BROAD AGENCY ANNOUNCEMENT

Federal Highway Administration
Office of Technical Services

Accelerating Market Readiness Program 2024

October 29, 2024

1 INTRODUCTION AND OVERVIEW

The Federal Highway Administration's (FHWA) Office of Technical Services (OTS), Accelerating Market Readiness (AMR) Program is announcing its intent to solicit white papers and proposals under this Broad Agency Announcement (BAA). This BAA is developed in accordance with FAR 6.102(d)(2) and FAR 35.016. This BAA involves the use of a 5-year Open BAA to quickly and efficiently deliver projects that help accelerate market readiness to deliver practical solutions to high priority problems. This strategy will provide FHWA an acquisition tool with the flexibility to solicit white papers and proposals and make awards to meet present and compelling needs.

White papers and proposals will only be solicited and accepted during individual calls. Calls for white papers and proposals will occur periodically throughout the life of the BAA. Each call will: (1) identify specific topic areas; (2) identify any changes to the standard evaluation criteria or white paper and/or proposal preparation instructions, and (3) contain cutoff dates for submissions.

This BAA is an expression of interest only and does not commit the Government to pay any proposal preparation costs. All responsible sources capable of satisfying the Government's needs may submit a proposal. The Government reserves the right to award either contracts, assistance agreements, or other instruments determined to be of benefit to the Government in achieving the goals of this program.

1.1 Background

Successfully integrating new innovations into widespread use can take many years, often due to the gap between research and practice when a technology has been proven but is not yet ready for the marketplace. The Federal Highway Administration's AMR program advances transformative innovations by funding testing and field evaluations, pilot demonstration projects, and documentation and dissemination of performance results to widen the knowledge base on the innovations. The goal is to move innovations into the marketplace that offer significant improvement over similar, currently available innovations or practices to accelerate project delivery. The AMR program helps move promising highway industry innovations from prototype to market. The AMR program supports key U.S. Department of Transportation and FHWA goals in safety, accelerated project delivery, and infrastructure performance. AMR addresses specific technology and knowledge gaps to reduce transportation-related fatalities and serious injuries, shorten project delivery timeframes, reduce project life cycle costs, and optimize the operation and performance of existing transportation facilities.

The AMR program is intended to spur the advancement of emerging and transformative innovations and technologies in the transportation industry. The AMR program seeks to identify innovations and technologies from the transportation community and propel the advancement of these innovations into the marketplace by having interested transportation organizations evaluate the innovations by conducting field experiments or tests to increase understanding of the innovations' potential benefits, and objectively document the findings to widen the knowledge base on the innovations.

The innovations and technologies to be supported by AMR program resources are those that:

- significantly advance conventional practice;
- address knowledge and technological gaps;
- significantly advance the state-of-the-art; or
- constitute a sea change in the development and delivery of transportation projects and programs.

For the purposes of this BAA, innovation means that part of development that succeeds basic and applied research, that is not related to the development of a specific system or hardware. Innovation is for "scientific study and experimentation directed toward advancing the state-of-the-art or increasing knowledge or understanding rather than focusing on a specific system or hardware solution." The AMR program is not intended to serve as resource to initiate or continue ongoing basic research activities, or to support the development of a specific system or hardware innovation or technology. The purpose of AMR is to increase understanding on the readiness of innovations or technologies as they emerge from the research activities and document what is necessary to bring them to a more market-ready status.

FHWA anticipates that by providing resources to foster innovations and technologies to the deeper level of market readiness, the AMR program will create more strategic linkages between the research community and the transportation field practitioner as well as identify future needs for research and development activities.

The AMR program also serves to advance the goals of the existing Cooperative Agreement between the FHWA Center for Accelerating Innovation and the American Association of State Highway Transportation Officials (AASHTO) Innovation Management (AIM) by identifying the market readiness of potentially transformative innovations and conducting the steps necessary to get the innovation ready for national deployment. The FHWA-AIM collaboration provides an additional opportunity to use existing technology deployment programs and resources to more effectively address the challenge of accelerating market readiness and making the findings of technology deployment efforts more readily available to decision-makers. This BAA will potentially identify AASHTO members interested in testing and evaluating the AMR innovations. For additional information on the AASHTO AIM please visit: https://transportation.org/innovation-management/

The primary purpose of this BAA is to solicit a variety of solutions that will support the strategic objectives of the AMR program The AMR program will provide resources for the rapid, national assessment of emerging innovations and for the development of objective-written documentation of these assessments. These activities are intended to help advance the innovations to a more complete market-ready status, which in turn should accelerate the adoption of the innovations by transportation agencies. Projects shall develop next generation technologies and solutions that address FHWA current strategic goals and objectives.

1.1 Legislative Authority

23 U.S. Code § 503(c) of the United States Code establishes the Technology and Innovation Deployment Program (TIDP), which includes four initiatives:

- accelerated innovation deployment (AID);
- implementation of future strategic highway research program (SHRP2) findings and results;
- accelerated implementation and deployment of pavement technologies; and
- advanced transportation innovation deployment.

TIDP relates to all aspects of highway transportation, including planning, financing, operation, structures, materials, pavements, environment, construction, and the duration of time between project planning and project delivery. Existing programs under TIDP, such as Every Day Counts (EDC), enable FHWA to identify for accelerated deployment fully market-ready, proven but underutilized innovations relating to the aspects described above to shorten the project delivery process, enhance roadway safety, reduce congestion and improve environmental sustainability. Numerous other innovations exist that have not yet been advanced to the fullest level of readiness for adoption by transportation agencies.

