ITS AMERICA

August 21, 2025

Mr. Gregory Cote
Acting General Counsel
U.S. Department of Transportation
1200 New Jersey Ave., SE
Washington, D.C. 20590

Re: Advancing a Surface Transportation Proposal That Focuses on America's Most Fundamental Infrastructure Needs [U.S. Department of Transportation - Docket No. DOT-OST-2025-0468]

Executive Summary:

The Intelligent Transportation Society of America (ITS America) is grateful for the opportunity to respond to the U.S. Department of Transportation's (Department) Request for Information on the 2026 Surface Transportation Reauthorization. ITS America's policy proposals support the Administration's goal of ensuring the United States' transportation infrastructure is best-in-class and are focused on modernizing and improving the safety, efficiency, and reliability of our system.

For more than 30 years, ITS America has been the nation's leading voice on intelligent transportation, uniting cross-sector leaders to shape forward-thinking policy, guide smart investments, and accelerate the deployment of emerging technologies. Through convening, education, and advocacy, we advance transportation solutions that save lives, modernize roads, reduce congestion, and strengthen America's global competitiveness. We work with leaders across sectors to realize the technologies and policies that improve how people and goods move and make our infrastructure safer and more efficient.

Our members share the Administration's goal of utilizing this Surface Transportation Reauthorization to deliver a modern, world-class transportation system – one that strategically utilizes innovative solutions to deliver robust improvements to road safety, system efficiency, and project delivery. The Administration and the 119th Congress are well-positioned to enact a national transportation policy agenda that unlocks private sector investment in our transportation system, maximizes the benefits of limited transportation dollars, and provides State and local transportation agencies the flexibility to invest in solutions that solve challenges specific to their communities.

Prioritizing and investing in innovative transportation technologies will allow us to collectively achieve each of the Administration's transportation policy objectives and more. We have been encouraged by Secretary Duffy's immediate focus on leveraging transportation innovation to achieve the Department's goals, and we respectfully submit the following recommendations for how the upcoming Surface Transportation Reauthorization can deliver transportation system modernization. Our recommendations are centered on three primary concepts:

I. Integrating Digital Infrastructure and Innovative Technologies throughout Transportation Policy and Programs

II. Establishing a Driving Innovation and Growth by Integrating Technology for American Leadership (DIGITAL) Formula Funding Program

III. Streamlining and Improving Transportation Technology Procurement

As a broader recommendation, ITS America encourages Congress to establish an *Innovation Title* in reauthorization legislation to underscore the importance of unleashing a broad range of innovative technologies to

improve our national surface transportation system, and we believe the three areas on which our recommendations are focused represent foundational elements of such an *Innovation Title.* We have identified how each of these recommendations can be achieved below and look forward to working closely with the Department and this Congress to deliver on this opportunity to fundamentally modernize our nation's transportation system and deliver significant safety, efficiency, and mobility benefits for the American people.

The following represents a brief overview of our three policy pillars, with recommended statutory language and more detailed rationale attached at the end as appendices.

I. Integrating Digital Infrastructure and Innovative Technologies throughout Transportation Policy and Programs

Technology has emerged as a foundational element of our nation's transportation system, and the United States has been on the forefront of developing and piloting groundbreaking transportation innovations, yet federal transportation policy has failed to keep pace with these innovations. In the era of artificial intelligence and advanced transportation technologies, States, cities, and regional governments across the country must be empowered to widely deploy intelligent transportation systems technology and upgrade their digital infrastructure as a critical enabling component of their physical infrastructure. Just as the Department is modernizing air traffic control to be a best-in-class system, we must similarly modernize our surface transportation infrastructure to lead the world in safety, efficiency, economic growth, and mobility.

Digital infrastructure represents the public and private technology assets that create, exchange, or use data to provide information and insights for transportation systems that advance safety, security, efficiency, and economic growth. These technologies are becoming the digital backbone to transportation networks large and small, enabling more efficient traffic movement, reducing crash risks, and maximizing the use of our physical infrastructure. Digital infrastructure represents a core element of our nation's transportation system and should be incorporated into every step of the infrastructure process: from planning and procurement to project delivery and operations. This includes incorporating vehicle connectivity technologies in both infrastructure and vehicles (the latter through the New Car Assessment Program).

ITS America supports the inclusion of digital infrastructure and technology considerations throughout the Department's safety, mobility, and freight strategies, as well as planning processes for States and metropolitan planning organizations (MPOs). In conjunction, specific eligibility for digital infrastructure and transportation technologies should be included under all formula and discretionary grant programs, ensuring that the country is taking advantage of the most innovative solutions to our transportation challenges. Additionally, the next surface bill should advance technology workforce development programs and research initiatives built for the digital age that prioritize American innovation and economic growth.

II. Establishing a Driving Innovation and Growth by Integrating Technology for American Leadership (DIGITAL) Formula Funding Program

ITS America proposes establishing a Driving Innovation and Growth by Integrating Technology for American Leadership, or DIGITAL, funding program to provide flexible formula-based funding to states to modernize their transportation systems. This proposal calls for a $5 billion dedicated funding stream for innovative technologies that will enhance safety, efficiency, and economic growth while unlocking private sector investment. While current grant programs are helpful for demonstrations and early-stage technology development, they are often limited in both size and scope. Transportation agencies need certain and dedicated funding over a multi-year timeline so that they can properly plan for and deploy technology into their systems at scale. This funding will be a critical enabler of the Department's efforts to nationally scale V2X solutions, a top safety priority of ITS America and our members.

Previous surface transportation authorization bills made incremental progress to ensuring United States leadership in transportation and infrastructure innovation. However, direct spending on transportation technology was only one tenth of one percent (0.1%) of the total surface transportation funding authorized in the Infrastructure Investment and Jobs Act (IIJA). In contrast, technology modernization investments in the recent FAA reauthorization bill were close to 15% of the total funds authorized. In this next surface reauthorization, the U.S. has an opportunity to adequately fund transportation innovation, and reap the safety, efficiency, economic, and cost reduction benefits of investing holistically in technology.

III. Streamlining and Improving Transportation Technology Procurement

Procurement challenges and project delivery delays remain a roadblock to building and modernizing our infrastructure. Current procurement methods do not adequately reflect the modern nature of our transportation system. While State and local regulations often govern procurement decisions for transportation agencies, there is a federal role in ensuring that agencies can advance procurements that result in the best outcomes and greatest long-term value.

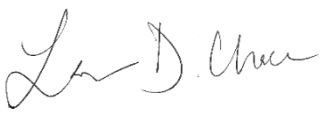
Unlocking private sector innovation in transportation is key to improving safety outcomes and realizing long term return on investment. It is important that Congress and the Department encourage and allow robust partnerships between private sector technology suppliers and public transportation agencies for the entire project lifecycle. Federal support for this collaboration can help speed up projects by helping the public and private sector work together seamlessly as partners, rather than being held up by bureaucratic delays.

Our proposal calls for the Department to encourage and incentivize outcomes-based procurement, a contracting method which allows vendors to propose innovative solutions to meet stated outcomes, thereby seeking to avoid locking agencies into often costly and overly prescriptive contracts that may involve using outdated or inefficient technology. Each modal administration at the Department should be encouraging innovative procurement methods that lower lifecycle costs for technology and lead to tangible outcomes. These types of innovative procurement methods could be incentivized through higher federal cost shares on projects and preferences on grant applications.

Additionally, State and local agencies will benefit tremendously from additional federal research, best practices, and guidelines for innovative procurement methods – speeding up project delivery and updating transportation procurement methods to reflect modern needs.

