



Washington Office

25 Massachusetts
Ave., NW Suite 500

Washington, D.C. 20001

(202) 789 -7850

Fax: (202) 789-7859

Statement for the Record of

The American Society of Civil Engineers

on

"Infrastructure Investment and Jobs Act Implementation and Case Studies"

Committee on Environment and Public Works

U.S. Senate

February 26, 2025

Introduction

The American Society of Civil Engineers (ASCE) appreciates the opportunity to submit a statement to the Senate Committee on Environment and Public Works regarding the hearing “Infrastructure Investment and Jobs Act Implementation and Case Studies.”

The Infrastructure Investment and Jobs Act (IIJA) was highly significant legislation that directly impacts the work of many of our members. The IIJA has provided meaningful investments in the roads, bridges, transit systems, pipes, and ports that keep our country’s economy functioning. As ASCE continues to follow the course of this legislation, we look with eager anticipation toward the next surface transportation reauthorization bill. ASCE commends the committee for examining the needs of our nation’s surface transportation infrastructure in the 119th Congress. Passing a comprehensive surface transportation reauthorization bill before the IIJA expires next September is a top priority for ASCE this Congress and we appreciate the committee’s early focus on this subject.

Founded in 1852, ASCE is the nation’s oldest engineering society. ASCE represents more than 160,000 members of the civil engineering profession in 177 countries. As the professionals who design, construct, and maintain critical aspects of the transportation system, including roadways, ASCE welcomes the opportunity to offer perspective on this legislation.

The economic value of infrastructure investment

In 2024, ASCE released *Bridging the Gap*, a report analyzing the impacts of recent infrastructure investments on American households and businesses. As Congress considers reauthorizing surface transportation programs over the upcoming year, it will be critical to have a strong understanding of the country’s needs. The report found that, to bring the nation’s surface transportation infrastructure into a state of good repair, \$3.5 trillion would need to be invested from 2024-2033.¹ If Congress continues to invest in surface transportation programs at the same funding levels represented by the IIJA, the overall funding gap for surface transportation programs will decrease slightly to \$1.2 trillion. However, if funding reverts to 2019 levels, the gap will grow to \$1.8 trillion. While recent federal legislation has halted the infrastructure investment gap’s rapid growth, continued robust investment is needed to keep up with increasing demands and ensure our system is fit for the future.

Furthermore, continuing to invest in infrastructure at IIJA levels will have significant economic benefits for American families and businesses over the next two decades. *Bridging the Gap* finds that, if IIJA spending becomes the new baseline for infrastructure investment, American families will save \$700 more per year from 2024-2043. These savings will allow Americans to have more disposable income to invest in the goods and

¹ <https://bridgingthegap.infrastructurereportcard.org/wp-content/uploads/2024/05/2024-Bridging-the-Gap-Economic-Study.pdf>

services they want, rather than the expenses related to failing infrastructure, such as car repair, bottled water, or losses from spoiled food when the power goes out. Continued investment in our transportation system will also result in safer and more dependable trips for individuals heading to work, children on their way to school, and truck drivers delivering goods to businesses.

ASCE's Report Card for America's Infrastructure

Every four years, ASCE publishes its *Report Card for America's Infrastructure*, which grades the nation's major infrastructure categories using an "A" to "F" school report card format. The most recent Report Card², released in March 2021, evaluated 17 categories of infrastructure and reflected an overall "C-" grade. Roads received a "D" on the Report Card, while bridges received a "C", transit a "D-", and rail a "B". The next Report Card will assess 18 categories and will be released on March 25, 2025.

Recommendations for a surface transportation reauthorization bill

1. Funding for infrastructure investment

Recent federal legislation, such as the IIJA, set a new standard for investment in surface transportation. Although this law included substantial funding for the nation's roads, bridges, and transit systems, a funding gap remains, and Congress will need to determine how these programs are supported going forward.

ASCE urges Congress to at least maintain investment levels set by the IIJA and provide adequate funding for infrastructure investment. The IIJA has resulted in many tangible benefits to the transportation system. Since the law's enactment in November 2021, the IIJA has directed \$591 billion to over 72,000 projects.³ These are projects to improve safety on roads and at railroad crossings, accelerate the movement of goods at ports, and increase connectivity in rural and under-resourced communities. In short, the IIJA has funded projects that not only protect human lives, but also spur economic activity.

Transportation funding should involve a continuation of traditional user fees, such as federal and state motor fuel taxes, while transitioning to more sustainable innovative user fees, such as alternative energy vehicle fees and road usage charges. Funding for roads and bridges relies on the Highway Trust Fund (HTF), which is supported by motor fuel tax revenue. The federal motor fuel tax rate of 18.4 cents per gallon for gasoline and 24.4 cents per gallon for diesel has not been raised since 1993. Due to the growth in construction costs and the increasing fuel efficiency of vehicles, the purchasing power of the HTF has declined precipitously over the years.

