the owner. It is therefore critical that all parties to a project “speak the same language” throughout the risk allocation process—whether it relates to individual projects or the state’s transportation improvement program in general.

Given the ongoing importance of risk-related issues, the Joint Committee will form a representative working group to enhance mutual understanding of the various perspectives on risk allocation. This group will review current materials on risk, consider various types of risks and their potential solutions, encapsulate its discussions through new collaborative documents as appropriate, and organize educational sessions for the benefit of the states and the entire construction industry. The Joint Committee encourages the Federal Highway Administration to assist in facilitating these efforts.
Individual transportation improvement projects can shape public perception of a state’s DOT, its transportation construction industry and their stewardship of taxpayer funds.

Collectively, transportation projects employ dedicated professionals, foster innovation, facilitate economic growth and enhance quality of life. Unfortunately, even when the benefits of a high-profile project should be obvious, media coverage often focuses on perceived shortcomings, such as budget or schedule issues, or short-term inconveniences for motorists during construction. As an example, upon the opening of a major new highway facility on the East Coast in 2011, initial media reports centered on complaints over its absence from GPS systems, its variable toll rates and its speed limit. In that case, the local media paid little attention to the shorter commutes and relief from daily gridlock stemming from the new capacity provided by the project.

In a contrasting example, the Massachusetts “Fast 14” program, which replaced 14 bridges over 10 weekends during the summer of 2011, proved to be a popular media story and was well-received by the public. The media coverage reflected positively on the project participants.

Some state DOTs have explored the concept of “enterprise risk management.” Researchers describe this as managing the uncertainties—such as public opinion—necessary to achieve a DOT’s strategic objectives.

In a similar vein, AASHTO, AGC and ARTBA want to identify and share with the public the many benefits and substantial value provided by major projects. Quantifying and publicizing a project’s benefits after its opening should be routine DOT practice. This might include public release of economic, traffic or safety studies showing the project’s value over the ensuing months and years. These communications efforts might also spotlight a project’s cost savings; deployment of new and effective technology; testimonials from commuters, system users and other beneficiaries of a new or improved facility; and environmental stewardship.

Besides the general public, target audiences for these efforts may include legislators, local officials, media, the business community, local environmental organizations and other interest groups.

Please provide any recent examples and related information for the Joint Committee to share.
WHEREAS, the Fixing America’s Surface Transportation (FAST) Act of 2015 is the longest duration surface transportation program reauthorization in a decade; and

WHEREAS, prior to enactment of the FAST Act, a series of short-term extensions and Highway Trust Fund revenue crises created years of uncertainty about future federal-aid funding, resulting in project delays and cancellations, higher costs and deferring of improvements affecting safety, efficiency and economic development; and

WHEREAS, the investment levels and federal program stability promised under the FAST Act require timely enactment of annual appropriations bills that adhere to the new law’s authorization levels; and

WHEREAS, increasing state flexibility and accountability were primary objectives of the FAST Act; and

WHEREAS, putting off enactment of a fiscal year 2017 appropriations bill for the U.S. Department of Transportation until well into calendar year 2017—as some members of Congress are currently proposing—would needlessly delay critical highway and public transportation investment increases and renew uncertainty about future federal-aid funding; and

WHEREAS, rescinding unobligated highway contract authority is a Washington, D.C., budget gimmick that impedes the flexibility of state departments of transportation to meet their individual infrastructure needs, and disrupts transportation planning and timely delivery of projects; and

WHEREAS, the Senate-passed fiscal year 2017 transportation appropriations bill contains a $2.2 billion rescission of unobligated highway contract authority and the House proposal includes no comparable provision; and

WHEREAS, these issues will be severely exacerbated when combined with the $7.6 billion rescission enacted in the FAST Act; now, therefore, be it

RESOLVED, That the AASHTO-AGC-ARTBA Joint Committee and its component associations urge the U.S. House of Representatives and Senate to pass a final fiscal year 2017 appropriations bill for the U.S. Department of Transportation during calendar year 2016 that: provides, at a minimum, the highway and public transportation investment levels authorized by the FAST Act; and includes no rescission of unobligated highway contract authority; and be it further

RESOLVED, That the AASHTO-AGC-ARTBA Joint Committee and its component associations urge the president to sign this legislation expeditiously when it is passed in Congress.
WHEREAS, the President signed the Fixing America’s Surface Transportation (FAST) Act on December 4, 2015 authorizing federal highway and public transportation programs through September 30, 2020; and

WHEREAS, Congress failed to provide an increase in the federal excise tax on gasoline and diesel fuel or create any new on-going revenue source for the Highway Trust Fund, but instead transferred $70 billion from the General Fund of the U.S. Treasury; and