The authority to implement this Accelerating Market Readiness (AMR) program under TIDP falls under 23 U.S. Code § 503 (c)(2)(B) which commands the Secretary to, among other things, "develop improved tools and methods to accelerate the adoption of proven innovative practices and technologies as standard practices." Additionally, the authority to administer the AMR is found under 23 U.S. Code § 503 (c)(1) which commands the Secretary to:

> *[. . .] carry out a technology and innovation deployment program relating to all aspects of highway transportation, including planning, financing, operation, structures, materials, pavements, environment, construction, and the duration of time between project planning and project delivery, with the goals of—*
>
> *(A) significantly accelerating the adoption of innovative technologies by the surface transportation community;*
>
> *(B) providing leadership and incentives to demonstrate and promote state-of-the-art technologies, elevated performance standards, and new business practices in highway construction processes that result in improved safety, faster construction, reduced congestion from construction, and improved quality and user satisfaction;*
>
> *(C) constructing longer-lasting highways through the use of innovative technologies and practices that lead to faster construction of efficient and safe highways and bridges;*
>
> *(D) improving highway efficiency, safety, mobility, reliability, service life, environmental protection, and sustainability; and*
>
> *(E) developing and deploying new tools, techniques, and practices to accelerate the adoption of innovation in all aspects of highway transportation.*

1.2 Purpose

The purpose of this BAA is to solicit a variety of solutions that will support the strategic objectives of the AMR program The AMR program will provide resources for the rapid, national assessment of emerging innovations and for the development of objective-written documentation of these assessments. These activities are intended to help advance the innovations to a more complete market-ready status, which in turn should accelerate the adoption of the innovations by transportation agencies. In addition, the AMR program will:

- Provide a shared-risk environment to conduct field proof-of-concept activities for emerging innovations and technologies with the maximum potential to shorten the project delivery process, enhance roadway safety, and improve the performance of the transportation infrastructure.

- Provide sound, objective, detailed, and coordinated evaluation of the emerging innovations and technologies that are supported in the AMR program.

- Document and communicate the findings provided above throughout the transportation community to foster the advancement of the emerging innovations and technologies into more widespread adoption and practice.

FHWA's strategic goals and objectives are described in more detail in the most current FHWA Strategic Plan, https://highways.dot.gov/sites/fhwa.dot.gov/files/2023-05/FHWA_Strategic_Plan_05.25.23.pdf.

Planned research topics for this BAA are contained in Appendix C. Each call will identify the specific topics that the call is requesting white papers or proposals for. Additional research topics may be added as amendments to this BAA at any time during the open period of this BAA.

2 PROGRAM GUIDELINES

By participating in this BAA, the Offeror/s agrees that if selected for award, the Government's liability for any effort performed shall not exceed the payment amount of the preceding milestone for firm fixed price awards or costs incurred for cost awards. The Offeror shall propose and implement a delivery method consistent with this requirement. If it is determined that the Offeror's performance under the contract is not progressing to the satisfaction of the Government, the Government retains the right to commence a process to modify or end performance. This process will require a 60-day notice and may be used in conjunction with FAR clause 52.242-15, Stop-Work Order.

2.1 Schedule

The open period for BAA white papers and proposals will be defined in each issued call. The FHWA may modify the schedule or research topics. If such changes are made, the corresponding call will be amended. This BAA and amendments issued thereto as well as calls under this BAA will be posted to the www.SAM.gov website. It is the responsibility of the Offeror and interested parties to be aware of BAA amendments by regularly checking the website by registering to receive notifications and updates to this specific BAA.

2.2 Communications Protocol

Any exchanges of information must be consistent with procurement integrity requirements of section 27 of the Office of Federal Procurement Policy Act (41 U.S.C. 423, as amended) (see FAR 3.104). Communication between Offerors and FHWA is encouraged prior to issuing a call. After issuing a specific call, all information exchanges will be conducted through the Contracting Officer. Offerors are advised that any indication of interest, in the affirmative, is not meant to

imply nor in any way impart an obligation on the part of the Government that an award will be forthcoming for the offered work or project.

2.3 Points of Contact

All submittals shall be delivered in electronic format (Adobe PDF) to the Contracting Officer's Representative with copy to the Contract Specialist and Contracting Officer, via the e-mail addresses listed below:

Contracting Officer's Representative, Amit Armstrong	Amit.Armstrong@dot.gov
Contract Specialist, Kristen Hayes	Kristen.Hayes@dot.gov
Contract Specialist, Khadija Osman	Khadija.Osman@dot.gov
Contracting Officer, Carolyn Lethert	Carolyn.Lethert@dot.gov

2.4 Offeror Eligibility

This is an unrestricted BAA. However, this BAA is limited to US businesses only. Foreign owned businesses are not eligible for awards. Any responsible source may submit a proposal for consideration, including, but not limited to, States or local governments, or organizations of State or local governments, universities or institutions of higher education, hospitals, non-profit organizations, private individuals, corporations, and businesses or commercial organizations, except that any businesses owned in whole or in part by the Federal Government are not eligible.

Small, Small Disadvantaged (SD), Service Disabled Veteran Owned Small Business (SDVOSB), Veteran Owned Small Business (VOSB), Woman Owned Small Business (WOSB), Historically Underutilized Business Zones (HUBZones), Historically Black Colleges and Universities (HBCU), and Minority Institutions (MIs) are encouraged to submit proposal white papers on their own and/or in collaboration with others. However, no portion of this BAA will be set aside or reserved exclusively for these business concerns or institutions.

2.5 Project Qualification Requirements

This BAA solicits innovation and technology projects in response to specific topics detailed in Appendix C. The AMR program is intended to identify and steer the advancement of emerging and transformative innovations and technologies in the transportation industry. Innovation, in this sense, refers to "scientific study and experimentation directed toward advancing the state-of-the-art or increasing knowledge or understanding rather than focusing on a specific system or hardware solution." This BAA will drive such advancement by soliciting interested transportation organizations to evaluate the innovations' potential benefits through field demonstrations and assessments and objectively document the findings to widen the knowledge base on these innovations. The innovations and technologies to be supported by AMR program resources are those that:

- significantly advance conventional practice;
- address knowledge and technological gaps;
- significantly advance the state-of-the-art; or

- constitute a sea change in the development and delivery of transportation projects and programs.

However, for the purposes of this BAA, the FHWA will respond only to white paper submittals that are in direct response to the specific research topic/s #1-6, as defined in Appendix C.

This BAA will not be used to sponsor projects that develop specific products or systems for sale. FHWA will use the Technology Readiness Level (TRL) scale as a frame of reference to determine whether a technology or innovation is appropriate for the AMR program. TRLs are formal metrics that support assessments of the maturity of a technology using a set of standard questions to measure progress of a technology toward maturity. The TRL scale considers two aspects of the testing completed for a particular innovation or technology:

- How complete was the technology when it was tested? Was it a paper-and-pen concept, a system of equations, a component, a subsystem, or the complete system?
- How representative was the test environment?

