Highway Policy

Executive Summary

America's network of roads and bridges is the foundation of the U.S. economy and enhances the quality of life of its citizens. The American Road and Transportation Builders Association (ARTBA) believes the federal government has a major role to play in the development and maintenance of an efficient national highway and bridge system.

This system is a product of more than 50 years of partnership between all levels of government, which addresses unique state needs, while delivering the national connectivity envisioned by the U.S. Constitution.

ARTBA believes the U.S. highway program must achieve the following objectives:

- Highway capital improvements should be financed through the collection of highway user fees. These fees, which should be imposed by governments, must be raised as necessary to provide a continuing source of funding for the highway program.
- Safety must be of paramount concern in the design, construction, maintenance and traffic operations of the nation's highway system.
- Critically deficient bridges should be repaired or replaced.
- Improved smoothness and pavement durability should be program goals.
- The capacity and efficiency of the highway system should be improved as necessary to meet public and business demand, changing demographics, shifting population centers, and physical condition requirements. Federal policymakers should recognize America will need additional highway capacity to meet transportation demand.
- New construction or major rehabilitation projects should be constructed to the most current relevant standards and resilient construction practices to minimize the risk of structure failure or loss of use from natural hazards throughout the lifetime of the project.
- State and local governments should be given the flexibility to allocate their share of federal funding within the framework of the federal-aid Highway Program as they see fit, providing that national highway needs within their state are met.
- The National Highway Freight Network is vital to the U.S. economy and the nation's competitiveness. It should be a focus of federal capital investments.

The following outlines ARTBA's policy on several areas relating to highways: funding and finance, government responsibilities, procurement, project delivery, safety, and system needs.



Funding and Finance

Funding

 ARTBA believes the cost of building and maintaining highway infrastructure should be paid for by users of the system. Any user fee, mechanism or strategy should be sustainable, consistent, adjusted for inflation, and deliver dedicated, recurring revenues sufficient to meet the need for capital improvements to the nation's highway and transit system.

Examples of user fees that meet these criteria include but are not limited to: motor fuels taxes, mileage use charges on individual and commercial travel, excises, and tolls.

- All energy sources utilized to power vehicles (e.g. gasoline, diesel, electric, hydrogen) that use the
 nation's highway and bridge system should be equitably taxed to pay for system improvements. As
 the nation's highway vehicle fleet becomes more energy efficient, and as alternate energy-sourced
 vehicles become more prevalent, highway user fees must be appropriately adjusted and alternate
 forms of revenue collected, to ensure the revenue stream necessary for highway and bridge
 improvements is not compromised.
- To assure the integrity of user financing, proceeds collected from those who directly benefit from the nation's highway and bridge network should be deposited in the Highway Trust Fund and used exclusively to support surface transportation and other improvements that benefit such users.
- The federal Highway Trust Fund's expenditure authority—and funding sources to support it—should be made permanent to ensure that adequate financial resources to meet state needs are available. Recurring funding is critical to state and local government confidence in federal partnership. All levels of government should index highway user fees, regardless of energy source, to the Consumer Price Index to assure that these fees rise commensurate with increases in inflation.
- Recognizing the enormous cost associated with meeting highway capital needs, "non-traditional" funding mechanisms should be considered for use when appropriate to supplement user fee revenue.
- Non-transportation policy objectives should be pursued through federal General Funds or other appropriate non-transportation user fees. Limited Highway Trust Fund revenues should be preserved for and fully invested in transportation improvements. Highway Trust Fund Highway Account dollars should be earmarked exclusively for highway and bridge improvements.
- To ensure that all federal transportation user fees are collected as intended, federal and state activities aimed at combating evasion in this area should be continued and expanded.
- All levels of government must diligently monitor transportation improvement needs and continue to dedicate transportation revenue to highway improvements.



