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Statement for the Record of

The American Society of Civil Engineers

on

"Building Back Better: Investing in Transportation while Addressing Climate Change, Improving Equity, and Fostering Economic Growth and Innovation"

United States Senate

Committee on Environment and Public Works

February 24, 2021

Introduction

The American Society of Civil Engineers (ASCE) appreciates the opportunity to submit a statement on today's hearing about the Build Back Better Plan and the importance of long-term, strategic investment in our nation's transportation infrastructure. ASCE is eager to continue to work with the Committee in the 117th Congress and beyond to find ways to further improve our nation's vital surface transportation infrastructure systems and to address the economic impacts felt during the COVID-19 pandemic.

As the pandemic continues to have sweeping economic consequences across all sectors in the United States, many American families and businesses are looking to Congress and the Administration to provide both short-term relief and long-term economic recovery. While the Coronavirus Aid, Relief, and Economic Security (CARES) Act (Pub.L. 116–136) and the Consolidated Appropriations Act of 2021 (Pub.L. 116-260) provided much needed relief to our nation's infrastructure system amid the pandemic, more needs to be done. ASCE urges policymakers to prioritize our nation's infrastructure and get people back to work, using the current economic slowdown to make strategic and sorely needed investments to strengthen the networks that are the foundation of our economy.

Presently, many of our infrastructure assets have reached the end of their design life. Coupled with long underinvestment and inadequate support, a large and growing investment gap of $2.6 trillion over the next ten years has emerged. This gap must be closed if we hope to both repair and modernize our infrastructure systems to be competitive in the 21st century.

Failure to Act: Closing the Infrastructure Investment Gap for America's Economic Future

As our infrastructure continues to age, and investments do not keep pace with needs, the gap between identified investments and the public commitments to meet those needs widens every year. Last month, ASCE released our most recent report, *Failure to Act: Economic Impacts of Status Quo Investment Across Infrastructure Systems*[1]. By examining our nation's airports, bridges, drinking water systems, energy networks, inland waterways, ports, railways, roads, stormwater systems, transit networks, and wastewater infrastructure; the report found that infrastructure inadequacies will significantly stifle U.S. economic growth. In fact, the report found that failing to invest in our vital infrastructure systems will cost each American household $3,300 a year, or $63 a week, over the next two decades. Furthermore, our lack of investment will also cause the loss of $10 trillion in GDP and 3 million jobs over the next 20 years. The good news is that if the U.S. closes the growing gap in the investments needed for bridges, roads, airports, power grid, water supplies and more that we can mitigate these staggering economic impacts.

For these reasons alone, now is the time to invest in our nation's infrastructure. Compounded by the current crisis, infrastructure investments can provide both an immediate and long-term boost to the struggling American economy, and ensure we remain globally competitive in trade and commerce.

ASCE's *Infrastructure Report Card*

Infrastructure is the foundation that connects the nation's businesses, communities, and people, serves as the backbone to the U.S. economy, and is vital to the nation's public health and welfare. Every four years, ASCE publishes the *Infrastructure Report Card*, which grades 16 major infrastructure categories using a

[1] https://www.asce.org/failuretoact/

simple "A" to "F" school report card format. ASCE released its *2017 Infrastructure Report Card*[2] giving the nation's overall infrastructure a grade of "D+," with an investment gap of $2 trillion.

The release of the *2021 Infrastructure Report Card* on Wednesday, March 3rd will provide a comprehensive assessment of the nation's infrastructure across 17 sectors, with stormwater a new addition in the upcoming report.

Solutions

ASCE recommends the inclusion of key investments to maintain and modernize our nation's infrastructure, create jobs, support economic growth, and increase the resilience of our systems. This includes a large and comprehensive infrastructure investment package, as well as a timely reauthorization of our water resources and surface transportation networks. As the Committee continues to develop legislation that addresses our concerns, ASCE asks that you take the following key priorities under consideration:

Prepare for a Sustainable, Resilient Future. ASCE supports federal initiatives that increase resilience of infrastructure against man-made and natural hazards. ASCE urges the development of performance criteria and uniform national standards that establish minimum performance goals for infrastructure, as well as the inclusion of comprehensive risk assessments that encourage mitigation strategies and address recovery and return to service. Furthermore, ASCE supports the development, adoption, and enforcement of a national model building code as a key to creating disaster resilience in communities. The following ASCE documents offer a sound basis upon which such a model code can be developed:

- ASCE 7, *Minimum Design Loads and Associated Criteria for Buildings and Other Structures (ASCE/SEI 7-16)*, currently an integral part of U.S. building codes, describes the means for determining soil, flood, tsunami, snow, rain, atmospheric ice, earthquake, and wind loads, and their combinations for resilient structural design;
- ASCE 24, *Flood Resistant Design and Construction*, prescribes a standard for cost effectively increasing resiliency by reducing and eliminating risks to property from flood hazards and their effects;
- ASCE 41, *Seismic Evaluation and Retrofit of Existing Buildings*, standardizes methods for the retrofit of existing buildings to increase resiliency in communities after a seismic event; and
- ASCE Manual of Practice 140, *Climate-Resilient Infrastructure: Adaptive Design and Risk Management*, provides guidance for and contributes to infrastructure analysis/design in a world in which risk profiles are changing due to climate change per the Fourth National Climate Assessment.

Prioritize Asset Management and Operations and Maintenance (O&M) Needs. ASCE supports prioritizing investments that increase safety and resilience, as well as focusing on state of good repair and the operations and maintenance of the current systems. The use of performance-based ownership of infrastructure, which encourages the use of sustainable engineering practices and life-cycle performance, will be critical to the long-term use of our infrastructure systems. Therefore, ASCE supports:

- Making federal grant or loan funding contingent on the development of an asset management plan and annual reporting to the appropriate federal agency, such as EPA for water utilities, MARAD for ports, FTA for transit authorities, FHWA for DOTs;

[2] https://www.infrastructurereportcard.org/

- Requiring continuous oversight and accountability for completed plans to ensure that they meet stated goals and can be implemented, and do not become a "check the box" exercise;
- The creation of a new grant or low interest loan program to assist localities or states with setting up a comprehensive asset management inventory as well as education and training programs;
- Consolidating best standards that are currently developed for different infrastructure assets across agencies into one center for best practices; and
- Encourage communities to move beyond paper reports and implement innovative asset management solutions.

Restore a Strong Federal Partner in Infrastructure Investment. To close the estimated investment gap, meet future needs, and restore our global competitive advantage, we must increase investment in our infrastructure across all levels of government and the private sector and authorize programs to improve specific categories of deficient infrastructure by fully funding them. Failing to close this investment gap is not only a public safety issue, but has a cascading impact on our economy, impacting business productivity, gross domestic product (GDP), employment, personal income, and international competitiveness. The first step Congress should take to address major infrastructure priorities is to fix the Highway Trust Fund (HTF) and increase funding for the Clean Water State Revolving Fund (CWSRF) and the Drinking Water State Revolving Fund (DWSRF).

The HTF, 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. 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 face a backlog of maintenance needs for our nation's roads, bridges, and transit systems, which has only been worsened by the COVID-19 pandemic.

The next iteration of a federal surface transportation bill should continue to support the proven user-fee system by raising the gas tax to ensure it is sustainable over the upcoming years. Furthermore, Congress and the Administration should also explore alternative user fees such as vehicle miles traveled to identify a long-term user fee solution for the HTF, as well as a tax on electric vehicles that would account for their presence on our nation's roads. Furthermore, other methods of revenue generation, including state, regional, and/or local sales taxes, dynamic pricing, container fees, and transit ticket fees should be considered for surface transportation maintenance and improvement.

In the past 30 years, the federal government has loaned $42 billion to all 50 states, the District of Columbia, and Puerto Rico through the CWSRF, which has given states the ability to fund over $126 billion in wastewater infrastructure system improvements – all through low-interest financing. Every dollar provided by the federal government is matched at 20 percent by the state.

Likewise, the DWSRF program provides low-interest loans to state and local infrastructure projects. The EPA provides an allotment of funding for each state, and like the CWSRF, each state provides a 20 percent match. Since the program's inception, $35.4 billion of low-interest loans have been allocated. ASCE was pleased that the DWSRF was reauthorized at increasing funding levels in the America's Water Infrastructure Act of 2018 (P.L. 115 – 270, Sec. 2023) and urges Congress to reauthorize the CWSRF at increasing funding levels, as well.

Conclusion

Across the nation, our future recovery depends on reliable, modern infrastructure to provide a good quality of life for Americans and to support economic growth. There is a unique opportunity during these challenging times, while traffic is minimal and people stay home, to maintain and modernize these critical assets and jump-start job growth.

ASCE looks forward to working with the Committee as it develops legislation that provides much-needed investments in our nation's vital infrastructure systems. Continuing to underinvest in our infrastructure is already costing American families and businesses in wasted time, increased congestion, leaky pipes, and ongoing repair work. Therefore, investing in our infrastructure now, will not only create jobs and help our economy, but these investments will act as a down payment for future infrastructure projects.