WHEREAS, the Congressional Budget Office estimates that in order to simply maintain current investment levels for federal highway and public transportation programs the Highway Trust Fund revenue gap at the expiration of the FAST Act will be $20 billion annually; and

WHEREAS, in the first term of the next President, the Highway Trust Fund will once again be facing significant revenue shortfalls that will create uncertainty and lead to disruptions in states delivering their transportation programs, ultimately impacting safety, economic development, and quality of life; and

WHEREAS, presidential candidates have expressed support for increased infrastructure investment; and

WHEREAS, any responsible new infrastructure funding proposal needs to take into consideration and address the long-term solvency of the Highway Trust Fund and maintain the historic 80/20 split of revenues between the Highway Account and the Mass Transit Account; now, therefore, be it

RESOLVED, that the AASHTO-AGC-ARTBA Joint Committee and its component associations urge the next administration, the U.S. House of Representatives and the U.S. Senate to secure the long-term solvency of the Highway Trust Fund by providing real, reliable, dedicated and sustainable revenue sources derived from the users and beneficiaries of the system for the Highway Trust Fund.
WHEREAS, the United States Constitution deems investment in transportation infrastructure as one of the few core responsibilities of the federal government; and

WHEREAS, the states are equal partners to the federal government; and

WHEREAS, the Interstate Highway System (IHS) is a key component of the US transportation system, as it handles nearly 25 percent of the total vehicle miles traveled annually and almost 40 percent of the nation's total truck traffic even though it makes up only 1.2 percent of the country's public roadway lane-miles; and

WHEREAS, the IHS of today, with a network little-changed since its inception, serves more traffic than the entire US road network served when the IHS was authorized in 1956, and that what was once a premier system that stood as a symbol and enabler of American growth and economic vigor is showing its age and constraining economic growth; and

WHEREAS, much of the IHS is still “first generation” and as a system, it has not kept up with the growing population and economy while the need for ongoing maintenance and preservation actions—and increasingly, complete reconstruction of the system—has grown; and

WHEREAS, the capacity of the IHS and its configuration are overwhelmed by expanding and evolving travel demands, yet the potential of new technology to maximize service and minimize costs has barely been tapped; and

WHEREAS, a renewed and modernized IHS fully serving the nation’s transportation needs for the next 50 years will require far more than simply maintaining its current condition and configuration; and

WHEREAS, under Section 6021 of the Fixing America’s Surface Transportation Act, the Transportation Research Board was tasked by Congress to complete a “Future Interstate Study,” which would examine actions needed to upgrade and restore the Dwight D. Eisenhower National System of Interstate and Defense Highways to its role as a premier system that meets the growing and shifting demands of the 21st century; now therefore be it

RESOLVED, the AASHTO-AGC-ARTBA Joint Committee calls for Congress to uphold the federal government’s constitutional responsibility to provide for interstate and national defense by ensuring that:

- The IHS renewal, modernization, and expansion, given its critical importance to interstate commerce and national defense, is responsibly and adequately funded at the federal level for the long-term, based on reliable and dedicated user-based revenue sources; and

- The IHS harnesses—rather than simply responding to—rapidly developing technologies ranging from connected and autonomous vehicles, unmanned aerial vehicles, and mobile phone-based services, and possesses flexibility to adapt to yet-to-be-known future technologies; and

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• The IHS, as a dominant element of the transportation system, seamlessly integrates into other travel modes and fit holistically into the overall national and global network that is becoming only more complex; and

• The IHS most effectively facilitates both passenger and freight transportation since approaches to improve efficiency, reliability, and safety vary greatly between passenger and freight users, such as interstate truckers and daily urban commuters; and

• The IHS serves both rural and urban transportation needs since the system has long outgrown its original design as an inter-urban network of highways; and

• The IHS is secured from threats ranging from terror attacks to extreme weather through enhanced resiliency, given its fundamental responsibility to support national defense, emergencies, and evacuations; and

• In areas experiencing population and economic growth, the IHS is strategically expanded by adding capacity in existing routes, construction of new segments, and improved efficiency of operations.
Title: Protecting Workers and Motorists while Minimizing Impact on the Motoring Public

Background: Building, rebuilding and expanding our transportation infrastructure has always involved a balance between getting projects completed safely, on time, within budget and with top quality while minimizing the impact on motorists. Motorists, unfortunately have little patience with road construction which they mostly view as an inconvenience. Most agreed that distracted driving, speeding and impaired driving are the leading causes of work zone intrusions. As states and, hopefully the federal government increase financial commitments to significantly improve our transportation infrastructure these conflicts are likely to become more pronounced with implications for the safety of construction workers, DOT personnel and motorists.

