



**U.S. Department
of Transportation**
Pipeline and
Hazardous Materials
Safety Administration
(PHMSA)

Notice of Funding Opportunity (NOFO)

Pipeline Safety Research Competitive Academic Agreement Program (CAAP) Fiscal Year 2025

NOFO Issue Date:	May 19, 2025
Question Deadline:	June 13, 2025, 11:59 p.m. EST
Application Due Date:	June 20, 2025, 11:59 p.m. EST

Applicants must be registered at www.grants.gov to apply for the financial assistance award. It is highly recommended that applicants begin the registration process as soon as possible to avoid delays in submission. In addition, applicants must maintain a valid Universal Entity Identifier (UEI) number and an active registration in the System for Award Management (SAM) at www.SAM.gov.

Furthermore, applicants must register for an account with FedConnect at www.fedconnect.net before applying. FedConnect is a messaging platform where applicants can communicate directly with PHMSA. Your organization's Marketing Partner ID Number (MPIN), which can be retrieved from SAM, is required to create an account. For instructions on how to register in FedConnect and how it works, view the *FedConnect: Ready, Set, Go! Tutorial* on the FedConnect home page.

Assistance Listing Program Number (formerly CFDA): 20.724 – Pipeline Safety Research Competitive Academic Agreement Program (CAAP)

PHMSA Notice of Funding Opportunity Number: 693JK325NF0003

Table of Contents

SECTION A – BASIC INFORMATION	4
Section A.1: Statement of Purpose	4
Section A.2: Statute and Program Authority	4
Section A.3-1: Background on PHMSA’s Pipeline Safety R&D Program	4
Section A.3-2: Background on the CAAP Initiative	4
Section A.3-3: CAAP Performance Goals and Expected Outcomes	5
Section A.4: Research Topics	5
SECTION B – ELIGIBILITY	10
Section B.1: Eligible Applicants and Activities	10
Section B.2: Cost Sharing	10
Section B.3: Minimum Requirements	10
Section B.4: Funding Restrictions	11
SECTION C – PROGRAM DESCRIPTION	11
Section C.1: Funding	11
Section C.2: Period of Performance	11
Section C.3: Type of Award	11
SECTION D – APPLICATION CONTENTS AND FORMAT	11
Section D.1: Address to Request an Application Package	11
Section D.2: Content and Form of Application Submission	11
SECTION E – SUBMISSION REQUIREMENTS AND DEADLINES	13
Section E.1: Submission Dates and Times	13
Section E.2: Unique Entity Identifier (UEI) and System for Award Management (SAM)	13
SECTION F – APPLICATION REVIEW INFORMATION	14
Section F.1: Criteria	14
Section F.2: Considerations	15
Section F.3: Review and Selection Process	15
Section F.4: Risk Review	15
SECTION G – AWARD NOTICES	15
Section G.1: Federal Award Notices	15
Section G.2: Compliance with Federal Law and Policies	16
SECTION H – POST-AWARD REQUIREMENTS AND ADMINISTRATION	16
Section H.1: Administrative and National Policy Requirements	16
Section H.2: Reporting Requirements	16
SECTION I – FEDERAL AWARDING AGENCY CONTACTS	18

Program Summary

Federal Agency Name: U.S. Department of Transportation (DOT)
Pipeline and Hazardous Materials Safety
Administration (PHMSA)

Funding Opportunity Title: “Pipeline Safety Research CAAP – FY 2025”

Announcement Type: Initial Announcement

Funding Opportunity Number: 693JK325NF0003
Total Funding Distributed through the NOFO: \$2 million

Location where the final NOFO will be published: www.grants.gov

SECTION A – BASIC INFORMATION

Section A.1: Statement of Purpose

PHMSA requests applications from nonprofit higher education institutions for Competitive Academic Agreement Program (CAAP) funding to research innovative solutions for five topics. PHMSA will award up to \$2 million under CAAP in Fiscal Year (FY) 2025, with no award exceeding \$1 million. Research will focus on solutions to known pipeline integrity and safety challenges. Each award is expected to last between 12 to 36 months.

