

intended service of the vessel TODAY'S OFFICE is:

Intended Commercial Use of Vessel: Requester intends to offer charters.

Geographic Region Including Base of Operations: Massachusetts, Rhode Island, Connecticut, New York, New Jersey, Delaware, Maryland, Virginia, North Carolina, South Carolina, Florida. Base of Operations: Haley's Marine, East Hampton, NY.

Vessel Length and Type: 34' Motor yacht.

The complete application is available for review identified in the DOT docket as MARAD 2024-0062 at <https://www.regulations.gov>. Interested parties may comment on the effect this action may have on U.S. vessel builders or businesses in the U.S. that use U.S.-flag vessels. If MARAD determines, in accordance with 46 U.S.C. 12121 and MARAD's regulations at 46 CFR part 388, that the employment of the vessel in the coastwise trade to carry no more than 12 passengers will have an unduly adverse effect on a U.S.-vessel builder or a business that uses U.S.-flag vessels in that business, MARAD will not issue an approval of the vessel's coastwise endorsement eligibility. Comments should refer to the vessel name, state the commenter's interest in the application, and address the eligibility criteria given in section 388.4 of MARAD's regulations at 46 CFR part 388.

Public Participation

How do I submit comments?

Please submit your comments, including the attachments, following the instructions provided under the above heading entitled **ADDRESSES**. Be advised that it may take a few hours or even days for your comment to be reflected on the docket. In addition, your comments must be written in English. We encourage you to provide concise comments and you may attach additional documents as necessary. There is no limit on the length of the attachments.

Where do I go to read public comments, and find supporting information?

Go to the docket online at <https://www.regulations.gov>, keyword search MARAD-2024-0062 or visit the Docket Management Facility (see **ADDRESSES** for hours of operation). We recommend that you periodically check the Docket for new submissions and supporting material.

Will my comments be made available to the public?

Yes. Be aware that your entire comment, including your personal

identifying information, will be made publicly available.

May I submit comments confidentially?

If you wish to submit comments under a claim of confidentiality, you should submit the information you claim to be confidential commercial information by email to SmallVessels@dot.gov. Include in the email subject heading "Contains Confidential Commercial Information" or "Contains CCI" and state in your submission, with specificity, the basis for any such confidential claim highlighting or denoting the CCI portions. If possible, please provide a summary of your submission that can be made available to the public.

In the event MARAD receives a Freedom of Information Act (FOIA) request for the information, procedures described in the Department's FOIA regulation at 49 CFR 7.29 will be followed. Only information that is ultimately determined to be confidential under those procedures will be exempt from disclosure under FOIA.

Privacy Act

Anyone can search the electronic form of all comments received into any of our dockets by the name of the individual submitting the comment (or signing the comment, if submitted on behalf of an association, business, labor union, etc.). For information on DOT's compliance with the Privacy Act, please visit <https://www.transportation.gov/privacy>.

(Authority: 49 CFR 1.93(a), 46 U.S.C. 55103, 46 U.S.C. 12121)

By Order of the Maritime Administrator,
T. Mitchell Hudson, Jr.,
Secretary, Maritime Administration.

[FR Doc. 2024-09653 Filed 5-2-24; 8:45 am]

BILLING CODE 4910-81-P

DEPARTMENT OF TRANSPORTATION

[Docket No. DOT-OST-2024-0049]

Opportunities and Challenges of Artificial Intelligence (AI) in Transportation; Request for Information

AGENCY: Department of Transportation (DOT)

ACTION: Notice; Request for Information (RFI).

SUMMARY: The U.S. Department of Transportation's Advanced Research Projects Agency—Infrastructure (ARPA-I) is seeking input from interested parties on the potential applications of artificial intelligence (AI) in

transportation, as well as emerging challenges and opportunities in creating and deploying AI technologies in applications across all modes of transportation. The purpose of this Request for Information (RFI) is to obtain input from a broad array of stakeholders on AI opportunities, challenges and related issues in transportation pursuant to Executive Order (E.O.) 14110 of October 30, 2023 entitled "Safe, Secure, and Trustworthy Development and Use of Artificial Intelligence".

DATES: Written submissions must be received within 60 days of the publication of this RFI.

