

March 20, 2026

VIA ELECTRONIC CORRESPONDENCE

Mr. Alasdair Cain
Director of Research, Development and Technology Coordination
Office of the Assistant Secretary for Research and Technology
U.S. Department of Transportation
1200 New Jersey Avenue, SE
Washington, D.C. 20590

RE: Request for Information-Research To Support Establishing a National Strategy for Transportation Digital Infrastructure (Docket No. DOT-OST-2026-0430).

Dear Director Cain:

On behalf of the more than 8,000 members of the American Road & Transportation Builders Association (ARTBA), we appreciate the opportunity to provide comments and feedback on the establishment of a national strategy for transportation digital infrastructure. The historic levels of federal-aid transportation funding provided by the Infrastructure Investment and Jobs Act (IIJA) have underscored the importance of safety, efficiency, and cost-effectiveness in project delivery. ARTBA believes the application of advanced digital technologies can help achieve these objectives. The next surface transportation reauthorization bill must build on the IIJA's investment levels and can enhance the value of these federal dollars by better enabling the U.S. Department of Transportation (USDOT) to facilitate the appropriate adoption of emerging technologies in project design and construction. We respectfully offer the following comments and resources to assist the agency as it advances its national strategy.

Background

ARTBA represents every facet of transportation construction across all modes, including roads, bridges, highways, airports, ports, and transit. Our membership includes construction contractors, materials suppliers, planning and design firms, equipment manufacturers, state departments of transportation, and transportation research institutions.

We believe this request for information is especially timely given the Administration's focus on digital infrastructure modernization and the responsible adoption of artificial intelligence (AI)¹ and other advanced technologies across the transportation sector. Federal leadership in this space - particularly efforts that promote innovation, interoperability, and secure data environments - can help accelerate project delivery, strengthen system performance, and improve roadway worker and traveler safety. ARTBA strongly supports the responsible deployment of proven technologies that advance the safe and efficient movement of people and goods.

¹ See e.g., Exec. Order No. 14,179, *Removing Barriers to American Leadership in Artificial Intelligence*, 90 Fed. Reg. 8,421 (Jan. 31, 2025).

ARTBA's Comments on the Request for Information

I. The agency should adopt a holistic definition of transportation digital infrastructure.

As developed by subject matter experts within our membership, ARTBA's official policy defines digital construction as "commercially proven digital technologies and processes for management of construction and engineering activities."² While the agency uses the term *transportation digital infrastructure*, ARTBA believes these concepts are closely related and should be understood as encompassing the full spectrum of technology-enabled activities across the transportation infrastructure life cycle.

At times, transportation digital infrastructure may be framed narrowly around intelligent transportation systems (ITS) and operational tools. ARTBA agrees that safety, mobility, and real-time operations are core components of modern transportation systems. However, a truly effective digital strategy must include the technologies, data environments, and delivery tools that support planning, design, construction, asset management, and long-term operations.

Digital construction itself can take many forms, and the definition should remain flexible enough to reflect evolving, commercially-proven applications. These tools are already accelerating state and industry priorities by improving project delivery, enhancing roadway worker safety, strengthening asset management, and enabling more reliable data sharing across the infrastructure life cycle. Transportation digital infrastructure connects planning, design, construction and operations with a continuous digital thread. This can help prevent data silos and ensure the right data is available at the right time.

Importantly, ITS deployments alone will not accelerate project delivery. Leveraging high-quality digital data and interoperable systems from initial design through construction and into operations is what enables measurable gains in speed, cost-effectiveness, and system performance. ARTBA's white paper on accelerating digital construction provides recommendations to further digital construction nationally.³

For these reasons, ARTBA encourages the agency to adopt a broad, holistic framework for transportation digital infrastructure that fully integrates construction, asset management, and operational technologies, in addition to focusing on ITS applications.

II. Existing USDOT programs, including ADCMS, can be leveraged and expanded to accelerate transportation digital infrastructure deployment.

ARTBA's white paper on accelerating digital construction highlights the role of the Advanced Digital Construction Management Systems (ADCMS) program and identifies key steps needed to mainstream adoption nationwide. The paper emphasizes that dedicated funding to support the use of proven digital construction technologies is a prerequisite for successful adoption. It also notes that the IJJA's ADCMS funding is intended to help state DOTs advance model-based delivery and related digital practices.⁴ Building on these early successes, USDOT should evaluate what has worked at the state level and support broader national scaling of proven approaches,

² American Road & Transportation Builders Ass'n, *Digital Construction Policy Statement* (May 19, 2021), <https://www.artba.org/resource/digital-construction-policy-statement/>.

