Introduction

The American Society of Civil Engineers (ASCE) appreciates the opportunity to submit our position on the importance of long-term, strategic investment in our nation’s infrastructure systems. ASCE also wants to thank the U.S. House of Representatives Appropriations Subcommittee on Interior, Environment, and Related Agencies for holding a hearing on this critical issue. ASCE is eager to work with the Subcommittee in the 116th Congress to robustly fund our nation’s vital infrastructure systems.

Ms. Robin Kemper, P.E. is the current president of the American Society of Civil Engineers. She is a civil engineering leader with more than 40 years of professional practice in risk management consulting. In addition to many other roles within ASCE, she also served as a Director of Engineers Without Borders USA.

ASCE has long been an advocate for maintaining and modernizing the nation’s infrastructure. 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.

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

In 2016, ASCE released Failure to Act: Closing the Infrastructure Investment Gap for America’s Economic Future. This economic study analyzed the impact of current infrastructure investment trends on America’s GDP, jobs, personal income, and businesses. The study determined that the
U.S. is on track to invest only half of what is needed in infrastructure over the next decade. This underinvestment will cause our infrastructure to further degrade, resulting in a loss of 2.5 million jobs, $3.9 trillion in GDP, and $7 trillion in lost business sales by 2025. In addition, poor infrastructure will cost each American family $3,400 a year, which is $9 a day, in personal disposable income. To catch up and fill in the investment gap, we must invest an additional $144 billion each year, which is an average investment of just $3 per day per household. This small investment would put $3,400 back into the wallets of American families each year for a three to one return.

**U.S. Environmental Protection Agency**

**Drinking Water and Wastewater**

Well-maintained public drinking water and wastewater infrastructure systems are critical for public health, strong businesses, and clean waters and aquifers. ASCE’s 2017 *Infrastructure Report Card* gave the nation’s drinking water infrastructure a grade of “D,” while the nation’s wastewater infrastructure did not fare much better with a grade of “D+.” Despite increased efficiency methods and sustainable practices, there is a growing gap between the capital needed to maintain drinking water and wastewater infrastructure and the actual investments made. By 2025, the investment gap for drinking water and wastewater infrastructure systems is estimated at $105 billion. According to the American Water Works Association, $1 trillion will be needed to maintain and expand drinking water service demands during the next 25 years, while the U.S. Environmental Protection Agency (EPA) estimates that over the course of the next 20 years, $271 billion will be needed for wastewater infrastructure. It is critical that the EPA has funding to conduct its Drinking Water Needs Survey and Assessment and its Clean Watersheds Needs Survey so that Congress has the data it needs to maintain and improve the nation’s drinking water and wastewater infrastructure.

Fortunately, Congress has provided some federal funding options that – if robustly appropriated – could help close the funding gap for our nation’s infrastructure. Of the major infrastructure categories the federal government funds, water services receive less than 5%. However, the Clean Water State Revolving Fund (CWSRF) and the Drinking Water State Revolving Fund (DWSRF) – both authorized by Congress several decades ago – play a vital role in providing much-needed support for investments in state and local drinking and wastewater infrastructure.

The federal government has provided on average $1.4 billion per year over the past five years to all 50 states and the District of Columbia through the CWSRF, which makes funds available to wastewater systems to finance infrastructure improvements. The states, in turn, have provided on average a total of $5.8 billion per year in financial assistance to eligible recipients, primarily as discounted loans.

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 each state provides a 20% 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.

In the Water Resources Reform & Development Act (WRRDA) of 2014, Congress authorized the Water Infrastructure Finance and Innovation Act (WIFIA) (P.L. 113 – 121, Sec. 5021), a new mechanism to primarily fund large water infrastructure projects over $20 million. In Fiscal Year 2018, the WIFIA program received $63 million in appropriations. This program offers the sponsors of large projects a new tool to leverage limited federal resources and encourage greater private sector participation in meeting the nation’s clean and drinking water needs. The EPA estimates that a $20 million annual level of appropriations will result in approximately $1 billion in loans supporting approximately $2 billion in water and wastewater infrastructure investments. Last year, EPA began issuing its first WIFIA loans for drinking water and wastewater projects across the country.