The AASHTO-AGC-ARTBA Joint Committee recommends that while meeting these often competing goals can be a challenge, safety must be paramount. The Joint Committee encourages state DOTs and their local industry partners to meet to discuss work zone practices. Examples of practices being used around the country include:

Increased enforcement:
- Law enforcement presence on projects and, when feasible, involving law enforcement in designing work zones so that officers have space for surveillance and for ticketing.
- Pre-construction meetings with contractors and police before work zone goes into effect and subsequent meetings as traffic flow changes during the project.
- Use of police blue/red lights on construction vehicles where permissible under state law.
- Photo enforcement in work zones when permissible under state law.
- Distracted driver and other awareness campaigns to make motorists aware of work zone hazards.
- Increase enforcement of “no-texting” in work zone laws.

Technology:
- FHWA’s Every Day Counts (EDC) initiative on Smart Work Zones.
- Partnering with GPS and social media providers to share information on real time construction activities.
- Use of queue and speed management deployed through Intelligent Transportation Systems (ITS) for dynamic management of work zone traffic. Queue management systems, when coupled with traffic information strategies, can alert drivers to a line of vehicles ahead caused by a work zone so they can slow down safely.
- Speed management, especially variable speed limit (VSL) systems, dynamically manage work zone traffic based on real-time conditions such as changing work zone situations, congestion and weather.

Job Site Practices:
- Use of positive protection barriers between workers and drivers when designing work zones done under traffic.
• Full road closures during construction or during critical periods in the construction process, including incentives and disincentives, should be given priority consideration.
• Separate alternative bid items for: incident management, police enforcement, emergency response, intrusion detection systems, bubble lighting for night work, construction acceleration techniques, and other construction related technologies.
• Project coordination by synchronizing projects at various levels, combining multiple projects in a corridor or network, correlating right-of-way acquisition and utility work, and coordinating work between different transportation agencies to minimize work zone impacts and produce time and cost savings.
• Temporary rumble strips in work zones to alert drivers when entering work zones.
• Use of safety contingency in project budgets that allow the contractor or the DOT to make changes in the contract to address identified safety concerns.
• Training in safety principles.
The transportation construction industry continues to embrace emerging technology as a means of delivering projects as efficiently, expeditiously and safely as possible. As a prominent example, the use of unmanned aerial systems (UAS) technology (more commonly referred to as “drones”) has increased exponentially in recent years. The use of drones in transportation design, construction and related activities was once considered unusual, but is now commonplace. Current uses include:

- Remote inspection of bridges and other structures
- Determining stockpiled quantities of materials
- Geospatial tagging and surveying
- Documenting work zone setups and completed projects
- Disaster response and incident management
- Collection of traffic data

The potential for the use of drones in transportation construction seems limitless, with new applications being developed at a rapid pace. Moreover, public agencies and the industry are only beginning to quantify the advantages of using drone technology in terms of cost savings and safety improvements. As an example, in planning for the use of drones for certain bridge inspections, Minnesota DOT has noted that the capital cost for such a device is currently about $40,000, compared to an inspection truck which runs to $675,000. While state DOTs will continue to deploy both forms of inspections as appropriate, their combination will result in enhancements for worker safety, decreased disruptions for the traveling public and new sources of useful data.

One challenge, however, is the extent to which the current and future regulatory environment could impede the ideal usage of UAS technology in transportation construction. The Federal Aviation Administration (FAA) regulates the use of drones in national airspace, most recently revising its rule last year. This primarily relates to certification, registration and operational approval of the devices and their operators. Many states have also added a layer of UAS regulations for various purposes, generally involving privacy and safety concerns for those on the ground.

The Joint Committee recognizes that this regulatory regime serves a critical purpose: ensuring the safe operation of drones for everyone involved. However, we believe all parties should also anticipate and address current and future regulatory barriers that could stifle UAS innovations in our sector, along with the related enhancements to safety and efficiency. This would include
streamlining the waiver process for common exemptions (such as operation at night, or above people) sought by drone operators in the transportation construction industry.