In the context of the technology readiness levels (TRL) defined in Appendix F of the FHWA's Technology Readiness Level Guidebook this BAA is designed mainly for development of technology in Levels 5 or 6. However, other levels will be considered on a case by case basis.

The AMR program is intended to demonstrate and evaluate emerging and transformative innovations and technologies that are at a TRL of 5 or 6, with the goal to advance and accelerate the innovations' readiness for potential adoption by the transportation community.

The AMR program is not intended to serve as resource to initiate or continue ongoing basic research activities, or to support the development of a specific system or hardware innovation or technology. Conversely, the AMR program is also not intended to serve as a resource to further demonstrate innovations and technologies that have already been proven in their operational environment. The purpose of AMR is to increase understanding on the readiness of innovations or technologies as they emerge from the research activities and document what is necessary to bring them to a more market-ready status.

This BAA is being issued under NAICS 541330.

2.6 Program and Project Funding Limits

FHWA will determine if submittals are consistent with the objectives of this BAA and of interest to the Government, and if adequate funding exists. Awards are subject to the availability of funds.

At this time the Government anticipates three calls under this five-year open BAA. Each call is anticipated to award up to eight (8) contracts, cooperative agreements or funding allocations. No funding provision or commitment can be made at the time of award for phased or expanded work or projects beyond the initial or base phase funded at the time of award that the applicant may propose in its submissions. If appropriated funds are authorized, FHWA may, at its discretion, provide additional funding for phased or expended effort under existing awards. Awards may be

of any dollar value, but it is anticipated that most individual awards will have dollar values ranging between $300,000 and $600,000 per award.

Awards resulting from this BAA will be made based on the evaluation results of a two-phased process. The Government reserves the right to fund all, some, one, or none of the proposals submitted and may elect to fund only part of a submitted proposal. The Government also may incrementally fund any or all awards under this BAA. In either case, the Contracting Officer will have the ultimate authority and responsibility to make final scope determinations for selections of proposals that will not be totally funded to ensure the portion selected meets the solicited requirements. In addition, the Government reserves the right to create and maintain a reserve list of proposals for potential funding, if additional funding becomes available.

Offerors considered unresponsive to the Government's requests for information in a timely manner, defined as meeting government deadlines established and communicating with the request, may be removed from further consideration.

2.7 Cost Sharing

Due to the requirements of Public Law 114-94, Section 6002(a), for allocations to States , the Government requires a non-federal cost share of at least 20 percent from non-federal sources of funding (e.g., $25,000 of non-Federal source for $100,000 of Federal funding, for a total project cost of $125,000).

2.8 Project Selection Process

This BAA selection process is structured as a two-step process. The Government will utilize a phased approach for the evaluation of project white papers and proposals in response to this BAA.

2.8.1 Project White papers

The first step of the process is the submission and evaluation of project white papers. As detailed in Section 3, the project white paper provides a brief overview of the innovation effort, including the current state of development, the next steps in the development plan and rough order magnitude cost and schedule data. Project white papers will be used to gauge applicability of and the Government's interest in the technology innovation area. All Offerors must first submit a project white paper to be considered for an award.

Project white papers shall be submitted in electronic form via e-mail. FHWA will work to complete project white paper evaluations within 60 days of receipt and will notify the Offeror of final disposition. The final disposition includes the following:

- A conclusion of FHWA's evaluation of the project white paper: Acceptable or Not Acceptable.
- If the conclusion is Acceptable, an invitation to submit a formal proposal will be included. If the white paper is determined to not be acceptable, an invitation will not be extended.

Offerors may request feedback on their white papers after receipt of this notification. Additionally, feedback may be provided to Offerors along with the letter inviting an Offeror to submit a proposal.

2.8.2 Project Proposals

Following project white paper evaluation and discussion, FHWA may invite the Offeror to submit a detailed technical and cost/price proposal for award evaluation. Unless otherwise noted in the call, Offerors whose white papers are found to be Not Acceptable will not be permitted to submit a proposal. Proposals shall be prepared in accordance with the requirements of Section 4. Submissions that are incomplete, materially lacking, or not responsive to the technical requirements of this BAA may be returned unevaluated, or evaluated as is, without further opportunity for revision, at the discretion of the FHWA's evaluation committee.

2.9 Deliverable Requirements

All deliverables developed under this BAA must be compliant with Section 508 of the Rehabilitation Act and shall be improved, modified, or edited to address Government reviews and requirements and remediation. Section 508 requires that all electronic products prepared for the Federal Government be accessible to persons with disabilities, including those with vision, hearing, cognitive, and mobility impairments.

In addition to the work requirements specified in this statement of work, the Contractor shall ensure that all ICT deliverables meet the requirements of Section 508 of the Rehabilitation Act and the ICT Final Standards and Guidelines (508 Refresh) at 36 CFR Part 1194.

As defined in the 508 Refresh, at 36 CFR Part 1194, Appendix A, E103.4, ICT is "Information technology and other equipment, systems, technologies, or processes, for which the principal function is the creation, manipulation, storage, display, receipt, or transmission of electronic data and information, as well as any associated content.

Examples of ICT include but are not limited to: computers and peripheral equipment; information kiosks and transaction machines; telecommunications equipment; customer premises equipment; multifunction office machines; software; applications; Web sites; videos; and, electronic documents."

Section 508 requires that all electronic products prepared for the Federal Government be accessible to persons with disabilities, including those with vision, hearing, cognitive, and mobility impairments.

Applicable Standards:

- Appendix A to Part 1194 – Section 508 of the Rehabilitation Act: Application and Scoping Requirements
- Appendix B to Part 1194 – Section 255 of the Communications Act: Application and Scoping Requirements
- Appendix C to Part 1194 – Functional Performance Criteria and Technical Requirements

Section 508 Refresh standards are available at https://www.access-board.gov/guidelines- and-standards/communications-and-it/about-the-ict-refresh.

The Contractor shall adhere to the terms and requirements in FHWA Form 4260 Section 508 Information and Communication Technology (ICT) Conformance Criteria for Section 508 conformance (https://highways.dot.gov/sites/fhwa.dot.gov/files/form4260.pdf). The Conformance Criteria document does not need to be completed when submitting a deliverable.