Section A.2: Statute and Program Authority

PHMSA’s Pipeline Safety Research and Development (R&D) Program was originally authorized pursuant to section 12 of the Pipeline Safety Improvement Act of 2002 (Public Law 107-355). Congress most recently reauthorized the R&D Program in the Protecting our Infrastructure of Pipelines and Enhancing Safety (PIPES) Act of 2020 to ensure the integrity of pipeline facilities. PHMSA’s authority to enter into cooperative agreements to further the objectives of 49 United States Code (U.S.C.) 60101 et seq. is codified in 49 U.S.C. 60117(l).

Section A.3-1: Background on PHMSA’s Pipeline Safety R&D Program

Pipeline infrastructure is crucial for transporting natural gas and hazardous liquids from production sites to consumers. Energy pipelines play an essential role in the U.S. economy and are vital to maintaining and improving Americans’ standard of living. They must be safely maintained and, where needed, expanded or adapted to meet energy needs. R&D is essential for identifying solutions to help ensure the safety and reliability of pipeline operations. This includes providing operators with effective technology to meet or exceed regulations and ensuring that industry standards are based on the latest science for safe pipeline design, construction, and maintenance.

PHMSA’s Pipeline Safety R&D Program continues to impact technology development, strengthen standards, and inform decision makers. More performance details are available on the web site at <http://primis.phmsa.dot.gov/rd/performance.htm>.

Section A.3-2: Background on the CAAP Initiative

Section 12 of the Pipeline Safety Improvement Act of 2002 (Pub. L. 107-355) mandates that DOT and other designated Federal agencies “carry out a program of research, development, demonstration, and standardization to ensure the integrity of pipeline facilities.” Specifically, the mission of PHMSA’s Pipeline Safety R&D Program is to sponsor R&D projects that provide near-term solutions to improve safety and enhance reliability in the U.S. pipeline system. The CAAP initiative aligns with this mission and congressional mandate.

CAAP aims to drive innovation by funding academic research focused on high technical risk and high payoff solutions for many safety challenges. This research may lead to solutions for PHMSA’s Core Research Program¹ for further testing and deployment, aiming to validate theories toward commercialization.

¹ The Core program is one of three pipeline research programs administered by PHMSA.

Another goal of CAAP is to expose undergraduate and graduate students to pipeline safety challenges, encourage their involvement, and show them how their engineering or technical skills can be used within the field. This aims to cultivate new talent across all areas of the pipeline sector.

Section A.3-3: CAAP Performance Goals and Expected Outcomes

PHMSA's Pipeline Safety R&D Program seeks projects through the Pipeline Safety Research-CAAP (CFDA Number 20.724) to develop solutions for integrity threats and support its mission. Awards will be made to projects with clear goals that also help grow talent in the pipeline field. Section A.4 outlines the 2025 CAAP award performance goals.

PHMSA will collect data as outlined in section H.2 to ensure that projects are progressing as expected and review for any variances. PHMSA will also track the number of pipeline engineering positions filled by CAAP participants.

Section A.4: Research Topics

PHMSA is soliciting applications for five topics based on ideas submitted through our open portal,² pipeline accident/incident data, and research gaps identified from the November 2023 R&D Forum. PHMSA seeks applications outlining research that addresses the shared interests of academic researchers, the public, and pipeline operators regarding pipeline safety topics aiming for commercial application.

The research will build scientific and engineering foundations for developing commercially viable safety and mitigation technology. Researchers are expected to collaborate with PHMSA-regulated industry operators to ensure relevance. PHMSA encourages faculty from diverse fields to partner across universities and with industry to form industry-university groups, allowing students to work on critical pipeline sector topics.

PHMSA will only consider applications addressing technical gaps in the safety program areas listed in this NOFO. Applications outside these areas will not be reviewed. The focus areas are purposefully broad to allow a wide range of applications that strategically support PHMSA's mission. Applicants must choose one primary safety program topic per submission but may submit multiple applications.

Topic 1: Knowledge Development – Risk Evaluation of Vehicle Strikes on Aboveground Pipeline Equipment and Facilities

The objective of this research project is to evaluate the risks and consequences of motor vehicle accidents impacting aboveground pipelines and pipeline equipment.

Between 2010 and the present, motor vehicle strikes accounted for 204 incidents and 24 deaths (17.5 percent of total fatalities) on gas distribution pipelines. This topic aims to provide the industry with guidance on reducing both the frequency of these incidents and the associated injuries or loss of life. The study must investigate risk factors that can affect the frequency of

² <https://primis.phmsa.dot.gov/matrix/gapnew.rdm>

motor vehicle strikes or their consequences. In addition, it must identify designs, methods, equipment, or other countermeasures that can be used to reduce the risk of such incidents and provide guidance on how to use them.

