



**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 2021

NOFO Issue Date: January 12, 2021
Question Deadline: February 23, 2021 11:59 p.m. ET
Application Due Date: March 15, 2021 11:59 p.m. ET

Assistance Listing Program Number (formerly CFDA): 20.724

PHMSA Funding Opportunity Number 693JK321NF0002

Applicants must be registered at www.grants.gov to apply for the grant. It is highly recommended that applicants begin the registration process as soon as possible to avoid delays in submission. Additionally, applicants must maintain a valid Dun and Bradstreet Universal Numbering System (DUNS) number and an active registration in the System for Award Management (SAM) at www.SAM.gov.

Furthermore, applicants must register with FedConnect at <https://www.fedconnect.net> for an account before submitting an application. 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 to use the portal, view the *FedConnect: Ready, Set, Go! Tutorial* under the *Need Help?* section on the FedConnect home page.

Table of Contents

MISSION	5
SECTION A – PROGRAM DESCRIPTION	5
Section A.01: Statement of Purpose.....	5
Section A.02: Program Authority	5
Section A.03-1: Background on PHMSA’s Pipeline R&D Program.....	6
Section A.03-2: Background on the CAAP Initiative	6
Section A.04: Research Topics	7
Research Area #1: Remote Monitoring Technology.....	8
Research Area #2: Artificial Intelligence-Automation Solutions	8
Research Area #3: Underground Natural Gas Storage (UNGS) Leak Identification and Well Control Solutions	9
SECTION B – FEDERAL AWARD INFORMATION	9
Section B.01: Funding.....	9
Section B.02: Period of Performance	9
Section B.03: Type of Award.....	9
SECTION C – ELIGIBILITY INFORMATION.....	10
Section C.01: Eligible Applicants	10
Section C.02: Cost Sharing	10
Section C.03: Minimum Requirements.....	10
SECTION D – APPLICATION AND SUBMISSION INFORMATION	11
Section D.01: Address to Request an Application Package.....	11
Section D.02: Content and Form of Application Submission.....	12
Technical Proposal	12
Budget/Cost Proposal and Budget Narrative	13
Standard Title VI/Nondiscrimination Assurances.....	14
Lobbying	14
Section D.03: Dun and Bradstreet Universal Numbering System (DUNS) Number and System for Award Management (SAM)	15
Section D.04: Submission Dates and Times	15
Section D.05: Funding Restrictions	15
SECTION E – APPLICATION REVIEW INFORMATION.....	16

Section E.01: Criteria 16

Section E.02: Review and Selection Process 17

 Administrative Review..... 17

 Technical Review 17

 Programmatic Review 17

 Selection Process..... 18

SECTION F – FEDERAL AWARD ADMINISTRATION INFORMATION 18

 Section F.01: Federal Award Notice 18

 Section F.02: Administrative and National Policy Requirements..... 18

 Section F.03: Reporting..... 19

SECTION G – AGENCY CONTACT INFORMATION..... 19

Program Summary

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

Funding Opportunity Title: Pipeline Safety Research CAAP – FY 2021

Announcement Type: Initial Announcement

Funding Opportunity Number: 693JK321NF0002

Catalog of Federal Domestic Assistance Number: 20.724

Eligible Applicants: Applicants must be nonprofit institutions of higher education located in the U.S. or a U.S. territory or possession.

Dates: NOFO Issue Date: January 12, 2021
Question Deadline: February 23, 2021, at 11:59 p.m. ET
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MISSION

The mission of the U.S. Department of Transportation (DOT or Department) is to ensure our Nation has the safest, most efficient and modern transportation system in the world. DOT's Pipeline and Hazardous Materials Safety Administration (PHMSA) protects people and the environment by advancing the safe transportation of energy and other hazardous materials that are essential to our daily lives. To do this, the agency establishes national policy, sets and enforces standards, educates, and conducts research to prevent incidents. We also prepare the public and first responders to reduce consequences if an incident does occur. To accomplish this, PHMSA awards grants to States, tribes, territories, localities, communities, and nonprofits that help make sure pipelines operate safely and shipments arrive without incident.

