Chairman Graves, Ranking Member Norton, and Members of the Subcommittee, thank you for holding this important hearing and for the opportunity to submit testimony.

ACEC – the voice of America’s engineering industry – is a national federation of 52 state and regional councils representing the great breadth of America’s engineering industry. Member firms employ more than 600,000 engineers, architects, land surveyors, scientists, and other specialists, responsible for more than $200 billion of private and public works annually. Our mission is to strengthen the business environment for our member firms through government advocacy, political action, and business education.

Now is the time to enact a robust infrastructure package

Investing in the nation’s critical infrastructure has attracted strong, bipartisan support in Congress over the years. The President’s support for infrastructure as a key piece of his agenda has created a unique opportunity in 2017 to pass legislation that will enhance the nation’s transportation, water, energy, and communications infrastructure, while creating jobs and boosting competitiveness in the global marketplace.

ACEC urges Congress to enact a bold infrastructure package that includes:

(1) robust funding for core federal programs, including highways, bridges, transit, airport, water and wastewater programs;
(2) innovative financing mechanisms to promote additional private investment and Public-Private Partnerships (P3s), particularly through an expansion of TIFIA and Private Activity Bond financing;
(3) a long-term, sustainable solution for the Highway Trust Fund; and
(4) responsible regulatory reforms to facilitate efficient project delivery.

Massive infrastructure needs still go unmet despite recent initiatives

Congress has enacted a series of bipartisan infrastructure bills in recent years – including the FAST Act, WRRDA, and the WIIN Act – to reauthorize and expand federal programs and
funding for the nation’s transportation and water systems. Despite these successes, our nation’s infrastructure remains severely deficient and underfunded across all sectors. According to the U.S. Department of Transportation, improving the condition and performance of highways and bridges requires $142 billion annually from all levels of government. We currently invest approximately $105 billion. For public transit, current investment totals $17 billion per year, while the cost of preservation and expansion needs is 50% higher. Airports have identified $100 billion in capital needs over the next 5 years, while current funding sources only provide for half of that total. For water and wastewater, the EPA and the Government Accountability Office (GAO) have documented over $500 billion in funding shortfalls over the next 20 years.

Challenges in the movement of freight and the impact on our national economy typify these funding concerns. According to the Bureau of Transportation Statistics, in 2015 our national transportation system moved 18.1 billion tons of goods worth $19.2 trillion. The amount of freight traveling on the network is projected to grow by 40 percent over the next 40 years. These goods move over every mode, including by truck, rail, water, and air. However, those trucks are moving across a system that includes over 55,000 structurally deficient bridges, including 13,000 bridges on Interstates that need replacement or major reconstruction to accommodate traffic demands. Those intermodal containers sit stuck in ports that cannot handle growing demand. The average driver spends 43 hours stuck in traffic each year. Last year, delays exacted a $160 billion cost to the economy due to wasted fuel and lost productivity.

Problems with inadequate funding are compounded by regulatory uncertainties which drive up costs, deter private investment, and delay the safety, environmental, and economic benefits of investment. Congress has made progress in passing bipartisan reforms in recent years to streamline regulatory reviews for projects – due in large part to the leadership of this committee – but more can be done to advance responsible reforms to promote more efficient project delivery. ACEC submitted an extensive list of potential regulatory and legislative actions to the Administration and to this committee earlier this year.

**Congress can leverage existing programs for efficiency and success**

ACEC believes that the most effective infrastructure investment will be funneled primarily through existing programs. New mechanisms may be necessary to address certain areas of need; however, any effort to renegotiate funding formulas and allocations, or to establish a complex new bureaucracy for administering funds, is unnecessary and could delay the delivery of vital funds. MAP-21 and the FAST Act were carefully crafted laws that advanced critical reforms to highway and transit programs, targeting funds to national priorities while giving state and local governments significant flexibility to identify their needs. These existing programs are well established and well suited to get funds out the door and into projects on the ground.

Moreover, lawmakers should not view an infrastructure package as a “stimulus” bill. The legislation should focus on programs and projects that generate long-term economic growth, not “shovel ready” quick hits that have little impact on economic development.