2.10 Intellectual Property Rights

Awards will generally contain detailed provisions concerning patent rights, rights in technical data and computer software, data reporting requirements, and other terms and conditions which shall be negotiated as part of the award process. These terms will generally be based on FAR Part 27 and the associated contract clauses in FAR Part 52.

Offerors must describe any limitations on any intellectual property (patents, inventions, trade secrets, copyrights, or trademarks) that will impact the Offeror's performance of the contract or impact the Government's subsequent use of any deliverable under the contract. The Offeror must describe the intellectual property in sufficient detail to describe the limitations (Data assertions of the Offeror or any subcontractor, potential patent licenses required by the Government, etc.), and to describe why or how the Government can accomplish the stated objectives of this BAA with the limitations described or proposed by the Offeror. This information must be included in Volume II of the proposal. Additional information can be found in Section 4.3.4 below.

2.10.1 Patents

Offerors must list any known patents, patent applications, or inventions which may require the Government to obtain a license should the Offeror's proposal be selected for award. If any patent, patent application or invention is owned by the Offeror, the Offeror must provide a statement, in writing, that it either owns or possesses the appropriate licensing rights to patent, patent application or invention for which the Government may require a license for this program. If an Offeror does not own or have license rights to license the Government for any such patent or patent application, the Offeror must explain how the Government may obtain a license or whether the Offeror plans to obtain these rights on behalf of the Government.

For any patent or patent application listed above, the Offeror must provide the patent number or patent application publication number, a summary of the patent or invention title, and indicate whether the Offeror is the patent or invention owner. If a patent or invention is not licensed by the Offeror, identify the licensor. Be advised that no patent, patent application, or invention disclosure will be accepted if any of them are identified in the Data Rights Assertion list described in Section 2.10.2. Rights in patents, patent applications, and invention disclosures are addressed in the patent rights clause to be included in the contract and therefore, no assertion of limited rights in patents or patent applications will be accepted. The list of patents, patent applications and inventions of this section must be a separate list from the Data Rights Assertion list described below.

2.10.2 Proprietary Data Restrictions

Offerors are advised that the proposal white papers and/or proposals may contain data the Offeror does not want disclosed to the public for any purpose or used by the Government except for evaluation purposes. If the Offeror wishes to restrict such data, the cover page of all submittal documents must be marked with the following legend, and relevant sheets marked as instructed.

> *This proposal includes data that shall not be disclosed outside the Government and shall not be duplicated, used, or disclosed – in whole or in part – for any purpose other than to evaluate this proposal. However, if a contract is awarded to this Offeror as a result of – or in connection with – the submission of these data, the Government shall have the right to duplicate, use, or disclose the data to the extent provided in the resulting contract. This restriction does not limit the Government's right to use information contained in these data if they are obtained from another source without restriction. The data subject to this restriction are contained in Sheets [insert numbers or other identification of sheets].*

Each restricted data sheet shall be marked as follows:

> *Use or disclosure of data contained on this sheet is subject to the restriction on the cover page of this document.*

To the extent that such restrictions on proprietary data or information would not interfere with the intent of the Government to make the results of the work and projects awarded under the BAA available to all interested parties, and if in conformance with the Freedom of Information Act (5 U.S.C. 552, as amended), the Government will honor those preferences.

2.11 Data Rights

The Government has unlimited rights to all documents/materials produced under this BAA. All documents and materials, to include the source code of any software produced under this BAA, shall be Government owned and the property of the Government with all rights and privileges of ownership/copyright belonging exclusively to the Government unless otherwise specified in an individual contract award. These documents and materials may not be used or sold by the Contractor without written permission from the CO. All materials supplied to the Government shall be the sole property of the Government and may not be used for any other purpose. This right does not abrogate any other Government rights.

2.12 Section 889 Compliance Requirement

All contracts awarded under this BAA must be compliant with Section 899 ("Prohibition on Certain Telecommunications and Video Surveillance Services or Equipment") of Public Law 115-232, also known as the John S. McCain National Defense Authorization Act.

- FAR 52.204-24 Representation Regarding Certain Telecommunications and Video Surveillance Services or Equipment (OCT 2020)

- FAR 52.204-25 Prohibition on Contracting for Certain Telecommunications and Video Surveillance Services or Equipment (AUG 2020)

3 PROJECT WHITE PAPERS

All project white papers must respond to an innovation topic defined in each BAA call. Generally, the topics for each call will be one or more of the topics listed in Appendix C. The FHWA will not evaluate project white papers that do not respond to a listed innovation topic. In the case of multiple project proposals from a single Offeror, a separate project white paper is required for each project. Full proposals will only be accepted from Offerors who submit white papers; proposals received from Offerors who did not provide a timely white paper submission will be deemed ineligible for award.

Project white papers shall be prepared simply, economically, and shall provide a concise description of the proposed innovation deployment project, organized as defined in the following sections. Project white papers shall be no more than 6 pages in length (excluding cover page and Quad Chart), no less than 12- point font, and single-spaced, single-sided letter size pages with 1" margins (minimum). Project white paper submissions should not include promotional brochures, advertisements, taped recordings, or other extraneous material. Proposal title shall adhere to the following naming convention: "Topic #, Innovation, Proposer – FHWA AMR BAA"

3.1 Cover Page (not included in page limit)

Project white papers shall include a cover page containing the following information:

- Working title of the proposed project;
- BAA Innovation Topic title and topic reference number (i.e. Topic 1) from Appendix C;
- Names, phone numbers, mailing and e-mail addresses for the principal technical and contractual points of contact (person or persons authorized to negotiate on behalf of the Offeror and who can contractually obligate the Offeror's organization);
- Unique Entity Identifier (UEI) from SAM.gov confirming registration for your organization;
- Secondary Offeror organization (project partners) names and UEIs if any;
- Business Type (Small, Large, State, etc.);
- Federal Tax Identification Number (TIN);
- Unique Entity Identifier (UEI) from SAM.gov confirming registration for your organization. Offerors must be registered prior to submitting a proposal.
- Date of submittal; and
- Proprietary data restrictions, if any (See **Section 2.10.2**)

3.2 Technical Approach (included in page limit)

The Technical Approach white paper shall contain the answer to the following questions as detailed in the White Paper Sample Document in Appendix A:

1. What is the transportation challenge being addressed?
2. Brief description of the innovation.
3. Describe how the innovation supports one of the innovation topic areas listed in Appendix C.
4. How does the innovation produce a significant advancement to conventional practice?
5. What is the national demand for the innovation?

