



U.S. Department of Transportation

Notice of Funding Opportunity Number 693JJ317NF0001

*“Advanced Transportation and Congestion Management Technologies
Deployment Initiative”*

Issue Date: April 12, 2017

Application Due Date: June 12, 2017

TABLE OF CONTENTS

<u>SECTION</u>	<u>TITLE</u>	<u>PAGE</u>
N/A	SUMMARY INFORMATION AND WEBINAR DETAILS	3
A	PROGRAM DESCRIPTION	6
B	FEDERAL AWARD INFORMATION	15
C	ELIGIBILITY INFORMATION	16
D	APPLICATION AND SUBMISSION INFORMATION	18
E	APPLICATION REVIEW INFORMATION	28
F	FEDERAL AWARD ADMINISTRATION INFORMATION	32
G	FEDERAL AWARDED AGENCY CONTACTS	34

The FHWA is using www.Grants.gov for issuance of this Notice of Funding Opportunity (NOFO). Applicants must register at Grants.gov under NOFO Number 693JJ317NF0001 to receive notifications of updates/amendments to this NOFO. It is the Applicant's responsibility to monitor the Grants.gov site for any updates/amendments to this NOFO.

Summary Information

Funding Opportunity Summary:	Up to \$60 Million in Federal Funding to provide grants to eligible entities to develop model deployment sites for large scale installation and operation of advanced transportation technologies to improve safety, efficiency, system performance, and infrastructure return on investment.
Federal Agency Name:	U.S. Department of Transportation (DOT) Federal Highway Administration (FHWA) Office of Operations 1200 New Jersey Avenue, SE Mail Drop: E86-205 Washington DC 20590 Attn: David Harris
Funding Opportunity Title:	Advanced Transportation and Congestion Management Technologies Deployment (ATCMTD) Initiative
Announcement Type:	This is the initial announcement of this funding opportunity. This is not a follow-on notice.
Funding Opportunity Number:	693JJ317NF0001
Type of Award:	Cooperative Agreements or Allocations to State Departments of Transportations
Catalog of Federal Domestic Assistance (CFDA) Number:	20.200 Highway Research & Development
Application Due Date:	Applications Due by June 12, 2017 at 3:00 pm Eastern Time through www.Grants.gov
Questions:	Questions Due on or before May 12, 2017 at 3:00 pm Eastern Time to ATCMTD@dot.gov

Funding Opportunity Informational Webinar

The United States Department of Transportation (DOT) will host an Informational Session regarding this Funding Opportunity focused on the Advanced Transportation and Congestion Management Technologies Deployment Initiative. This session will be conducted as a virtual forum and will focus on specific topics to help potential applicants gather additional information and ask specific questions.

Participation in this session is not mandatory in order to submit an application under this solicitation. However, we encourage potential applicants to take advantage of this opportunity to gather information regarding this specific funding opportunity.

INFORMATIONAL SESSION: ADVANCED TRANSPORTATION AND CONGESTION MANAGEMENT TECHNOLOGIES DEPLOYMENT INITIATIVE

SESSION: Virtual Webcast: Background and Application Information for the Advanced Transportation and Congestion Management Technologies Deployment Initiative

DATE: April 25, 2017

TIME: 1:00 pm Eastern Time

INFORMATION AND REGISTRATION:

<https://connectdot.connectsolutions.com/e4x9x0mcr0a/event/registration.html>

Substantive Changes from Fiscal Year 2016 NOFO

Note: Applicants are responsible for familiarizing themselves with the entire NOFO. This page is only guidance to identify significant changes and does not identify all changes.

The areas of deployment programs and projects of particular interest by the Department have been revised on pages 11 through 13.

The description of available funding and the number of awards has been clarified on page 15.

The application content and form that begins on page 18 has been revised to split the application into two Volumes – a Technical Application and a Budget Application.

The information requested on page 19 for the table on the application's cover page has been revised.

The page limit for the Project Narrative on page 20 has been changed to 30 pages, and clarity added related to paper sizes.

Résumés of key personnel are requested on page 21 under the Staffing Description.

The Funding / Budget Information of Volume 2 on page 22 has been expanded.

More information has been added on pages 18 and 22 regarding the submission of applications and required forms on Grants.gov, and a request for a detailed budget plan added under Volume 2 on page 23.

“Cost” has been added under the “Criteria for Selection of ATCMTD Awards” on page 28.