The project scope must include the following tasks:

- Perform a literature review of relevant research on the effects of motor vehicle incidents on pipelines.
- Evaluate risk factors which affect the frequency and consequences of motor vehicle incidents including, but not limited to, the size of the pipelines; products being transported; proximity to roads and highways; speed limits on adjacent roads; topography of the sites; barriers meant to protect the pipeline facility from outside forces; and emergency equipment, such as shut-off valves.
- Evaluate potential designs that can be used for newly installed pipelines to reduce the risks associated with motor vehicle strikes including recommended setback distances and appropriate barriers.
- Evaluate modifications, technology, methods, or other countermeasures that can be used to reduce motor vehicle risk to existing pipelines.
- Include input from appropriate stakeholder groups such as pipeline operators, industry experts, and Standards Development Organizations (SDOs).
- Coordinate with Standards Development Organizations for potential incorporation into a standard or industry best practice.
- Provide a detailed breakdown of project costs and expected deliverables at each stage of development.
- Involve a total project duration not to exceed 24 months.

Topic 2: Technology Development – Technology, Equipment, or Procedures to Prevent Human Error

The objective of this research project is to develop technology that can reduce the frequency of pipeline accidents or incidents caused by human error.

PHMSA data shows that incorrect operation is a frequent cause of pipeline accidents and incidents and that these events carry an increased risk of injury or death. Often, these events are caused by the complexity of the processes, equipment, or environment that do not fully account for human factors. This topic seeks to develop or improve equipment, technology, or procedures that can assist personnel in doing their jobs safely. Focus should be on processes that are performed in environments which are difficult for human personnel to safely manage. Projects must identify one or more specific pipeline operations or maintenance tasks commonly performed on pipelines regulated under 49 Code of Federal Regulation (CFR) Part 192 or Part 195 to which the project is applicable.

The project scope must include the following tasks:

- Identify a specific equipment, technology, or process (the “product”) that when operated

or completed incorrectly can result in pipeline accidents or incidents.

- Contain a plan for developing and testing the product with human-centric testing methodologies (e.g., usability testing).
- Include input from relevant stakeholders, such as pipeline operators, maintenance contractors, industry experts, and SDOs.
- Define personnel who are the “users” of the target product with a representative list of roles that are likely to interact with or utilize the product as part of their duties.
- Include a plan for field testing of the product in a representative or real-world environment with relevant personnel.
- Specify relevance of the product to pipelines regulated under 49 CFR Part 192 or Part 195.
- Provide a detailed breakdown of project costs and expected deliverables at each stage of development.
- Involve a total project duration not to exceed 24 months.

Topic 3: Knowledge Development – Testing, Modeling, and Verifying Strain Capacity in Vintage Pipelines

The objective of this research project is to improve confidence and accuracy of strain capacity prediction for vintage pipelines.

Currently, pipeline design is based mostly on stress-based design criteria, which is a method focusing on the allowable stress limit of pipe materials. In the past several decades, the pipeline industry has increasingly adopted strain-based design and assessment (SBDA) methods in order to manage pipeline integrity challenges stemming from geohazards. Strain-based design is a method based on the allowable strain limit (strain capacity) that is suitable for ductile materials subjected to displacement-controlled loads, such as by geohazards, aimed at ensuring structural integrity. While strain-based assessment involves assessing the integrity of existing—in this project, vintage—pipelines under current and potential threats.

PHMSA is seeking research to test and verify strain capacity for vintage pipelines with the goal to improve the confidence and accuracy of the predictive models using SBDA methods.

The project scope must include the following tasks:

- Perform a literature review, including past and current research studies related to strain-based design for pipelines to identify the gaps that limit the implementation of SBDA methods to predict and prevent the effects of geohazards on pipelines.
- Based on the literature review, identify the critical factors that are important to improve confidence and accuracy of strain capacity prediction for vintage pipelines.
- Based on the literature review, develop a testing plan to generate the necessary data that will be utilized in strain-based pipeline failure models to improve confidence and accuracy of strain capacity prediction for vintage pipelines.