ADDRESSES: Please submit any written comments to Docket Number DOT-OST-2024-0049 electronically through the Federal eRulemaking Portal at <https://www.regulations.gov>. Go to <https://www.regulations.gov> and select "Department of Transportation (DOT)" from the agency menu to submit or view public comments. Note that, except as provided below, all submissions received, including any personal information provided, will be posted without change and will be available to the public on <https://www.regulations.gov>. You may review DOT's complete Privacy Act Statement in the **Federal Register** published on April 11, 2000 (65 FR 19477) or at <https://www.transportation.gov/privacy>.

FOR FURTHER INFORMATION CONTACT: For questions about this RFI, please email ARPA-I@dot.gov. You may also contact Mr. Timothy A. Klein, Director, Technology Policy and Outreach, Office of the Assistant Secretary for Research and Technology (202-366-0075) or by email at timothy.klein@dot.gov.

SUPPLEMENTARY INFORMATION: Advances in artificial intelligence (AI) bring significant potential benefits and risks, and they have the potential to transform American society with deep implications for safety, access, equity and resilience in the transportation sector. Virtually all aspects of transportation and mobility—from the design, construction, operation, and maintenance of physical infrastructure systems to the operation of the digital infrastructure that underpins and enables the movement of people and goods—will likely be impacted by the deployment of AI tools and applications. Beyond the direct impact of the technology itself, AI has the potential to reshape how individuals, communities, corporations, governments, and other users interact with the transportation network in ways that are difficult to anticipate. In recognition of AI's rapidly evolving

capabilities and implications across all facets of government, society and our economy, the Biden Administration issued Executive Order (E.O.) 14110 on *Safe, Secure, and Trustworthy Development and Use of Artificial Intelligence* on October 30, 2023. In section 8, “Protecting Consumers, Patients, Passengers, and Students”, under Sub-section (c), the E.O. directs the U.S. Department of Transportation to “promote the safe and responsible development and use of AI in the transportation sector, in consultation with relevant agencies”. Paragraph (iii) under sub-section (c) further requires that ARPA-I “explore the transportation-related opportunities and challenges of AI—including regarding software-defined AI enhancements impacting autonomous mobility ecosystems”.

This RFI seeks information that will assist ARPA-I and the U.S. Department of Transportation (DOT) in carrying out their responsibilities under section 8 (c)(iii) of E.O. 14110 noted above.

About ARPA-I

The *Advanced Research Projects Agency—Infrastructure (ARPA-I)* is an agency within DOT (see <https://www.transportation.gov/arpa-i>) that Congress established “to support the development of science and technology solutions that overcomes long-term challenges and advances the state of the art for United States transportation infrastructure.” (Pub. L. 117–58, section 25012, November 15, 2021; 49 U.S.C. 119). ARPA-I is modeled after the Defense Advanced Research Projects Agency (DARPA) within the U.S. Department of Defense and the Advanced Research Projects Agency-Energy (ARPA-E) within the U.S. Department of Energy. ARPA-I offers a once-in-a-generation opportunity to improve our nation’s transportation infrastructure, both physical and digital, and supports DOT’s strategic goals of Safety, Economic Strength and Global Competitiveness, Equity, Climate and Sustainability, and Transformation. ARPA-I focuses on developing and implementing technologies, rather than developing policies and processes or providing regulatory support. ARPA-I has a single overarching goal and focus: to fund external innovative advanced research and development (R&D) programs that develop new technologies, systems, and capabilities to improve transportation infrastructure in the United States.

The aims of ARPA-I include “lowering the long-term costs of infrastructure development, including costs of planning, construction, and

maintenance; reducing the lifecycle impacts of transportation infrastructure on the environment, including through the reduction of greenhouse gas emissions; contributing significantly to improving the safe, secure, and efficient movement of goods and people; promoting the resilience of infrastructure from physical and cyber threats; and ensuring that the United States is a global leader in developing and deploying advanced transportation infrastructure technologies and materials.” (Pub. L. 117–58, section 25012, November 15, 2021; 49 U.S.C. 119). Funding the development and use of AI technologies to address these challenges is expected to be a key future activity of ARPA-I.

Federal Activities on AI Most Closely Related to DOT’s Work

E.O. 14110 directs agencies all across government, including the Department of Transportation, to take a wide range of actions that will help ensure the United States leads the way in seizing AI’s promise and managing its risks. This work includes actions to manage AI’s safety and security risks, promote innovation and competition, advance equity and civil rights, protect Americans’ privacy, stand up for consumers and workers, and more. Beyond E.O. 14110, the Federal Government has also fostered and funded work to advance the responsible development of AI and machine learning (ML) for decades. Examples of such work range from early work conducted by the Department of Defense’s Advanced Research Projects Agency (now DARPA) to ongoing efforts summarized in the 2023 Update to the National Artificial Intelligence Research and Development Strategic Plan, led by the White House Office of Science and Technology Policy (OSTP).

