AUTHORIZATION OF THE NATION’S SURFACE TRANSPORTATION PROGRAM:

ASCE’s BLUEPRINT FOR SUCCESS
We are underinvesting in our nation’s surface transportation infrastructure. ASCE estimates that between 2016 and 2025, we will underinvest in our infrastructure by over $2 trillion. Over half of that investment gap—$1.1 trillion—is in our roads, bridges, and transit systems.

Article 1, Section 8 of the U.S. Constitution identifies infrastructure and commerce as a federal responsibility. Our founders understood that a seamless, modern transportation system supports interstate commerce and fosters economic growth across the United States. Subsequent generations adhered to that Constitutional obligation—some of our largest public works projects were built in the 20th century with significant federal funding and support.

Today is a different story. The federal Highway Trust Fund, which pays for improvements and construction of roads, bridges, and transit systems, is funded by the federal gasoline tax, currently 18.4 cents a gallon. The tax has not been raised since 1993, and the revenues have not kept pace with system needs. While the price of every other household good—like bread, milk, or a new car—has nearly doubled in price, as a nation we are trying to pay for today’s transportation needs using 1993 dollars.

In the fall of 2020, the Fixing America’s Surface Transportation (FAST) Act will expire. The next iteration of a federal surface transportation bill should continue to support the proven user-fee system by raising the gas tax by five cents per gallon for five years. The legislation should also explore alternative user fees such as VMT. These actions will ensure the Highway Trust Fund can continue supporting critical transportation projects across the country to keep our country and economy moving and raise the ASCE Infrastructure Report Card grades.

### 2017 Infrastructure Grades

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<tr>
<th>Bridge Grade</th>
<th>Road Grade</th>
<th>Transit Grade</th>
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<tbody>
<tr>
<td>C+</td>
<td>D</td>
<td>D-</td>
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*American’s Cumulative Infrastructure Grade:* D+
The Highway Trust Fund was set up in 1956 to build and maintain a nationwide transportation network. It was traditionally a self-supporting bank account, collecting revenue from excise taxes on motor fuel. In recent years, Congress has had to rely on the General Fund to shore up resources. Even then, total spending remains stagnant, while our systems age and maintenance requirements increase.

We are now approaching a crisis point – forecasts show that if Congress does not act and find a long-term revenue solution, the Highway Trust Fund will have a total revenue deficit of $92 billion between FY2021-2025, or a yearly average of $18.6 billion. This comes at a time when we are already facing a backlog of maintenance needs for our nation’s roads, bridges, and transit systems.

SOURCE: CRS, based on CBO, Highway Trust Fund Projections: May 2019 HTF Baseline 2018-2029. FY2016-FY2018 revenues and outlays are actual. NOTES: Includes highway account and mass transit accounts combined. Revenues include interest on HTF balances. The shading between spending and revenues indicates the period that the HTF balance is maintained by the FAST Act transfers from the general fund and the LUST fund.
THE NEXT ITERATION OF A FEDERAL SURFACE TRANSPORTATION BILL SHOULD ADHERE TO THE USER FEE PRINCIPLE. IN THE SHORT-TERM, THIS INCLUDES RAISING THE GAS TAX BY 5 CENTS PER GALLON FOR 5 YEARS.

ASCE has developed a series of recommendations for Congress to incorporate into surface transportation legislation.

RECEIPTS, OUTLAYS, EXPANDING INFRASTRUCTURE INVESTMENT

1. Increase Funding to Provide Adequate Infrastructure Investment
   - ASCE urges Congress and the Administration to fix the Highway Trust Fund (HTF) by adding 25 cents to the current motor fuels user fee over the next five years and then indexed to the Consumer Price Index (CPI).
   - As part of the solution to fix the Highway Trust Fund’s funding shortfall, there should be a tax on electric vehicles that would account for their presence on our nation’s roads.

2. Long-term Viability of Fuel Taxes for Transportation Finance
   - ASCE urges Congress to establish a broad national pilot program to better understand how a Mileage-Based User Fee (MBUF) could be implemented. A national MBUF pilot program should examine key issues including the development of a mileage collection system, administrative costs, and revenue allocations.
   - Other methods of revenue generation, including standard and electric vehicle taxes, state, regional, and/or local sales taxes, dynamic pricing, container fees, and transit ticket fees should be considered for surface transportation maintenance and improvement.

3. Innovative Financing
   - ASCE supports the use of public-private partnerships (P3s) as a tool in the toolbox to provide revenue for infrastructure investments. P3s must not serve as a substitute for direct investment from all levels of government.
OPTIMIZING INFRASTRUCTURE INVESTMENTS

1. Transportation System Safety
   • ASCE supports the mission of Vision Zero and a safety program where significant enhancements in highway safety and the resulting reduction of highway crashes can be achieved by:
     o **Safety Contingency Funds**: Congress should explore the use of innovative contracting methods as an example of Innovative Project Delivery, outlined in 23 USC 120(c)(3)(B), by adding the following clause (vii): “contractual provisions that provide safety contingency funds to incorporate safety enhancements to work zones prior to or during roadway construction and maintenance activities.” Congress should expand safety funds to work zone areas to ensure all who work and travel on our roads remain safe.
     o **Highway Safety Improvement Program**: ASCE supports current language in the FAST Act which ensures that Highway Safety Improvement Program (HSIP) funds are used for HSIP eligible projects and cannot be flexed to other safety programs.
     o ASCE also supports the establishment of a national highway safety goal, improvement of work zone safety and mobility, as well as expanding the development and application of Intelligent Transportation Systems (ITS) programs, including the use of connected and autonomous vehicles.