- ARTBA opposes the concept of linking the availability of federal highway funding to state and local government compliance with federal mandates of any sort.
- To assure equity in taxation and maximize receipts to transportation trust funds so that highway capital needs can be met, ARTBA urges all levels of government to eliminate exemptions from the motor fuel excise and other highway user fees.
- ARTBA opposes temporary suspensions of federal motor fuels taxes for any reason. Such proposals are short-sighted and ultimately cost the motoring public and taxpayer more in the long-run.

Capital Budgeting and Budgetary Treatment of Highway Trust Fund

ARTBA urges the federal government to adopt a capital budget that differentiates between federal capital investments in public infrastructure and the general day-to-day operating expenses of government. This accounting procedure is used by most state governments and many other nations. Such an action would help ensure that highway user revenue is not impounded and that artificial spending ceilings are not placed on the user-supported "pay-as-you-go" federal highway program. If and when the highway program becomes self-sustaining, it should be separated from the federal unified budget and exempted from any general spending caps or other "across-the-board" deficit reduction measures enacted by Congress or the Executive Branch.

Financing

Tolling

ARTBA believes state transportation agencies should be permitted to use federal funds to develop new toll highways and have maximum flexibility to design and implement toll-financing solutions. When federal funds are used to finance the acquisition, construction, or reconstruction of a new or existing toll facility, states should be under no obligation to repay the federal funds used or to remove the toll once the non-federal costs have been recovered.

The U.S. Secretary of Transportation should be granted the authority to allow the imposition of tolls on existing federal-aid highways that have unusually high maintenance, construction or reconstruction costs. The purpose of this action would be to allow states to use the toll revenue realized to repay bonds issued to finance these improvements.

Toll revenue generated in excess of the amount necessary to operate and maintain a facility should only be used for transportation-related purposes. Privately operated toll highways may be a viable means of meeting increased traffic demands in some areas.

Public-Private Partnerships

While public funding is and should continue to be the foundation of advancing surface transportation infrastructure improvement programs, we recognize that private investment is also necessary if the nation is to meet its transportation capital needs. ARTBA believes the public interest can be served well



through public-private partnerships in transportation development. ARTBA further believes that publicprivate partnerships should be structured so that each sector provides what it can most effectively contribute. Such recognition of expertise should maximize project success and protect all applicable public interests.

In support of these pursuits, we recommend:

- Federal and state transportation agencies should be encouraged to develop and fund proposals for appropriate projects using a public-private partnership approach to designing, constructing, improving and operating highway transportation projects.
- When federal or other public funding is involved, public-private venture projects should be constructed in cooperation with applicable federal and state transportation agencies and in accordance with all relevant laws, including those applicable to competitive bidding for construction contracts.
- States should be permitted to use federal funds as loans or matching funds for all public-private partnership transportation projects with a dedicated revenue source.
- Appropriate types of tax incentives, such as arbitrage relief, public benefit bonds (which would be suitable investments for 401(k) and other employee benefit plans), private activity bonds, and volume cap flexibility should be considered to facilitate the private financing of transportation infrastructure projects.
- Proposals have been suggested that would establish federal and/or state revolving loan structures, also known as "Infrastructure Banks," to leverage funding for capital investment. While ARTBA encourages the development of innovative financing mechanisms as additive funding sources for transportation infrastructure investment, such "banks" or loan programs should not utilize Highway Trust Fund revenues to pay for non-highway programs or investments.
- State participation in public-private partnerships should be optional, and non-participation will not adversely affect "traditional" federal highway program funding.

Government Responsibilities

A strong transportation system relies on true partnership between the federal, state and local governments to best serve national interests and user/financial supporters. All levels of government must diligently monitor transportation improvement needs and continue to dedicate sufficient revenue to highway improvements.

State and federal governments should continue to hold peer exchanges and share successful projects, technologies and workflows that other states and municipalities could replicate to improve efficiencies. This includes peer exchanges with owners outside of the U.S.