6. What is the current TRL for the innovation or technology? What TRL will the innovation or technology achieve after AMR activities? (with support for the answer)
7. What support has the innovation or technology received from other "research-to-practice" programs (e.g., Small Business Innovative Research (SBIR), National Cooperative Highway Research Program (NCHRP) Innovations Deserving Exploratory Analysis (IDEA), Exploratory Advanced Research (EAR))? ?
8. What funding amount is being requested from the Accelerating Market Readiness Program? Provide a preliminary and summary level cost estimate to accomplish the technical approach described; identification of required non-Federal cost share (required for proposed allocations to a State);
9. Provide a brief outline of the activities to be completed with the funds and describe how these activities will advance the market readiness of the technology. Include an estimated timeline to complete the work.
10. Provide a brief outline of the risks associated with this innovation/technology deployment in the current state of development.
11. If applicable – identify and describe any patented or proprietary items to be evaluated. Per the FHWA definition:

    Patented or Proprietary Product: A product, specification, or process identified in the plans or specifications as a "brand" or trade name. However, it may also be a product so narrowly specified that only a single provider can meet the specification. A proprietary product must meet one of the conditions listed under 23 CFR 635.411(a) or (c) for Federal funds to participate in its use on a Federal-aid highway construction project.
    For more information, please refer to the definitions section of the FHWA's Questions and Answers Regarding Title 23 CFR 635.411.

4 PROJECT PROPOSALS

Following review, evaluation, and discussion of the project white papers, the FHWA may invite the Offeror to submit a formal proposal for the project. The project proposal builds upon the contents of the project white papers, as modified through discussions between the Offeror and FHWA. Additional content and more detailed information is required in the proposal document, as described in the sections that follow.

Proposal documents are produced to the same formatting requirements as the project white papers, except for a 14-page limit. This 14-page limit is for Volume I only. Submissions that are incomplete, materially lacking, or not responsive to the technical requirements of this BAA, may be returned unevaluated, or evaluated as is, without further opportunity for revision, at the discretion of the FHWA's evaluation committee.

The proposal shall contain a Cover Page and relevant data organized into 2 Volumes:

- Volume I: Technical Proposal
- Volume II: Cost and Pricing Information

Offerors are advised that the FHWA's evaluation of a project for possible award is based solely on the contents of the Offeror's project proposal document and the Offeror's answers to any

technical clarification questions, as transmitted through the Contracting Officer. FHWA shall treat all proposals as competitive information and to disclose the contents only for the purposes of evaluation.

4.1 Cover Page (does not count towards page limit)

Project proposals shall include a cover page containing the following information:

- BAA number;
- Proposal title;
- Type of organization (State DOT, local public agency, private sector/industry, public/private sector partnership, etc.) and if your organization is or is not a small business;
- Estimated project duration;
- Type of award anticipated (allocation or contract);
- Names, phone numbers, mailing and e-mail addresses for the principal technical and contractual points of contact (person or persons authorized to negotiate on behalf of the Offeror and who can contractually obligate the Offeror's organization);
- Unique Entity Identifier (UEI) from SAM.gov confirming registration for your organization. Offerors must be registered prior to submitting a proposal.
- Secondary Offeror organization (project partners) names and UEIs if any;
- Proprietary data restrictions, if any (See **Section 2.10.2**); and
- A project abstract of no more than 200 words.

The cover page does not count against the 14-page limit on technical content for the proposal.

4.2 Volume I: Technical Proposal

The Technical Proposal shall contain the following sections:

- Work Plan
- Management Plan
- Schedule, Milestones, and Evaluation Metrics
- Deliverables and Products
- Qualifications

4.2.1 Work Plan (maximum 5 pages)

This section must include relevant background, objectives, and the technical approach for assessment and evaluation of the innovation. The assessment plan should include, but not be limited to, a discussion of all supporting activities (e.g., field testing/trials, incorporation of the innovation in a transportation project, etc.) and evaluation methodologies. The Work Plan shall also identify all entities proposed to participate in the work (e.g., a State Department of Transportation (DOT) conducing a field assessment, state university conducting the assessment documentation, etc.), and shall describe a strategy for how the results will be made sharable to other transportation stakeholders upon completion of the project.

4.2.2 Management Plan (maximum 2 pages)

This section must describe the overall approach to management of the proposed Work Plan, including a discussion of the proposed organization and the use of personnel and other resources.

This section shall also describe any partnership structure between the Offeror and other public and private sector entities funding or otherwise substantially participating in the work, including State Departments of Transportation, Metropolitan Planning Organizations, Universities, etc.

4.2.3 Schedule, Milestones, and Evaluation Metrics (maximum 2 pages)

This section must provide a summary of the schedule, milestones, and associated evaluation metrics for the proposed effort. This section also must describe any critical technical areas and activities related to the proposed assessment and indicate approaches for mitigating technical and schedule risk. This section should provide discussion on how FHWA will know the work conducted or managed by the awardee has been successful.

4.2.4 Deliverables and Products (maximum 1 page)

This section must identify and describe anticipated deliverables for the proposed effort, including documentation and reporting elements. The deliverables must identify how the innovation will be marker ready by providing case studies of conducted field assessments, instructions for use of innovation/technology, and other deployment materials.

4.2.5 Qualifications (maximum 4 pages)

The Qualifications section of the project white paper shall introduce the project team, the team's experience, and any unique capabilities. It shall include sections on Project Team and Experience as described below.

Project Team

List all key personnel proposed for the project, including Offerors from outside the prime Offeror's organization. For each key personnel list the employing organization name and briefly describe each key person's roles and responsibilities on the project. Provide a short synopsis of each key person's education, experience, and other qualifications applicable to the proposed project. Provide information on the business type (small, large, or disadvantaged) for each Offeror organization.

Experience

Describe the relevant experience of each organization participating in the project. Identify any publicly available and accessible resources that may provide more details regarding this experience, e.g., public web site links to past or current project documents.

4.3 Volume II: Cost and Pricing Proposal

4.3.1 General Requirements

NOTE**:** This section only applies to an Offeror who is selected to submit a proposal for the award of a contract.