2. Operations and Maintenance
   • ASCE considers it essential that the following issues regarding Operations and Maintenance be considered in the authorization bill: homeland security initiatives through joint planning, planning for the future with everchanging environmental conditions, federal support of state and local agencies through research, best practices and education enhancement, flexible funding, and the encouragement of P3s.
   • Special attention must be directed toward incident management programs, Intelligent Transportation System programs including CAVs, support for regional cooperation and partnerships, and congestion mitigation programs.
1. Sustainable System Expansion
   • ASCE supports the vision of a National Intermodal Transportation System that is economically efficient, technologically and environmentally sound, provides the foundation for the nation to compete in the global economy and will move people and freight in a safe, reliable, and energy efficient manner.

2. Resilience
   • Resilience is critically important to the overall health of our nation’s infrastructure network and can be achieved by developing active community resilience programs for severe weather and seismic events, consider emerging technologies and shifting social and economic trends when building new assets, improving land use planning at the local level, and supporting research and development into innovative new materials, technologies.

3. Freight Mobility Including Rail Systems
   • ASCE encourages the next authorization bill to provide a strong Federal role in freight mobility and intermodal connectors. This should include continued support for the Infrastructure for Rebuilding America (INFRA) grant program. The meaningful reforms in the FAST Act should be continued. This includes finalizing and implementing the National Freight Strategic Plan.
   • ASCE supports the development, construction and operation of an expanded passenger rail transportation system within the United States, including advanced technology high speed ground transportation (HSGT) systems.

4. Transportation Research Programs
   • ASCE strongly supports avoidance of earmarking in Federal research programs and endorses free and open competition among non-Federal entities to perform research that utilizes Federal funding.
   • ASCE supports the following actions regarding specific surface transportation research and technology (R&T) programs: funding for the research and technology portion of the State Planning and Research (SPR) program should be maintained, university research should continue to be supported through the University Transportation Centers (UTC) program, continue the successes found in the Strategic Highway Research Program (SHRP II), the Federal Transit Administration’s (FTA) research program should be free of earmarks and allocations, the Transit Cooperative Research Program should be authorized at a minimum of $20 million per year, and the Research and Innovative Technology Administration (RITA) should have a well-defined scope and appropriate funding.
1. Expedited Project Decision Making and Expedited Project Delivery
   - ASCE supports maintaining the progress made under the FAST Act on project delivery and recommends Congress take an active role to ensure that these changes are efficiently implemented.
   - ASCE supports the recommendations from the National Surface Transportation Policy and Revenue Study Commission in order to expedite project delivery.
   - ASCE supports provisions in the FAST Act that work to expedite the project delivery process. These measures should now be implemented without further delay, including Sections 1304 and 1309. Implementing these two sections would accelerate project delivery by coordinating efforts among federal agencies, minimizing duplicated project delivery reviews, and providing public transparency of project status.

2. Support Performance-Based Ownership of Infrastructure
   - ASCE encourages the use of performance-based standards for the procurement, design, operation, maintenance, and reuse/decommissioning of infrastructure; using infrastructure rating tools, such as the Institute for Sustainable Infrastructure's Envision, that encourage sustainable engineering practices and life-cycle performance of infrastructure projects; inclusion of a comprehensive life-cycle cost analysis in the decision-making processes; encouraging the use of innovative technologies; and consideration of the effect of the overall resilience on the affected community.

3. Demand Transparency for the American Taxpayers
   - Both MAP 21 and the FAST Act included provisions intended to improve transparency by providing real-time public information on the use of core federal highway and transit investments. ASCE encourages Congress to order a status report on Sec. 1402, which requires U.S. DOT to publish data on where the federal-aid highway program funds are going. ASCE seeks to modify that section to include the creation of visual graphics and other user-friendly features that convey the status of the requested information for each given year (updated quarterly), and require U.S. DOT to provide members of Congress with the same notifications of new project awards for apportioned funds, as is currently required for the discretionary grant programs.

CONCLUSION: A 21ST CENTURY VISION FOR AMERICA’S INFRASTRUCTURE

In the 21st century, ASCE sees an America that thrives because of high-quality infrastructure. Our surface transportation network is the foundation that connects the nation’s businesses, communities, and people – driving our economy and improving our quality of life. The federal government must be a strong and reliable partner by providing sound policy and robust, sustained investment in order to make that vision a reality.
Find the 2017 Infrastructure Report Card at www.infrastructurereportcard.org. See how your state is doing and how we as a nation can modernize our infrastructure.