The rating categories for the applications have been added on page 29 under the “Review and Selection Process” section.

SECTION A – PROGRAM DESCRIPTION

Section 503(c)(4) of Title 23 of the United States Code (23 USC 503(c)(4)) directs the DOT to establish an advanced transportation and congestion management technologies deployment (ATCMTD) initiative to provide grants to eligible entities to develop model deployment sites for large scale installation and operation of advanced transportation technologies to improve safety, efficiency, system performance, and infrastructure return on investment. The DOT intends for these model technology deployments to help demonstrate how emerging transportation technologies, data, and their applications, that also link to Beyond Traffic – 2045, can be effectively deployed and integrated with existing systems to provide access to essential services and other destinations. This also includes efforts to increase connectivity to employment, education, services and other opportunities; support workforce development; or contribute to community revitalization, particularly for disadvantaged groups: low-income residents, persons with visible and hidden disabilities, elderly individuals, and minority person and populations.

The DOT will make no fewer than 5 and no more than 10 awards of up to \$12 million individually.

1. STATEMENT OF PURPOSE

The DOT hereby requests applications to result in awards to eligible entities to develop model deployment sites for large scale installation and operation of advanced transportation technologies to improve safety, efficiency, system performance, and infrastructure return on investment. These model deployments are expected to provide benefits in the form of:

- reduced traffic-related fatalities and injuries;
- reduced traffic congestion and improved travel time reliability;
- reduced transportation-related emissions;
- optimized multimodal system performance;
- improved access to transportation alternatives, including for underserved populations;
- public access to real time integrated traffic, transit, and multimodal transportation information to make informed travel decisions;
- cost savings to transportation agencies, businesses, and the traveling public; or
- other benefits to transportation users and the general public.

This competitive advanced transportation and congestion management technologies deployment grant program will promote the use of innovative transportation solutions.

The deployment of these technologies will provide Congress and DOT with valuable real life data and feedback to inform future decision making.

2. LEGISLATIVE AUTHORITY

Specific statutory authority for conducting this effort is found in 23 U.S.C. §503(c)(4), which authorizes the Secretary of Transportation to “...establish an advanced transportation and congestion management technologies deployment initiative to provide grants to eligible entities to develop model deployment sites for large scale installation and operation of advanced transportation technologies to improve safety, efficiency, system performance, and infrastructure return on investment.”

Per 23 U.S.C. §503(c)(4)(l)(i), funding for this effort is available from amounts authorized under §6002(a)(1), §6002(a)(2), and §6002(a)(4) of Public Law 114-94, the Fixing America’s Surface Transportation Act (FAST).

The authority to enter into a cooperative agreement for this effort is found under 23 U.S.C. §502 - Surface Transportation Research, Development, and Technology, paragraph (b)(3) which states:

“(3) **cooperation, grants, and contracts.** — The Secretary may carry out research, development, and technology transfer activities related to transportation—

(A) independently;

(B) in cooperation with other Federal departments, agencies, and instrumentalities and Federal laboratories; or

(C) by making grants to, or entering into contracts and cooperative agreements with one or more of the following: the National Academy of Sciences, the American Association of State Highway and Transportation Officials, any Federal laboratory, Federal agency, State agency, authority, association, institution, for-profit or nonprofit corporation, organization, foreign country, or any other person.”

3. BACKGROUND

Projects funded under this initiative will deploy advanced transportation and congestion management technologies, including:

- i. **Advanced traveler information systems** – Systems that provide real time, predicted, and individualized information about travel choices, based on data from sensors (traffic, weather), mobile sources (personal portable devices,