The Offeror may only propose a Firm Fixed Price type price proposal or allocation to a State. The Offeror shall provide Volume II of its formal Proposal organized by the following sections:

1. Cover Page
2. Cost/Price Information
3. Other Financial/Organizational Information

4. Small Business Subcontracting Plan (required for proposals of $750,000 or more from other than small business Offerors/not required for assistance agreement)
5. Recommended Pricing Arrangement

Identify each funding source and their contribution to the whole, expressed as a percentage. Include all anticipated sources, including Offeror internal sources, government funds, and other Offeror organizations.

The proposal should contain a cost/price estimate for the proposed effort to allow for meaningful evaluation and determination of price or cost reasonableness. The cost/price estimate shall account for the entire project, inclusive of that portion of cost/price the applicant or other Offerors would bear in any proposed cost sharing arrangement or other investment of resources, as a means of venture sharing, in lieu of a formal cost sharing arrangement. The cost/price estimate shall be broken down for each year of the proposed work, and by all years combined.

4.3.2 Cover Page

The proposal shall include a cover page that is signed and dated by the Offeror, and contains the following information:

1. Proposal title: "Topic #, Proposer – FHWA AMR BAA"
2. Business Type (Small, Large, State, etc.)
3. Federal Tax Identification Number (TIN)
4. Unique Entity Identifier (UEI)
5. Confirmation of a current SAM.gov registration for your organization
6. Name and contact information (mail address, telephone, and email address) of your authorized business representative/point of contact

4.3.3 Cost/Price Information

Offerors shall provide detailed cost/price information. Offerors shall present cost/price information using the Cost Reimbursement or Time-and- Materials workbooks in Appendix B – Cost/Price Proposal Models. Offerors' cost/price information shall include the total costs for the proposed period of performance. The detailed cost and price information in the Contract cost/price proposal must also include a separate breakdown of costs by major SOW task areas. Offerors shall use the same task or subtask numbers as described in the SOW submitted in its technical proposal. If necessary, the Government will request additional back-up information, as appropriate.

NOTE: See Section 2.6 for Program and Project Funding Limits.

The Offeror shall provide a detailed cost break-down showing all its proposed costs by each major cost category, including (as applicable) direct labor, overhead and/or fringe rates, subcontract costs, general & administrative costs, profit or fee, cost sharing, other direct costs (travel, equipment, etc.), and indirect costs for the proposed effort. For each major cost category, the Offeror's price proposal shall include:

Direct Labor:

- Personnel by name or labor category;
- Number of hours proposed (commercial organizations) or percent of effort (organizations subject to OMB Circulars);
- Hourly unburdened labor rate (commercial organizations) or salary rate and basis (9- or 12-month basis) (organizations subject to OMB Circulars);
- Overhead and/or Fringe Benefits Rates applied; and
- Profit/Fee percentage and amount

Other Direct Costs. Other Direct Costs shall be supported by explanation of estimating factors and other relevant supporting details. For example, travel costs shall be supported by detail on the estimated trips, number of travelers, and associated costs for airfare, per diem, other transportation, etc. A similar level of detail shall be provided for any meeting costs, equipment, duplication/printing charges, and other direct costs.

Indirect Costs. Discuss your proposed rates for all years. Identify the various specific indirect rates and what they are based on (e.g., labor overhead based on direct labor dollars) and how they are applied/calculated. State any differing rate applications (for example if there is a different proposed rate when applied to travel or material purchases than when applied to subcontractor costs). Offerors must provide dollar values as well as percentages. Subcontractor costs should be fully detailed, and the information used by the proposer to analyze the price of the subcontract shall be provided. If an Offeror has approved rates with DCAA/DCMA/HHS or another agency, a copy of the rate letter should be included in their proposal.

Details of any cost sharing to be undertaken by the Offeror shall also be included in the cost section. Describe the type of funds (cash, in-kind, etc.) and its contribution and relationship in enhancing the proposed effort.

For a Firm Fixed Price proposal , the Offeror's proposal should include a proposed milestone payment schedule detailing the amount paid for each deliverable or milestone under the contract. The Offeror must also still provide the fully loaded labor rates and hours used to arrive at the total price as a basis of estimate. Pricing for each milestone must be all inclusive of costs associated with the proposal and cannot later be adjusted.

<u>Assumptions</u>
For all cost/price proposals, the Offeror shall submit, under a separate tab, all (if any) assumptions or conditions upon which the cost/price proposal is based.

4.3.4 Other Financial / Organizational Information

Offerors shall provide the following financial and organizational information in its Volume II – Contract Cost/Price Proposal:

1. Terminated Contracts - List any contract that was terminated for convenience of the Government within the past 3 years, and any contract that was terminated for default within the past 5 years. Briefly explain the circumstances in each instance.

2. A completed copy of the Offeror's Representations and Certifications if the Offeror is not registered and in the System for Award Management with complete and up to date representations and certifications.
3. Conflicts of Interest - The Offerors shall provide a brief statement in its proposal that describes in a concise manner all past, present or planned organizational, contractual, or other interest(s), which may affect the Offerors' ability to perform the proposed contract in an impartial and objective manner. The Contracting Officer will review the statement and may require additional relevant information from the Offerors. In accordance with FAR Subpart 9.5, all such information, and any other relevant information known to DOT, will be used to determine whether an award to the Offerors may create an actual or potential conflict of interest. If any such conflict of interest is found to exist, the Contracting Officer may (a) disqualify the Offerors, or (b) determine that it is otherwise in the best interest of the United States to contract with the Offerors and include appropriate provisions to mitigate or avoid such conflict in the contract awarded.
4. If subcontractors and/or individual consultants will be used in carrying out the requirements of this project, the following minimum information concerning the subcontractor shall be furnished: Name, address and contact information of the subcontractor or consultant, subcontractor's UEI.
5. If an Offeror is proposing a cost type contract, evidence of an approved accounting system must be included in this section.
6. Standard Form LLL - Submit a completed Standard Form LLL, Disclosure of Lobbying Activities. See Appendix E– Standard Form LLL, Disclosure of Lobbying Activities.
7. Identify any preexisting intellectual property the Offeror anticipates using during award performance, and the Offeror's position on its data rights during and after the award period of performance. In identifying any proposed assertions of data rights, the Offeror should complete the table below for each assertion:

Deliverable Description	SOW Reference	Technical Data or Computer Software to be furnished with Restrictions (include as of dates or version numbers)	Basis for Assertion (i.e. developed exclusively at private expense)	Asserted Rights Category(i.e. Restricted or Limited for FAR based contracts)	Name of Person/Company Asserting Restrictions

The Offeror must describe the intellectual property in sufficient detail to describe the limitations (Data assertions of the Offeror or any subcontractor, potential patent licenses required by the

Government, etc.), and to describe why or how the Government can accomplish the stated objectives of this BAA with the limitations described or proposed by the Offeror.