In general, Federal investments in and other support for basic and applied research in AI in transportation are critical to achieving national priorities and build on applied AI research across the Federal government. Foundational research into and application of AI has been supported by the National Science Foundation (NSF), the Department of Defense (DOD), the Department of Energy (DOE), the Department of Homeland Security (DHS) Cybersecurity and Infrastructure Security Agency (CISA), the National Institute of Standards and Technology (NIST), and the National Aeronautics and Space Administration (NASA). Ongoing AI research at these agencies with high relevance to DOT priorities include developing effective methods for human-AI collaboration, ensuring the

safety and security of AI-based systems, developing shared public datasets and environments for AI training and testing, measuring, and evaluating AI-based systems through standards and benchmarks.

DOT Activities on AI

AI approaches are being applied to a range of activities and efforts across DOT; this section provides a brief, non-comprehensive overview.

Operating administrations within DOT have developed and implemented many uses of AI. These range from use of AI and ML technologies to streamline transportation operations (*e.g.*, weather prediction, routing and scheduling, transit automation), to research projects addressing safety (*e.g.*, driver behavior classification, passenger safety, incident risk assessment, grade crossing safety video analytics), to tools for rapid analysis of text and component schematic data submissions, and to perform real-time asset management to maintain a state of good repair. AI and ML tools may have applications across all of DOT’s operating administrations, with many actively exploring uses including the Federal Aviation Administration (FAA), Federal Highway Administration (FHWA), Federal Motor Carrier Safety Administration (FMCSA), Federal Railroad Administration (FRA), Federal Transit Administration (FTA), Great Lakes St. Lawrence Seaway Development Corporation (GLS), National Highway Traffic Safety Administration (NHTSA), Maritime Administration (MARAD), and Pipeline and Hazardous Materials Safety Administration (PHMSA).

The Intelligent Transportation System Joint Program Office (ITS JPO) within DOT has established the AI for ITS Program, recognizing the promise that AI offers for achieving significant benefits in transportation safety, mobility, efficiency, equity, accessibility, productivity, and resilience, while achieving reductions to individual and societal costs, emissions, and other negative environmental impacts. Currently, ITS JPO is developing AI-enabled ITS Capability Maturity Model and Readiness Checklists, and the Application of the NIST AI Risk Management Framework for ITS. ITS JPO published a review of AI for ITS in October 2022.

Two DOT initiatives that include the application of AI to serve the Department’s policy priorities are being led by the Office of the Assistant Secretary for Research and Technology (OST-R). The U.S. DOT Intersection Safety Challenge (<https://its.dot.gov/isc/>) is a prize-based competition that is

exploring how a combination of advanced sensing, perception, path planning and prediction, and AI-based decision making can help to improve intersection safety for vulnerable road users. The Complete Streets Artificial Intelligence (CSAI) Small Business Innovative Research (SBIR) program (<https://its.dot.gov/csai/>) is a multi-phase effort to develop powerful new decision-support tools for public agencies to assist in the siting, design, and deployment of streets and road networks that prioritize safety, efficiency, and connectivity.

Additional AI-related activities at OST–R include extramural research conducted at a number of University Transportation Centers, work at the Highly Automated Systems Safety Center of Excellence, technology demonstration projects through the SMART Grants Program, and research at the U.S. DOT Volpe Center.

Similarly, consistent with E.O. 14110, the Department’s internal Non-Traditional and Emerging Transportation Technology (NETT) Council has work underway to identify use cases across the various operating administrations and share observations and potential implications for the use of AI throughout the existing transportation system. Finally, the Transforming Transportation Advisory Committee (TTAC) and the Advanced Aviation Advisory Committee (AAAC) have been directed by Secretary Buttigieg to provide insights on the Department’s approach to AI and make recommendations for this technology’s integration into operational advancements, in a manner that anticipates AI’s benefits, while safeguarding against its negative impacts.

Potential Development and Uses of AI in Transportation

This section provides illustrative use cases to help respondents to this RFI consider the breadth of potential uses of AI in transportation, including physical infrastructure, digital infrastructure, operations, and many other aspects.

Many of the fundamental components of AI technologies and AI tools developed in other domains will be directly applicable to AI in transportation, from algorithmic advances, foundational model development, machine learning, deep learning techniques, and AI assurance methods to methods for ensuring cybersecurity, model transparency and trustworthiness.