Vehicles, navigation systems, safety mechanisms, and roadway design techniques have all made their way into the 21st century. Funding for infrastructure should

² <https://infrastructurereportcard.org/>

³ <https://www.transportation.gov/briefing-room/big-deal-biden-harris-administration-nears-close-history-making-progress-continues>

transition to reflect the current transportation system. ASCE recommends innovative user fees that align with the “user pay” principle, which is based on the idea that people who use roadways should bear the costs associated with them. Innovative financing techniques can benefit infrastructure development by better leveraging available resources to deliver more capital. They can also play a major role in delivering projects and public benefits sooner than conventional methods. However, financing by any technique does not supplant the need for adequate user fees or other sources of revenue to pay for projects.

2. Operations and maintenance

Congress should support state- and local-level transportation asset management plans that link asset management efforts to long-term transportation planning and incorporate the use of life-cycle cost analysis. Life-cycle cost analysis, which helps raise awareness of the full cost of infrastructure, can help transportation professionals make well-informed operations and maintenance decisions. Using life-cycle cost analysis to evaluate operations, maintenance, repair, and energy costs can help with the overall cost-effectiveness of the project.

One key component of judicious infrastructure decisions is accurate, updated data. Thoroughly collected and promptly reported data guides infrastructure owners on when and how to distribute valuable resources to maintain their roads and bridges. ASCE would like to suggest the incorporation of a provision included in the Rail Bridge Safety and Transparency Act that proposes a bridge inspection report database. This bill, which was introduced last year, calls on the Department of Transportation to develop a database of bridge inspection reports received from railroad carriers. ASCE believes this provision would promote transparency and increase the safety of these critical structures.

ASCE also recommends Congress consider the Bureau of Transportation Statistics’ (BTS) work to provide local government agencies with data tools to support infrastructure decisions. The IIJA directed BTS to conduct outreach and identify the data needs of local government officials to make informed decisions about infrastructure investments. It also called on BTS to create a work plan to develop relevant data analysis tools for infrastructure investments in rural and urban communities. In the upcoming surface transportation reauthorization bill, ASCE suggests requiring an update from BTS on the progress of the work plan. Additionally, ASCE would recommend preserving an IIJA provision authorizing \$10 million per fiscal year for BTS besides the amounts provided through the HTF.

3. Building for the future

Across the U.S., disasters of greater intensity, duration, and frequency have wreaked havoc on communities of every size and location. In 2023, a total of 28 extreme weather events caused nearly 500 deaths and over \$95 billion in damages; since 1980, the U.S.

has experienced 400 events amounting to at least \$1 billion with a total cost of \$2.7 trillion.

Therefore, in any reauthorization bill, ASCE urges Congress to include requirements to design and construct infrastructure that can withstand increasingly extreme weather events, such as incentivizing the use of the latest codes and standards for projects receiving federal dollars. Designing and maintaining with resilience in mind can result in longer-term project viability, cost savings over time for infrastructure owners, reduced negative impacts on communities and the environment, and increased public involvement in decision-making. The widespread adoption of frameworks and standards can help deliver resilient, fiscally responsible projects and make the nation's infrastructure fit for the future. The past year alone, during which tornadoes caused damage across the central and southeastern U.S. and hurricanes devastated communities, has demonstrated the need for resilient infrastructure. One recent standard ASCE recommends would be ASCE/COS 73-23: Standard Practice for Sustainable Infrastructure, which provides guidance for infrastructure owners to develop and implement solutions throughout a project's entire life cycle.

Additionally, incorporating sustainability considerations into project design and construction can help ensure infrastructure systems are built to withstand growing challenges caused by extreme weather. An effective approach to this is the increased utilization of the Envision Sustainable Infrastructure Framework. The Envision framework is a decision-making tool that allows stakeholders – including engineers, architects, and contractors – to evaluate projects through the lens of sustainability indicators addressing economic, environmental, and social factors, allowing for more systemic change and improving system performance.⁴

Relatedly, ASCE recommends Congress continue to fund research into the use of innovative technologies, materials, and construction techniques, which can help ensure our infrastructure systems withstand extreme weather events. Innovation in the transportation sector can result not only in longer-lasting infrastructure, but also safer systems for the traveling public.

ASCE also recognizes that reducing delays in the permitting process for infrastructure projects can help our nation achieve a transportation system appropriate for the 21st century. ASCE supports a balanced approach to the National Environmental Policy Act (NEPA) process characterized by quality science, objective determinations of potential project impacts on the environment, and streamlining the permitting and approval process for infrastructure projects. Project delays associated with the current NEPA process often result in significant additional expenses to taxpayers stemming from issues such as increases in labor and materials costs. Time is another challenge, as environmental impact statements (EIS) can take years to complete. These delays in projects across every infrastructure sector are impacting public safety and our economy,

⁴ <https://sustainableinfrastructure.org/envision/about/>

and ASCE encourages Congress to look at ways for the permitting process to be streamlined in a safe and responsible way.

Conclusion

ASCE thanks the Committee on Environment and Public Works for holding a hearing on this important subject. ASCE strongly supported the IIIJA and we consider comprehensive surface transportation reauthorization legislation a top priority. We appreciate the opportunity to share our recommendations, and we are ready to be a resource as you work on this important bill.