- connected vehicles), and other information systems (public transportation, shared-use mobility, traffic incident management, construction, parking, congestion pricing/tolls or other costs) to allow travelers and shippers to make informed decisions regarding destinations, when to travel, routes, or modes. This information should be publically accessible and not limited to users with smart phones.
- ii. **Advanced transportation management technologies** – Technologies that assist transportation system operators in managing and controlling the performance of their systems to provide optimal services or respond to dynamic conditions, including interjurisdictional and intermodal coordination; technologies may include traffic signal equipment, advanced data collection and processing (from sensors, connected vehicles and other mobile sources, other information systems), dynamic lane controls/configurations, and cooperative transportation management algorithms including pricing strategies across jurisdictions/agencies/facilities/modes.
 - iii. **Infrastructure maintenance, monitoring, and condition assessment** – Technologies and systems that monitor the behavior or assess the condition of transportation infrastructure to allow agencies to better manage their transportation assets through optimizing resource allocation, preventative maintenance processes, and responses to critical conditions.
 - iv. **Advanced public transportation systems** – Technologies that assist public transportation system operators or other shared mobility entities in managing and optimizing the provision of public transportation and mobility services; technologies may include remote fleet monitoring systems, coordinated communication systems, algorithms, and applications to enable better transit connections for users, advanced data collection and processing (from sensors, mobile/connected sources, other information systems) to provide dynamic responsive transit services, and communication and data systems that enable shared mobility services.
 - v. **Transportation system performance data collection, analysis, and dissemination systems** – Technologies and systems that actively monitor the performance of and interactions between transportation systems and permit agencies and other interested entities to conduct analyses and research, and explore innovative, value-added products and services.
 - vi. **Advanced safety systems, including vehicle-to-vehicle and vehicle-to-infrastructure communications, technologies associated with autonomous vehicles, and other collision avoidance technologies, including systems using cellular technology** – Deployment of technology-based safety systems such as described at Safer Car (<http://www.safercar.gov/>) or at the Intelligent Transportation Systems (ITS)

- Program (<http://www.its.dot.gov/landing/safety.htm>), or other applicable safety technologies.
- vii. **Integration of intelligent transportation systems with the Smart Grid and other energy distribution and charging systems** – Technologies that link information from ITS and other transportation systems with information from Smart Grid and other energy distribution and charging systems to provide users with better information related to opportunities for recharging electric vehicles, and to provide energy distribution agencies with better information related to potential transportation-user demand.
 - viii. **Electronic pricing and payment systems** – Technologies that permit users to electronically conduct financial transactions for mobility services across jurisdictions and agencies, such as unified fare collection, payment, and tolling systems across transportation modes; or
 - ix. **Advanced mobility and access technologies, such as dynamic ridesharing and information systems to support human services for elderly and disabled individuals** – Technologies and systems that leverage data and communications systems to allow public agencies and human service organizations to provide improved mobility services to at-risk users such as elderly, disabled, or other individuals that require transportation assistance.

4. VISION, GOALS, AND FOCUS AREAS

The DOT recognizes that each location has unique attributes, and each location's proposed deployment will be tailored to their vision and goals. Applications may be submitted for deploying any eligible technology. However, this section provides a framework for applicants to consider in the development of a proposed deployment by presenting the DOT's vision, goals, and focus areas.

The DOT's vision for the ATCMTD initiative is the deployment of advanced technologies and related strategies to address issues and challenges in safety, mobility, sustainability, economic vitality, and air quality that are confronted by transportation systems owners and operators. The advanced technologies are integrated into the routine functions of the location or jurisdiction, and play a critical role in helping agencies and the public address their challenges. Management systems within transportation and across other sectors (e.g., human services, energy, and logistics) share information and data to communicate between agencies and with the public. These management systems provide benefits by maximizing efficiencies based on the intelligent management of assets and the sharing of information using integrated technology solutions. The advanced technology solutions and the lessons learned from

their deployment are used in other locations, scaled in scope and size, to increase successful deployments and provide widespread benefits to the public and agencies.

Goals for the advanced transportation and congestion management technologies deployment initiative include:

- Reduced costs and improved return on investments, including through the enhanced use of existing transportation capacity;
- Delivery of environmental benefits that alleviate congestion and streamline traffic flow;
- Measurement and improvement of the operational performance of the applicable transportation networks;
- Reduction in the number and severity of traffic crashes and an increase in driver, passenger, and pedestrian safety;
- Collection, dissemination, and use of real time transportation related information to improve mobility, reduce congestion, and provide for more efficient and accessible transportation, including access to safe, reliable, and affordable connections to employment, education, healthcare, freight facilities, and other services;
- Monitoring transportation assets to improve infrastructure management, reduce maintenance costs, prioritize investment decisions, and ensure a state of good repair;
- Delivery of economic benefits by reducing delays, improving system performance and throughput, and providing for the efficient and reliable movement of people, goods, and services;
- Accelerated deployment of vehicle-to-vehicle, vehicle-to-infrastructure, and automated vehicle applications, and autonomous vehicles and other advanced technologies;
- Integration of advanced technologies into transportation system management and operations;
- Demonstration, quantification, and evaluation of the impact of these advanced technologies, strategies, and applications towards improved safety, efficiency, and sustainable movement of people and goods; and
- Reproducibility of successful systems and services for technology and knowledge transfer to other locations facing similar challenges.

