



Invest in Our Nation's Infrastructure to Improve Our Economy and Economic Competitiveness

Issue Background:

Perhaps our nation's greatest asset, as well as our resource, is our infrastructure. It has served as our greatest tool for economic commerce and has put us on the path of prosperity. We now are at a crossroads. Our systems continue to grow older, exceed their capacity, and are now in need of a comprehensive and systematic upgrade. We must protect the billions in investments we have made over the past 100 years and we must also plan and invest in the future. Critical investments in our infrastructure will go a long way to provide the best we have to offer in our building, energy, water and transportation infrastructure.

Key Points:

- *Building Infrastructure.* The Department of Defense construction agencies design and manage construction for homes, schools, hospitals, day care centers, office buildings, airfields, warehouses and training facilities for members of the military and their families. In addition, the vast majority of non-Defense federal construction activity is in dire need to address a serious backlog of needed repairs, alterations and project starts. In addition to federal office buildings, funding is needed for federal prisons, courthouses, border stations, and our embassies overseas.
- *School Construction.* School construction has generally been considered a state and local responsibility and the needs are not being met. According to the National Center for Education and Statistics the unmet need for school construction and renovation is estimated to be \$127 billion or \$2.2 million per school and the average age of a public school building is estimated to be over 40 years old.
- *Energy Infrastructure.* America relies on an aging electrical grid, some of which originated in the 1880s. Investment in power transmission has increased since 2005, but ongoing permitting issues, weather events, and limited maintenance have contributed to an increasing number of failures and power interruptions. The availability of energy in the form of electricity, natural gas, and oil will become a greater challenge after 2020 as the population increases. Although about 17,000 miles of additional high-voltage transmission lines and significant oil and gas pipelines are planned over the next five years, regulatory issues threaten their completion. The investment gap for distribution infrastructure is estimated to be \$57 billion by 2020, much larger than the investment gap for transmission infrastructure of \$37 billion. The implementation of smart grid technologies will revolutionize electric delivery in the U.S. The transformation to a smarter grid will increase the reliability, efficiency, and security of the nation's electrical system; encourage consumers to manage their electricity use; reduce greenhouse gas emissions; and allow the integration of clean energy sources and electric vehicles into the grid of tomorrow.
- *Water Infrastructure.* Federal investments in drinking water and waste water infrastructure have been sorely lacking for years. The primary federal funding sources for these programs, the Safe Drinking Water and Clean Water State Revolving Loan Fund (SRF) programs are drastically short in additional funding to meet our needs. The U.S. Environmental Protection Agency, Government Accountability Office (GAO), the Congressional Budget Office (CBO), and private studies have all estimated our nation's water infrastructure needs to range between \$550 and \$600 billion over a 20-year period. The long-term solution to this program's funding shortfalls is creation of a long-term, sustainable, off-budget source of funding for water infrastructure such as a trust fund to finance construction and maintenance of this critical infrastructure. Establishing a stable revenue stream to supplement federal funds helps guarantee funding for critical projects.

- *Waterways Transportation.* Our nation's waterways, provide family-wage American jobs, support exports, and protect the environment. They relieve traffic congestion, are the most energy-efficient mode of surface transportation, and are vital to our agriculture, manufacturing and energy sectors. Modern lock and dam infrastructure is critical to U.S. competitiveness in the world market, to environmental protection, to energy efficiency, to the sustainment of well-paying American jobs and to congestion relief.
- *Electrical Vehicle Infrastructure.* As manufacturers offer vehicles that operate on biodiesel, electricity, ethanol, hydrogen, natural gas, and propane, alternative fuel and electric vehicle charging stations are becoming more prevalent around the United States. "Electric highways" connect electric vehicle drivers with fast charging between EV-friendly communities along interstates and other major roadways. State Departments of Transportation are collaborating on electric highways, leading the charge into this new technology and mode of transportation.
- *Highway Transportation.* Our highway transportation system is a key component of our economic strength. Recent battles over properly funding a multi-year surface transportation bill has clogged our highways, stifled our progress and slowed down our economy. The current funding structure, which is now severely at risk and preventing states from receiving critical funding necessary to meet our needs, must be shored up in order to help us move forward and have a truly 21st Century infrastructure. NECA contractors are a critical contributor in ensuring the safety and efficiency of our highways, lighting our streets and highways, helping planning officials succeed in their lighting design goals, and forging smart corridors to optimize vehicle traffic times.
- *Transit Transportation.* A growing populace, traffic jams, and high gas prices have lead many commuters to increasingly rely and utilize transit. Nation's public transportation systems are owned and operated by state and local governments or governmental agencies, in partnership with the federal government. Currently, there are over 7,700 transit providers operating in the U.S. NECA contractors nationwide provide design support, construction engineering, project management, installation, testing, startup and maintenance for transit systems in heavy rail, light rail, and automated people mover systems.
- *Rail Infrastructure.* Railroads are experiencing a competitive resurgence as both an energy-efficient freight transportation option and a viable city-to-city passenger service. Since 1980 over \$500 billion in private funding has been invested in our railroad lines without any federal infrastructure funding assistance. The U.S. rail network is made up of more than 160,000 miles of track, 76,000 rail bridges, and 800 tunnels across the nation that are shared by all operators moving freight and passengers. NECA contractors perform a variety of work for rail carriers nationwide, including: installing fiber optic communication systems, trolley poles & contact systems, overhead catenaries, rail switches, and switch yard and rail diamond reconstruction.
- *Aviation Infrastructure.* Our national aviation transportation system is an essential component of interstate travel, commerce and the national defense, generating substantial benefits to the public. In order to provide adequate air service for all Americans, we must upgrade and improve existing airports as we continue to build new airports. A well-developed and integrated airport development program will require careful long-range planning and adequate funds to support coordination of highway, rail, transit, and ports to accommodate increased passenger and cargo demand.