4.3.5 Subcontracting Plan

The evaluation of Small Business Subcontracting Plan will be conducted in Phase 2 of the evaluation, and it will only be evaluated for those Offeror's that elect to submit a formal Proposal that will result in a contract award over $750,000. Proposals submitted from other than small businesses (under NAICS 541330) that exceed $750,000 in total value, must include a Small Business Subcontracting Plan in accordance with the Federal Acquisition Regulation Part 19.7. Each prime Offeror who is other than a small business shall include within its proposal a complete copy of the prime Offeror's Master Subcontracting Plan, satisfactorily addressing all the administrative requirements set forth in FAR section 52.219-9. The Offeror shall also submit a subcontracting plan in accordance with the instructions/format in Appendix D - Small Business Subcontracting Plan to this BAA. In the event that the Offeror has no such plan, the form shall be submitted with "no plan identified" indicated on the form as applicable and the Offeror shall submit a statement of circumstances supporting that determination. The Small Business Subcontracting Plan will be rated on a pass/fail basis.

4.3.6 Recommended Pricing Arrangement

Offerors shall include a summary of the proposed pricing arrangement (e.g., firm fixed price or state allocation) and include the rationale for their use. However, the FHWA reserves the right to negotiate and award the types of proposals determined most appropriate under the circumstances. If warranted, portions of resulting awards may be segregated into pre-priced options. It is anticipated that most awards will be contracts with firm fixed price pricing arrangements with milestone payments.

5 EVALUATION AND AWARD PROCESS

The BAA evaluation process shall be conducted in accordance with FAR Subpart 35.016 (d) and (e). Offerors will be notified of evaluation results electronically via e-mail. The Government reserves the right to select for award any, all, part, or none of the proposals received in response to this announcement. In addition, the Government reserves the right to award either contracts, funding allocations to States, or other instruments determined to be of benefit to the Government in achieving the goals of this program.

It is the policy of the FHWA to treat all proposals as competitive information and to disclose the contents only for the purposes of evaluation. The Government may use selected stakeholder organizations as special resources to provide feedback and input into the evaluation of proposals. All non FHWA evaluators reviewing proposals from this BAA will be required to sign a conflict of interest statement, and a non-disclosure agreement. By submission of a proposal, the Offeror agrees that proposal information may be disclosed to those selected organizations for the limited purpose stated above.

5.1 Evaluation Methodology

The Government will utilize a phased approach for the evaluation of project white papers and proposals in response to this BAA. The evaluation will consist of two phases. In Phase 1 of the evaluation, the Government will review and assess the technical merit of each Offeror's project white papers. Based on the Phase 1 evaluation results, the Government may select Offeror(s) to advance to the next phase. Selected Offerors will be invited to submit a formal Proposal.
In Phase 2 of the evaluation, the Government will review and assess the full merit of the Offeror's formal Proposal. Based on the Phase 2 evaluation results, the Government may select awardee(s). The required conflict of interest statements and non-disclosure agreements will be utilized to mitigate against possible bias in selection decisions. Additional information on the phased evaluation methodology is delineated below.

5.1.1 Phase 1 – Project White Paper Evaluation

White papers will first be screened to ensure that all of the requested information listed within Section 3 is contained within the submission. Incomplete white paper submissions may be removed from further consideration. The Government will use Factor 1 – Technical Merit of White Papers in Phase 1 of the evaluation. The project white papers will be evaluated for technical value to the Government's area of interest, within the context of available funding, in accordance with the criteria established in 5.2 Evaluation Factors. FHWA will consider the project topic's alignment with agency and department goals, the feasibility of approach, and the reasonableness of estimated costs for each project white paper submitted. FHWA will also consider the Offeror's capability to perform the work based on the technical approach, background, and referenced resources provided in the project white papers.

Based on the Phase 1 evaluation results, the Government may select Offerors to advance to Phase 2 and invite them to submit a proposal, which will be evaluated as part of Phase 2. FHWA may request proposals for project concepts that are deemed to have technical value to the FHWA's objectives and are found to fit within funding constraints. Project white papers are not evaluated, or considered, as part of the award evaluation process.

5.1.2 Phase 2 – Project Proposal Evaluation

The Government will review and evaluate Phase 2 proposals in accordance with Factor 2 – Technical Merit of Proposals, Factor 3 – Cost/Price, and Factor 4 - Small Business Subcontracting Plan (if applicable).

During Phase 2 of the evaluation, the Government reserves the right to conduct negotiations with Offerors to clarify technical and cost/ price details from the proposals. Based on the Phase 2 evaluation results, and in consideration of all applicable Evaluation Factors (listed below), the Government will select Offeror/s for award.

5.2 Evaluation Factors

The evaluation of white papers using the criteria described in Factor 1 (Phase 1). Proposal evaluations will be conducted using the criteria in Factors 2-5 (Phase 2).

Factor 1 – Technical Merit of the Project White Paper

The Government will evaluate the Phase I white papers on the following sub-factors which are equal in importance:

1. The white paper clearly demonstrates that the innovation or technology is at a TRL level of 5 or 6 and therefore appropriate for the AMR program.
2. The white paper clearly describes the extent to which the innovation or technology supports one or more of the Topic Areas described in Appendix C of the BAA, or other strategic initiatives or national goals of the Department and fits within the Project Qualification Requirements listed in Section 2.5. The white paper clearly addresses all other questions included in the Sample White Paper Form (Appendix A) portion of the white paper.
3. Funding Availability – the Government will consider the overall availability of funding for allocations or awards selected under this BAA.

Once all project white papers are reviewed and evaluated, FHWA will request formal proposals for project concepts that are deemed to have technical value to the FHWA's objectives and are found to fit within funding constraints. Project white papers will not be used or considered as part of the Phase 2 evaluation process.