Although applications are not limited to DOT priorities, the Department is particularly interested in deployment programs and projects in the following areas:

- ***Multimodal Integrated Corridor Management (ICM)***: ICM is the coordination of individual transportation network operations of adjacent facilities across all government or other operations agencies that creates a unified, interconnected, and multimodal system capable of sharing cross-network travel management to safely and efficiently improve the movement of people and goods. All corridor transportation assets and information services (i.e., local, county, regional, State) are brought to bear when prevailing or predicted transportation conditions trigger alerts. Through an ICM approach, transportation agencies manage the corridor as a multimodal system and make operational and safety decisions for the benefit of the corridor as a whole. The DOT is interested in increasing deployment of ICM.
- ***Installation of Connected Vehicle Technologies at Intersections and Pedestrian Crossing Locations***: Deployment of connected vehicle wireless communications technologies at intersections to enhance motorized and non-motorized traveler safety, or actively improve the management, operation, and maintenance of traffic signal systems through real-time data collection and signal control. Example technologies include vehicle-to-infrastructure (V2I) and vehicle-to-pedestrian (V2P) deployments, such as at intersections or midblock pedestrian crossings, to support activities and initiatives of the V2I Deployment Coalition and non-motorized traveler applications, or technologies to support automated traffic signal performance measures. Such technologies should provide information, notifications, and alerts in accessible formats to assist all users navigate safely through intersections including providing contextual information for situational awareness and localization. The DOT has been working to accelerate the implementation of technologies that advance these strategies.
- ***Unified Fare Collection and Payment System Across Transportation Modes and Jurisdictions***: Technological advancements in payment systems allow convergence across both publicly-delivered and privately-delivered mobility services. However, field implementations have been achieved only sparingly and in small projects. Convergence will enhance consumer payment options and mode choices and forge partnerships among providers to achieve a seamless, accessible, and flexible transportation network across the Nation. DOT is engaged in efforts which will assist in identifying technical, institutional, and policy solutions to achieve unified transportation payment systems.
- ***Freight Community System***: A Freight Community System (sometimes called port community system) is an electronic platform which connects the multiple systems operated by a variety of organizations that make up a freight

transportation community, including seaports, airports, rail yards / inland ports and distribution centers. It is shared in the sense that it is set up, organized and used by firms in the same sector – in this case, a freight community – to provide a neutral and open electronic platform enabling an intelligent and secure exchange of information between public and private stakeholders in order to improve the efficiency and competitive position of the ports' community(ies). It optimizes, manages and automates smooth port and logistics processes through a single submission of data by connecting transport and logistics chains. This focus area is important to the Departmental goal of integrating freight infrastructure within the surface transportation system, particularly maritime ports, while at the same time providing a platform to reduce the impacts of national freight movement on local communities.

- ***Technologies to Support Connected Communities:*** Deployment of technologies for a multimodal transportation system provides Americans with safe, reliable, and affordable connections to employment, education, obtain and provide healthcare, and other essential services. Examples include dynamic ridesharing through the latest communications technologies and social network structures to bring drivers and riders together quickly and efficiently, technologies to mitigate the negative impacts of freight movement on communities, or technologies that support workforce development, particularly for disadvantaged groups, which include low-income groups, persons with visible and hidden disabilities, elderly individuals, and minority persons and populations. Any of these example technologies should include the elements of universal design and inclusive information and communication technology solutions, and may include deployment of autonomous vehicles through geographically contained ridesharing pilot programs, including the benefits of the technology with groups that might otherwise have limited transportation options, such as older Americans who no longer drive or those with disabilities or no driver's license. The DOT is interested in using advanced technologies to improve the public's connections to employment, education, healthcare, and other essential services.
- ***Infrastructure Maintenance, Monitoring, and Condition Assessment:*** Timely, accurate and efficient assessment of infrastructure condition is critical to effective infrastructure asset management. Current state-of-the-practice technologies for condition assessment represent a good start, but have a variety of limitations. Opportunities for advancement include: implementation of friction management programs founded on highway-speed friction testing; highway speed deflection monitoring for pavement structural evaluation; sensor systems for infrastructure condition monitoring; use of unmanned aerial systems (UAS) for condition

inspection; development of holistic and virtual data visualization technologies; and advancement of bridge load rating technologies. Implementation of these emerging technologies will enable improved highway safety and more timely intervention to address structural deficiencies and infrastructure deterioration with relatively low-cost solutions.