SECTION A – PROGRAM DESCRIPTION

Section A.01: Statement of Purpose

PHMSA hereby requests applications from nonprofit institutions of higher education for Competitive Academic Agreement Program (CAAP) grant funding to research innovative solutions in three pipeline safety topic areas. CAAP grant funding is subject to the availability of appropriations. PHMSA anticipates awarding up to \$2,000,000 under CAAP in FY 2021, with Federal funding not to exceed \$1,000,000 per award. The research to be conducted under CAAP agreements will pursue a set of solutions for known pipeline integrity challenges. PHMSA anticipates the period of performance of each award will be no less than 24 months and will not exceed 36 months.

A strong transportation network is critical to the functioning and growth of the American economy. The Nation's industry depends on the transportation network to move the goods that it produces and facilitate the movements of the workers who are responsible for that production. When the Nation's highways, railways, and ports function well, they connect people to jobs, increase the efficiency of delivering goods and thereby cut the costs of doing business, reduce the burden of commuting, and improve overall wellbeing.

Rural transportation networks play a vital role in supporting our national economic vitality. Addressing the deteriorating conditions and disproportionately high fatality rates in our rural transportation infrastructure is of critical interest to the Department, as rural transportation networks face unique challenges regarding safety, infrastructure condition, and passenger and freight usage. Consistent with the Rural Opportunities to Use Transportation for Economic Success (ROUTES) Initiative, the Department encourages applicants to consider how a project will address the challenges faced by rural areas in advancing pipeline safety by utilizing university research to address safety gaps.

Section A.02: Program Authority

PHMSA's Pipeline Safety Research and Development (R&D) Program is authorized pursuant to Section 12 of the Pipeline Safety Improvement Act of 2002 (Public Law 107-

355) to ensure the integrity of pipeline facilities. The authority to offer grants and enter into cooperative agreements in furtherance of the objectives of 49 U.S.C. § 60101, et seq., is codified in 49 U.S.C. § 60117(k).

Section A.03-1: Background on PHMSA’s Pipeline R&D Program

The pipeline infrastructure in the U.S. is the primary means of transporting natural gas and the majority of hazardous liquids from production basins and ports to areas of consumption. The importance of energy pipelines to the U.S. economy and our standard of living—as well as the risk it poses to health, safety, and the environment—requires that these assets be maintained safely and reliably and expanded appropriately to meet our energy demands.

R&D must play a larger role in finding solutions to national, regional, and local pipeline operational safety, reliability, and environmental challenges. Some of these challenges include ensuring operators have the most suitable technology to efficiently and effectively meet or exceed Federal and State regulatory requirements regarding the safety and integrity of pipelines. Other challenges include keeping critical industry consensus standards updated with the latest scientific information and knowledge to be effective and relevant to their purpose of supporting the safe design, construction, operation, maintenance, and repair of pipelines.

The PHMSA R&D enterprise continues to have an impact on developing technology, strengthening consensus standards, and creating and promoting general knowledge to decision makers. More performance details are available on PHMSA's Pipeline Safety Research website: <http://primis.phmsa.dot.gov/rd/performance.htm>.

Section A.03-2: Background on the CAAP Initiative

Section 12 of the Pipeline Safety Improvement Act of 2002 (Pub. L. No. 107-355) mandates that DOT and other designated Federal agencies must “carry out a program of research, development, demonstration and standardization to ensure the integrity of pipeline facilities.” Specifically, PHMSA’s Pipeline Safety R&D Program’s mission is to sponsor R&D projects focused on providing near-term solutions that will improve the safety, reduce the environmental impact, and enhance the reliability of the Nation’s pipeline transportation system. The goals and objectives of the CAAP initiative, as discussed below, directly support both this mission and the congressional mandate.

The CAAP initiative is intended to spur innovation by enabling academic research focused on high technical risk and high payoff solutions for many pipeline safety challenges. Such research will potentially deliver solutions that can be handed off to PHMSA’s Core¹ research program for demonstration and deployment. The goal is to validate proof of concept for a thesis or theory along a logical path towards commercialization.

Another goal of the CAAP initiative is to expose undergraduate and graduate research

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

students to subject matter that is common to pipeline safety challenges, encourage them to participate in these subjects, and illustrate how their engineering or technical disciplines are highly needed in the pipeline field. The ultimate benefit would be to cultivate new talent in all aspects of the pipeline industry.