The Role of the Federal Government

Working in full cooperation with the states, the federal government's stewardship responsibilities include: identification of national priorities, strengthen already established accountability mechanisms, and provide requisite investment levels and regulatory/policy framework to achieve those objectives. The federal government should not dictate to states project selection and delivery decisions, such as procurement methods and product and material choices, or make operational decisions for states. Rather, leave these decisions to state transportation agencies per their performance expectations, programming and delivery needs.

Consistent and predictable federal funding is essential to operating orderly and cost-effective state highway improvement programs.

The Role of State and Local Governments

State and local governments are the owners and managers of the nation's highway and bridge network. States should be responsible for project planning, management, and environmental analysis and should assume partial responsibility for financing development of a uniform, nationally coordinated highway system.

Once a federally-assisted highway or bridge has been constructed, states should have lead responsibility for maintaining them in good, safe condition with highway durability and safety as top priorities. In pursuit of these goals, states should make every effort to incorporate long-lasting, state-of-the-art design standards and products in their highway and bridge plans.

Congress has given state transportation departments and metropolitan planning organizations (MPO's) broad authority and responsibility for planning, prioritizing and developing highway and bridge projects that qualify for federal aid. In carrying out these responsibilities, it is essential that states continue to be allowed to streamline federal program requirements, particularly during project oversight where certification is required, and be permitted to provide "value-add" to projects.

To ensure increased federal highway and bridge investment results in more total funds for transportation improvements, a "maintenance of effort" provision should be enacted that makes increased apportioned federal funds contingent on individual state highway investments being continued at least at prior year levels.

Procurement

Competitive Bidding System

ARTBA staunchly supports the free enterprise system of open competitive bidding for highway projects.

Further, ARTBA opposes contractor ratings systems which can alter the procurement process by changing bid prices. At least one such program initiated by a state transportation agency has included ratings metrics that are subjective and may dissuade contractors from pursuing legitimate claims



because it may harm their future ratings and negatively affect their bids. By contrast, the low-bid contracting system should be completely objective and transparent, without the uncertainties of such a ratings system.

"Union-Only" Labor Agreements

Federal law should prohibit the use of union-only project labor agreements on federal-aid highway projects. Such agreements are counter to the free enterprise system of open competitive bidding.

Davis-Bacon Act

ARTBA supports reform of the Davis-Bacon Act (DBA). This law requires the payment of local "prevailing wages" on federal-aid transportation projects and addresses other labor-related issues. ARTBA believes Davis-Bacon reform should include, but not be limited to:

- Full implementation of the helper regulations; changing the Act's payroll reporting requirements from weekly to monthly; and
- Exempting from the Act's requirements employees of off-site batch plants and suppliers, and truck drivers who spend only an incidental percentage of their time at the work site in the course of delivering materials from off-site locations.
- The threshold for application of the Act should be \$500,000.

ARTBA does not support an expansion of the statutory definition of "site of the work," or modifications of the exclusion from the Act's coverage for fabrication plants "whose location and continuance in operation are determined wholly without regard to a particular federal or federally assisted contract or project." Extending DBA coverage to off-site plants that do both federal and non-federal work with a permanent workforce would create administrative, logistical and practical problems for all federal contractors; disincentivize contractors whose work is regularly done off-site from bidding on DBA projects; and significantly increase the cost of all federal construction projects.

Disadvantaged Business Enterprise Program

The goals of the Disadvantaged Business Enterprise (DBE) program should be to attract certifiable DBE firms, to enable and assist them to grow and develop within the safe harbor of the DBE program, and to facilitate their transition into the broader, unsheltered market as financially viable and technically proficient construction companies and professional service firms. The DBE program should use the rate at which DBE firms successfully graduate into the unsheltered construction market as its primary metric.

The periodic re-justification for the compelling need for DBE programs does not justify the lack of a time limit on how long a DBE firm may remain certified. Longevity in the program is a function of either a failure to "narrowly tailor" the program or the lack of business development and technical assistance or both.