- **Rural Technology Deployments:** Deployment of advanced technologies to enhance safety, mobility, or economic vitality. Example technologies include improved access to transportation services, corridor freight platooning, mobile work zone alerts, improved roadway weather management, improved emergency response services and traffic incident management, curve warning systems, or animal intrusion detection and warning. The DOT is interested in geographically diverse application of technologies to include rural deployments.

5. DELIVERABLES

The selected ATCMTD awardees shall provide a schedule for the project deliverables that includes at a minimum the following items.

Deliverable	Approximate Due Date	Section 508 Compliant?
Kick-off Meeting – Conduct a kick-off meeting with DOT at mutually-agreed-upon location.	Within 4 weeks after award.	No
Monthly Progress Reports – submit progress reports to document activities performed, anticipated activities, and any changes to schedule or anticipated issues.	Monthly	No
Report to the Secretary – submit a report describing the deployment and operational costs compared to the benefits and savings, and how the project has met the original expectations projected in the deployment plan.	Annually beginning one year after award.	Yes
<i>(additional deliverables to be identified in separate rows by the</i>		

<i>applicant)</i>		

Note: Section 508 requirements are included in NOFO Section F's General Terms and Conditions available online at: <http://www.fhwa.dot.gov/aaa/generaltermsconditions.cfm>.

SECTION B – FEDERAL AWARD INFORMATION

1. FUNDING AND NUMBER OF AWARDS

For each fiscal year from 2016 through 2020, a maximum of \$60 million is available for award. That amount is subject to statutory obligation limitations each fiscal year and subject to a set aside of up to \$2 million for DOT administrative expenses each fiscal year. The Department is currently operating under a Continuing Resolution and awards will be subject to future availability of funds through appropriations and obligation limitation. A single grant recipient may not receive more than \$12 million in one fiscal year. The DOT anticipates making not less than 5 and not more than 10 awards each fiscal year. This Notice of Funding Opportunity is the second of the annual solicitations for ATCMTD.

2. TYPE OF AWARD

The planned award type is a cost-reimbursable Cooperative Agreement or an allocation to a State.

3. PERIOD OF PERFORMANCE

The estimated period of performance is between one and four years.

4. DEGREE OF FEDERAL INVOLVEMENT

The DOT anticipates substantial Federal involvement with the ATCMTD recipients during the course of these projects. The anticipated Federal involvement will include technical assistance and guidance to the recipient.

SECTION C – ELIGIBILITY INFORMATION

1. ELIGIBLE APPLICANTS

To be selected for an ATCMTD award, an applicant must be an eligible applicant. Eligible applicants are State or local governments, transit agencies, metropolitan planning organizations (MPO) representing a population of over 200,000, or other political subdivisions of a State or local government (such as publicly owned toll or port authorities), or a multijurisdictional group or consortia of research institutions or academic institutions. Partnership with the private sector or public agencies, including multimodal and multijurisdictional entities, research institutions, organizations representing transportation and technology leaders, or other transportation stakeholders is encouraged.

Typically, a consortium is a meaningful arrangement with all members involved in planning the overall direction of the group's activities and participating in most aspects of the group; the consortium is a long-term relationship intended to last the full life of the grant. Any application submitted by a sole research or academic institution and that is not part of a consortium will not be considered for selection.

2. COST SHARING OR MATCHING

Cost sharing or matching is required, with the maximum Federal share being 50 percent; hence, this NOFO requires a minimum non-federal cost share of 50 percent. Cost sharing or matching means the portion of project costs not paid by Federal funds. For a more complete definition, please see the Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards at 2 CFR Part 200, including section 200.306 on Cost Sharing or matching. Other Federal funds using their appropriate matching share may be leveraged for the deployment but cannot be considered as part of the ATCMTD matching funds, unless otherwise supported by statute.

3. OTHER INFORMATION

The ATCMTD recipients may use not more than five percent of the funds awarded each fiscal year to carry out planning and reporting requirements for the project.