- Based on the literature research and the testing plan, develop a new risk model or improve an existing model that can be used to facilitate pipeline operators' identification of strain-based risks from geohazards and take prompt actions to repair and mitigate the risks to the vintage pipelines.
- Include participation and input from stakeholder groups, such as pipeline operators, subject matter experts from industry and academia, service providers, and SDOs, etc.
- Provide a detailed breakdown of project costs and expected deliverables at each stage of development.
- Involve a total project duration not to exceed 36 months.

Topic 4: Technology Development – Non-Metallic Pipe Inspection Technology

The objective of this research project is to develop innovative and cost-effective in-line inspection technologies for non-metallic (plastic and composite) pipes to accurately detect and quantify defects in pipes, welds, or joints. The project will explore new technologies, modifications of existing technologies, or alternative approaches to enhance the detection of internal anomalies in non-metallic pipeline systems.

According to a PHMSA data analysis (2010–present), plastic pipelines have exhibited a higher incident count related to pipe, weld, or joint failures compared to steel pipelines. A robust inspection solution is needed to identify defects quickly and accurately in buried non-metallic pipelines.

The project scope must include the following tasks:

- Conduct a comprehensive literature review of existing inspection technologies for non-metallic pipelines, leveraging research from both public and private sectors, including service providers and operators. The literature review should cover current and past research on non-metallic pipe material or joint defect inspection technologies and provide a critical review of current status and challenges that limit current material and joint defect detection technologies. The literature review should aim to help ensure industry research activities avoid duplication and provide data to complement technologies and solutions that already exist.
- Identify emerging technologies and innovative solutions applicable to the detection of material and joint defects.
- Identify conditions and factors, as well as baseline anomaly detection technologies, to be considered in the design of experiments for field test and validation.
- Document validation testing results, assessing effectiveness, accuracy, and practical deployment feasibility.
- Include participation and input from stakeholder groups, such as operators, service providers, industry experts, and SDOs.
- Specify material types to which technology could pertain (e.g., pipe body, welds, joints).
- Identify representative implementation costs for innovative or enhanced anomaly-

locating technologies.

- Provide a detailed breakdown of project costs and expected deliverables at each stage of development.
- Involve a total project duration not to exceed 36 months.

Proposals that address advancements/validations to existing technologies also should:

- Focus on tools and technologies that have the best potential for being used “as is,” modified, enhanced, or added onto, to perform reliably for all.
- Describe operational tasks for which an operator would use this technology, and in what typical environments.
- Test for application, as appropriate.

Topic 5: Knowledge Development – Acceptable Methods for Modeling Shrouding or Obstructions for Pressurized Liquid Releases

The objective of this research project is to explore shrouding structures and evaluate acceptable methods for modeling shrouding or obstructions as a mitigation measure for pressurized leaks. The study will assess the effectiveness of shrouding in limiting vapor dispersion, identify best practices for design and implementation, and provide recommendations for regulatory compliance and facility safety enhancements.

The National Fire Protection Association (NFPA) 59A-2001 section 2.2.3.4, incorporated by reference in 49 CFR § 193.2059, requires: “Provision to be made to minimize the possibility of a flammable mixture of vapors from a design spill...reaching a property line that can be built upon that would result in a distinct hazard.” Shrouding can serve as a protective measure to mitigate vapor dispersion following a loss of containment resulting in a release of hazardous fluid at liquefied natural gas (LNG) facilities and reduce potential hazards to the public. A standardized approach to shrouding design and modeling will help improve consistency in implementation across LNG facilities. This research will support industry stakeholders by identifying effective strategies for shrouding placement, material selection, and performance evaluation in various operating environments.

The project scope must include the following tasks:

- Conduct a literature review of existing studies, experimental data, and industry practices related to shrouding and obstruction methods for leak mitigation.
- Identify different types of shrouding technologies and evaluate their effectiveness in controlling vapor dispersion under varying leak scenarios and environmental conditions.
- Develop computational fluid dynamics and other modeling approaches to assess how shrouding affects vapor production, liquid dropout, and hazardous vapor dispersion.
- Analyze regulatory requirements and industry standards relevant to shrouding implementation for LNG facilities including, but not limited to, 49 CFR Part 193 and NFPA 59A.