Factor 2 – Technical Merit of the Proposal
The Government will evaluate the Phase 2 proposals on the following technical merit sub-factors which are equal in importance:

1. The Offeror's technical merit will be evaluated on the demonstrated technical work plan and approach for advancing the innovation or technology to a state of market readiness at a TRL 7 or greater.
2. The proposal demonstrates the innovation's current place in the market and the potential demand following inclusion in the AMR program and the proposal demonstrates the potential for the innovation and technology to be included in Every Day Counts (EDC) program.
3. Degree of experience, credentials, and capability of the project team, including key personnel and team organizational partners, as these elements relate to the project work and influence the project's potential for a successful outcome.
4. Funding Availability – the Government will consider the overall availability of funding for allocations or awards selected under this BAA.

Factor 3 – Past Performance
The Government will evaluate the relevant merits of the Offeror's past performance on the basis of its reputation with its former customers. The past performance review will primarily consist of a review of records in the Contractor Performance Assessment Reporting System. The Government may consider past performance of proposed subcontractors. The Government may also consider other sources of past performance information. The lack of a performance record will neither be used to the advantage or disadvantage of the Offeror. The Government reserves the right to conduct a determination of contractor's responsibility.

Factor 4 - Cost/Price

The Government will evaluate the reasonableness of individual cost elements in the Offeror's proposal to determine that the budget proposal or cost/price proposal is fair and reasonable. The Government will consider the overall availability of funding for allocations or awards selected under the BAA. The number of and dollar value of awards will depend on the merit of the proposals received.

Factor 5 – Small Business Subcontracting Plan
The evaluation of the Small Business Subcontract Plan will be conducted in Phase 2 of the evaluation and will be evaluated on a "Pass/Fail" basis. Small Business Subcontracting Plans are only required for other than small businesses who submit proposals of $750,000 or more. See Appendix D – Small Business Subcontracting Plan.

5.3 Awards

In determining which proposals provide the best value, the Government will conduct an integrated evaluation of cost/price and non-price evaluation factors. The integrated evaluation will consist of four factors: Technical Merit, Past Performance, Small Business Subcontracting, and Price. Small Business Subcontracting (if applicable) is not weighted and will only be evaluated on a "Pass/Fail" basis. Technical Merit is more important than Past Performance, and when the two preceding non-price factors (Technical Merit and Past Performance) are combined, they are more important than cost/price.

The ratings listed in the table below will be used to evaluate Technical Merit for Phase 1.

RATING	DEFINITION
Acceptable	The white paper is for a project at an appropriate TRL level; the project supports one or more of the Topic Areas described in Appendix C of the BAA, or other strategic initiatives or national goals of the Department and fits within the Project Qualification Requirements listed in BAA Section 2.5; and the project fits within the Government's overall funding availability.
Not Acceptable	The white paper is for a project not at an appropriate TRL level; or the project does not support one or more of the Topic Areas described in Appendix C of the BAA, or other strategic initiatives or national goals of the Department or does not fit within the Project Qualification Requirements listed in BAA Section 2.5; or the project does not fit within the Government's overall funding availability.

The ratings listed in the table below will be used to evaluate Technical Merit for Phase 2:

RATING	DEFINITION

Outstanding	Proposal meets requirements and indicates an exceptional approach and understanding of the requirements. Strengths far outweigh any weaknesses. Risk of unsuccessful performance is very low.
Good	Proposal meets requirements and indicates a thorough approach and understanding of the requirements. Proposal contains strengths which outweigh any weaknesses. Risk of unsuccessful performance is low.
Satisfactory	Proposal meets requirements and indicates an adequate approach and understanding of the requirements. Strengths and weaknesses are offsetting or will have little or no impact on contract performance. Risk of unsuccessful performance is no worse than moderate.
Marginal	Proposal does not clearly meet requirements and has not demonstrated an adequate approach and understanding of the requirements. The proposal has one or more weaknesses which are not offset by strengths. Risk of unsuccessful performance is high.
Unacceptable	Proposal does not meet requirements and contains one or more deficiencies. Proposal is unawardable.

The ratings listed in the table below will be used to evaluate Past Performance:

RATING	DEFINITION
Outstanding	Offeror's performance meets contractual requirements and exceeds many requirements that benefit the Government. Performance was accomplished with few, if any, minor problems for which corrective actions taken by the contractor were highly effective. Past performance indicates a very low risk of unsuccessful performance to the Government.
Satisfactory	Offeror's performance meets contractual requirements. Performance was accomplished with some minor problems for which any required corrective actions taken were satisfactory. Past performance indicates a moderate to low risk of unsuccessful performance to the Government.
Neutral	No relevant past performance record is identifiable upon which to base a meaningful performance risk prediction. A search was unable to identify any relevant past performance information for the contractor or their key personnel. This is neither a negative or positive assessment.
Unsatisfactory	Offeror's performance did not meet one or more critical contract requirements. Performance was not successfully accomplished, or a contract was terminated for default. Past performance indicates a very high or unacceptable risk of unsuccessful performance to the Government.

During Phase 2 of the evaluation, the Government reserves the right to conduct negotiations with Offerors to clarify technical and cost/ price details from the proposals.

All awards will be subject to the availability of funds. The Government may select proposals for award pending availability of funds. Only the Contracting Officer can legally commit the Government to the expenditure of public funds under the BAA.

5.3.1 Notifications and Negotiations

All Offerors will receive electronic notification via e-mail of the final disposition of their proposal. If selected for award, the Contracting Officer will contact the Offeror with further instructions, including negotiation procedures, if needed.

6 DUE DATES

Questions and white papers must be submitted to the Contracting Officer, Carolyn Lethert at Carolyn.Lethert@dot.gov and the Contract Specialists, Kristen Hayes and Khadija Osman at Kristen.Hayes@dot.gov and Khadija.Osman@dot.gov, respectively, by the date and time specified in each BAA Call to be considered timely and acceptable. No phone telephone requests will be taken.

6.1 Proposal Due Date

Proposal due dates will be specified in an email sent to Offeror/s who are selected from the white paper submissions.

7 ATTACHMENTS:

Appendix A	White Paper Example
Appendix B	Price Model
Appendix C	Innovation Topics
Appendix D	Small Business Subcontracting Plan
Appendix E	Standard Form LLL

(END OF BROAD AGENCY ANNOUNCEMENT)