Conclusion

ITS America's proposal represents a thoughtful approach to modernizing our surface transportation system and achieving the Administration's safety and efficiency goals. ITS America looks forward to working with the Department and Congress on the modernization of our surface transportation system. Please reach out if you have any questions or would like to discuss our proposal and statutory language more in-depth. Thank you for your consideration of our proposal.



Laura Chace
President and CEO, Intelligent Transportation Society of America

Appendix A: Recommended Statutory Language

I. Integrating Digital Infrastructure and Innovative Technologies throughout Transportation Policy and Programs

Congress should define digital infrastructure within transportation programs, allowing consideration of digital infrastructure technologies alongside traditional physical infrastructure and explicitly including the concept in transportation law.

- Amend 23 USC § 101 (Definitions) to include a definition of digital infrastructure: "Digital infrastructure comprises the public and private technology assets that create, exchange, secure, or use data to provide information and insights to advance transportation safety, mobility, resiliency, automation, efficient operations, and economic growth. This includes the efficient movement of people and goods across users, companies, devices, digital assets, and public agencies. Digital infrastructure includes the data, communications systems, servers, routers, hardware, sensors, software applications, and computing to layer actionable insights across transportation systems."

  Section 101(a) of title 23, United States Code, is amended –

  (a) By adding at the end the following:

  "(37) Digital Infrastructure: the term Digital Infrastructure comprises the public and private technology assets that create, exchange, secure, or use data to provide information and insights to advance transportation safety, mobility, resiliency, automation, efficient operations, and economic growth. This includes the efficient movement of people and goods across users, companies, devices, digital assets, and public agencies. Digital infrastructure includes the data, communications systems, servers, routers, hardware, sensors, software applications, and computing to layer actionable insights across transportation systems."

- Amend 23 USC § 501 to include definition of digital infrastructure after intelligent transportation systems as defined in 23 USC § 101 above

  (a) Section 501 of title 23, United States Code, is amended –

  (1) By redesignating paragraphs (6) through (9) as paragraphs (7), (8), (9), and (10), respectively.

  (2) By inserting after paragraph (5) the following:

  (A) "(6) Digital Infrastructure: the term Digital Infrastructure comprises the public and private technology assets that create, exchange, secure, or use data to provide information and insights to advance transportation safety, mobility, resiliency, automation, efficient operations, and economic growth. This includes the efficient movement of people and goods across users, companies, devices, digital assets, and public agencies. Digital infrastructure includes the data, communications systems, servers, routers, hardware, sensors, software applications, and computing to layer actionable insights across transportation systems.

Direct USDOT to consider including digital infrastructure and transportation technology deployment as a priority in its strategic planning documents.

- Amend 49 USC § 70102 (National Freight Plan) to include a consideration of digital infrastructure under section (b)(5)

(a) Section 70102(b) of title 49, United States Code, is amended –

(1) In paragraph (16) by striking "and" at the end;

(2) In paragraph (17) by striking the period at the end and inserting a semicolon; and

(3) By adding at the end the following:

"(18) consideration of digital infrastructure, as defined in 23 U.S.C. § 101, and transportation technologies for improving multimodal freight movement, intermodal connectivity, and freight data sharing."

- Amend 49 USC § 70202 (State Freight Plans) to include a consideration of digital infrastructure in section (b)(5)

(a) Section 70202(b) of title 49, United States Code, is amended –

(1) in paragraph (5) by adding "and digital infrastructure," after "freight intelligent transportation systems"

USDOT should establish responsibility within the Department for advancing and advising the Secretary's office on digital infrastructure strategies, ensuring that promoting safety and innovation is central to USDOT initiatives and programs.

- Amend 49 USC § 313 (NETT Council) to include digital infrastructure as area of focus

(a) Section 313(c) of title 49, United States Code, is amended –

(1) In paragraph (2) by striking the semicolon at the end and inserting the following

", including digital infrastructure;"

(2) In paragraph (3) by striking the semicolon and the word "and", and inserting the following

", including digital infrastructure; and"

Congress and USDOT should encourage states, MPOs, local, and tribal governments to consider digital infrastructure strategies and uses in their transportation plans.

- Amend 23 USC § 134 (MPO Program) to encourage digital infrastructure as a consideration of capital investments and other strategies in section (i)(2)(G)

(a) Section 134 of title 23, United States Code, is amended –

(1) In subsection (i) –

(A) In paragraph (2) by striking subparagraph (G) and inserting the following:

"(G) Capital investment and other strategies. - Capital investment and other strategies to preserve the existing and projected future metropolitan transportation infrastructure, provide for multimodal capacity increases based on regional priorities and needs, reduce the vulnerability of the existing transportation infrastructure to natural disasters, and prepare and provide for the use of innovative transportation technologies."

- Similarly, amend 49 USC § 5303 to include digital infrastructure and technology used for transportation under the scope of MPO planning – in section (h)(1)

(a) Section 5303 of title 49, United States Code, is amended –

(1) In subsection (h) –

(A) By redesignating paragraph (2) and (3) as paragraphs (3) and (4) respectively

(B) By inserting after paragraph (1) the following:

"(2) Innovative Technologies – The metropolitan planning process, to the extent practicable, should consider the use of innovative transportation technologies and digital infrastructure to carry out project goals under Section 5303(h)(1) of title 49, Untied States Code."

- Amend 23 USC § 135 (State Transportation Planning) to encourage digital infrastructure as a key consideration in long-range state transportation plans (LR STP) in section (f)(8)

(a) Section 135(f) of title 23, United States Code, is amended –

(1) In paragraph (8) by striking the period after "operated" and inserting "as well as consideration of digital infrastructure technologies."

- Similarly, amend 49 USC § 5304 to include digital infrastructure/technology systems for transportation under the scope of state transportation planning – under (d)(1)

(a) Section 5304 of title 49, United States Code, is amended –

(1) In subsection (d) -

(A) By redesignating paragraph (2) and paragraph (3) as paragraphs (3) and (4), respectively;

(B) by inserting after paragraph (1) the following:

"(2) Innovative Technologies – The statewide transportation planning process, to the extent practicable, should consider the use of innovative transportation technologies and digital infrastructure to carry out project goals under Section 5304(d)(1) of title 49, United States Code."

- Amend 23 USC § 202 (Tribal Transportation) to include digital infrastructure as an eligible activity under transportation planning in section (a)(1)(A)

(a) Section 202(a) of title 23, United States Code, is amended –

(1) In subsection (a)(1)(A) -

(A) In clause (vii) by striking "and" at the end;

(B) In clause (viii) by inserting "and" at the end;

(C) By adding at the end the following:

"(ix) digital infrastructure and intelligent transportation systems capital and operating expenses;"

USDOT should prioritize digital infrastructure as a needed investment in our nation's transportation system, working closely with Congress to make sure lawmakers are aware of ways to improve the digital components of our nation's transportation system.

- Authorize a Digital Infrastructure Investment Needs Report, similar to the traditional physical infrastructure needs report, created by USDOT to be sent to House Transportation & Infrastructure, House Science, Space, and Technology, and Senate Environment and Public Works Committees no later than two years after enactment and every second year thereafter under 23 USC § 503(b)

(a) Section 503(b) of title 23, United States Code, is amended –

(1) By inserting the following at the end:

"(10) Digital Infrastructure Needs Report.—Not later than 2 years after the date of enactment of this section, the Secretary shall submit to Congress a report that describes estimates of the current conditions and future needs of the United States' transportation digital infrastructure, including—

(i) the conditions and performance of the digital components our transportation system, including artificial intelligence applications;

(ii) intelligent transportation systems;

(iii) cybersecurity needs; and

(iv) interoperable data sharing needs."