- Provide recommendations on best practices for the design, installation, and maintenance of shrouding systems as well as modeling methods/assumptions to enhance facility safety and regulatory compliance.
- Engage stakeholders, including LNG operators, safety experts, regulators, and engineering professionals, to ensure industry-wide applicability of findings.
- Provide a detailed breakdown of project costs and expected deliverables at each stage of development.
- Involve a total project duration not to exceed 24 months.

SECTION B – ELIGIBILITY

Section B.1: Eligible Applicants and Activities

Applicants must be nonprofit higher education institutions in the U.S. or its territory. PHMSA encourages partnerships among institutions, as well as with the pipeline industry or private organizations, provided partnership costs do not exceed 40 percent of Federal funding.

Section B.2: Cost Sharing

Pursuant to section 22(b)(2)(C)(ii) of the PIPES Act of 2016 (Pub. L. 114–183), there is a mandatory minimum 20 percent cost-sharing requirement for CAAP agreements. The Federal government cost share shall not exceed 80 percent of the total cost, capped at \$1 million. Firm commitment letters for cost sharing must accompany applications, or proposals will not be reviewed. See section D.2 for additional information regarding budget/cost applications.

Section B.3: Minimum Requirements

All applicants must meet these minimum requirements to be considered. Failure to do so at any time—pre- or post-award—will result in removal from consideration or agreement termination. Applications must include a letter on the institution’s letterhead, signed by the dean or equivalent authority, certifying understanding and compliance with these requirements. This letter should be included as Appendix A for the technical application (the first page of the Appendix).

1. Applicants must be nonprofit higher education institutions in the U.S. or its territories.
2. Agreements will be with institutions, not individuals.
3. The research must involve undergraduate, graduate, or PhD students, with faculty/staff designing the scope and overseeing its execution. *Applications without student involvement will be deemed non-responsive and will be removed from consideration.*
NOTE: *Students must be identified no later than the first quarter of the project.* Faculty, staff, and students must be U.S. citizens, permanent residents, or have valid visas to complete the project. Include resumes for proposed students if available. Federal funds may cover allowable research costs like overhead, expendables, labor, and testing equipment but cannot be used for constructing or refurbishing existing facilities.
4. Applications must comply with the 20 percent cost-sharing requirement stipulated in section B.2.

Section B.4: Funding Restrictions

The following costs are not eligible for reimbursement:

- Costs disallowed or deemed ineligible in 2 CFR Part 200
- Pre-award costs without PHMSA’s prior written approval consistent with 2 CFR 200.458
- Construction activities.

SECTION C – PROGRAM DESCRIPTION

Section C.1: Funding

PHMSA plans to award up to \$2 million in CAAP funding for FY 2025, with no more than \$1 million in Federal funding per award. Applicants may submit multiple applications, each capped at \$1 million.

Section C.2: Period of Performance

Awards are expected to last 12 to 36 months from the date of award for each agreement. Modifications within the agreement’s scope will be considered on a case-by-case basis.

Section C.3: Type of Award

Awards will be cooperative agreements. PHMSA will provide significant involvement, including guidance on industry practices, data, methods, and testing materials like pipe samples. PHMSA will facilitate communication with pipeline industry contacts and trade associations to support research success if needed.

SECTION D – APPLICATION CONTENTS AND FORMAT

Failure to meet these requirements described in this section will result in application rejection. PHMSA’s agreement officers and program officers may request additional information during the review process to ensure compliance with DOT’s Guide to Financial Assistance and 2 CFR Part 200, Subpart E.

Section D.1: Address to Request an Application Package

PHMSA requires applicants to apply electronically through www.grants.gov.

If you are hearing-impaired, please contact the FR/TTY at 1-800-877-8339 or e-mail PHMSA-Accessibility@dot.gov.

Section D.2: Content and Form of Application Submission

Applicants must submit complete applications through www.grants.gov and must be registered on the site, a process that can take up to two weeks. For help with registration, contact grants.gov

support.

Applicants must also register with **FedConnect** at www.fedconnect.net using their organization's Marketing Partner ID number from the **System for Award Management (SAM)** at www.SAM.gov. For registration guidance, refer to the *FedConnect: Ready, Set, Go!* tutorial on the FedConnect homepage.

Standard Forms

The following forms, available on www.grants.gov under the FY 2025 CAAP Funding Opportunity, must be completed by the applicant:

1. Standard Form (SF)-424 – Application for Federal Assistance
2. SF-424A – Budget Information
3. Lobbying Form – Certifications Regarding Lobbying
4. Standard Title VI/Non-Discrimination Assurances – Civil Rights Assurances.