Existing programs are also available to spur private investment and facilitate public-private
partnerships, a clear priority for the Administration. The TIFIA, WIFIA, and RRIF programs for transportation, water, and rail, respectively, can be grown and expanded to accommodate additional projects at very little risk or expense to the federal budget. The federal cost of the loans provides an approximately 30:1 leverage ratio. In addition, Private Activity Bonds are an essential tool for fostering additional investment. PABs allow private sponsors to issue tax-exempt bonds when financing projects with a public benefit. The existing $15 billion cap on such issuances should be raised to allow additional private investment.

Any infrastructure package must address the Highway Trust Fund

One of the most effective means for fostering state, local, and private investment in transportation infrastructure is to ensure a strong and stable federal partner. No single action would do more to unlock long-term investment than to permanently address the structural revenue deficit of the Highway Trust Fund and support robust, long-term funding increases for surface transportation programs. Conversely, failure to fix the Trust Fund would only undermine the anticipated benefits from an infrastructure investment package.

We were encouraged that 253 House members – including a majority of both Republican (119) and Democrat (134) members – signed the letter you circulated, Chairman Graves and Ranking Member Norton, earlier this year urging the Ways & Means Committee to include a long-term fix for the Highway Trust Fund in the context of tax reform. ACEC applauds the members of this committee that signed that letter and who have shown consistently strong leadership on this issue.

As every Member of this committee and of this Congress knows, the gas and diesel tax have been flat since 1993. The purchasing power of this user fee has been diminished by 40 percent over that time. Congress has lurched through a series of short-term patches totaling $140 billion, and scraped for every budget gimmick in existence to offset General Fund transfers to keep the Trust Fund solvent. While it is encouraging that lawmakers understand the importance of maintaining the solvency of the Fund so much that they are willing to raid other parts of the federal budget to do so, the time has come for a more responsible and long-term solution. The simplest and most efficient fix is to restore the lost buying power of the gas and diesel taxes and index them to inflation going forward.

ACEC has endorsed a wide array of other existing revenue options, and supports a transition to a direct mileage-based user fee over the long term. Pilot programs created by this committee in the FAST Act to study and accelerate those options are vital. Nevertheless, we cannot wait for those programs to come to fruition. For the foreseeable future, the existing excise taxes are the foundation for federal investment and must be increased.

Private sector engineering firms deliver value

Lastly, in order to promote the effective and efficient use of additional funding, the infrastructure package should promote the utilization of private sector engineering and design firms to deliver projects. Engineering firms play an important role in partnering with state and local agencies to deliver transportation projects. Agencies rely on the specialized skills and technical expertise
that firms provide to solve complex design challenges in creative ways. They also use local firms to meet tight project deadlines and identify better and more efficient ways to get projects done.

The FAST Act recognized the value of these partnerships. Section 1443 of the law states that the engineering industry “continues to provide critical technical expertise, innovation, and local knowledge to Federal and State agencies,” and urges the Secretary of Transportation “to reinforce those partnerships by encouraging State and local agencies to take full advantage of engineering industry capabilities to strengthen project performance, improve domestic competitiveness, and create jobs.”

While many state and local agencies partner very effectively with engineering firms, there are some that do not take advantage of the services available. Local firms, many of them small businesses, are essentially shut out from competing for federally funded projects.

A recent funding initiative in California is illustrative. The state legislature approved a 10-year, $52 billion road repair bill and constitutional protection bill earlier this year, with a bi-partisan, two-thirds majority vote. ACEC and its member firms were strongly supportive of this effort, which will fix unsafe bridges and overpasses, improve road safety and reduce traffic congestion. The California Department of Transportation (Caltrans) will start receiving revenue from SB 1 in January 2018 and in anticipation, has already jump-started state road projects. With SB 1 money being split equally between state and local projects, ACEC is cautiously optimistic at the additional opportunities for the private sector. Caltrans already performs more than 90 percent of engineering work in-house, but with such a historic funding package being implemented, they cannot go alone. Caltrans cannot simply add to their staff in anticipation of the additional funds but must rely on available, private sector firms to perform the necessary engineering, design and inspection services. Otherwise the value and efficiency available through partnerships with the private sector diminishes.