Encourage the inclusion of technology and digital infrastructure in all aspects of USDOT research and development, including annual modal research plans and sub-agencies such as ARPA-I.

- Amend 23 USC § 403 (Highway Safety R&D) to include digital infrastructure technologies that improve roadway safety and prevent crashes as an eligible R&D activity under (b)(1)

(a) Section 403 of title 23, United States Code, is amended –

(1) In subsection (b)(1) –

(A) By striking subparagraph (F) and inserting the following:

"the effect of State laws on any aspects, activities, or programs described in subparagraphs (A) through (F).

(B) By redesignating subparagraph (F) as subparagraph (G)

(C) Inserting the following after subparagraph (E)

"(F) the use of intelligent transportation systems and digital infrastructure technologies that aim to improve roadway safety and prevent crashes;"

- Amend 23 USC § 502 (USDOT Research Authority) to include digital infrastructure technologies as a priority and consideration in (b)(4)

(a) Section 502(b) of title 23, United States Code, is amended –

(1) by striking paragraph (4) and inserting the following in its place:

"(4) Technological Innovation. –

(A) Alignment with Strategic Plan- The programs and activities carried out under this section shall be consistent with the transportation research and development strategic plan under section 6503 of title 49.

(B) Digital Infrastructure and Technology Innovation- The Secretary should consider and prioritize the current and future needs of intelligent transportation system technologies as defined in (Section 101 of title 23, United States Code) in research programs and activities."

- Amend 23 USC § 503 (Highway Research and Technology) to include the following:
  - Add digital infrastructure technologies to improve highway safety as a qualified research activity under (b)(2)(C)
  - Add interoperable digital infrastructure to reduce congestion under section (b)(5)(C)

(a) Section 503(b) of title 23, United States Code, is amended –

(1) In subparagraph (C) of paragraph (2) –

(A) In clause (xv) by striking the "and"

(B) In clause (xvi) by striking the period and inserting a semicolon, and inserting "and" after the semicolon

(C) By inserting the following at the end:

"(xvii) digital infrastructure and intelligent transportation systems deployment to improve highway safety"

(2) In subparagraph (C) of paragraph (5) -

(A) In clause (xxiv) by striking the "and";

(B) In clause (xxv) by striking the period and inserting a semicolon, and inserting "and" after the semicolon;

(C) By inserting the following at the end:

"(xxvi) interoperable digital infrastructure."

- Amend 49 USC § 119 (ARPA-I) to include a new goal under section (c)(1) to promote the development and deployment of new digital infrastructure technologies, including artificial intelligence, to improve traffic safety and efficiency

(a) Section 119(c)(1) of title 49, United States Code, is amended –

(1) In subparagraph (B), striking the period and inserting a comma, and inserting the following at the end:

"including digital infrastructure technologies, as defined in 23 U.S.C. § 101, and artificial intelligence applications to improve traffic safety and efficiency."

- Amend 49 USC § 330 (OST Research & Development) to include digital infrastructure technologies under section (d)(2) after intelligent transportation systems as a duty of the research program

(a) Section 330(d) of title 49, United States Code, is amended –

(1) In paragraph (2) by striking the period and inserting the following at the end –

"and digital infrastructure (as defined in 23 U.S.C. 101)."

- Amend 49 USC § 6503 (R&D 5-Year Plan) to include digital infrastructure technologies as a new topic under section (c)(1)(D) so that USDOT's strategic five-year R&D plan includes digital infrastructure as a priority and that digital infrastructure activities of University Transportation Centers

(a) Section 6503(c) of title 49, United States Code, is amended –

(1) In paragraph (1) –

(A) By redesignating subparagraphs (E), (F), and (G) as (F), (G), and (H), respectively

(B) By inserting the following after subparagraph (D)

"(E) maintaining, optimizing, and upgrading transportation digital infrastructure;"

USDOT should consider ways to improve data sharing among public transportation agencies through OST-R.

- Direct the Office of the Secretary and Assistant Secretary for Research & Technology to facilitate activities that promote interoperable data sharing between public transportation agencies (State, MPO, Regional, Local, Tribal, etc.)

(a) In General – The Secretary and Assistant Secretary for Research and Technology shall facilitate activities that promote interoperable data sharing between public transportation agencies, including the following actions:

(1) Assess transportation data sharing needs across jurisdictions

(2) Develop a strategic plan for interoperable data sharing

(3) Conduct technology and knowledge transfer activities

(4) Provide technical assistance

(5) Undertake other actions deemed necessary by the Secretary to promote interoperable data sharing

(b) Coordination with Public Transportation Agencies – The Secretary and Assistant Secretary for Research and Technology shall coordinate with the following public transportation agencies:

(1) State departments of transportation, regional governments, metropolitan planning organizations, local governments, and Tribal governments;

(c) Plan – Not later than 3 years after the date of enactment of this Act, the Department shall submit a report to appropriate committees of Congress on the implementation of this provision and how the Department has promoted interoperable data sharing between public transportation agencies.

Bolster the prevalence of digital infrastructure in all workforce development and technical assistance programs throughout USDOT, including work of the University Transportation Centers (UTC), community colleges, and other educational institutions.

- Amend 23 USC § 504 (National Highway Institute) to include the following:
    - Add digital infrastructure technologies as a new course as part of the NHI
    - Explicitly authorize funding for workforce development related to digital infrastructure and transportation technology under current surface transportation workforce development programs at FHWA

(a) Section 504 of title 23, United States Code, is amended –

(1) In subsection (a)(3)(A)

(A) In clause (ii) by redesignating subclauses (III) through (VI) as (IV) through (VII), respectively

(B) By inserting the following after subclause (II)

"(III) digital infrastructure;"

(2) By amending subsection (e)(3)

(A) By striking subparagraph (C) and inserting the following:

"(C) activities to develop a robust surface transportation workforce with new skills resulting from transportation technologies, including artificial intelligence, vehicle automation, vehicle-to-everything communications, data analytics, computer science, cybersecurity, and other intelligent transportation systems technologies; and"

- Amend 49 USC § 5505 (UTC Program) to add language affirming digital infrastructure and technology as a research activity at University Transportation Centers – conforming changes to address changes recommended to 49 USC § 6503(c)(1) [see above]

(a) Section 5505 of title 49, United States Code, is amended –

(1) Strike all references to "subparagraphs (A) through (G) of section 6503(c)(1)" and substitute the following in its place:

"subparagraphs (A) through (H) of section 6503(c)(1)"

Continue workforce development initiatives and funding, while encouraging increased investment and activities around transportation technology-specific workforce development

- Direct Office of the Secretary to include consideration of digital infrastructure technologies in all DOT-sponsored or funded workforce development initiatives

(a) *In General – Notwithstanding any other provision of law, the Secretary shall include a consideration of digital infrastructure and transportation technology throughout all Department-funded or sponsored workforce development initiatives to ensure the current and next generation of the transportation workforce is prepared for new opportunities and challenges*

- Direct the Office of the Secretary (and/or others) to conduct a workforce development plan related to artificial intelligence, including a skills gap analysis to see what gaps exist in the skillset of the current transportation workforce

Sec. ____., Artificial Intelligence Workforce Development and Skills Gap Analysis

(a) Authorization –

(1) In General – the Secretary shall create a workforce development plan related to the use of artificial intelligence ("AI") in the transportation industry and its impact on the workforce, and the plan shall

(A) include –

(i) A skills gap analysis of the current public and private sector transportation workforce

(ii) Information on the education and recruitment of technical workers in the transportation sector as it relates to AI

(iii) The state of AI use in the transportation sector

(iv) The impact of AI on all aspects of the transportation workforce since the five years preceding this enactment of this Act, including but not limited to AI adoption, job creation, displacement, and wage effects.