Long-standing programmatic issues should be fixed. These include how goals should be set, over concentration and reverse discrimination within the meaning of 49 CFR §26.7(a), the meaning of "unreasonably high price" and "commercially useful function," making "good faith effort" less subjective, making certification databases user friendly, and measuring and reporting DBE capacity.

Hiring Preferences

ARTBA opposes mandatory hiring preferences – such as those based on residence or income level – for federal-aid highway and transit projects. These mandates from contracting agencies can compromise contractors' efficiency and safety in building these projects, through the hiring of workers who are not integral to the project or are inadequately trained and experienced, especially in safety procedures. This can lead to displacement of existing employees and cost increases as contractors take on the risk of inexperienced or superfluous labor.

On many projects around the country, contractors have successfully collaborated with public agencies to implement voluntary or incentive-based, targeted hiring programs. This approach is greatly preferable to imposing hiring mandates on contractors unilaterally.

Funding for Cost Adjustments

The U.S. Department of Transportation (USDOT) and its agencies should allow use of federal-aid funds for retroactive cost adjustments on projects under extraordinary market conditions.

Incentive/Disincentive Clauses

ARTBA supports the inclusion of incentive/disincentive clauses in highway construction contracts provided the disincentives (penalties) are properly balanced with the incentives. This practice rewards contractors who utilize good management practices and innovative techniques and technologies to deliver contracted work prior to deadline. It also reduces inconvenience to the highway user caused by construction activity.

Qualifications-Based Selection

To assure state-of-the-art, high-quality projects, contracts for professional services such as transportation planning, design and construction management, should be procured by Qualifications Based Selection procedures. Contracts for these services should be based on uncapped salaries and overhead in accordance with Title 48 (Federal Acquisition Regulations), Sec.15.901 (c).

To assure equitable compensation and fair competition, federal surface transportation law should require:

• the use of Federal Acquisition Regulations (FAR) cost principles in audits conducted on engineering and design service contracts or subcontracts "funded in whole or in part" with federal-aid highway or transit program funds;



 that recipients of federal funds accept the results of pre-award audits were established in accordance with FAR cost principles; were conducted within one year of the current contract negotiations; and were not under dispute.

Further, compensation for these contracts should be determined on the basis of FAR cost principles without modification or limitation.

Alternative Procurement

The transportation construction industry is continuously looking for new and better ways to build projects safely, efficiently and cost-effectively. A key to this process is the desire to provide value without sacrificing service or quality. The low bid system of procurement has historically succeeded in achieving these objectives in a competitive, open, cost-effective, efficient and fair manner. In seeking to expedite project delivery, while still achieving the highest quality of transportation projects, a number of transportation agencies have implemented alternate delivery methods encompassing various combinations of procurement, financing and construction practices.

ARTBA continues to support and promote the low bid procurement process as the most favored project delivery system for most projects, which includes awarding professional services contracts through the qualification-based selection process, and construction contracts to the lowest responsible bidder. At the same time, there may be well-defined projects that are suited for alternative procurement methods, offering the industry the opportunity to implement flexibility in project delivery methods.

The use of alternate procurement methods by public owners should not be mandated by the federal government. Rather, state and local agencies should be allowed maximum flexibility in determining their own procurement methods. If public owners opt to use alternate procurement methods, they should consider the following elements as part of the process:

- A two-step procurement system where bidders on a project are qualified through a preliminary screening process, whether it be a pre-qualification process, a surety bond-based system, or an arrangement whereby a bidder demonstrates understanding of the technical requirements of the project, or any combination thereof. Such a system should be based solely on well-defined, objective, measurable criteria relevant to the project's size, value, duration, technical features and complexity. The owner should clearly communicate key information to the proposer/bidder in advance of bid preparation, including pre-qualification criteria, how various requirements will be evaluated and what weight they will have in the final determination of the qualification. This information should be tailored to encourage participation by all qualified contractors and designers.
- Because the use of the alternate procurement method requires more resources in the preparation
 of the proposal/bid than the traditional low bid system, public owners should pay a fee to each
 unsuccessful but responsive and competitive proposer/bidder for their preparation work. This fee
 should be based on the size of the project and the complexity of the proposal/bid process. This
 payment should not necessarily imply that the owner will then "own" any ideas, concepts or
 innovations that the team has developed.