As the Federal government has emphasized, there are substantial ethical, legal, and societal risks and

potential adverse effects surrounding the application of AI across society. Minimizing risks and adverse effects through developing trustworthy AI and enhancing trust in human-AI interactions, reducing bias in data, protecting privacy, and developing robust AI systems, standards, and frameworks will be integral to ensuring the effective incorporation of these new technologies into transportation and mobility systems.

This RFI employs the meaning of “artificial intelligence” or “AI” as used in E.O. 14110 and set forth in 15 U.S.C. 9401(3): “a machine-based system that can, for a given set of human-defined objectives, make predictions, recommendations, or decisions influencing real or virtual environments. Artificial intelligence systems use machine- and human-based inputs to perceive real and virtual environments; abstract such perceptions into models through analysis in an automated manner; and use model inference to formulate options for information or action.” ARPA–I defines “Digital Infrastructure” as the sensing, computation, automation, networking, connectivity, data management, analysis, optimization, control and virtual elements that underpin our physical transportation infrastructure. Beyond transportation-specific use cases, AI also has the potential to increase operational efficiencies for DOT’s own internal core business, regulatory, and permitting functions, including such applications as analyzing consumer complaints, compiling and summarizing public comments, streamlining permitting and application processes and more.

Potential areas for funded AI research and development at DOT will span all modes of transportation and mobility and could include:

- Enhancing the safety of pedestrians and vulnerable road users at roadway intersections through technologies such as ML and deep learning for computer vision, perception, sensor fusion, real-time decision making and warning systems,
- Real-time AI-based decision support tools, optimization and control of wide area traffic systems and transit operations,
- Autonomous mobility systems and vehicles on roads and rails, in the air, and on water (AI-intensive computation hardware and its design are beyond the scope of this RFI),
- Optimization of road traffic management systems and signalized intersections in cities and towns across timescales from seconds or minutes to hours, including such elements as

variable speed limit control, queue detection and prediction, and wrong-way driving detection,

- Optimization of equitable curb management in urban areas,
- Transportation systems management and operations (TSMO) optimization and control,
- Use of AI to assess traveler behavior and preferences across modes,
- Real-time monitoring of transit rail systems for maintenance assessment and state of good repair,
- Real-time monitoring of transit facilities for incident risk analysis,
- Air traffic control optimization for large-scale aviation operations facilitated by AI,
- Development and operation of secure complementary position, navigation, and timing (PNT) systems using AI-based recognition and utilization of signals of opportunity,
- AI assessment and assurance tools, methods and frameworks, benchmarks, testing environments, validation and verification, and the creation of datasets for AI and AI-enabled systems across all modes of transportation,
- Automating and digitizing physical infrastructure asset management through AI to optimize planning, design, operations, construction, and maintenance, and end of life,
- Optimizing planning, design, build and permitting for infrastructure construction and repair, and reducing construction costs by incorporating best practices developed through generative AI, including natural language processing (NLP) and large language model (LLM)-based processing of existing knowledge and databases,
- Sensor output processing, sensor fusion, data analysis, and ML for analysis and control of large-scale transportation networks and systems, including remote sensing,
- Real-time control and optimization of traffic networks and signalization from the local scale to a full city or region,
- Optimization of multimodal freight and logistics networks and supply chains nationally, including commercial vehicle, marine, rail and aviation freight and logistics systems,
- Safe operation of uncrewed air systems (UAS) in emerging aviation applications,
- Developing shared mobility-on-demand (MOD) services, from AI-based dynamic route scheduling and fleet optimization for city or region-wide passenger demand using traveler decision support tools,
- Offline analysis of traffic data, transportation safety data, and emissions inventories,

- Enhancing mapping and spatial AI for real-time automation and navigation across all modes, as well as for infrastructure design, maintenance, and repair,

- AI-based robotic repair and repurposing of pipeline infrastructure, and
- AI-enhanced robotic mapping of sub-surface infrastructure and utilities for safe, efficient, and cost-effective “dig once” construction.

Specific Questions

This RFI seeks information that will assist ARPA-I and the U.S. Department of Transportation in carrying out responsibilities under section 8 (c)(iii) of E.O. 14110, as noted above.

DOT is providing the following specific questions to prompt feedback and comments. DOT encourages public comment on any of these questions and seeks any other information commenters believe is relevant.