(v) Recommendations to address challenges and opportunities associated with (i) through (iv) of this subparagraph (A), including how the Secretary, in consultation with the Department of Labor, plans to address these challenges and opportunities;

(2) Submission to Congress and the Public – Not later than 2 years after the enactment of this Act, the Secretary shall submit to Congress the workforce development plan developed under paragraph (1) and make it publicly available on the Department's website.

(3) Updates – the Secretary shall update this plan every 2 years following the first submitted and published plan developed under paragraph (1)

- Create an intelligent transportation systems (ITS) certification course and accreditation mechanism for transportation practitioners to bolster technology workforce development efforts and provide an industry standard for certification (that may extend opportunities beyond four-year college graduates, for example)

Sec. ____., Intelligent Transportation Systems Workforce Certification Program

(a) Sense of Congress.—It is the sense of Congress that—

(1) intelligent transportation systems and digital technologies are increasingly important to the safety, efficiency, and resiliency of the United States transportation system;

(2) major workforce skills gaps exist within the transportation industry as new technologies continue to emerge and look to integrate into legacy infrastructure systems, educational and vocational curricula, and on-the-job training programs;

(3) workforce development challenges, including training and certifications, have been identified as a key barrier to continued adoption of intelligent transportation systems and technologies in surface transportation

(b) In General – Chapter 5 of title 23, United States Code, is amended by inserting after section 520

"§ 521 ITS workforce certification program

"(a) Establishment – Not later than 18 months after the enactment of this chapter, the Intelligent Transportation System Joint Program Office, in coordination with the Federal Highway Administration and Federal Transit Administration, shall establish a national intelligent transportation systems workforce certification program;

"(b) Program Requirements.—The Intelligent Transportation Joint Program Office shall –

(1) develop nationally recognized, voluntary certification standards for intelligent transportation system workforce roles and technologies, including—

"(A) systems engineering and intelligent transportation systems architecture;

"(B) connected and automated vehicle systems, including vehicle-to-infrastructure and vehicle-to-vehicle communications;

"(C) cybersecurity and data privacy for transportation systems;

"(D) traffic operations and control systems;

"(E) transportation data analytics;

"(F) intelligent transportation systems for public transit;

"(G) artificial intelligence;

"(H) digital infrastructure; and

"(I) other relevant or emerging technologies;

"(2) align certification frameworks with nationally recognized workforce standards and transportation sector needs;

"(3) engage stakeholders including State departments of transportation, local agencies, academic institutions, labor organizations, and private sector employers;

"(4) make training and certification courses available through a national intelligent transportation systems organization;

"(5) promote access to training and certification for individuals in underserved, rural, and Tribal communities.

"(c) Report to Congress.—Not later than 2 years after the date of enactment of this section, and annually thereafter, the Intelligent Transportation Joint Program Office shall submit to the Committee on Transportation and Infrastructure of the House of Representatives, the Committee on Environment and Public Works of the Senate, and the Committee on Banking, Housing, and Urban Affairs of the Senate a report describing—

"(1) the implementation status of the Program;

"(2) participation rates and demographic information;

"(3) recognition and adoption by employers and public agencies; and

"(4) recommendations for future improvements."

II. Establishing a Driving Innovation and Growth by Integrating Technology for American Leadership (DIGITAL) Funding Program

Creation of a formula funding program that would support the deployment, management, and operations of intelligent transportation systems and operation programs, including digital infrastructure

(a) IN GENERAL – Section 104 (b) of this title is amended by:

(1) In section 104(b)(1) replace 'paragraphs (4), (5), and (6))' with '(paragraphs (4) and (5), (6), and (9))'

(2) In section 104(b)(2) replace 'paragraphs (4), (5), and (6))' with '(paragraphs (4) and (5), (6), and (9))'

(3) In section 104(b)(3) replace 'paragraphs (4), (5), and (6))' with '(paragraphs (4) and (5), (6), and (9))'

(4) In section 104(b)(7) replace 'paragraphs (4), (5), and (6))' with '(paragraphs (4) and (5), (6), and (9))'

(5) In section 104(b)(8) replace 'paragraphs (4), (5), and (6))' with '(paragraphs (4) and (5), (6), and (9))'

(6) In section 104(b)(9) replace 'paragraphs (4), (5), and (6))' with '(paragraphs (4) and (5), (6), and (9))'

(7) By adding the following at the end:

'(9) DIGITAL Formula Program

(A) In general.— For the DIGITAL Program under section 180 of title 23, United States Code, the Secretary shall set aside from the base apportionment determined for a State under subsection (c) an amount determined for the State under subparagraphs (B) and (C).

(B) Total amount.—The total amount set aside for the DIGITAL formula program for all States shall be $1,000,000,000 for each fiscal year 2027-2031

(C) State share.—For each fiscal year, the Secretary shall distribute among the States the total set-aside amount for the DIGITAL formula program under subparagraph (B) so that each State receives the amount equal to the proportion that—

(i) the total base apportionment determined for the State under subsection (c); bears to

(ii) the total base apportionments for all States under subsection (c).

(b) DEPLOYING INNOVATIVE TRANSPORTATION TECHNOLOGIES - At the end of Chapter 1 of title 23, United States Code, the following shall be inserted:

"§180 - Driving Innovation and Growth by Integrating Technology for American Leadership (DIGITAL) Program

(a) DEFINITIONS – For the purpose of this section, the following definitions apply:

(1) Intelligent transportation systems: The term "intelligent transportation systems" means that as defined in section 501 of title 23, United States Code

(2) Digital infrastructure: The term "digital infrastructure" means the public and private technology assets that create, exchange, secure, or use data to provide information and insights to advance transportation safety, mobility, resiliency, automation, efficient operations, and economic growth; This includes the efficient movement of people and goods across users, companies, devices, digital

assets, and public agencies, and may comprise of -

(A) the data, communications systems, servers, routers, hardware, sensors, software applications, and computing that provide layer actionable insights across transportation systems.

(3) *Project: The term "project" means any undertaking eligible for assistance under this title.*

(b) ESTABLISHMENT – The Secretary shall establish and implement a program known as the "Driving Innovation and Growth by Integrating Technology for American Leadership" program

(c) ELIGIBLE PROJECTS – funds apportioned under section 104(b)(9) may be obligated for projects to deploy, procure, and manage intelligent transportation systems, digital infrastructure, and operational programs, including—

(1) projects to establish or operate a traffic monitoring, management, and control facility or program,

(2) projects that improves traffic flow, including projects to improve signalization, construct high occupancy vehicle lanes, improve intersections, add turning lanes, improve transportation systems management and operations that mitigate congestion and improve air quality, and implement intelligent transportation system strategies

(3) projects or programs that involve the purchase of integrated, interoperable communications equipment for signal preemption;

(4) a project for the deployment of infrastructure-based intelligent transportation systems capital improvements and the installation of vehicle-to-infrastructure communications equipment, including both cellular vehicle-to-everything (C-V2X) and networked V2X technology;

(5) projects that deploy the following transportation technologies, including -

(A) Infrastructure & Integration for Automation: The use of technology to advance the integration of automated transportation, such as autonomous vehicles, into the broader transportation system, including infrastructure readiness for autonomous vehicle operations.