Accordingly, the Joint Committee requests that the FAA and other appropriate modal agencies work with our component associations to review the unique needs of the industry in carrying out this important work with drones, recognize distinctions between drone use by the industry and that of other sectors, explore programmatic waivers for the industry under defined conditions, and streamline operator requirements and certification, all with the intention of maximizing potential innovations, efficiencies and safety enhancements. These organizations should also work together to identify and disseminate UAS-related state statutes and regulations that have effectively addressed these various objectives.
Title: Encouraging the Use of Value Engineering Change Proposals on Design-Bid-Build Contracts

Background: The MAP–21 transportation authorization legislation placed increased emphasis on the use of value engineering (VE) on federal-aid highway projects by increasing the monetary thresholds that trigger a VE analysis. While this analysis is required during the project development phase pre-bid, FHWA’s regulations encourage use of a Value Engineering Change Proposals (VECP) clause (also called Cost Reduction Incentive Proposals (CRIPS)) allowing the construction contractor to propose changes to the project’s plans, specifications, or other contract documents. VECP proposals may improve the project’s performance, value and/or quality, lower construction costs, or shorten the delivery time.

The basis for state DOTs to consider a VECP is the analysis and documentation supporting the proposed benefits that would result from implementing the proposed change in the project’s contract or project plans. Proposals to accelerate construction after the award of the contract will not be considered a VECP and will not be eligible for Federal-aid highway program funding.

VECP is not a new concept in construction but it has not always produced the results hoped for. In FY 2015, VECPs submitted by contractors and accepted by State DOTs saved nearly $40 million, a small amount when compared to the size of the Federal-aid program.

Contractors can be discouraged from suggesting VECPs because proposals may not be given full consideration, there is a reluctance to offer a monetary award for the proposal, and the cost associated with developing the proposal is prohibitive. There is also much uncertainty about how a VECP suggestion will be evaluated.

AASHTO recently updated its value engineering guide and made the following observations about VECPs:

- Processing of proposals must be kept simple and done so as not to delay the contractor’s construction schedule.
- Cost savings are shared (normally equally) between the contractor and the implementing agency.
- Change proposals become the property of the state and the concept may be used on future projects.
- Change proposals should not compromise any essential design criteria or preconstruction commitments.
- Change proposals cannot be the basis for a contract claim. The implementing agency has the option to reject, with good justification, contractors’ proposals.
- It is essential that all VE team recommendations and contractor proposals be fairly reviewed and expeditiously evaluated for implementation.

Please note that the Code of Federal Regulations does not allow federal participation for VECPs to accelerate construction.

The Joint Committee recommends that states take steps that encourage contractors to submit value engineering change proposals and use the newly updated AASHTO value engineering document as a guide to evaluating VECPs.
WHEREAS, the Fixing America’s Surface Transportation (FAST) Act of 2015 provided five years of stability in federal surface transportation investment, subject to timely enactment annual appropriations bills consistent with the FAST Act’s investment levels; and

WHEREAS, the FAST Act did not address the long-term solvency of the federal Highway Trust Fund; and

WHEREAS, since 2008, Congress and previous administrations have shifted a total of $143 billion from elsewhere in the federal budget to the Highway Trust Fund in order to avoid major cuts in highway and transit investment; and

WHEREAS, absent additional action by the president and Congress, the Highway Trust Fund will face annual revenue shortfalls of $18 billion when the FAST Act expires on September 30, 2020, at the end of FY2020; and

WHEREAS, as the FAST Act’s expiration approaches, it is likely that several state transportation agencies will begin delaying or cancelling projects because of the long-term uncertainty in federal funding, thereby lessening the associated transportation and economic benefits for their respective states; and

WHEREAS, at the same time, the House Appropriations for Transportation-Housing and Urban Development for fiscal year 2018 contains an $800 million rescission of unobligated highway contract authority carried only by the state departments of transportation and the Senate appropriations bill does not include a comparable provision; and

WHEREAS, rescinding unobligated highway contract authority is a budgetary artifice that impedes the flexibility of state departments of transportation to meet their individual infrastructure needs, and disrupts transportation planning and timely delivery of projects; and

WHEREAS, these issues will be severely exacerbated and may result in real funding cuts when combined with the $856 million rescission enacted in June 2017 based on fiscal year 2017 appropriations and the $7.6 billion rescission scheduled for July 2020 under the FAST Act; and

WHEREAS, President Trump’s administration and congressional leaders have publicly identified tax reform and infrastructure investment legislation as key priorities for enactment in coming months; and

WHEREAS, over the past 30 years, all revenue enhancements for the Highway Trust Fund have come through larger tax and deficit-reduction legislative packages; and

WHEREAS, 253 members of the U.S. House – representing a majority of members from each party – recently signed a letter to the leaders of the Ways & Means Committee urging them to include a permanent Highway Trust Fund solution in any tax reform legislation developed by the committee, an example of the broad bipartisan support for this approach in Congress; now, therefore, be it
RESOLVED, That the AASHTO-AGC-ARTBA Joint Committee and its component associations urge the Ways & Means Committee of the U.S. House of Representatives and Finance Committee of the U.S. Senate to include a permanent Highway Trust Fund solution and transportation infrastructure funding in forthcoming tax legislation, in order to address this issue as soon as possible; and be it further