• The bid selection process should be open and objective, well defined, on the public record and as isolated from political influence as possible. The bid price should be the most significant factor in determining the final bid selection. There also should be a process whereby, upon request of any unsuccessful bidder, the project owner will provide detailed information as to that bidder's scoring against the criteria.

When considering or implementing the design-build method, ARTBA recommends that all parties review the association's policy paper, "Risk Factors in Design-Build," as an early step in working collaboratively to identify and allocate areas of risk on the project.

Digital Construction

Digital construction technologies provide mechanisms and processes to decrease and more properly allocate project risk, reduce schedule uncertainty, increase productivity and efficiency, lower cost, and deliver safer, higher quality, and environmentally sustainable infrastructure projects. In order to accelerate innovation in the U.S. transportation design and construction industry, ARTBA supports the adoption of open data standards, the model as the legal document (MALD), and modern, commercially-proven, and competitively acquired digital construction technologies and processes for infrastructure projects.

Support of Unit Pricing

To help avoid contractual misunderstandings, to the extent possible, bid proposals for federal-aid surface transportation contracts should be required to use unit pricing. This would give the contractor a much better understanding of the actual work and project-related activities (i.e., lead health and safety programs) that he or she is being asked to perform and would not require them to include contingency pricing. Unit pricing would also serve to enhance work zone safety activities and increase taxpayer value.

Partnering

ARTBA believes the partnering process, whether formal or informal, should be implemented on all highway projects from conception through construction. It is essential that partnering includes the project's design engineers, contractor, subcontractors, and public owner.

Project Delivery

Regulatory Streamlining

ARTBA supports efforts to reduce regulatory delay in the surface transportation project review and approval process. ARTBA has championed measures aimed at streamlining the process that maintain existing environmental protections in multiple surface transportation reauthorization bills. While these



efforts have contributed to positive changes in the process, such as time limits on specific regulatory decisions and deadlines for filling lawsuits opposing projects, there is still much work to be done. Specific examples where further progress can be made include:

- Continuing to strengthen the United States Department of Transportation's role as "lead agency" on transportation projects;
- Further reducing the amount of time required for environmental impact statements required for large-scale, multi-year projects; and
- Protecting needed transportation improvement projects from frivolous lawsuits.

ARTBA also opposes increased regulatory burdens in other areas which could hinder the progress made in reducing delay in the transportation review and approval process.

Performance Management

The Federal Highway Administration's (FHWA) performance management process should limit its focus to an outcomes-based approach focused on physical condition and system performance of highways and bridges. Indirect factors and subjective measurements should be avoided.

- Appropriate system performance measurements should include: the causes and costs of traffic congestion; data-driven metrics; the impact on roadway safety; and the integration with national freight policy.
- Pavement condition standards should balance both pavement smoothness and structural condition. Consideration should be given to the wide range of geologic and climate conditions across the nation.
- Safety related measures should include the maintenance of shoulders and right of way, pavement markings, guardrails, signage and other elements affecting safe travel.

Dispute Resolution Boards

States use dispute resolution boards (DRBs) as part of their contract administration strategies, in order to promote timely decision-making and claims resolution. While procedures vary state to state, generally DRBs include expert members recommended by the project owner and contractor, who meet regularly throughout a project to resolve issues as needed. ARTBA encourages federal support of state DRB programs as an option for efficient administration of federal-aid highway construction contracts.