(B) Intelligent Infrastructure: The deployment and use of a collective digital infrastructure that allows sensors to collect and report real-time data to inform everyday transportation-related operations and performance.

(C) Systems Integration: The integration of intelligent transportation systems with other existing systems and other advanced transportation technologies, including vehicle fueling infrastructure, truck parking applications, maritime port operations, and public transit operations.

(D) Commerce & Freight: Innovative data and technological solutions supporting efficient goods movement, such as connected vehicle probe data, road weather data, or global positioning data to improve on-time pickup and delivery, improved travel time reliability, reduced fuel consumption and emissions, reduced labor and vehicle maintenance costs, and improved truck parking availability.

(E) UAS for Surface Transportation: Leveraging the use of innovative aviation technologies, such

as unmanned aircraft systems, to support surface transportation safety and efficiencies, including traffic monitoring and infrastructure inspection.

(F) Smart Technology Traffic Signals: Improving the active management and functioning of traffic signals, including through the use of automated traffic signal performance measures; implementing strategies, activities, and projects that support active management of traffic signal operations, including through optimization of corridor timing, improved vehicle, pedestrian, and bicycle detection at traffic signals, or the use of connected vehicle technologies; replacing outdated traffic signals.

(G) Artificial Intelligence: the deployment of AI-based software for improving transportation safety, traffic efficiency, infrastructure planning, maintenance, and transportation system management and operations.

(H) Software: the use of software needed for the operations of digital infrastructure and intelligent transportation technologies that enhance transportation system safety, efficiency, and resiliency, such as smart traffic signals, roadway asset management, and optimizing speed limits.

(I) Data: the acquisition, use, and maintenance of data for operating a safe, efficient, and accessible transportation system. This may include transportation system performance data collection, analysis, and dissemination systems, and data used for future transportation system planning. This may also include cybersecurity activities relating to the privacy and security of the data.

(J) Transportation Accessibility: Utilizing digital infrastructure tools to advance mobility, access, and on-demand transportation service technologies, such as dynamic ridesharing and other shared-use mobility applications and information systems to support human services for those with mobility challenges;

(K) Travel Management Systems: Innovative technology solutions such as advanced parking reservation or variable pricing systems; electronic pricing and payment systems; technology that enhances high occupancy vehicle toll lanes; integration of transportation service payment systems;

(6) a project described in section 503(c)(4)(E) for advanced transportation and congestion management technologies;

(d) ELIGIBLE COST USES – Funding may be used for the acquisition of equipment and materials, including software/digital-based products, licensing, construction, planning, preliminary engineering and design work, performance improvements of digital assets, deployment and operation of digital infrastructure, intelligent transportation systems, or any eligible project.

(e) FEDERAL COST SHARE

(1) In general. — the Federal share of the cost of a project carried out using funds apportioned to the State under section 104(b)(9) shall not exceed 80 percent of the total project cost.

(2) Safety Projects - For DIGITAL program projects using funds apportioned to the State under section 104(b)(9) whose primary application is transportation safety, the federal share may be up to 100% of project costs.

(f) SET-ASIDES

(1) Rural areas – Not less than 10.00% of DIGITAL program funds apportioned to each State under section 104(b)(9) shall be reserved for projects serving non-urban areas. A non-urban, or rural, area is defined as located outside of a U.S. Census-designated urban area with a population of 50,000 or more.

(2) Workforce Development – States receiving funding under section 104(b)(9) may use up to 3% of annual apportionments from the DIGITAL program for workforce development activities relating to projects eligible under Section 180(c) of Title 23, United States Code.

(3) Administrative Costs – the Federal Highway Administration may use up to 1.5% of DIGITAL formula funds under section 104(b)(9) for operations and administration of the DIGITAL program

(g) APPLICABILITY OF OTHER REQUIREMENTS

(1) Except as otherwise specifically provided, DIGITAL Formula funds are administered as if apportioned under chapter 1 of title 23, United States Code. As a result, Title 23 requirements generally apply to these funds.

III. Streamlining and Improving Transportation Technology Procurement

Revise federal funding criteria to promote outcomes-based technology deployment, allowing vendors to propose innovative solutions to meet stated objectives and outcomes, including improved safety, reduced travel times, increased efficiency, and maintenance durability, among others.

- Amend 23 USC § 112 (Contracting) by including a new section (h), titled as above, that defines outcomes-based contracting and directs the Secretary to encourage this practice and disseminate resources to state and local agencies for innovative procurement methods.

(a) Section 112 of chapter 23, United States Code, is amended by adding the following at the end–

"(h) Use of Innovative Contracting and Outcomes-Based Procurement

(1) Definition of outcomes-based procurement: the term "outcomes- based procurement" means a procurement process whereby the procuring agency –

(A) Requests solutions to specific problems or desired outcomes and describes what must be achieved rather than how it must be done,

(B) Vendors are empowered to propose creative, efficient, or technology-enabled solutions that meet or exceed the desired outcome, and; scoring criteria is based on how well a proposed solution delivers desired outcomes.

(2) Program.-With respect to transportation projects that receive federal funding, the Secretary shall encourage the use of outcomes-based procurement for digital infrastructure and intelligent transportation systems;

(3) Activities. -In carrying out paragraph (2), the Secretary shall-

(A) compile information relating to outcomes-based procurement, including industry best practices, successful case studies, and guidance on how to use outcomes-based methods

(B) disseminate to States information relating to outcomes-based procurement for digital infrastructure and technology writ large, including industry best practices

(C) promote the use of innovative contracting methods, including outcomes-based procurement, in all federal-aid highway programs and grants.

(4) Comprehensive plan.-The Secretary shall develop and publish on the public website of the Department of Transportation a detailed and comprehensive plan for the implementation of paragraph (2)."

Amend Title 23 programs, such as the federal Highway Administration's Every Day Counts, to encourage innovative procurement methods and affirm technology procurement as an eligible research activity under the federal Highway Administration.

- Amend 23 USC § 503 (Highway Research and Technology) to include procurement as part of section (c) which governs the FHWA's Every Day Counts program and encourages sharing of procurement best practices and innovative methods for technology project delivery

(a) Section 503 of chapter 23, United States Code, is amended by –

(1) In subsection (c) –

(A) In paragraph (1) inserting "procurement," after "financing,"

(B) In paragraph (1), redesignating subparagraph (F) as subparagraph (G)

(C) Striking "and" from subparagraph (E)

(D) Inserting the following after subparagraph (E)

"(F) implementing new methods of procurement and disseminating best practices on procuring innovative technologies for surface transportation; and"

Publish and disseminate successful technology procurements in states and localities across the country, sharing best practices for innovative procurement.

- Amend 23 USC § 515 (ITS Program General Authorities and Requirements) to include procurement guidance for digital infrastructure and ITS, ensuring that the Secretary and ITS program share innovative and non-traditional procurement methods for technology.

(a) *Section 515 of chapter 23, United States Code, is amended by adding the following at the end –*

"(j) *Procurement Methods.—*

"(1) Guidance .— The Secretary shall develop and disseminate appropriate guidance and best practices to assist State and local agencies in selecting appropriate methods of procurement for intelligent transportation system projects carried out using funds made available from the Highway Trust Fund, including innovative and nontraditional methods such as outcomes-based procurement."