RESOLVED, That the AASHTO-AGC-ARTBA Joint Committee and its component associations urge Congress to pass legislation including this provision and the president to sign it expeditiously; and be it further

RESOLVED, That the AASHTO-AGC-ARTBA Joint Committee and its component associations urge the Congressional authorizing and appropriations committees to consistently support federal investment in transportation by ceasing its reliance on highway contract authority rescissions as an off-set for unrelated programs.
WHEREAS, the United States Constitution deems investment in transportation infrastructure as one of the few core responsibilities of the federal government; and

WHEREAS, according to the US Department of Transportation’s 2015 Conditions and Performance report to Congress, state and local governments provided 80 percent of $217 billion invested in highway and bridge programs and 74 percent of $43 billion invested in transit programs compared to 20 percent and 26 percent, respectively, contributed by the federal government; and

WHEREAS, states continue to make significant commitments to invest in transportation infrastructure as evidenced by successful enactment of transportation revenue packages in 29 states since 2012, with other states examining similar measures; and

WHEREAS, at the same time, investment backlog for transportation infrastructure continues to increase, reaching $836 billion for highways and bridges and $122 billion for transit according to the US Department of Transportation, and the American Society of Civil Engineers has identified a $1.1 trillion funding gap for surface transportation between 2016 and 2025; and

WHEREAS, as evidenced by these significant transportation infrastructure investment needs, further strengthening and reaffirmation of the federally-assisted, state-implemented foundation of the national program is even more critical now than in the past; now, therefore be it

RESOLVED, the AASHTO-AGC-ARTBA Joint Committee strongly disagrees with any notion that federal transportation funding displaces or discourages state and local investment; and be it further

RESOLVED, that the federal government must augment substantial state and local transportation investment by ensuring long-term, sustainable federal funding from the Highway Trust Fund, and provide robust direct funding to address highway and transit backlog as part of the major infrastructure package currently under consideration.
Relocating underground utilities in highway right-of-way, while undertaking road improvement projects, continues to be one of the leading causes of delay in getting projects completed once the construction phase has started. Underground utilities that are unmarked or incorrectly marked pose a significant safety risk to the construction workforce, DOT employees and the public. Damage to utility facilities can be costly to all parties to the contract and negatively impact the collaborative spirit on jobs and lead to litigation.

Congress recognized these issues and in 1998 included a provision in the Transportation Equity Act for the 21st Century (TEA 21) legislation directing the U.S. Department of Transportation (USDOT) to conduct a study of best practices in place nationwide to address these concerns. One significant outcome of the study was the establishment of the Common Ground Alliance (CGA), whose safety motto was and continues to be “Damage Prevention Is a Shared Responsibility.” CGA brings together all underground utility safety and damage prevention stakeholders and recommends best practices for: Planning and Design, One Call Centers, Locating and Marking, Excavation, Mapping, Compliance, Public Education and Awareness, Reporting and Evaluation. The National 811 One Call number is among the recommendations from CGA that have been adopted.

Many state DOTs have implemented their own initiatives to address utility protection and relocation including: use of ground penetrating radar, undertaking extensive predesign to eliminate conflicts, working in cooperation with utility companies and the construction industry to implement best practices, more aggressively challenging utilities in court for failure to meet their responsibilities.

Recently a new organization, “Gold Shovel Standard,” formed by pipeline companies, is attempting to significantly shift the risk for underground utility protection from a shared responsibility to one of absolute liability borne primarily by the excavator. GSS calls for a contractor certification through a one sided evaluation and reporting process and is encouraging owners to include membership in GSS as a requirement in bidder qualification.

With the continuing growth of technology cables, including 5G, being included in the highway right-of-way coupled with the traditional utilities already there, it is important that utility location, mapping and protection be an ongoing priority.

The Joint Committee recommends that:

Public agencies reject the Gold Shovel Standard organization’s efforts to promote its one sided approach to responsibility for utility protection because it undermines the collaborative efforts of the CGA by ignoring the concept of shared responsibility.

DOTs consider becoming involved in efforts such as the CGA to promote shared responsibilities for utility protection and adopting their recommended best practices.

DOTs participate in their local one-call systems or develop in house capabilities to locate DOT owned facilities within the ROW.

Consider include pot hole and other physical utility location as part of the design phase of a project.