Applicant Attachments

All required forms must be created and uploaded to www.grants.gov under the FY 2025 CAAP Funding Opportunity. Guidance for submitting the project narrative and budget narrative is provided below:

1. PHMSA Technical Application Template (Attachments A and B)
2. Project Narrative attachment
3. Budget Narrative attachment
4. Indirect Cost Agreement and/or Statement claiming 15 percent de minimis (if applicable)
5. Letters of Support from partner organizations (if applicable)
6. Additional optional attachments (if applicable).

Applications should be well written and free of mathematical errors in the line-item budget and budget narrative. Program narratives should follow the NOFO structure with clearly identified sections. Forms, templates, and instructions are available under the “Related Documents” tab on www.grants.gov.

Refer to section F to ensure that the application meets PHMSA's evaluation criteria.

Technical Application Template (PHMSA Template)

Applicants must use the Technical Application Template provided in the www.grants.gov NOFO package, which includes instructions on required content. Funding requests should align with the proposed period of performance.

Failure to follow these requirements will result in disqualification. Key requirements include:

1. All information supporting the evaluation criteria must be 20 pages or less, excluding the

Cover Page, Technical Application Information Page, and Appendix.

2. The Certification Letter of Minimum Requirements must be on the first page of the Appendix.
3. The Appendix may include additional details but will not be used for evaluation, except to confirm the Certification Letter is included (see section B.03).
4. Documents must be in Times New Roman, 12-point font, with 1.15-line and paragraph spacing for text body.
5. Applications must follow the formatting of Attachment A and be uploaded to the Project Narrative section on www.grants.gov.

Unmanned Aerial Systems (UASs)

UASs used in the proposed research must be designed and built in the U.S. They cannot be developed, manufactured, or supplied by entities owned, controlled, or directed by foreign governments.

Budget/Cost Application and Budget Narrative (Standard Form)

Applicants must use Standard Form 424A to submit their budget/cost application through www.grants.gov. The budget should reflect the applicant's best terms, from a cost and technical standpoint, to perform the work. No fee or profit should be proposed, as this is a resource-sharing arrangement.

Additional budgetary information, broken out as described [in this link](#), must provide detailed information on each cost element, consistent with the applicant's cost-accounting system. The amounts requested for each budget category must be justified in a Budget Narrative document and uploaded to the Budget Narrative section of the application.

Sharing of Application Information – Except for the information properly marked, PHMSA may share application information within the Department or with other Federal agencies if it is determined that sharing is relevant to the respective program's objectives. [Click here for more information.](#)

SECTION E – SUBMISSION REQUIREMENTS AND DEADLINES

Section E.1: Submission Dates and Times

Complete applications must be received electronically via www.grants.gov by **11:59 p.m. EST on June 20, 2025**. Late applications will not be considered. Applicants will receive an automated receipt from grants.gov confirming the submission date and time.

Section E.2: Unique Entity Identifier (UEI) and System for Award Management (SAM)

PHMSA cannot make an award to an applicant until all applicable UEI and SAM requirements are met. If these requirements are not fully complied with by the time PHMSA is ready to make an award, the applicant may be deemed ineligible, and PHMSA may award to another applicant.

PHMSA recommends applicants review the SAM database at <https://sam.gov/content/home> to ensure that their UEI is up to date.

Each Applicant is required to:

- Register in SAM (www.SAM.gov) before submitting its application
- Provide a valid UEI number in its application
- Maintain an active SAM registration and UEI with current information during the period of an active Federal award or application under review.

For new users, visit www.grants.gov/web/grants/applicants.html or www.grants.gov/ and select “Register.” New registrations can take up to two weeks. For help, contact grants.gov support at 1-800-518-4726 or email support@grants.gov.

SECTION F – APPLICATION REVIEW INFORMATION

Section F.1: Criteria

PHMSA has established evaluation criteria to assess and select amongst competing applications. Submission does not guarantee an award. Awards may be based on the complete application, with a maximum amount of \$1 million, determined by evaluation results.