Congress and USDOT should encourage robust partnerships between private sector technology suppliers and public transportation agencies for the entire project lifecycle (idea conception to completion)

- Directive to USDOT and the Secretary's office to promote collaboration and partnerships in technology projects that receive federal-aid highway funding

(a) *Private Sector Collaboration*

(1) In general – The Secretary shall promote and support partnerships between recipients of Federal-aid highway funds, both formula and discretionary grants, and private sector intelligent transportation systems and technology vendors to the maximum extent possible to encourage close collaboration throughout an entire project lifecycle from conception to completion, including the following activities–

(A) Reviewing and updating Department guidance, memoranda, and regulations as necessary to help facilitate greater public and private collaboration on intelligent transportation systems and technology projects;

Require explicit language in Notices of Funding Opportunity on the level of involvement of the private sector and roles they make take in projects.

- Directive to USDOT and the Secretary's office (and/or modal administrations) to amend Notice of Funding Opportunities (NOFOs) to include explicit language detailing the level of involvement expected from a private sector entity during the grant application, negotiation, and contracting process.

(a) DEFINITIONS.—In this section:

(1) Competitive Transportation Grant.—The term "competitive transportation grant" means a discretionary award (as defined in section 200.1 of title 2, Code of Federal Regulations) awarded by the United States Department of Transportation—

(A) through a grant agreement or cooperative agreement under which the agency makes payment in cash or in kind to a recipient to carry out a public purpose authorized by law; and

(B) the recipient of which is selected from a pool of applicants through the use of merit-based selection procedures for the purpose of allocating funds authorized under a grant program of the agency.

(2) Notice Of Funding Opportunity. —The term "notice of funding opportunity" has the meaning given the term in section 200.1 of title 2, Code of Federal Regulations.

(b) Public Sector Involvement - Each notice of funding opportunity issued by the United States Department of Transportation for a competitive transportation grant shall include—

(1) explicit language detailing the level of involvement expected from a private sector entity during the grant application, negotiation, and contracting process

Direct USDOT to issue guidance for procurement-related terms, in order to ensure uniform understanding of procurement terminology across Department programs, as well as to provide additional clarity for transportation agencies when navigating the procurement process.

- Directive to USDOT and Secretary's office to provide clarity on project definitions such as pilots; proof of concept; and demonstration to ensure uniformity across modes and grant programs and prevent confusion.

(a) Uniform Project Definitions

(1) In General. The Secretary shall issue guidance on the following transportation project terms to bring conformity across projects and Notices of Funding Opportunities across modal administrations –

(A) Demonstration;

(B) Pilot;

(C) Proof of concept;

(b) Publication – the Secretary shall publish this guidance publicly on the Department's website no later than 1 year after the enactment of this provision.

USDOT should incentivize outcomes-based procurement methods and innovative contracting in transportation programs through changes to the federal share payable for all funding streams, including formula and discretionary grants.

- Amend Title 23 and Title 49 to improve procurement practices by incentivizing outcomes-based procurement and lifecycle cost analysis through increased federal share payable on federally funded projects, while directing the Secretary to raise the federal share on discretionary, competitive grant opportunities.

(a) Incentivizing Better Procurement Practices

(1) Increasing Federal Share for Better Procurement

(A) 23 USC § 120(c) is amended by adding the following at the end:

"(5) Excellence in Procurement –

(A) For the purposes of this paragraph, the following definitions shall apply:

(i) Lifecycle cost analysis – The term 'lifecycle cost analysis' refers to any procurement process or competition whereby the procuring agency:

(I) prioritizes the total cost of a project, asset, or system over its entire lifespan rather than an initial cost,

(II) considers within its criteria all associated costs with acquiring, operating, maintaining, and disposing of the asset or project, and

(III) takes into consideration indirect costs or savings.

(ii) Outcome-based procurement – The term 'outcome-based procurement' refers to procurement processes or competitions whereby the procuring agency:

(I) Requests solutions to specific problems or desired outcomes and describes what must be achieved rather than how it must be done,

(II) Vendors are empowered to propose creative, efficient, or technology-enabled solutions that meet or exceed the desired outcome, and; scoring criteria is based on how well a proposed solution delivers desired outcomes.

(B) The Federal share payable on account of any project carried out under this title shall be:

(i) 90% if the project is procured or will be procured using a procurement process that uses lifecycle cost analysis in its criteria or an outcome-based procurement process, or;

(ii) 100% if the project is procured using both a lifecycle cost analysis in its criteria and an outcome-based procurement process.

(B) 49 USC § 5323(i) is amended by adding the following at the end:
"(3) Excellence in Procurement –

(A) For the purposes of this paragraph, the following definitions shall apply:
(i) Lifecycle cost analysis – The term 'lifecycle cost analysis' refers to any procurement process or competition whereby the procuring agency:

*(I) prioritizes the **total cost** of a project, asset, or system over its entire lifespan rather than an initial cost,*
(II) considers within its criteria all associated costs with acquiring, operating, maintaining, and disposing of the asset or project, and
(III) takes into consideration indirect costs or savings.

(ii) Outcome-based procurement – The term 'outcome-based procurement' refers to procurement processes or competitions whereby the procuring agency:

(I) Requests solutions to specific problems or desired outcomes and describes what must be achieved rather than how it must be done.
(II) Vendors are empowered to propose creative, efficient, or technology-enabled solutions that meet or exceed the desired outcome, and; scoring criteria is based on how well a proposed solution delivers desired outcomes.

(iii) The Federal share payable on account of any project carried out under this title shall be:

(I) 90% if the project is procured or will be procured using a procurement process that uses lifecycle cost analysis in its criteria or an outcome-based procurement process, or;
(II) 100% if the project is procured using both a lifecycle cost analysis in its criteria and an outcome-based procurement process.

(2) Promoting Better Procurement Through Competitive Grants

(A) The Secretary shall increase the Federal Share payable on any grant provided under its jurisdiction to:

(i) 90% if the project is procured or will be procured using a procurement process that uses lifecycle cost analysis in its criteria or an outcome-based procurement process, or;

(ii) 100% if the project is procured using both a lifecycle cost analysis in its criteria and an outcome-based procurement process.

(B) For discretionary grants provided through the Department of Transportation, the Secretary may prioritize the selection of projects that will use or plan to use a procurement process that uses lifecycle cost analysis in its criteria or an outcome-based procurement process.

Appendix B: ITS America Surface Transportation Reauthorization Blueprint

Over the last century, great strides have been made to improve our national transportation system. From the creation and expansion of our Interstate Highway System to the freight and logistics revolution and the development and advent of ubiquitous commercial aviation – the United States of America has established an abiding global legacy of transportation innovation, vision, and leadership. While there is much about this legacy to celebrate, we must simultaneously ensure that our transportation system is prepared to deliver a similar legacy over this century – a century that will be defined by what we are able to accomplish through the integration of transportation technologies and innovations, both to solve longstanding transportation challenges and to capitalize on emerging opportunities to provide for the safe and efficient movement of people and goods. Encouragingly, such solutions are within reach – intelligent systems (ITS) developed by American industry and academia are eagerly sought-after by our international partners and competitors, and technology solutions promise to dramatically improve transportation safety, drive economic growth and development, enhance our global competitiveness, and improve the return on investment of our infrastructure spending.

Building and sustaining high quality infrastructure requires significant investment in the best tools available today – especially technology. Other industries such as healthcare, financial services, and telecommunications have embraced technology – and transportation should be no different. Still, the deployment and integration of these solutions will not happen automatically. **It will take the dedicated support of public and private sector partners to successfully secure widespread implementation of ITS technologies, just as it will require reimagining our understanding of transportation infrastructure to one which reaches beyond concrete or steel.**

The 119th Congress has a unique opportunity through the surface transportation reauthorization to achieve such a vision and thereby begin to substantively address our enduring transportation challenges in a way which exceeds current efforts using traditional solutions; a way which leverages new technological innovations to deliver new and improved outcomes. In line with Secretary Duffy's focus on innovation, our proposal will allow agencies across the country leverage technology at scale to improve safety and efficiency.