The Federal Highway Administration (FHWA) include best practices and new approaches to utility relocation and protection in Round 6 of Every Day Counts.
Look to ways to encourage that utilities located in highway ROW participate in preconstruction meeting with the DOT and contractor.

Look at ways to maintain a repository of electronic “as built” 3D data of completed highway improvement projects to begin compiling an index of utility locations for future road improvement uses.
Title: Optimizing the Implementation of Buy America Requirements

Dating to the early 1980’s, the Buy America law requires that steel or iron components “permanently incorporated” in federal-aid highway projects be manufactured in the United States, subject to certain possible waivers and exemptions. The public policy rationale for this law, as stated by the U.S. Department of Transportation, is that federal-aid highway (and transit) investments should “support an entire supply chain of American companies and their employees” in the manufacturing industry.

Congress has maintained or – on occasion – expanded Buy America requirements through a series of surface transportation reauthorizations. For example, Section 1518 of the Moving Ahead for Progress in the 21st Century (MAP-21) Act, passed in 2012, mandates Buy America compliance for the entirety of a federal-aid highway project (i.e. within the complete scope of its approved National Environmental Policy Act (NEPA) document), including related utility and railroad relocations and improvements.

In implementing Buy America on these projects, the Federal Highway Administration (FHWA) may grant waivers based on “public interest” (such as an emergency) or limited/lack of domestic availability for particular products. Under the current administration, the agency has issued far fewer waivers than was customary in prior years. This appears consistent with President Trump’s Executive Order (EO) 13788 of April 2017, which outlined his “Buy American and Hire American” policy and directed federal agencies to carefully examine their use of waivers under Buy America (or parallel) requirements “by type and impact on domestic jobs and manufacturing.”

While acknowledging the clear intentions of federal policymakers, contractors on federal-aid projects seek consistent and expeditious interpretation of Buy America regulations in order to minimize the possibility of project costs and delays that could result. As an example, ARTBA and AGC supported FHWA’s efforts to clarify its policy on manufactured products from 2012 through 2016. In some states, interpretations of the Buy America rule had required costly certifications and documentation for inexpensive items such as nuts, bolts, washers and tie wires. FHWA initiated a rulemaking on this issue, although it was not completed before the change in administrations, and appears not to be moving forward at the present time.

Having considered optimal ways to implement Buy America requirements, the Joint Committee supports the following principles:

- Through this policy statement, the Joint Committee is not seeking to undermine core Buy America principles, including the coverage of “permanently incorporated” materials which FHWA has regularly enumerated.
- The waiver application process with FHWA should be timely and should not become a barrier to efficient project delivery or related decision-making by the owner and contractor.
- On the project level, Buy America requirements should be interpreted with a “common sense” approach, ensuring that the burden of compliance on contractors does not lead to the likelihood of cost increases and delays on the project.
- Similarly, FHWA should renew its efforts to develop a nationwide waiver that would exempt commercially-available, off-the-shelf products. The cost and time required to trace and document these products can far outweigh their de minimis financial impact to the project’s total value.
WHEREAS, technology has benefited the transportation industry and the overall economy but there remain sector-specific challenges such as projects that are ever more complex and larger in scale, growing demand for environmentally sensitive construction requiring changes to traditional practices, and shortage of skilled labor and supervisory staff; and

WHEREAS, one of the ways to improve industry-wide productivity is to ensure not only access to but robust use of modern tools and systems by every industry participant; and

WHEREAS, such tools and systems need not be the cutting-edge technology and could consist of “everyday tech” that can be deployed at the lowest level of transportation construction; and

WHEREAS, modern survey technology comprising lidar and GPS serves as example of a technology that has become more accessible due to substantially falling costs while capability has improved through small and light high-resolution cameras mounted on drones and cheaper data uploading and processing services; now therefore be it

RESOLVED, the AASHTO-AGC-ARTBA Joint Committee supports the adoption of commonly used technology at all levels of the transportation construction industry by:

- Identifying methods that can defray relatively high upfront technology acquisition costs for smaller firms, especially given the long-term productivity benefits that can result;
- Identifying and addressing any federal and state regulatory barriers that inhibit deployment of “everyday tech,” and conversely, identifying federal and state actions that can incentivize technology adoption;
- Better understanding the impact of technology deployment on labor and personnel towards a more complementary outcome that better develops and harnesses human capital; and
- Considering implementation of efforts similar to the AASHTO Innovation Initiative (AII) to better understand industry needs related to technology.
WHEREAS, the Fixing America’s Surface Transportation (FAST) Act enacted in December 2015 continues to fulfill the Constitutional directive that investment in transportation is a core federal responsibility with its authorization of $305 billion for federal highway, highway safety, transit, and passenger rail programs from 2016 to 2020, and;

