

Congress of the United States

Washington, DC 20515

January 2, 2023

The Honorable Pete Buttigieg
Secretary
U.S. Department of Transportation
1200 New Jersey Avenue, SE
Washington, DC 20590

Dear Secretary Buttigieg:

As you and your team work to implement the bipartisan Infrastructure Investment and Jobs Act (IIJA) and translate this historic federal investment to rebuild our nation's aging infrastructure into reality, we would like to reiterate our commitment to integrating and maximizing the use of proven technologies to expedite timelines, save taxpayer money, and build out a 21st century infrastructure ecosystem that levels the playing field with our foreign competitors.

Our federal investment in infrastructure comes at a critical time, with inflation, labor shortages, and supply chain challenges creating an environment where leveraging every taxpayer dollar to the full extent possible is essential. Historically, large projects across different asset classes to take 20% longer than scheduled and exceed their budgets by up to 80%.¹ Today, we have proven tools to help mitigate and improve these outcomes. Construction and project management technologies utilized in various states and around the globe have fundamentally changed how world-class infrastructure is built and managed. By leveraging advanced technology, project sponsors could harmonize decision-making during project delivery, enabling real-time data capture directly from job sites and improve collaboration across organizations, work streams, and locations to gain earlier, more detailed insights about progress to intervene more effectively and maintain productivity.

By incorporating proven technologies into the scope of upcoming infrastructure investments across the U.S., we have a rare opportunity to modernize our infrastructure ecosystem and ensure we can close the competitive infrastructure gap with foreign competitors. For instance, under Section 13006 (titled "Research and Technology Development and Deployment") of the IIJA, Congress recognized the benefits of advanced digital construction management systems in delivering transportation projects and set forth the basis for accelerating their adoption during the construction lifecycle by means of a demonstration program. To that end, as you work to implement this important legislation, we recommend that the U.S. Department of Transportation (DOT) consider the following recommendations:

1. Establish criteria for the new advanced digital construction management systems grant program and define key attributes of these systems, including how they can best track, verify, and share information critical to meeting the objectives of the IIJA. We also recommend ensuring that such systems be open data platforms, modular, data first, modern, and real-time.
2. Collect information regarding the types of projects undertaken with advanced digital construction management systems, amount of money spent as a percentage of total funding, types of technologies utilized, objective and outcome of the technologies, and cost-effectiveness in order to quantify the benefits of advanced digital construction management systems relative to costs. Additionally, we urge you to provide Congress, state departments of transportation, and transit agencies with access to real-

¹ Agarwal, R., Chandrasekaran, S., Sridhar, M. (2016, June 24). Imagining construction's digital future. McKinsey & Company. <https://www.mckinsey.com/business-functions/operations/our-insights/imagining-constructions-digital-future>.

world examples of how they can use advanced digital technologies to achieve desired outcomes. In planning infrastructure projects, state transportation departments and other sponsors can use the data collected to determine how to deliver projects most efficiently, while Congress may provide additional guidance if necessary. The recommendation aligns with the reporting requirement in Section 13006, which requires the Secretary to report on cost savings, project delivery time improvements, congestion impacts, and safety improvements for roadway users and construction workers upon implementing advanced digital construction management systems.

3. Expand the criterion for competitive grants to incentivize the use of advanced digital construction management systems in the following programs: (1) Bridge Investment Program grants; (2) Promoting Resilient Operations for Transformative, Efficient and Cost-Saving Transportation (PROTECT) grants; (3) Reconnecting Communities grants; (4) National Infrastructure Project Assistance grants; and (5) Nationally Significant Freight and Highway Projects grants.

Thank you for your consideration and attention to this matter. We look forward to our continued collaboration regarding DOT's work to date and your plans for ensuring that infrastructure projects are designed, built, operated, and maintained in a manner that maximizes the potential benefits and outcomes.

Sincerely,



Marilyn Strickland
Member of Congress



Nicole Malliotakis
Member of Congress



Brian K. Fitzpatrick
Member of Congress



Sheila Jackson Lee
Member of Congress



Chrissy Houlahan
Member of Congress



Stephen F. Lynch
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