In 2023, the National Highway Traffic Safety Administration (NHTSA) estimated that there were 40,990 deaths on American roads. Despite investment and policy efforts, we continue to see the same outcomes. Furthermore, these numbers do not capture the millions of Americans that are injured on our roads every year, nor the estimated $800 billion in financial costs that such crashes cost our country annually. These numbers demonstrate that the status quo approach to addressing transportation safety is insufficient, and innovative solutions are required.

It is clear that we need to embrace a proactive, comprehensive, all-of-the-above approach to improving safety on our roadways. Technology is a key tool to solving our traffic safety crisis, and it is more apparent than ever that we need to prioritize investments in technology solutions, such as digital infrastructure, artificial intelligence, Vehicle-to-Everything (V2X) communications, and automation, that will improve safety outcomes for all road users. V2X technologies, for example, are capable of eliminating up to 80% of non-impaired crashes, as estimated by NHTSA and the University of Michigan. Congress can utilize Surface Transportation Reauthorization to meaningfully reimagine federal transportation policy to include transportation technologies at every step of the process and updating procurement methods to reflect 21st century needs.

Additionally, transportation technologies will modernize our infrastructure to improve the transportation experience for all Americans. According to the Texas A&M Transportation Institute, congestion costs the U.S. economy over $224 billion annually in lost productivity, wasted fuel, and delayed goods. Similarly, Americans individually lose nearly 54 hours to traffic congestion annually, spending time in traffic that could be spent at work or at home with their families. ITS technologies, such as adaptive traffic signal control and real-time traffic monitoring, reduce congestion by dynamically adjusting to real-time traffic conditions. These solutions can additionally be paired with AI to optimize traffic signals across a network or a region. Further, ITS technologies can dramatically improve crash detection, response, and management, allowing first responders to clear incidents faster and restore traffic flow with minimal delays. These are just a few of ways in which innovative transportation solutions are already helping people reduce their time stuck in traffic behind the wheel – and coordinated Federal support for ITS deployment can expand these innovative solutions and bring them to even more communities across the country, as well as unlock private investment in the transportation sector by promoting innovation, reducing regulatory burdens, and enhancing the availability and scope of transportation solutions to the unique challenges faced by our State and local governments.

The world is becoming more technologically advanced, and an investment in ITS is an investment in the future workforce, fostering innovation and creating jobs across various sectors.

Similarly, federal support for ITS technologies also presents a significant opportunity for economic growth and job creation, particularly in the fields of engineering, data analysis, and technology development. As the demand for smarter, more efficient transportation systems increases, the U.S. will need a skilled workforce to design, implement, and maintain these systems. **Studies have shown that investing in ITS can lead to an over 5:1 cost-benefit ratio for metropolitan areas.[1] Further, by supporting the growth of ITS technologies, we can solidify the U.S. as a global leader in transportation innovation.** As nations around the world seek to modernize

their transportation systems, companies that develop and deploy ITS technologies will have an opportunity to lead the global market. This not only boosts the U.S. economy but also enhances our nation's technological standing on the world stage. These benefits eclipse the transportation sector, as a modernized transportation system ensures that American businesses remain globally competitive, reducing costly delays that hinder productivity and job creation. Investing in digital infrastructure strengthens America's economic engine by reducing congestion, improving supply chain logistics, and keeping goods moving efficiently.

Finally, investments in ITS technologies represent sound fiscal policy – transportation technologies significantly improve returns on investment for infrastructure projects while simultaneously bolstering domestic economic growth and global competitiveness. Digital infrastructure and artificial intelligence solutions harness relevant transportation data to create actionable planning insights, allowing transportation practitioners to address safety concerns before crashes occur while pinpointing infrastructure most in need of improvement, expansion, or repair. Specifically, ITS technologies can extend the lifespan of existing transportation infrastructure and reduce the need for costly road expansion and repairs. By using sensors and data analytics, ITS technologies provide real-time monitoring of road conditions, helping transportation agencies identify areas that require maintenance before problems become more expensive to remedy. Proactive infrastructure management ensures that limited transportation funds are being spent efficiently, maximizing the return on transportation expenditures. With greater return on investment with ITS, limited transportation funds can be freed up for other critical hard infrastructure projects. Similarly, ITS technologies can optimize the use of existing infrastructure by increasing throughput without requiring significant physical expansions, achieving desired transportation outcomes at a fraction of the cost.

Instead of just spending more, we need to spend smarter by using real-time data, AI, and automation to optimize our transportation networks.

These are some of the ways in which technology is already beginning to transform our transportation system for the better in communities across the United States. Congress is well-positioned to maximize this collaborative effort between the public and private sectors in the surface transportation reauthorization process, through which we can finally align our transportation processes and funding strategies with the realities of today's technological capabilities, rather than continuing to embrace a 20th century status quo policy approach.

Now is the time for Congress to lead the national implementation of a truly modern transportation system – one which is safer and more efficient for all.

Incorporating Digital Infrastructure in Federal Transportation Policy

Surface transportation reauthorization provides the 119th Congress with the opportunity to enact much-needed updates to federal transportation policy to account for the realities of technology's role in today's transportation network. These updates range from the basic inclusion of a formal legislative definition for widely used transportation assets such as digital infrastructure to expanded flexibilities for State and local transportation agencies to utilize digital infrastructure solutions under federal programs and necessary planning processes. Similarly, Congress can issue updates to the U.S. Code to strengthen the research and development of digital technologies and advance technology workforce development programs, all of which will contribute to the successful scaled deployment of these transformative transportation approaches. More detail on each of these proposals is included below.

It is critical that decision makers at the federal, State, regional, and local levels include digital infrastructure and broader technology solutions in agency-wide initiatives. **Current federal transportation initiatives, as well as many State and local initiatives, do not yet include adequate consideration for technology and digital infrastructure. Technology elements can be mistakenly considered as an "add-on" or "nice-to-have" – but in this era of artificial intelligence and advanced technology at our fingertips, transportation agencies across the country must modernize and consider digital tools in a more fulsome way in order to reduce roadway crashes and improve the overall travel experience.** Technology must be incorporated throughout federal surface transportation programs, prioritizing the inclusion of technology in U.S. Department of Transportation (USDOT) initiatives, including in the Office of the Secretary and in all modal administrations. States, metropolitan planning organizations, and local agencies should strongly consider including digital infrastructure and transportation technology deployment as a priority in their strategic planning processes.

Current formula funding programs include some eligibility for technology solutions, but we are proposing to increase this and affirm this under a new definition for digital infrastructure. Given the return on investment and safety-enhancing abilities of technology, States should be given the ability to deploy digital infrastructure solutions at-scale under a broad set of eligibility criteria. Various cities and States across the country have reduced injury and fatal crashes by close to 22% in some areas after incorporating digital infrastructure solutions, while others have reduced traffic signal maintenance costs by 20% and saved hundreds of thousands of dollars after using AI-based tools.[2]

ITS America is also seeking to reauthorize the Strengthening Mobility and Revolutionizing Transportation (SMART) grant program, recognizing its importance in bringing early-stage concepts and demonstrations to the transportation space that will ultimately improve roadway safety and efficiency. Federal leadership in the SMART grant program encourages private sector innovation and is a strong signal to the market that the U.S. values innovation and safety in the transportation sector. The SMART program has been successful in demonstrating new ways of moving people and freight (such as automated vehicles and drones), processing and analyzing transportation data, reducing traffic congestion, streamlining operations, and more. The program was incredibly oversubscribed by applicants, signaling strong demand for such a program to continue in the next reauthorization.