Section A.03-3: CAAP Performance Goals and Expected Outcomes

PHMSA's Pipeline Safety R&D Program is requesting projects through the Pipeline Safety Research Competitive Agreement Program (CAAP – CFDA Number 20.724) that will seek to advance its mission through well researched solutions to known integrity threats. PHMSA will make awards to projects that have clear objectives and foster increased talent in all aspects of pipelining. Section A.04 outlines the performance goals PHMSA has put forth for 2021 CAAP awards.

Program staff will collect data on ongoing projects as outlined by Section F.03 to ensure projects are on track to meet PHMSA's expectation. PHMSA staff will review data collected for indicators of variances from expect project outcomes. Furthermore, PHMSA staff will also track the number of positions sought by CAAP participants in pipeline engineering position.

Section A.04: Research Topics

PHMSA is soliciting proposals in three primary R&D focus areas based on the research gaps identified during PHMSA Research Forum held on February 19-20, 2020. PHMSA seeks proposals that focus on research addressing shared interests of academic researchers and pipeline operators regarding pipeline safety technology topics, with the goal of commercialization.

The research objectives will establish solid scientific and engineering foundations on technology development towards the commercialization effort to promote pipeline safety. Researchers will be expected to include the pipeline industry in their work to ensure that the research is relevant and commercially viable. It is encouraged the faculties with different academic backgrounds and expertise to collaborate between universities, and interact with one or more industrial partners to define the research objectives and form virtual industry-university groups to allow the undergraduate/graduate students to participate in the subjects that are critical and highly needed in the pipeline industry.

PHMSA will only consider proposals that address technical gaps within the onshore pipeline safety program areas listed in this NOFO. Proposals submitted that are outside of the identified program areas listed below, will not be reviewed or considered. The focus areas are intentionally ambitious and broad enough to allow for the acceptance of a wide spectrum of specific proposals that strategically support PHMSA's mission of pipeline safety.

Each application must address only one of the following primary pipeline safety program areas per proposal submission. Applicants may submit multiple proposals. PHMSA

intends to make one or more awards for each of the focus topic areas.

Research Area #1: Remote Monitoring Technology

Significant advances in remote monitoring systems have been made in the past several years; from the proliferation of Unmanned Aerial Systems (UASs) across a wide array of industries to greater availability of satellite monitoring data. Several pipeline operators are perusing the utilizations of UAS systems to enhance their pipeline safety programs. While the systems are more widely available and affordable, it is crucial to have remote monitoring solutions that produce trusted outputs for utilization in pipeline integrity management programs (such as those required by 49 CFR Part 192 Subpart O – Gas Transmission Pipeline Integrity Management and 49 CFR Part 195.452-Pipeline Integrity Management in High Consequence Areas). Effective remote monitoring technology by the pipeline industry will enhance pipeline safety by more frequently monitoring pipeline integrity with limited human capital investments.

PHMSA is seeking solutions that would utilize remote monitoring technology to effectively monitor pipeline integrity. The solutions should consider the utilization of various remote monitoring technologies to include, but not limited to UAS inspections and Supervisory Control and Data Acquisition Systems/Operational Technology network connected integrity monitoring systems of unpiggable pipelines, such as vibration monitoring, Interferometric Synthetic Aperture Radar (InSAR) monitoring, etc. to assist pipeline operators in determining potential threats to pipeline integrity. Proposed solutions should have a high degree of probability to detect threats that pose a risk to pipeline safety.

Research Area #2: Artificial Intelligence-Automation Solutions

The working group at the PHMSA 2019 Forum on Automated Solutions for Integrity Management Challenges identified a gap in the development of probabilistic models utilizing Artificial Intelligence (AI) tools. Significant advances have been made in the AI field during the last several years, and there is increasing interest in utilizing AI tools to advance pipeline safety. AI tools can be utilized in pipeline operator's integrity management plans when calculating risks and identifying threats. To more accurately and efficiently calculate risks, pipeline operators can include AI tools across the input, processing, and data output stage of the calculation.

AI tools can assist pipeline operators to greatly reduce manual entry errors of current and historical pipeline and inspection records beyond those available through conventional Optical Character Recognition (OCR) systems. Furthermore, AI systems can be utilized to draw connections between a wide array of non-homogenous pipeline safety data sets utilizing machine learning provided the system is programmed with a framework that outlines correlations and relationships. Ultimately the goal of the AI tools would be to produce outputs that would identify threats and a prioritization (near and long term) of those threats to support the decision making for pipeline operators' integrity management programs.

