April 29, 2019

Dear Speaker Pelosi, Leader McConnell, Leader Schumer, and Leader McCarthy:

The undersigned organizations, which represent a diverse cross-section of the innovation economy, strongly commend both Congress and the administration for their interest in rebuilding and modernizing American infrastructure. There is an unequivocal opportunity for policymakers on both sides of the aisle to bring U.S. infrastructure into the 21st century and leave a lasting legacy that will improve the lives of Americans for decades to come.

In today's rapidly-evolving digital world, infrastructure challenges cannot be solved with the solutions from yesterday. Indeed, technology companies have pioneered enhancements to infrastructure and transportation systems through the use of hardware, sensors, transponders, cameras, meters, monitors, control systems, optical fiber, digital design software and construction collaboration platforms, and other vanguard technologies that seek to address these challenges. By leveraging technology in the design, construction, and operation of infrastructure, the U.S. government can help spur economic growth and job creation, incentivize domestic investment, and meet the current and future needs of the American public.

To achieve this, we recommend five areas on which Congress, working with the administration, industry, and other stakeholders, should focus its infrastructure modernization efforts:

Enabling Smart Tech in Infrastructure: In an age where everything is increasingly connected to the internet, the ability to horizontally integrate "smart" technologies with traditional infrastructure and transportation systems is essential. Incorporating emerging technologies, through smart, data-driven, standards-based Internet of Things (IoT) solutions, into the foundation of any new, or repairs of existing, infrastructure – from roads, bridges, and traffic management and transportation systems, to the electric grid, communications network, and water infrastructure – will improve public safety, reduce congestion, conserve energy, maximize efficiency, save significant taxpayer dollars, be more sustainable and environmentally-friendly, and enhance overall quality of life.

Ensuring the Security of Digital Infrastructure: Congress should also ensure that security is integrated into digitally-enabled infrastructure at the outset. Legislation should make clear that consideration of cybersecurity, including cyber hygiene best practices, is a requirement for funding smart infrastructure projects. Indeed, "smart" technologies that underpin digital infrastructure will keep U.S. systems and citizens safer while increasing connectivity. Resources must also be made available to local and state entities to ensure that privacy and security are integrated into the foundation of any infrastructure solution. Doing so will increase resilience against cybersecurity threats, safeguard data privacy, and secure the trust of the American people.

Expanding Broadband Access Nationwide: Ubiquitous, affordable, high-speed broadband connections are essential to deploying 21st century infrastructure technologies, driving productivity through cloud computing, and enabling the benefits and services of "smart" cities and communities nationwide. We encourage Congress to advance technology-neutral legislation that will catalyze the expansion of broadband access through various mechanisms, including increasing incentives for broadband deployment; accurately mapping national broadband availability; streamlining the application and permitting process; and lessening the deployment costs for communities through 'dig once' and 'climb once' policies. These legislative efforts will help to close the digital divide and strengthen U.S. broadband infrastructure across rural and urban communities alike.

Expediting Deployment of Licensed and Unlicensed Spectrum for 5G: In order for the U.S. to maintain its leadership in emerging infrastructure technologies and continue to enable access to cloud services, Congress should ensure that new and existing licensed and unlicensed spectrum is made available for wireless broadband, and incentivize private investment in, and accelerate the scalable deployment of, emerging 5G technologies. Robust and cutting-edge broadband networks like 5G are essential to harnessing the benefits offered by low-, mid-, and high-band spectrum, as well as advancing innovations such as smart cities and communities and first responder networks. Policies should therefore be put in place to ensure a smart, secure, and reliable 5G communications ecosystem. We also encourage responsible efforts to make additional federal spectrum available for commercial use where practicable, particularly as it relates to 5G, in a way that complements the ongoing work at the Federal Communications Commission. Additionally, Congress should embrace policies that reduce barriers to the installation of small cells, which are essential to expediting 5G deployment nationwide.

Encouraging Use of Digital Design and Construction Technologies: The U.S. leads the world in "smart" design and construction technologies. For example, Building Information Modeling (BIM) enables the design of "intelligent" models of building and infrastructure projects that shorten project delivery time, reduce costs, enhance sustainability, and improve operational efficiency. In addition, new Industrialized Construction technologies allow components of building projects to be made in the factory and "snapped together" at the construction site, driving even greater efficiencies and quality. Construction collaboration platforms also are revolutionizing the process by reducing paper and providing anytime, anywhere access to critical construction documents, saving time and reducing re-work on the construction site. As such, Congress should establish policy incentives to promote greater use of these and other cutting-edge technologies throughout the design and construction of building and infrastructure projects.

As the Congress continues to look for ways to improve and transform U.S. infrastructure, we strongly encourage the integration of smart technologies at the outset of any proposal. We stand ready to assist as this legislative process moves forward, and we remain at your disposal to further discuss these important issues at your request.

We sincerely thank you for your consideration,

BSA | The Software Alliance
CompTIA
Consumer Technology Association
CTIA
Fiber Optic Sensing Association
Information Technology Industry Council
Intelligent Transportation Society of America
Smart Cities Council
TechNet
Telecommunications Industry Association
Wireless Infrastructure Association

cc: Chairman DeFazio, House Committee on Transportation and Infrastructure
        Ranking Member Graves, House Committee on Transportation and Infrastructure
        Chairman Pallone, House Committee on Energy and Commerce
        Ranking Member Walden, House Committee on Energy and Commerce
        Chairman Wicker, Senate Committee on Commerce, Science, and Transportation
        Ranking Member Cantwell, Senate Committee on Commerce, Science, and Transportation
        Chairman Barrasso, Senate Committee on Environment and Public Works
        Ranking Member Carper, Senate Committee on Environment and Public Works