Quality Construction

Quality construction is essential to the success and credibility of the U.S. highway program. ARTBA also believes that the nation's highway and bridge network stands as a testament to the high quality of the industry's craftsmanship relative to the level of public investment in the program. The federal-aid highway system is owned and operated by public agencies on behalf of the taxpayer, and final payment to a contractor for work conducted is not made until the public owner agency has inspected and certified that the project has been built to set specifications. Highway contractors do not have control



over the myriad elements that affect the durability of a highway project such as level of public investment, routine maintenance, specification of design and materials, traffic volume and allowable weights.

Taken together, ARTBA believes:

- It is unreasonable for the government to require a contractor to warrant or guarantee a highway project and ARTBA will oppose such initiatives.
- ARTBA opposes the use of the latent defect clause, which holds contractors responsible or financially liable for subsequent problems or latent defects that could be caused by reasons beyond their control.
- The use of "pay-for-performance" contracts would inject subjective judgments into the open competitive bidding process and cause contractors serious financial problems by tying payment for work already performed to specification to, among other things, the durability over time of highway pavements--something contractors have little control over. Exceptions include certain public-private partnerships, when contractual language details performance measures for the developer or concessionaire.

Require Owner Agencies to Pay Damages for Delays

Currently, owner agencies are permitted to charge contractors for engineering costs associated with federal-aid surface transportation project delays caused by the contractor. Federal law should require owner agencies to compensate contractors for costs associated with project delays caused by owner decisions or inaction. These costs include those associated with idle labor and equipment, as well as design changes.

Utility Relocation

Safe relocation of utilities on transportation construction projects is literally a matter of life or death. They are also a common reason for project delays, in part because contractors do not have contractual relationships with utility companies. To alleviate these concerns, utilities should provide transportation agencies and contractors with accurate as-built information and commit to a relocation schedule related to the project, all of which the contractor can rely on in formulating a bid. Moreover, if the utility deviates from these standards, then the company should pay appropriate damages to make the contractor whole.

Hours of Service

The federal hours of service rule primarily addresses fatigue and safety risks related to long-haul motor carrier operators. In contrast, transportation construction industry drivers generally travel shorter distances and often wait in queues or carry out non-driving duties during the work day. Given this distinction, ARTBA believes industry drivers should be exempt from hours of service limitations.



U.S. DOT Training Requirements

The availability of a ready workforce is one of the biggest long-term challenges to the transportation construction industry. ARTBA supports workforce development efforts, however, U.S. DOT-mandated training requirements create an undue hardship on the construction industry and should be repealed or avoided.

Buy America

ARTBA supports a commonsense interpretation of the Buy America rule so that the burden of compliance on transportation construction contractors does not lead to the likelihood of project cost increases and delays. Therefore, ARTBA supports efforts by FHWA, the Federal Transit Administration (FTA) and other federal transportation agencies to develop nationwide waivers that would exempt commercially available off-the-shelf products due to the burden of traceability of component materials in these products and their de minimis financial impact to total project value.

At the same time, ARTBA supports Buy America protection for a core list of iron and steel components that are permanently incorporated into projects and which have been regularly enumerated by FHWA. ARTBA continues to strongly support the statutory exemption of cement and cementitious materials; aggregates such as stone, sand, or gravel; and aggregate binding agents or additives from the categories of construction materials now covered by Buy America. Moreover, the law does not and should not apply to tools, equipment, supplies, consumables and temporary components or structures used or installed at a construction site and removed before or are incidental at the completion of a project.

Ideally, compliance with Buy America begins with a design that has effectively vetted the specified materials to confirm that the iron and steel materials and manufactured products are produced and available in the United States. ARTBA supports FHWA and FTA policy modifications that would require designers and specifiers of transportation projects to assess the availability of materials to be incorporated into the project and make all reasonable efforts to use available Buy America qualified materials as the basis of design. Finally, all parties to projects should approach Buy America compliance in a collaborative manner. Disproportionately burdening the contractor with this responsibility will likely result in unneeded project cost increases and delays.