PHMSA is seeking solutions that would utilize automation to increase the efficiency of predictive models implemented by pipeline operators in their effort to optimize their maintenance/inspection program. The solutions should focus on one or more areas of the predictive modeling process to include data collection, data processing, and decision-making outputs. In order to improve data collection efficiency and ensure data quality, current data collection programs may entail a paradigm shift from manual entry of pipeline integrity inspection results, blueprints, and other historical records to the utilization of automated data entry technologies. Proposed solutions should consider the latest advances in AI/machine learning to develop more substantive outcomes for utilization in the pipeline operator's safety programs.

Research Area #3: Underground Natural Gas Storage (UNGS) Leak Identification and Well Control Solutions

PHMSA recognizes the criticality of UNGS systems to the Nation's energy infrastructure and is statutorily charged with ensuring the safe operation of these facilities. PHMSA is interested in research to improve safety in the full life cycle of UNGS facilities to include emergency response.

PHMSA is seeking solutions to aid UNGS facilities in identifying leaks and controlling well blow-outs /rupture failures and to fill this gap both in technology and in design for natural gas storage wells. The research should offer solutions to identify leaks and control well blow-outs within a short time span, thereby limiting the risk to public safety and the environment. The well control methods should however not impact the continued viability of the storage facility.

SECTION B – FEDERAL AWARD INFORMATION

Section B.01: Funding

Subject to the availability of funds, PHMSA anticipates awarding up to \$2,000,000 in CAAP funding for FY 2021, with the amount of Federal funding not to exceed \$1,000,000 per award. Applicants may submit more than one application, but each individual application must not exceed \$1,000,000 in Federal funding requested.

Section B.02: Period of Performance

PHMSA anticipates a period of performance of generally between 24 months and 36 months from the date of award for each agreement. Modifications within the scope of the cooperative agreement will be handled between the parties on a case-by-case basis.

Section B.03: Type of Award

All awards resulting from this announcement will be issued as cooperative agreements. For the purposes of the cooperative agreement, PHMSA's substantial involvement may include assistance with the pipeline industry practices, history, data, methods, means, or requirements. PHMSA will be involved to advise, educate, coordinate efforts to acquire relevant materials—such as pipe samples—for testing, and provide data and suggestions

to aid in the successful completion of the research project. Further, while the collegiate institutions are not likely familiar with pipeline industry companies, trade associations, or principle contacts, PHMSA will be involved to advise and offer collaborative communication with key pipeline contacts to aid in the successful completion of the research project.

SECTION C – ELIGIBILITY INFORMATION

Section C.01: Eligible Applicants

Applicants must be nonprofit institutions of higher education located either in the U.S. or a U.S. territory or possession. PHMSA encourages applications from eligible higher education institutions that partner with other higher education institutions. PHMSA will also consider an application from an eligible higher education institution that partners with other eligible recipients, the pipeline industry, and/or with any private organization, so long as the cost of the proposed partnership does not exceed 40 percent of the proposed amount of Federal contribution to the project (which may be up to \$1,000,000).

Historically Black Colleges and Universities and Minority Institutions are encouraged to submit applications on their own and/or in collaboration with others. However, no portion of this requirement will be set aside or reserved exclusively for either of these groups. Applicants should state whether the project is located in a Qualified Opportunity Zone per 26 U.S.C. § 1400Z-1.

Section C.02: Cost Sharing

Pursuant to § 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 will fund no more than 80 percent of the total cost of each approved project, up to \$1,000,000. Firm letters of commitment for resource sharing must be provided with the proposal. Proposals without resource-sharing commitment letters will not be reviewed or considered for an award. See Section D.02 for additional information regarding budget/cost proposals.

Section C.03: Minimum Requirements

The following are minimum requirements that all applicants must meet to be considered. Failure to meet these requirements at any time—whether pre- or post-award—will result in either removal of the application from further consideration or termination of the agreement. The application must include a letter on the submitting institution’s letterhead that certifies these minimum requirements are understood and will be met. The letter must be signed by the Dean or an authority of an equivalent level for that college, department, or program and must then be inserted as Appendix A for the technical application (the first page of the Appendix).

1. Eligible applicants are nonprofit institutions of higher education located in the U.S. or a U.S. territory or possession.
2. The academic research agreement will be with the institution and not with individual students, faculty, or staff.