A federal infrastructure package should encourage this type of approach. Funding increases should go to fund projects, not grow state bureaucracies.

Legislation enacted in the State of Washington provides another example. For many years, the Washington DOT insourced the vast majority of its engineering and design work, even during peak funding periods. In 2015, the Washington state legislature passed a bipartisan 11.7 cent/gallon gas tax increase to fund a $15 billion transportation package. That package included a provision that specifically limits the Washington State Department of Transportation (WSDOT) from ramping up its internal engineering and technical staffing levels for the additional work funded under the bill, and recognizes that outside consultants will be utilized to handle the increased demands. A separate, related bill mandated that WSDOT work with industry to create a business plan for the Department that includes how it will be a strong owner in the future, how it will maintain sustainable staffing levels going forward, and how best to utilize outside consultants.

Washington still performs a large amount of engineering work in-house, but the Department is slowly being right-sized and more firms are being contracted for work.
A recent academic study from New York University (NYU) underscores the value of this partnership approach. NYU researchers examined cost data from a total of 28 State DOTs, as well as corresponding data from a sample of firms in each state, to present an accurate picture of the total cost of doing engineering work with in-house staff versus contracting with a local firm. Aggregating the data from those 28 states, NYU found that the average cost of a DOT engineer was $272,684, which includes salary, benefits and overhead costs, while the average for engineers in the firms was $217,020, which included the same costs as well as a 10.5% average profit margin.

The study was conducted because State DOTs are at times criticized for contracting out services on the presumed basis that it’s “cheaper” to perform the work in-house. Lawmakers at the state and federal level have also debated the relative merits of in-sourcing versus contracting out engineering services, where once again the most common metric cited is cost. The intent of the study is to inform policy makers and the public of how the true costs compare, with the goal of bringing the discussion back to the real value measures for strong partnership between public agencies and the nation’s engineering industry, such as promoting innovation, efficient and timely project delivery, and project success (including cost).

The NYU study also documented a number of additional benefits for public agencies to consider in making the decision to contract out work to the private sector:

- **Staffing capacity** - The public cannot afford to staff an agency to handle peak workloads. If the DOT staffed up to handle peak workloads, it is liable to pay those employees in lean times even if they have nothing to work on. If a project is contracted out, firm employees are only paid for the time they work on a project; they leave a project once it is over.

- **Schedule constraints** - Firms typically have more capacity, flexibility, and incentive to meet fast-track deadlines than government agencies.

- **Lack of special expertise** - Often the DOT has no choice but to contract out the design if it lacks the required expertise in-house.

- **Need for innovation** - The private sector has more means to encourage innovation than government agencies, including bonus programs and the sharing of intellectual properties. Most government agencies cannot by regulation provide these types of incentives.

- **Better management of risks** - Contracting out is an effective risk management tool that enables agencies to shift risk to the firm and away from the taxpayer.

- **Improved quality** - Since firms compete against one another for work, they cannot submit a poor-quality design and expect to be selected again by the same agency. This is the core principle of the Qualifications-Based Selection (QBS) procurement process, which is used by federal and state agencies to acquire engineering services for public projects. Past performance and project success is a major gatekeeper in the selection of consultants.
• **Cost-effectiveness** - The cost savings demonstrated by this study when State DOTs contract out design services, coupled with the other factors referenced above that drive the decision-making to engage the private sector, builds a convincing narrative supporting a robust partnership between the DOTs and the nation’s engineering industry.

These many benefits should be reflected in a federal infrastructure package to make sure that any additional federal dollars are put to the most effective use through innovation and efficiency.

ACEC thanks you for your consideration of our views, and for your leadership and support for a robust federal role in infrastructure investment. We stand ready to help you deliver on the promise of a substantial legislative package that finally begins to address this most pressing economic need.