

Statement for the Record of

The American Society of Civil Engineers

on

“Resilience Revolving Loan Fund Act of 2019”

United States House of Representatives

Committee on Transportation and Infrastructure

September 19, 2019

Introduction

The American Society of Civil Engineers (ASCE)¹ appreciates the opportunity to submit our views on this funding mechanism, the Resilience Revolving Loan Fund, that would improve the resilience of our nation's infrastructure. We also want to thank the U.S. Committee on Transportation and Infrastructure for holding a mark-up on this urgent and timely matter.

As natural disasters become more frequent and severe, investment in our nation's infrastructure is critical for safeguarding communities, maintaining healthy businesses, and strengthening the valuable assets we already have in place. Natural disasters cost the U.S. \$91 billion in 2018, according to a report from the National Oceanic and Atmospheric Administration (NOAA). Oftentimes, these incidents cause long-term economic, social, and environmental effects to communities thus magnifying the damage and driving up the ongoing burdens taxpayers must bear. While grant funding opportunities for mitigation activities exist, the need for more funds is growing to a crescendo that demands a mechanism for providing cities and states a way to prevent the loss of life and property.

ASCE's 2017 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 the nation's 16 major infrastructure categories using a simple A to F school report card format. The Report Card examines the current infrastructure needs and conditions, assigning grades and making recommendations to raise them. Resilience is one of the eight criteria used to assess each of the infrastructure categories, and the data shows we are not adequately prepared for future events.

ASCE's *2017 Infrastructure Report Card* rated the overall condition of the nation's infrastructure a cumulative grade of "D+" across sixteen categories, with an investment gap of \$2 trillion.

Additionally, ASCE's 2016 economic study, *Failure to Act: Closing the Infrastructure Investment Gap for America's Economic Future*, found that our nation's deteriorating infrastructure and growing investment deficit has a cascading effect on our nation's economy, impacting business productivity, gross domestic product (GDP), employment, personal income, and international competitiveness; in fact, our failure to act by 2025 carries an enormous economic cost to the tune of nearly \$4 trillion in lost GDP, which will

¹ ASCE was founded in 1852 and is the country's oldest national civil engineering organization. It represents more than 150,000 civil engineers individually in private practice, government, industry, and academia who are dedicated to the advancement of the science and profession of civil engineering. ASCE is a non-profit educational and professional society organized under Part 1.501(c) (3) of the Internal Revenue Code. www.asce.org,

result in a loss of 2.5 million jobs in 2025.

The ongoing impacts from disasters will multiply the existing infrastructure investment gap and economic risks we face from failing to support critical infrastructure. These threats signal a breakpoint – investments must be made in resilient infrastructure. The Resilience Revolving Loan Fund Act of 2019, H.R. 3779, provides a funding mechanism that would provide states with revolving, low-interest loans for projects that minimize the risk of disasters and decrease loss of life and property, costs of insurance claims, and federal payments in the wake of emergencies.

Building Resilience into Infrastructure

Across all levels of government, the current paradigm for disaster spending is to catalyze funds only after a disaster has occurred. As such, disaster spending is characterized by response and recovery instead of mitigation, preparedness, and resilience. Catastrophes around the U.S. are costing regions up to 8% of their economy with some states sustaining over \$150 billion in losses since 2005. However, spending on resilience and mitigation projects prior to disasters pay back taxpayers more than \$6.00 for every \$1.00 that is invested. The time for strategic investment in resilient infrastructure is upon us.

Solutions

ASCE supports the development, adoption, and enforcement of a national model building code as a key method of creating disaster resilience in communities to protect and improve public health, safety, and economic vitality. Standards such as ASCE 7, *Minimum Design Loads and Associated Criteria for Buildings and Other Structures (ASCE/SEI 7-16)*, which is an integral part of building codes in the U.S., describes the means for determining soil, flood, tsunami, snow, rain, atmospheric ice, earthquake, wind loads, and their combinations for resilient structural design. Additionally, ASCE 24, *Flood Resistant Design and Construction*, prescribes a standard for cost-effectively increasing resilience 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 resilience in communities after a seismic event.

Responsible design and construction are essential to improve the quality of life, assure safety and durability, and reduce vulnerability of the nation's infrastructure. The purpose of a building code and the consensus-based standards on which they are based is to establish minimum requirements necessary to protect and improve public health, safety and welfare in the built environment. Model building codes provide for protection from fire, structural collapse, general deterioration, and extreme loads related to man-made and natural hazards. They are also created to conserve natural resources reduce owner costs and preserve the environment by establishing minimum building standards. Safe and sustainable buildings are achieved through performance-based, code-based design, and construction practices in concert with a code administration program that ensures compliance.

Fortunately, Rep. Angie Craig (D-MN) and Rep. Rodney Davis (R-IL) have provided a federal funding option that – if authorized and then appropriated to the request of \$100 million in both FY 2020 and 2021 – could help safeguard communities, maintain healthy businesses, and strengthen critical infrastructure assets. The Resilience Revolving Loan Fund Act, H.R. 3779, offers loans at a low interest rate and would allow for the state or city to repay the loan with savings from the mitigation projects. Loans would be available to eligible cities, townships, and counties with the intent to protect against:

- Wildfires
- Earthquakes
- Flooding
- Storm Surges
- Chemical Spills
- Seepage resulting from chemical spills and flooding
- Any other event deemed catastrophic by FEMA

In conclusion, ASCE believes our nation must prioritize the investment needs for infrastructure to withstand the growing frequency and severity of extreme weather events. ASCE urges our nation's elected leaders to act quickly to address the need for a resilience revolving loan fund for infrastructure investment.

We thank you for holding this mark-up and bringing attention to this critical matter, and we look forward to working with you to find solutions to our nation's investment needs for resilient infrastructure.