3. The research scope must be executed by undergraduate, graduate, and/or PhD research students. Institution faculty/staff should design the scope and oversee student execution of the scope. *Applications that do not propose 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 period of performance.* Institution faculty, staff, and students who are proposed to be involved with the research agreement must be U.S. citizens, permanent residents, or possess current visas that will allow them to remain in the country long enough to complete the research project. If known, provide the proposed student's resume, curriculum vitae, or biography. Federal funding is solely for allowable costs necessary to execute the scope of the research, such as institution overhead, the procurement of expendables, and any required labor. Purchasing new or existing testing equipment with Federal funds will be permitted. Also, Federal funding cannot be used towards the construction of new facilities or the refurbishing of existing facilities.
4. Applications must meet the cost-sharing requirements stipulated in Section C.02; failure to meet the required 20 percent cost-sharing threshold will result in an application being removed from consideration.

SECTION D – APPLICATION AND SUBMISSION INFORMATION

Failure to comply with the requirements described in this section shall result in an application not being approved. Further, please note that PHMSA's agreement officers and grant specialists may request additional information pertaining to your application during the application review/evaluation process in order to comply with the DOT's Guide to Financial Assistance and the requirements of 2 CFR Part 200, Subpart E.

Section D.01: Address to Request an Application Package

PHMSA requires applicants for this funding opportunity to apply electronically through Grants.gov. Applicants must download the application package associated with this funding opportunity by following the directions provided at Grants.gov. To request a hard copy of the application package, please contact:

Ben Patterson
 Agreement Officer
 Acquisition Services Division
 The Pipeline and Hazardous Materials Safety Administration
 1200 New Jersey Avenue SE, E22-305
 Washington, DC 20590
 Phone: (202) 366-5102
 Email: Ben.Patterson@dot.gov

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

Section D.02: Content and Form of Application Submission

Consistent with the Department's ROUTES Initiative, (<https://www.transportation.gov/rural>), the Department encourages applicants to describe how activities proposed in their application would address the unique challenges facing rural transportation networks, regardless of the geographic location of those activities. Applicants are required to submit their complete applications through Grants.gov. To submit an application, applicants must be registered at [Grants.gov](https://www.grants.gov); new users must register for an account. **Please note that new user registrations for Grants.gov can take up to two weeks to complete.** For additional questions on how to register, contact Grants.gov support.

Additionally, applicants must register for an account with FedConnect at: <https://www.fedconnect.net> before submitting an application. Your organization's Marketing Partner ID number, which can be retrieved from SAM (www.SAM.gov), is required to create an account. For instructions on how to register with FedConnect and how to use the portal, view the *FedConnect: Ready, Set, Go! Tutorial* under the *Need Help?* section of the FedConnect home page.

Technical Proposal

In preparing their technical proposal, applicants must use the technical application template attached to this opportunity, which includes instructions regarding required content and information (Attachment A). Applicants must only apply for funding that can reasonably be spent within the proposed period of performance.

Technical application requirements are summarized below and described in detail in the provided template. Failure to follow these requirements shall result in the removal of an application from consideration.

1. All information supporting the evaluation criteria must be 20 pages or less, which does not include the Cover Page, the Technical Application Information Page, or the Appendix.
2. The Certification Letter of Minimum Requirements must be the first page in the Appendix.
3. The Appendix may include additional information; however, this information will not be used by reviewers in evaluating the proposal (except to determine that each applicant has submitted a certification letter regarding minimum requirements; ref: Section C.03).
4. All documents must be formatted as follows: Times New Roman 12-point font and 1.15 line and paragraph spacing for the body of the text.
5. Technical proposals in the format prescribed by Attachment A must be uploaded to the Project Narrative section of the Grants.gov application.

Budget/Cost Proposal and Budget Narrative

Applicants must use Standard Form 424A to submit their budget/cost proposal through 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 Subparagraphs A through H, below, 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. Budget Narratives must address the following items:

1. **Personnel:** List individually all personnel and include for each the requested hours to be funded and the respective compensation rates (salary/wages and fringe benefits).
2. **Fringe Benefits:** Applicants must provide a copy of or a web link to the university's policy stating the appropriate fringe rates for each labor classification.
3. **Travel:** Proposed travel must be directly related to the performance of the project. In the Budget Narrative, state the reason(s) for travel, the type and duration of the travel, and its relation to the project. Additionally, recipients may anticipate travel requested by PHMSA to present their findings up to once each 12 months of the project. Provide an itemized list of associated travel costs.
4. **Supplies:** Provide an itemized list of proposed supplies. Include individual costs for each item exceeding \$5,000 and the basis of estimating the cost (e.g., vendor quotes, catalog prices, prior invoices, etc.).
5. **Equipment:** Provide an itemized list of proposed equipment. Include individual costs for each item and the basis of estimating the cost (e.g., vendor quotes, catalog prices, prior invoices, etc.).
6. **Contractual (Consultants/Subcontractors):** List the names of consultants and describe the activities to be performed, the duration of the service, and the compensation involved. Provide the hourly or daily rate along with the basis of the rate. Furnish resumes or similar information regarding qualifications and experience. Provide at least two invoices reflecting hourly or daily rates charged to customers other than the Federal Government. You must provide a statement signed by the consultant certifying his or her availability and salary. If travel or incidental expenses are to be charged, give the basis for these costs. For proposed subcontractors, provide their total cost per year. Detailed subcontractor costs should appear in the subcontractor's budget explanation. The total cost of consultants and/or subcontractors must not exceed 40 percent of the proposed Federal contribution to the project. Contractual agreements must comply with the procurement standards in 2 CFR §§ 200.317-300.326.
7. **Other Direct Costs:** Provide an itemized list with associated costs for any other item proposed as a direct cost that is not included in another category. State the

basis for each proposed item.

8. Indirect Charges: Provide a copy of or a web link to the university's negotiated indirect rate agreement. Explain or demonstrate how the total indirect charges were calculated.
9. Resource Sharing, In-house Contributions: Cost/budget proposals must show the breakout between Federal and non-Federal funding sources, and the Budget Narrative must explain what the non-Federal sources are comprised of and how the associated values were derived. Non-Federal contributions may include cash, personnel, equipment, donated goods or services (provided that the market value of the good or service is substantiated by a letter or other form of evidence from the provider of the good or service), and other resources. All resource-sharing or matching contributions, including cash and third-party contributions, must meet the criteria in 2 CFR § 200.306: Cost Sharing or Matching. These criteria state that viable resource-sharing or matching contributions:
 - a. Are verifiable from the non-Federal entity's records;
 - b. Are not included as contributions for any other Federal award;
 - c. Are necessary and reasonable for accomplishment of project or program objectives;
 - d. Are allowable under Subpart E – Cost Principles of this part;
 - e. Are not paid by the Federal government under another Federal award, except where the Federal statute authorizing a program specifically provides that Federal funds made available for such a program can be applied to matching or cost-sharing requirements of other Federal programs;
 - f. Are provided for in the approved budget (when required by the Federal awarding agency); and
 - g. Conform to other provisions of this part, as applicable.

Standard Title VI/Nondiscrimination Assurances

Applicants must sign, date, and return with their application the Standard Title VI/Non-Discrimination Assurances specified in Attachment B: Standard Title VI/Non-Discrimination Assurances. Specifically, applicants must complete and return Attachment B. The completed documents should be submitted as an attachment with the other application materials.

Lobbying

Funds may not be used in direct support of litigation, lobbying, for direct advocacy for or against a pipeline construction or expansion project or other pipeline policy matters, or for activities associated with regulatory compliance or typical operations and maintenance of pipeline facilities. To be considered for award, each application must include a signed Standard Form of Disclosure of Lobbying Activities.

Unmanned Aerial Systems

Unmanned Aerial Systems (UAS) purchased or acquired for usage in proposed research project must be designed and constructed in the United States. UASs may not be designed, developed, manufactured, or supplied by persons owned by, controlled by, or subject to the jurisdiction or direction of foreign governments.

Section D.03: Unique Entity Identifier (Dun and Bradstreet Universal Numbering System (DUNS) Number) and System for Award Management (SAM)

Each applicant is required to be registered in SAM before submitting an application, provide a valid DUNS number in its application, and continue to maintain an active SAM registration with current information at all times during which it has an active Federal award or an application under consideration by PHMSA. PHMSA may not make a grant award to an applicant until the applicant has complied with all applicable DUNS and SAM requirements and, if an applicant has not fully complied with all applicable DUNS and SAM requirements by the time that PHMSA is ready to make a grant award, PHMSA may determine that the applicant is not qualified to receive an award and use that determination as a basis for making an award to another applicant. PHMSA will review an applicant's SAM registration status to make a responsibility determination.