Applications will be reviewed through administrative, technical, and programmatic evaluations based on the criteria outlined below:

Merit Criteria

Applications will be evaluated against the following evaluation criteria:

1. Within the application, demonstrate the extent to which the project will meet the research topic needs.
2. Within the application, demonstrate the extent to which the project solution can be readily implemented or transferred to the Core Research Program for demonstration and deployment.
3. Within the application, demonstrate the extent to which the project will identify the research partnership(s) and subject matter expert(s) involved, as well as how involved the identified partner(s) will be in the project.
4. Within the application, demonstrate the extent to which the project will establish work scope, tasks, milestones, and estimated project costs that align with project goals and objectives, as well as whether any potential risks have been identified and mitigated.
5. Within the application, demonstrate the extent to which the project involves students and defines their specific tasks and commitment to the project.

These criteria prioritize projects targeting high-risk technical areas with clear plans and measurable, transferable outcomes. Results must be factual, unbiased, verifiable, and repeatable. Note that a cooperative agreement award will not convey any authority to financial assistance recipients to secure information or cooperation from pipeline operators.

Selection Considerations

After completing the merit review, among projects of similar subject matter, PHMSA may prioritize projects with a focus on safety. PHMSA may prioritize applications which clearly demonstrate that the project:

- Provides substantial safety benefits compared to existing conditions
- Mitigates, to the extent practicable, any significant safety risks that could result after the project's completion
- Does not negatively impact the safety of the traveling public, or any relevant group applicable to the program.

Section F.2: Considerations

The Department intends to apply principles from the DOT Order 2100.7, [Ensuring Reliance Upon Sound Economic Analysis in DOT's Policies, Programs and Activities](#) when evaluating applications and making award selections. To the maximum extent permitted by law, PHMSA will prioritize projects that are in alignment with the principles outlined in DOT Order 2100.7.

Section F.3: Review and Selection Process

Details are available on the [web site](#).

Section F.4: Risk Review

Before awarding funds, PHMSA must review information about the applicant in the designated integrity and performance system accessible via SAM (currently FAPIIS) per 41 U.S.C. § 2313. Applicants may review and comment on previously entered Federal awarding agency information, which PHMSA will consider along with other system data to assess the applicant's integrity, business ethics, and performance record under 2 CFR § 200.205.

Applicants must maintain active SAM registration at www.SAM.gov, which PHMSA will use to verify the applicant in FAPIIS.

SECTION G – AWARD NOTICES

Section G.1: Federal Award Notices

After the selection process, PHMSA will notify selected applicants via email, including the financial assistance award with terms and conditions requiring bilateral signatures for execution. Awards are expected in the fourth quarter of FY 2025.

Section G.2: Compliance with Federal Law and Polices

The applicant assures and certifies, with respect to any application and awarded project under this NOFO, that it will comply with all applicable Federal laws, regulations, executive orders, policies, guidelines, and requirements as they relate to the application, acceptance, and use of Federal funds and will cooperate with Federal officials in the enforcement of Federal law, including cooperating with and not impeding U.S. Immigration and Customs Enforcement (ICE) and other Federal offices and components of the Department of Homeland Security in the enforcement of Federal immigration law.

SECTION H – POST-AWARD REQUIREMENTS AND ADMINISTRATION

Section H.1: Administrative and National Policy Requirements

The administration of this award by PHMSA and the recipient will be based on the following Federal statutory and regulatory requirements:

1. The recipient must comply with 2 CFR Part 200: Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards.
2. The recipient must comply with 49 CFR Part 20: New Restrictions on Lobbying. 49 CFR Part 20 will be incorporated by reference into any award under this program and is available at www.gpoaccess.gov/ecfr/ by clicking on Title 49 CFR Part 20.
3. The recipient must comply with Civil Rights requirements and Title VI. As a condition of a financial assistance award, recipients should demonstrate the recipient has a plan for compliance with civil rights obligations and nondiscrimination laws, including Title VI of the Civil Rights Act of 1964 and implementing regulations (49 CFR Part 21) (including any amendments thereto); the Americans with Disabilities Act of 1990 (ADA) and section 504 of the Rehabilitation Act; and all other civil rights requirements and accompanying regulations. This should include a current Title VI plan, a completed Community Participation Plan, and a plan to address any legacy infrastructure or facilities that are not compliant with ADA standards. DOT's and the applicable Operating Administrations' Offices of Civil Rights will work with award recipients to ensure full compliance with Federal civil rights requirements.
4. The recipient must comply with 49 CFR Part 32: Government-Wide Requirements for Drugfree Workplace (Financial Assistance), which implements the requirements of Public Law 100-690, Title V, Subtitle D: Drug-free Workplace Act of 1988. 49 CFR Part 32 will be incorporated by reference into any award under this program and is available at www.gpoaccess.gov/ecfr/ by clicking on Title 49 CFR Part 32.