Our nation's research and development efforts play a critical role in maintaining the safety and longevity of our current and future transportation infrastructure investments. New technologies – whether in the realm of artificial intelligence, automated vehicles, drones, or digital twinning – rely on strong federal leadership in R&D**. ITS America is encouraging the inclusion of technology and digital infrastructure in all aspects of USDOT R&D so that the U.S. can be the preeminent leader in advancing innovation in the transportation sector.** Other countries, including both allies and adversaries, often far outpace the U.S. in this area. When we are looking to improve the safety and efficiency of our transportation system, this starts with federal research into emerging technologies. This proposal builds upon past commitments to federal R&D and will help strengthen our domestic development and use of technology. Millions of Americans rely daily on the talents and hard work of our transportation workforce for their own travel, shipments, and safety. As we look to usher in a new age of modern transportation infrastructure in the United States, we need a workforce that is ready to take on new opportunities and challenges.

A report from ITS America and its members in 2024 showed sizeable technology gaps in the transportation workforce, with gaps in machine learning, software development, systems engineering, cybersecurity, among others.

Technologies like automation and AI are here to stay, and it is critical that our workforce is ready to meet the moment.

With greater training, education, and investment in our workers, we can have the most skilled and competitive transportation workforce in the world. In 2019, the Trump Administration identified STEM education as a critical priority, as well as education, training, and reskilling for tools such as AI and automation.[3] Building upon this visionary commitment, the Trump Administration and Congress have the opportunity to put our transportation workforce ahead of the curve on technology, thereby preparing the transportation workforce for the future. In surface reauthorization, we are calling for a continuation of transportation workforce development initiatives and funding, while encouraging

increased investment around transportation technology specifically. We must bolster the work of University Transportation Centers (UTCs), community colleges, career and technical education programs, and apprenticeships in order to maximize the benefits of our transportation investments.

It is critical that the work of current USDOT programs, especially around intelligent transportation systems and technology, continue to be supported and funded in the next surface reauthorization bill. Our federal transportation programs must be fully equipped to build high-quality, modern infrastructure and move people and goods more safely and efficiently than ever before, and access to transportation technologies will be a critical enabler of the success of these infrastructure projects.

Providing Certain and Substantial Funding for Transportation Technology

Previous surface transportation authorization bills represented strong commitments to ensuring that the United States remained an international leader in the development and deployment of transportation technologies. However, direct spending on transportation technology was one tenth of one percent (0.01%) of the total funds authorized.[4] In contrast, technology modernization investments in the recent FAA reauthorization bill were close to 15% of the total funds authorized. **Surface transportation technology investments from the federal government, however, have fallen behind. In this next surface reauthorization, the U.S. has a unique opportunity to modernize our national transportation system, thereby fully achieving the safety, efficiency, and economic benefits of scaled transportation technology deployment.**

While current grant programs are helpful for demonstrations and early-stage technology development, they are often limited in both size and scope. Transportation agencies need certain and substantial funding from the Federal government so that they can properly plan for and deploy technology in their system at scale. **In this upcoming surface bill, ITS America is proposing a dedicated technology formula funding program, providing certain and substantial funding to allow State and local agencies to invest in technology in a purposeful way, integrated into their broader transportation strategy.** States and localities should have flexibility through a formula program to deploy transportation technology solutions where they see the greatest need on the ground.

The old way of building our transportation infrastructure has yielded the same results – more crashes and injuries on our roads, increased commute and shipping times, slower economic growth, and decreased competitiveness with countries around the globe. The Trump Administration has already made historic announcements and pledges to invest in technology in the U.S., and it is critical that transportation be a focus area as well. By embracing a bold technology-driven proposal such as this, we can truly make the U.S. infrastructure and transportation system the envy of the world. Digital infrastructure underpins the movement of people and freight, helping our system run more safely and efficiently. Without continued support for technology in transportation, our system will become outdated and yield the same results. **Bringing about the golden age of American transportation requires us to think differently about how we've done things in the past – investing in and using technology today so that we empower the transportation system of tomorrow.**

Promoting Collaboration and Streamlining Procurement

Procurement is where the rubber meets the road when looking to use transportation funds across the country. Federal investments rely on procurement at the State and local level, and current procurement methods do not adequately reflect the modern nature of our transportation system. While State and local regulations most often govern procurement decisions for transportation agencies, there is a greater need for federal leadership in ensuring that these agencies have all the tools they need to take advantage of important investments.

Many policymakers have discussed the need for reform when it comes to permitting and contracting on infrastructure and energy projects. **USDOT and Congress have previously called for changes to project delivery policy over the slow rollout of transportation funds and delays that have prevented full modernization of our country's infrastructure. Our proposal to streamline procurement and promote collaboration helps solve this issue for a critical component of transportation: technology.**

Federal policy changes and funding will help us move toward a safer, more efficient transportation future powered by technology. For State and local agencies, the procurement process is currently much simpler when buying asphalt, steel, and other typical "hard" infrastructure assets. When it comes to technology, red tape and bureaucratic delays hold agencies back from deploying innovative solutions that will make roads safer and more efficient. As we confront numerous challenges to our nation's transportation network, we must make it easier to make use of technology and innovative tools that do not look like the infrastructure of the 20th century. Digital infrastructure solutions are distinctly unique from physical assets – they may not be one-time purchases, may require ongoing support and management to ensure cybersecurity and data integrity, and can improve performance over time unlike static physical assets. Data streams, software licenses, and even cloud storage services are key to the transportation system today, but were not core parts of our infrastructure procurement thirty years ago.

Updating procurement guidelines is critical to ensuring return on our federal transportation investments.

State and local agencies are ultimately responsible for carrying out a large portion of federal transportation funding, so we must ensure that they are equipped with the right tools and knowledge to make a true, lasting impact.

Federal leadership is needed to encourage outcomes-based procurement, a contracting method which will allow vendors to propose innovative solutions to meet stated objectives and outcomes, including improved safety, reduced travel times, increased efficiency, and maintenance durability, among others.

Unlocking private sector innovation in transportation is key to improving safety outcomes and realizing long term return on investment. It is important that Congress and USDOT encourage and allow robust partnerships between private sector technology suppliers and public transportation agencies for the entire project lifecycle. **Federal support for this can help speed up projects by helping the public and private sector work together seamlessly, rather than being held up by bureaucratic delays. Much like bipartisan goals of promoting innovation in federal transportation programs, this proposal to encourage collaboration and close partnership between the innovative private sector and public agencies will help bring innovation in roadway safety and efficiency to fruition.**

Additionally, State and local agencies will benefit tremendously from additional federal research and innovation in procurement, speeding up project delivery and updating transportation procurement methods to reflect modern needs. Updating existing USDOT programs and disseminating best practices will help procurement officers when working on technology projects. If we are to truly build world class infrastructure in the U.S., not only do we need technology included, but we must be able to deploy effectively at the State and local level.

Truly modernizing our infrastructure and making the travel experience safer for Americans must include changes to the procurement processes which often slow projects down and inhibit the adoption of new technological tools. **It is pivotal that in this next surface transportation reauthorization Congress helps encourage new ways to procure transportation technologies and encourages streamlining and collaboration in contracting processes.**