Safety

Highway Safety

Safety should remain a federal and state priority. Highway reconstruction is increasingly being done under traffic conditions. The safety of industry employees and motorists in these construction work zones is of special concern to ARTBA. To that end, ARTBA strongly encourages and supports:

• The continuation of the Highway Safety Improvement Program and prioritization of funds from this program to be primarily used for infrastructure safety activities, including devices and equipment that provide positive separation of construction site workers from nearby traffic.



- Requirements that mandate any reconstruction project should contain, as a component, restoration of safety features to enhance the level of safety performance.
- Effective traffic control plans should be implemented, traffic control devices and other appurtenances should be properly maintained. ARTBA supports federal encouragement of training, education and voluntary certification programs for personnel responsible for traffic control at highway construction sites.
- Experience has shown that public awareness programs aimed at motorists, which can help reduce the number of accidents in work sites. ARTBA encourages the U.S. DOT and all state transportation departments to initiate and/or continue these programs.
- The use of new technologies and new policies that reduce or eliminate safety risks for field users in the work zone, such as remote viewing of project sites, designs, and as-builts.

Innovative Technologies and Materials

To accelerate the introduction of better materials and more efficient designs, equipment and technologies into transportation development, states should be given the latitude to test and utilize new and innovative technologies, including those with intellectual propriety rights protections, on federal-aid highway projects without prior approval from the FHWA.

Federal surface transportation law should encourage, but not mandate, the use of recycled materials in federal-aid highway projects when it is economical and technologically feasible and applied research has provided adequate assurance that human health, safety, the environment and quality are not compromised. Design criteria should not be lowered to allow the use of recycled materials.

System Needs

Highway Quality

Policy makers and the public must recognize that highway durability and the quality of highway construction, while certainly linked, are not necessarily synonymous. Highway durability is directly related to public owner agency decisions regarding pavement design life, materials specifications, allowable vehicle weights and routine maintenance. Many of these decisions are directly related to the level of public investment government is willing and able to make in a highway project both initially and over time.

ARTBA believes highway users are willing to pay more to build increased durability into our roads and to ensure a balance of routine preventative maintenance, rehabilitation and reconstruction because such investments will save tax dollars over the long term. We encourage state and local governments to make durability a top priority as they develop highway project specifications.



Similarly, we encourage the federal government to provide the states with the financial resources necessary to build long-lasting pavements on the National Highway System as routes on it that have reached the end of their original design life are reconstructed.

As the nation continues to deal with natural disasters, environmental challenges and aging infrastructure, the transportation network has faced major disruptions along the way. The public and private sector continue to evolve through the use of innovation, technology and processes to create a more resilient infrastructure. ARTBA supports the role of innovation and technology, as well as increased investment, in creating more resilient infrastructure and acknowledges that this will vary based on geography and is not 'one-size-fits-all.' New thinking in terms of quantifying the impact and benefits of resilient solutions, as well as how innovative technologies are developed and deployed, will guide these improvements.

The Interstate Highway Program

ARTBA believes a national financial commitment should be made now to dramatically upgrade pavement durability on the Interstate Highway System to enhance serviceability and save tax dollars over the long term. We suggest that a systematic repair, replacement, rehabilitation and reconstruction program be put in place to achieve a goal of replacing existing pavement on the entire Interstate System.

Traffic congestion on portions of the Interstate System is having an increasingly negative effect on the movement of commercial goods. It also is a contributing factor in motor vehicle-related air pollution. This congestion is the result of an ever-increasing U.S. driving population and significant changes in the American workplace that have occurred since the Interstate Highway System was originally planned. Transportation and air quality planners should give very serious consideration to building capacity improvements to the Interstate System in these areas as part of a joint economic/clean air strategy.

National Highway System (NHS)

ARTBA urges Congress to ensure that the NHS is adequately funded to meet the capital needs identified by the U.S. DOT. ARTBA supports an increase in the federal motor fuels excise for this purpose. Assuring adequate funding to maintain the NHS as a first-class transportation network should be a priority of surface transportation program reauthorization legislation.