DOT is requesting information from all interested entities and stakeholders, including innovators and technology developers, researchers and universities, transportation system and infrastructure owners and operators, transportation-focused groups, organizations and associations, and the public. Where appropriate, responses should include discussion of real-world applications and actual examples of AI technologies, tools, and methods currently being used or contemplated for future use in the transportation and mobility domain.

DOT is interested in receiving succinct and relevant responses to some or all of the following questions, keeping in mind the current efforts and potential use cases as described above:

Question 1: Current AI Applications in Transportation

What are the relevant current or near-term applications of AI in transportation? If applicable, describe the mode(s) of transportation that these applications cover, referencing DOT’s stated priorities (including safety, climate and sustainability, equity, economic strength and global competitiveness, and transformation) that these applications support.

Question 2: Opportunities of AI in Transportation

What are the future potential opportunities in transportation that AI can facilitate? Describe the mode(s) of transportation that these opportunities cover, referencing DOT’s stated priorities (including safety, climate and sustainability, equity, economic strength and global competitiveness, and transformation) as appropriate.

Question 3: Challenges of AI in Transportation

What are the current or future challenges of AI in transportation, including risks presented by the use of AI in transportation and potential barriers to its responsible adoption? Describe the mode(s) of transportation that these challenges cover, referencing DOT’s stated priorities (including safety, climate and sustainability, equity, economic strength and global competitiveness, and transformation) as appropriate.

Question 4: Autonomous Mobility Ecosystems

What are the opportunities, challenges, and risks of AI related to autonomous mobility ecosystems, including software-defined AI enhancements? Describe how AI can responsibly facilitate autonomous mobility, including specifically safety considerations.

Question 5: Other Considerations in the Development of AI for Transportation

Comment on any other considerations relevant to the development, challenges, and opportunities of AI in transportation that have not been included in the questions above. These considerations may include ones such as potential priorities in transportation-specific future AI R&D funding, access to transportation datasets, the development of AI testbeds, physical and digital infrastructure needs and requirements, and workforce training and education.

Confidential Business Information

Do not submit information disclosure of which is restricted by statute, such as trade secrets and commercial or financial information (hereinafter referred to as Confidential Business Information “CBI”) to *Regulations.gov*. Comments submitted through *Regulations.gov* cannot be claimed as CBI. Comments received through the website will waive any CBI claims for the information submitted.

Issued in Washington, DC, on April 26, 2024.

Robert C. Hampshire,

Principal Deputy Assistant Secretary for Research and Technology and Chief Science Officer.

[FR Doc. 2024–09645 Filed 5–2–24; 8:45 am]

BILLING CODE 4910–9X–P

DEPARTMENT OF THE TREASURY

Privacy Act of 1974; System of Records

AGENCY: Internal Revenue Service, Department of the Treasury.

ACTION: Notice of a new system of records.

SUMMARY: In accordance with the Privacy Act of 1974, as amended (Privacy Act), the Department of the Treasury, Internal Revenue Service (IRS), proposes to establish a new system of records entitled, “Treasury/IRS 34.018, Insider Risk Management Records,” within its inventory of records systems subject to the Privacy Act. The IRS will use this system to identify potential threats to IRS resources and information assets and facilitate management of insider threat investigations, complaints, inquiries, and counterintelligence threat detection activities. An “insider” is defined to include current and former employees, contractors, interns, visitors, and any other individuals who have or who had persistent authorized access to IRS assets including any IRS facility, information, equipment, network, or system. An “insider threat” is the threat that an insider will use his or her authorized access, wittingly or unwittingly, to do harm to the IRS mission, resources, personnel, facilities, information, equipment, networks, or systems.

DATES: Comments must be received no later than June 3, 2024. This new system of records will be effective upon publication in the **Federal Register** unless the IRS receives comments which would result in a contrary determination. The routine uses will be effective on June 3, 2024. The IRS invites written comments on the routine uses and other aspects of this system of records prior to the proposed effective date.

ADDRESSES: Comments may be submitted to the Federal eRulemaking Portal electronically at <http://www.regulations.gov> identified by docket number TREAS–DO–2024–0003. Comments can also be sent to the Deputy Assistant Secretary for Privacy, Transparency, and Records, Department of the Treasury, 1500 Pennsylvania Avenue NW, Washington, DC 20220, Attention: New Privacy Act Systems of Records. All comments received, including attachments and other supporting documents, are part of the public record and subject to public disclosure. All comments received will be posted without change to