PHMSA will prioritize projects that advance the goals of the DOT Order, [“Ensuring Reliance Upon Sound Economic Analysis In DOT Policies, Programs, and Activities,”](#) during the review and selection process.

Section H.2: Reporting Requirements

Award recipients must fulfill the following reporting and presentation requirements and must be submitted via e-mail and uploaded to PHMSA's R&D Management Information System.

1. Kickoff Meeting held at project start.
2. Annual Performance Progress Reports due no later than 30 days after reporting period ends*.
3. Quarterly Progress Reports due no later than 30 days after reporting period ends*.
4. Research Project Poster must be presented annually at designated government and/or public event; travel may be necessary.
5. Final Research Report due no later than 90 days prior to agreement expiration. The report will be updated based on PHMSA comments and resubmitted.
6. Research Brief due no later than 90 days prior to agreement expiration.
7. Closing Presentation typically web based and due no later than 30 days prior to agreement expiration.
8. Annual Federal Financial Reports (SF-425) due within 90 days after the reporting period ends.
9. Performance and Program Evaluation: As a condition of award, financial assistance recipients may be required to participate in an evaluation undertaken by DOT or another agency or partner. The evaluation may take different forms, such as an implementation assessment across recipients, an impact and/or outcomes analysis of all or selected sites within or across award recipients, or a benefit/cost analysis or assessment of return on investment. DOT may require applicants to collect data elements to aid the evaluation and/or use information available through other reporting. As a part of the evaluation, as a condition of award, financial assistance recipients must agree to: (1) make records available to the evaluation contractor or DOT staff; (2) provide access to program records, and any other relevant documents to calculate costs and benefits; (3) in the case of an impact analysis, facilitate the access to relevant information as requested; and (4) follow evaluation procedures as specified by the evaluation contractor or DOT staff. Recipients and subrecipients are also encouraged to incorporate program evaluation, including associated data collection activities from the outset of their program design and implementation, to meaningfully document and measure their progress towards meeting an agency priority goal(s). Title I of the Foundations for Evidence-Based Policymaking Act of 2018 (Evidence Act), Pub. L. No. 115-435 (2019) urges Federal awarding agencies and Federal assistance recipients and subrecipients to use program evaluation as a critical tool to learn, to improve equitable delivery, and to elevate program service and delivery across the program lifecycle. According to 5 U.S.C. § 311, “evaluation” means, “an assessment using systematic data collection and analysis of one or more programs, policies, and organizations intended to assess their effectiveness and efficiency.” Credible program evaluation activities are implemented with relevance and utility, rigor, independence and objectivity, transparency, and ethics (OMB Circular A-11, Part 6, section 290).

For financial assistance recipients receiving an award, evaluation costs are allowable costs (either as direct or indirect), unless prohibited by statute or regulation, and such costs may include the personnel and equipment needed for data infrastructure and expertise in data analysis, performance, and evaluation (2 CFR Part 200). This paragraph does not authorize pre-award costs, and financial assistance recipients must separately obtain PHMSA's written approval to fund pre-award costs consistent with 2 CFR § 200.458.

*Note: The reporting period begins on the effective date of the cooperative agreement.

SECTION I – FEDERAL AWARDING AGENCY CONTACTS

NOTE: All questions related to this NOFO can be submitted via the Message Center on FedConnect.

For technical issues or questions related to FedConnect only:

Choose one of the following options:

1. E-mail fcsupport@unisonglobal.com.
2. Submit questions through the portal on their web site at www.fedconnect.net.
3. Call 1-800-899-6665, option 2.

NOFO-Related Questions:

Stephen Jones
 Agreements Officer
 Acquisition Services Division
 Phone: 202-366-4059
 Email: Stephen.Jones@dot.gov

Program Contact:

Nusnin Akter
 CAAP Program Manager
 Phone: 839-273-0528
 E-mail: Nusnin.akter2@dot.gov

For technical issues or questions related to www.grants.gov only:

Choose one of the following options:

1. E-mail support@grants.gov
2. Call 1-800-518-4726