Section D.04: Submission Dates and Times

Complete applications must be received electronically via Grants.gov by **11:59 p.m. ET on March 15, 2021**. No late proposals will be considered for evaluation. Applicants will receive an automated receipt from Grants.gov of the date and time of application submission.

Section D.05: Funding Restrictions

Construction is not an allowable activity under this announcement. PHMSA will not allow reimbursement of pre-Federal award costs.

Section D.06 Other Submission Requirements

PHMSA requires applicants for this funding opportunity to apply electronically through Grants.gov. Applicants may contact the following POC in the event of system problems:

Ben Patterson
 Agreement Officer
 Acquisition Services Division
 The Pipeline and Hazardous Materials Safety Administration
 1200 New Jersey Avenue SE, E22-305
 Washington, DC 20590
 Phone: (202) 366-5102
 Email: Ben.Patterson@dot.gov

SECTION E – APPLICATION REVIEW INFORMATION

PHMSA will evaluate applications through administrative, technical, and programmatic reviews based on the evaluation criteria. Consistent with the DOT’s ROUTES Initiative, (<https://www.transportation.gov/rural>), the Department recognizes that rural transportation networks face unique challenges. To the extent that those challenges are reflected in the merit criteria listed in this section, the Department will consider how the activities proposed in the application will address those challenges, regardless of the geographic location of those activities.

Section E.01: Criteria

PHMSA developed evaluation criteria to rate and select competing applications. Submission of an application is not a guarantee of award. PHMSA may, at its discretion, award a grant based on an application in its entirety, award only portions of a grant based on its application, or not award a grant at all. Applications will be evaluated against the following evaluation criteria:

1. The extent to which the applicant’s proposal meets the research topic area needs;
2. The extent to which the applicant’s proposed research topic solution can be readily implemented;
3. The extent to which the applicant’s proposal identifies research partnership(s) and subject matter expert involvement, as well as how involved the identified partner(s) will be in the project;
4. The extent to which the applicant’s proposal clearly establishes 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. The extent to which the applicant’s proposed plan involves students and defines their specific tasks and commitment to the project; and
6. Whether the location of the project(s) is a Qualified Opportunity Zone designated pursuant to 26 U.S.C. § 1400Z-1.

These criteria are intended to identify projects that target high technical risk areas, offer well-defined plans, and produce results that are measurable and transferable to further investigations in CAAP or PHMSA’s Core research program. In addition, PHMSA expects the proposed results of the projects to be factual, unbiased, verifiable, and repeatable, to the extent practicable. Applicants should be aware that a grant award will not convey any authority to grant recipients to secure information or cooperation from pipeline operators.

The Department will review and consider applications for funding pursuant to this Notice in accordance with the President’s September 2, 2020 memorandum, entitled *Memorandum on Reviewing Funding to State and Local Government Recipients of Federal Funds that Are Permitting Anarchy, Violence, and Destruction in American Cities*, consistent with guidance from the Office of Management and Budget and the Attorney General and with all applicable laws.

Section E.02: Review and Selection Process

Administrative Review

PHMSA will conduct an administrative review to ensure the application meets the eligibility criteria outlined in Section C: Eligibility Information. Each application will be reviewed for completeness to ensure it includes all the required elements to qualify for the grant. If the application does not meet the required elements, the application will likely be rejected.

Technical Review

PHMSA will conduct a technical review of the application to assess how the proposed work is to be performed and whether the application is responsive to the applicable program requirements, such as performance measurement, methodology, and technical merit. PHMSA reserves the right to use outside expertise to perform application evaluation.

Programmatic Review

PHMSA will conduct a programmatic review to assess the programmatic factors outlined in section E.01, which are relevant and essential to the process of selecting applications that best achieve the program objectives, in accordance with applicable statutes, regulations, policies, and guidelines. Other programmatic factors may include history of performance, program priorities, and other modal needs, such as rural areas and Qualified Opportunity Zones.