Bridges

ARTBA encourages Congress to continue increased federal funding for bridge repair and replacement and discretionary funding for high-cost bridge projects. Bridges have a significant role in connecting communities and supporting economic development. Proper investment should be made on individual projects to ensure that the highest quality materials and state-of-the-art technologies are used on federal-aid bridges.



The choice between whether to rehabilitate or replace a structurally deficient bridge should be based on careful inspections and detailed cost comparisons that consider safety, future maintenance, environmental and social impact, and operational costs. Such studies, design services and bridge inspections should utilize professionally qualified engineers. Actions or strategies that prevent, delay or reduce deterioration of bridges or bridge elements restore the function of existing bridges and extend their life.

ARTBA encourages the federal government to take the lead in developing and coordinating a national information system that would catalogue and share technical experiences and expertise in the areas of bridge repair and rehabilitation.

While the focus of the federal program should be providing adequate resources to maintain a first-class NHS, ARTBA also supports a strong federal commitment to helping meet non-NHS bridge needs.

National Highway Freight Network

ARTBA advocates the establishment of a third account in the Highway Trust Fund—a "National Highway Freight Network Account"—for dedicated investments in the National Highway Freight Network (NHFN). As such, ARTBA believes the NHFN should be a primary focus of federal capital investments supported by a NHFN-dedicated, user-based revenue stream to the HTF.

The NHFN plays an important role in supporting efficient supply chains. Its accommodation of heavy truck traffic results in greater costs to maintain existing facilities and the need to provide increased structural strength on new and rehabilitated roads and bridges. Research should be done to identify the true cost and benefit of highway-related freight movements to better align contributions to the HTF.

Outsourcing of Highway/Bridge Maintenance

To maximize the federal investment, federally-aided highways and bridges must be adequately maintained. Experience has shown that contracting out highway and bridge maintenance activities to private-sector firms can save tax dollars and improve efficiency.

Intermodality

ARTBA believes it is essential that highway transportation be integrated with other transportation modes to serve the nation's defense, enhance its competitiveness in world markets, support supply chains, and improve mobility for all Americans.

We support and encourage efforts to improve highway access to ports, airports, rail lines and terminals.

Use of Highway Right-of-Way

ARTBA encourages the use of highway right-of-way for public transportation purposes as long as such use does not limit highway use.



Border Infrastructure

ARTBA supports and encourages initiatives that will improve highway infrastructure along the U.S.-Mexico and U.S.-Canada borders. This includes investments in ports and other supply chain enhancements.

Addressing Traffic Diversity

Highways must be designed and constructed in ways that assure the maximum safety and efficiency possible for all highway users, recognizing the vast differences that exist in the size and weight of motor vehicles that must share the road. Provisions must also be made on roads and streets for pedestrians, bicycles, mopeds and motorcycles, buses and other high-occupancy vehicles, acknowledging that investments to ensure safety, like separation of modes, should be provided.

Research and Development

Greater emphasis must be placed on public and private highway research and development programs and technology transfer activities that can bring new products, techniques and ideas quickly into the field. In support of these goals, ARTBA urges:

- Expanded federal support and involvement in highway-related research, particularly in the areas of safety, resiliency, Intelligent Transportation Systems (ITS) and other advanced technology solutions, and pavement durability;
- Continued federal support for the Local Technical Assistance Program, which serves highway technology transfer centers across the nation, and university transportation centers that facilitate solutions to transportation challenges;
- Implementation, where appropriate and practical, of products and techniques developed by the Strategic Highway Research Program and the Accelerated Implementation and Deployment of Pavement Technologies (AID-PT) program; and
- Federal government encouragement through special tax incentives and other means of private sector research and development projects that have the potential to improve the quality, durability, safety and operation of our highways and bridges.