WHEREAS, 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, and since 2008, the Highway Trust Fund has been sustained through a series of General Fund transfers now amounting to $140 billion and is expected to incur a shortfall of about $20 billion per year just to keep current funding levels for the coming decade, and;

WHEREAS, without a solution to this crisis, AASHTO estimates that states will see about a 50 percent reduction in highway funding from FY 2020 to the following year, $47 billion to $23 billion in FY 2021, and due to a steeper projected shortfall in the Mass Transit Account, new federal transit obligations are expected to be zeroed out in FY 2021 and FY 2022, and;

WHEREAS, simply put, this is a devastating scenario that our nation must do all we can to avoid, as beyond maintaining program levels, there is strong consensus among states that additional federal funding and investment is warranted, and;

WHEREAS, a number of solutions to fix the Highway Trust Fund have been developed, including Chairman Bill Shuster of the House Transportation and Infrastructure Committee proposing in his infrastructure package discussion draft a 15 and 20 cent per gallon increase plus indexing of motor fuel taxes on gasoline and diesel, and various stakeholder support for a freight-based highway user fee.

NOW, THEREFORE BE IT RESOLVED, that Congress must act promptly to ensure the solvency of the Highway Trust Fund in order to prevent significant planning and construction disruptions to highway and transit projects, to provide stable cash reimbursements to states for costs already incurred, and to ensure and enhance many national benefits of the federal surface transportation program including jobs, economic competitiveness, safety, personal mobility and quality of life, and further be it;

RESOLVED, that the AASHTO Transportation Policy Forum is directed to recommend a specific revenue solution based on investment needs to the Board of Directors by the 2019 Spring Meeting, and be it further;

RESOLVED, that at the 2019 Executive Session, the Joint Committee recommends a specific revenue solution—based on consideration of policy reforms to strengthen the effectiveness and accountability of the federal surface transportation program—to put the Highway Trust Fund in sound and sustainable footing for the long term as part of FAST Act reauthorization, and be it further;

RESOLVED, the Joint Committee harnesses the collective voice and strength of AASHTO, AGC, and ARTBA, to build a bigger coalition of stakeholders supporting its consensus revenue solution to the Highway Trust Fund.
Title: Use of Methods to Accelerate Construction while Maximizing Safety and Minimizing Impacts to the Traveling Public with Enhanced Partnerships

Whereas, America’s highways contribute greatly to the quality of life of our citizens through improved access and mobility;

Whereas, Aging and significant wear and tear on the nation’s highway infrastructure has required repair, preservation and improvement, and such work is often conducted while the facility is still being used;

Whereas, The highway community has been using numerous methods and means to accelerate construction, to mitigate delay and to improve safety for the workers and the traveling public, and these methods and means are more frequently applied as common practice in many places;

Whereas, It is in the public’s interest for construction to be accelerated to maximize safety and minimize disruptions; and

Whereas, There has been sufficient experience with such methods and means to have understood limits, pros and cons and specific conditions for best use; now, therefore, be it

Resolved, That the AASHTO-AGC-ARTBA Joint Committee supports the use of construction acceleration methods and means statutorily allowable in each individual state that maximize safety and minimize disruption to the motoring public, and supports the appropriate use of such methods and means by forming a joint task force to accomplish the following:

- Identify parameters and conditions that are considered in the selection/use of construction acceleration methods and means, including but not limited to:
  - Contractual Alternatives: Design-Build, CMGC, Project Bundling,
  - Contractual Provisions: Incentives, Disincentives, Lane Rentals, Work Windows, Night Work, Full Closure, Valuing Safety,
  - Safety Strategies: Police Presence, ITS Warning Devices, Work Zone Configuration,
  - Construction Techniques: Sequencing, Prefabrication and Modular Construction,
  - Alternative Technical Concepts: encouraging collaboration and maintaining confidentiality as allowed by law,
  - Construction Management, Staffing, and Decision-making,

  This will provide guidance on benefits and use of each technique that balances the pros and cons;

- Devise a means to provide online access to the guidance that may be updated periodically;

- Develop talking points for presenting the task force results at the regional AASHTO meetings in 2020 to encourage appropriate use of the acceleration techniques within the parameters identified; and

Resolved, That AASHTO, AGC and ARTBA will collaborate with FHWA to develop and deliver a means to reintroduce and refresh partnering principles and practices with construction stakeholders to accelerate construction while also enhancing the performance, quality and safety of construction projects.
After almost twenty years of experience with the design-build contracting method on highway and bridge construction projects, a discussion around the country with state Department of Transportation officials, construction contractors and design professionals on their experience with this contracting method identified some positive and negative characteristics in its use.