Based on the results from each review, each application will receive one of the following overall ratings:

Rating Guidelines
<p>Highly Recommended: The application demonstrates that the NOFO requirements are very well understood and the approach will likely result in extremely high-quality performance. The application clearly addresses and exceeds requirements with no weaknesses. The application contains outstanding features that meet or exceed the expectations of the Federal Government on multiple dimensions. The application scope aligns very well with DOT objectives and priorities. The risk of poor performance is extremely low.</p>
<p>Recommended: The application demonstrates that the NOFO requirements are understood and the approach will likely result in satisfactory performance. The application addresses and meets requirements with some minor but correctable weaknesses. The application demonstrates requisite experience, qualifications, and performance capabilities. The application scope aligns with DOT objectives and priorities. The risk of poor performance is low.</p>

Rating Guidelines
<p>Acceptable: The application demonstrates that the NOFO requirements are mostly understood and the approach will likely result in satisfactory performance for part of the requirements. The applicant addresses some of the requirements, with some weaknesses. The applicant demonstrates some experience, qualifications, and/or performance capabilities. The application partially aligns with DOT objectives and priorities. The risk of poor performance is moderate.</p>
<p>Not Acceptable: The application does not meet the NOFO requirements. The application fails to address many requirements. The applicant may be ineligible to apply for the grant. The application could not satisfy critical requirements without a major revision and/or a rewrite of the application or a major redirection effort. The application scope does not align with DOT objectives and priorities. The risk of poor performance is high.</p>

Selection Process

Final award recommendations will be made by the PHMSA Administrator after taking into consideration recommendations made during the administrative, technical, and programmatic review and how well the applications address PHMSA's safety priorities. The Secretary of Transportation will make final award recommendations.

Applicants must maintain an active registration in the System for Award Management (SAM) at www.SAM.gov. The SAM registration number will be utilized by PHMSA to confirm the applicant in the FAPIIS system.

SECTION F – FEDERAL AWARD ADMINISTRATION INFORMATION

Section F.01: Federal Award Notices

Following the selection process, PHMSA will contact the selected applicants via email indicating that they have been selected for award. This email will include the financial assistance award, which will incorporate the terms and conditions included in Attachment C to this notice and will require bilateral signatures to be fully executed. PHMSA anticipates awarding the agreements during the fourth quarter of FY 2021.

Section F.02: 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 Title VI of the Civil Rights Act of 1964, which provides that no person in the U.S. shall, on the grounds of race, color, or national origin, be excluded from participation in, be denied benefits of, or be subject to discrimination under any program or activity receiving Federal financial assistance.
4. The recipient must comply with 49 CFR Part 21: Nondiscrimination in Federally-assisted Programs of the Department of Transportation—Effectuation of Title VI of the Civil Rights Act of 1964. 49 CFR Part 21 will be incorporated by reference into any award under this program. 49 CFR Part 21 is available at: www.gpoaccess.gov/ecfr/ by clicking on Title 49 CFR Part 21.
5. 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.

Section F.03: Reporting

The following reporting and presentation obligations will apply to each award recipient:

1. Kickoff Meeting will be held at the beginning of the research project;
2. Annual Performance Progress Reports (format/content in accordance with Standard Form for Research Performance Progress Reports) must be submitted via email and uploaded to PHMSA's R&D database MIS no later than 30 days after reporting period ends*;
3. Quarterly Progress Reports must be submitted via email and uploaded to the MIS no later than 30 days after reporting period ends*;
4. Research Project Poster must be presented at designated government and/or public event up to one time per year; travel may be necessary;
5. Final Research Report must be submitted via email and uploaded to MIS no later than 90 days prior to agreement expiration. The report will be updated based on and PHMSA comments and resubmitted;
6. Closing Presentation must be delivered to PHMSA designated audience (typically web based) no later than 30 days prior to agreement expiration; and
7. Annual Federal Financial Reports (SF-425) must be submitted via email and uploaded to MIS within 90 days after the reporting period ends.

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

SECTION G – AGENCY CONTACT INFORMATION

All questions related to the content of this funding opportunity MUST be submitted via the Message Center on FedConnect. Please do not send questions via email.

For technical issues or questions related to FedConnect only, please email fcsupport@unisonglobal.com. An applicant can submit questions through the portal on their website or call 1 (800) 899-6665 and select Option 2.

Agreement-related Questions

Ben Patterson

Agreement Officer

The Pipeline and Hazardous Materials Safety Administration

Acquisition Services Division (PHF-20)

Phone: 1 (202) 366-5102

Email: ben.patterson@dot.gov

For technical issues or questions related to Grants.gov only, please email support@grants.gov or call 1 (800) 518-4726.