The Securing Required Funding for Water Infrastructure Now (SRF WIN) Act is an innovative new financing tool that blends the most successful parts of the SRFs and WIFIA to create a program that gives State Infrastructure Financing Authorities access to WIFIA loans for drinking water and wastewater infrastructure. Authorized in the America’s Water Infrastructure Act of 2018 (P.L. 115 – 270, Sec. 4201) for $5 million each in FY20 and FY21, this new and efficient mechanism leverages limited federal resources and stimulates additional investment in our nation’s infrastructure.

ASCE recommends the House Appropriations Subcommittee on Interior, Environment, and Related Agencies renew the federal government’s commitment to drinking water and wastewater infrastructure by tripling the amount of annual appropriations to the CWSRF and the DWSRF; providing $1 million for the EPA’s Drinking Water and Clean Watersheds Needs Surveys; fully funding the WIFIA program at no less than the FY18 enacted level of $63 million; and fully funding the SRF WIN Act program at its $5 million authorization in FY20.

U.S. Department of the Interior

National Park Service

ASCE’s 2017 Infrastructure Report Card gave our nation’s public parks infrastructure a grade of “D+.” While the excitement around public parks is growing, our nation’s decades-long inadequate investment in public parks infrastructure has resulted in large backlogs of deferred maintenance, ultimately threatening the safety of these infrastructure systems and their surrounding communities’ economic stability while undercutting the ability of our nation to meet the demands of a growing population. The National Park Service (NPS) now has a deferred maintenance backlog of nearly $12 billion, which includes $6 billion for roads, bridges, tunnels, and parking lots and $6 billion for non-transportation related projects such as eroding trails, visitor facilities, and water and electrical systems. The NPS manages more than 75,000 constructed assets, and over 41,000 of them – more than half – are in need of repair.
ASCE supports legislation to address the NPS’ $12 billion deferred maintenance backlog. From supporting industries such as lodging and restaurants, to providing clean water to homes, to giving citizens the opportunity to partake in recreational activities, the lands, historical parks, cultural sites, monuments, battlefields, and recreational areas under the jurisdiction of the National Park Service, U.S. Forest Service, and U.S. Army Corps of Engineers – as well as those public parks operated at the state and local level – play important roles in American life.

**ASCE recommends the House Appropriations Subcommittee on Interior, Environment, and Related Agencies provide at least $2 billion in FY20 for the NPS’ deferred maintenance backlog.**

**U.S. Geological Survey**

Finally, ASCE supports fully funding the U.S. Geological Survey’s (USGS) National Earthquake Hazards Reduction (NEHRP) and streamgaging programs. Recent legislation amended prior NEHRP authorizations and provided for expanded activities to include: gathering information on community resilience (i.e., the ability of a community to prepare for, recover from, and adapt to earthquakes); publishing a systematic set of maps of active faults and folds, liquefaction susceptibility, susceptibility for earthquake-induced landslides, and other seismically induced hazards; and continuing the development of the Advanced National Seismic System, including earthquake early warning capabilities.

USGS’ streamgaging program provides consistent, scientifically reliable data that is essential for flood-risk assessments, water supply planning, water quality appraisals, and stream flow forecasting.

**ASCE recommends the House Appropriations Subcommittee on Interior, Environment, and Related Agencies fully fund the NEHRP program at $75 million in FY20. Additionally, ASCE recommends funding the streamgaging program at $100.5 million in FY20 broken down as follows: Federal Priority Streamgages ($27.5 million), Cooperative Matching Fund ($33 million), Modernizing the Streamgaging Network ($30 million) and Next Generation Water Observation System ($10 million).**

The projects funded by these programs have already proven to be successful; providing more funding to existing programs rather than creating new programs will reduce overhead costs and startup time while still allowing for significant and noticeable improvements across our nation’s water resources systems.

In conclusion, ASCE thanks the Subcommittee for holding this hearing on a topic that affects the quality of life and livelihood of every American. We believe that strategic, robust, and sustained investments, through long-term, reliable federal funding, as well as through the utilization of financing mechanisms, must be made quickly if we hope to close the growing funding gap and restore America’s world-class infrastructure. ASCE and its 150,000 members look forward to working with the House Appropriations Subcommittee on Interior, Environment, and Related Agencies to improve America’s infrastructure so that every family, community, and business can thrive.