- Design-Build has been used successfully to deliver a variety of transportation improvement projects;
- Design-Build can be useful in accelerating the delivery of transportation projects because construction can begin before design is 100 percent complete, materials can be ordered earlier, mobilization and preliminary site work can begin soon after contract award;
- Early collaboration during the proposal stage between the designers, contractors and owners can reduce constructability problems, design conflicts /uncertainty, and scheduling issues.
- Design-build allows the design-build team to be innovative in construction means, methods and materials.
- To accomplish these benefits the design-build project delivery method may shift many design and construction risks traditionally managed by the owner to the design-build team.

The Joint Committee recommends a national dialogue on the design-build delivery method amongst state DOTs, contractors and designers, with the intention of developing baseline recommendations to keep this method viable and successful. This dialogue should include highlighting best practices, including partnering and a discussion of risk sharing on ROW acquisition, environmental permitting, utility relocation, railroad coordination, unknown underground conditions, and scope creep to address local concerns. Potential venues for this dialogue in 2020 include the four regional AASHTO meetings, as well as the meetings of AASHTO committees. The Joint Committee also encourages a similar dialogue at the state level.
In the three most recent federal surface transportation reauthorization laws – the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (“SAFETEA-LU,” passed in 2005), the Moving Ahead for Progress in the 21st Century Act (“MAP-21,” passed in 2012), and Fixing America’s Surface Transportation Act (the “FAST Act,” passed in 2015) – Congress included provisions intended to streamline the review and approval process for transportation projects. Congress structured many of these reforms for optional use by states and project sponsors. Examples of current law include:

- Voluntary assignment to the states of project environmental reviews under the National Environmental Policy Act (NEPA), which eight (8) states have agreed to do since 2014;
- The option for a state department of transportation to request the U.S. Department of Transportation (U.S. DOT) to impose a time limit of two additional years for completion of an Environmental Impact Statement (EIS) if the process has already taken at least two years;
- Establishment of U.S. DOT as the lead agency for coordinated project reviews;
- Use of planning documents in the NEPA process “to the maximum extent practicable and appropriate,” rather than generating the same or similar material over again; and
- Expansion of categorical exclusions to projects which are multi-modal, within an existing right-of-way and/or utilize limited federal aid.

As the Joint Committee’s component associations consult with Congress about the next surface transportation reauthorization bill, it is a logical time to review these reforms, assess their effectiveness thus far, and recommend further process improvements as appropriate.

Accordingly, the Joint Committee recommends the following:

- For the benefit of states participating in or considering the NEPA assignment program, U.S. DOT – in coordination with relevant state transportation departments – is encouraged to report on its progress, quantify its successes and make recommendations in continuing to promote and educate on the use of this and related reforms.
- Similarly, U.S. DOT should gather and report data and case studies on the use and success of other recent reforms such as those described above. Where needed, the department should identify any obstacles to their utilization, recommend substantive improvements and/or undertake increased training to facilitate their greater use, as appropriate.
- Congress should be open to making further improvements in these provisions through the FAST Act reauthorization process.
Building public support for transportation infrastructure investment is a key factor in getting legislators at the state and National level to take the necessary legislative action to raise the needed revenue. States have been successful over the past six years in garnering this support. Since 2013, 28 States & D.C. have enacted legislation to increase the state motor fuels tax and 20 states & D.C. have indexed or initiated variable -rate gas taxes to alleviate some long -term shortfalls. States have also successfully implemented other transportation revenue initiatives including electric car fees, increasing a variety of transportation related fees including registration fees, sales taxes, bonding and others.

The key to success in most states was strong support from both the Governor and the general public. The Joint Committee encourages coordination between the State DOT and the stakeholder community, usually through a coalition, to deliver the infrastructure message to the public.

Communicating with the public about specific projects and the benefits to the state, community and individuals that will come from their completion is a key. Traditional media, digital advertising and social media can play an important role in delivering this message to the general public.

The Joint Committee recommends that state DOTs work with stakeholder groups in delivering the infrastructure investment message.
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.
This white paper for AASHTO’s surface transportation 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
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 transportation’s 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.”
o 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
- 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:
  o Ensure performance measures and the achievement of federal performance management targets are not related to apportioning or allocating federal funds among the state DOTs.
  o 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
- 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:**
  o Eliminate the minimum condition requirements written into law for both NHS bridges and Interstate System pavement.
  o 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.
  o 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
- 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 (LWFCFA) 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:
  o 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.
  o 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.