³ See American Road & Transportation Builders Ass'n, *White Paper on Accelerating Digital Construction* (Jan. 2023), <https://www.artba.org/resource/white-paper-on-accelerating-digital-construction/>.

⁴ American Road & Transportation Builders Ass'n, *White Paper on Accelerating Digital Construction 6* (Jan. 2023), <https://www.artba.org/resource/white-paper-on-accelerating-digital-construction/>

including investments in back-end systems, project-level incentives, open data standards, and peer exchanges to help states accelerate deployment.

III. The safe deployment of AI hinges on nationally consistent data standards and high-quality datasets.

Safe and effective AI deployment across jurisdictional boundaries depends first on high-quality, standardized, and interoperable data. Nationally adopted data standards and consistent data formats are essential to ensure AI tools can function reliably across state and local systems. Federal efforts should prioritize improving the quality, accessibility, and consistency of core transportation data sets so that AI-enabled applications can be deployed with confidence. These priorities are consistent with ARTBA's white paper on accelerating digital construction, which emphasizes the importance of open data environments and interoperable systems to support scalable digital deployment.⁵

When supported by strong data foundations, AI tools can enhance real-world transportation outcomes, including safer drone and unmanned aerial systems operations, improved work zone and roadway worker protections, real-time traffic monitoring, and earlier detection of queue formation and congestion risks. These safety-focused applications demonstrate the value of pairing AI innovation with disciplined data governance.

Accordingly, USDOT should emphasize data standardization, interoperability, and secure data-sharing frameworks as prerequisites to broader AI deployment across jurisdictional boundaries.

IV. A risk-based, scalable approach to cybersecurity is essential for safe deployment across the transportation sector.

Transportation cybersecurity and data governance frameworks should be appropriately scaled to the specific application and risk profile at issue. A one-size-fits-all approach may unintentionally slow deployment of beneficial technologies across the transportation sector. Risk considerations associated with connected vehicles, digital construction tools, unmanned aerial systems, and asset management platforms are not identical, and federal guidance should reflect these differences. USDOT should support flexible, risk-based frameworks that align security expectations with the intended end use while maintaining strong protection for critical transportation systems.

USDOT should also ensure that emerging innovators and startups can continue to participate in the transportation technology ecosystem. Early-stage firms often drive advances in AI-enabled analytics, drone operations, and digital construction tools. Clear, scalable compliance pathways will help maintain strong cybersecurity protections while avoiding unnecessary barriers to innovation.

Conclusion

ARTBA appreciates the opportunity to provide comments and feedback on this important topic and encourages USDOT to adopt a holistic, lifecycle-focused approach to transportation digital infrastructure that leverages existing programs and supports risk-based, scalable deployment of advanced technologies. Below is a list of additional materials developed by ARTBA's membership that may assist the agency in developing its framework. ARTBA and our members remain available to support these efforts. Should you have any questions or require

⁵ *Supra* note 3.

additional information, please contact Allison Klein at aklein@artba.org or Prianka Sharma at psharma@artba.org.

Sincerely,

//s//

Allison Klein
Senior Vice President, Strategic Engagement

//s//

Prianka P. Sharma
Vice President and Counsel for Regulatory Affairs

Resources (6)

1. ARTBA Policy Statement on Digital Construction (May 19, 2021) available at <https://www.artba.org/resource/digital-construction-policy-statement/>.
2. ARTBA White Paper on Accelerating Digital Construction (November 27, 2023) available at <https://www.artba.org/resource/white-paper-on-accelerating-digital-construction/>.
3. ARTBA Policy Statement on Resiliency & Technology in Transportation Construction (November 27, 2023) available at <https://www.artba.org/resource/resiliency-technology-in-transportation-construction-policy-statement/>.
4. ARTBA Transportation Builder Magazine, “Groundbreaking Innovations & Technologies Transforming Transportation Construction” (March-April 2025), available at <https://www.artba.org/wp-content/uploads/2026/03/TB-March-April-2025.pdf>.
5. ARTBA Transportation Builder Magazine, “How Technology and Data are Improving Transportation Project Delivery” (March-April 2024), available at <https://www.artba.org/wp-content/uploads/2024/04/TB-March-April-2024-1.pdf>.
6. ARTBA Transportation Builder Magazine, “The Future is Now: Virtual Construction, Digital Delivery & Artificial Intelligence” (July-August 2023), available at <https://artba.org/wp-content/uploads/2024/01/TB-July-August-2023-website-1.pdf>.