The DOT encourages applicants to identify any project components that have independent utility and separately detail the costs and requested ATCMTD funding for each component in their applications. If the application identifies one or more independent project components, the application should clearly identify how each

independent component addresses the selection criteria and produces benefits on its own, and describe how the full proposal, of which the independent component is a part, addresses the selection criteria.

SECTION D – APPLICATION AND SUBMISSION INFORMATION

1. ADDRESS TO REQUEST APPLICATION PACKAGE

Applicants may obtain application forms at Grants.gov under the Notice of Funding Opportunity Number cited herein.

The Applicant must complete and submit all forms included in the application package for this Notice as contained at www.Grants.gov.

2. CONTENT AND FORM OF APPLICATION SUBMISSION

Applicants shall submit an application consisting of the following:

1. VOLUME 1 – TECHNICAL APPLICATION (1 file, page limit of 30 pages)
 - a. Cover Page
 - b. Project Narrative
2. VOLUME 2 – BUDGET APPLICATION (1 file, no page limit)
 - a. Application Standard Forms (SFs)
 - b. Funding / Budget Information
 - c. Organizational Information

Note: Applicants shall provide résumés in Volume 1 of the application. Resumes will not count against the page limit. Applicants shall provide letters of commitment in Volume 2.

For the submitted application package, the FHWA suggests that pictures, graphics, and other large files be reduced in number and quality to keep the size of the files of the application manageable and in line with the Grants.gov suggested maximum size of 200 megabytes for the entire grant application package.

FHWA recommends that applicants use a file naming format of: *Applicant organization-2017-ATCMTD-fileID* (e.g., *Vol-1, Vol-2*) where “Applicant_organization” reflects the applicant’s legal name, abbreviated as appropriate. If an applicant organization is submitting multiple applications, project names or identifiers may be added to the workspace title in parentheses after the applicant organization. For example, a workspace in Grants.gov may be titled “Applicant_organization(Project 1)-2017-ATCMTD.” If necessary, the Workspace title can be edited per the instructions on Grants.gov.

VOLUME 1 – TECHNICAL APPLICATION

a) Cover Page Including the Following Table:

Project Name	
Eligible Entity Applying to Receive Federal Funding	
Total Project Cost (from all sources)	\$
ATCMTD Request	\$
Are matching funds restricted to a specific project component? If so, which one?	Yes/No
State(s) in which the project is located	
Is the project currently programmed in the: <ul style="list-style-type: none"> • Transportation Improvement Program (TIP) • Statewide Transportation Improvement Program (STIP) • MPO Long Range Transportation Plan • State Long Range Transportation Plan 	Yes/No – <i>please specify in which plans the project is currently programmed</i>
Technologies Proposed to Be Deployed (briefly list)	

b) Project Narrative

The application must include information required for DOT to determine that the project satisfies project requirements described in Sections A, B, and C and to assess the selection criteria specified in Section E.1. To the extent practicable, applicants should provide data and evidence of project merits in a form that is verifiable or publicly available. The DOT may ask any applicant to supplement data in its application, but expects applications to be complete upon submission.

The DOT recommends that the project narrative adhere to the following basic outline of a project description and a staffing description to clearly address the program requirements and make critical information readily apparent. In addition to a detailed statement of work and detailed project schedule, the project narrative should include a table of contents, maps, and graphics, as appropriate to make the information easier to review. The DOT recommends that the project narrative be prepared with standard formatting preferences: a single-spaced document, using a standard 12-point font such as Times New Roman, with 1-inch margins on 8.5 by 11 inch paper. (Applications may include appropriately-sized pages for conveying detailed

information important for the technical review, such as maps.) The project narrative may not exceed 30 pages in length, excluding cover pages, the table of contents, and résumés of key staff described in the project narrative. The only substantive portions that may exceed the 30-page limit are documents to support assertions or conclusions made in the 30-page project narrative. If supporting documents are submitted, applicants must clearly identify within the project narrative the relevant portion of the project narrative that each supporting document supports.

i. Project Description that includes the following:

1. An introduction that provides a clear, concise description of the project and the proposed technology deployment(s).
2. A description of the entity that will be entering into the agreement (i.e., receiving Federal funding) with FHWA including:
 - a) membership of any partnership or entity proposed to carry out the deployment;
 - b) a description of how the entity will manage the program including management of project funding.

Applicants that are multijurisdictional groups or consortia of research or academic institutions do not necessarily have to be an existing organization or coalition but should show evidence that a cooperative agreement, memorandum of understanding (MOU), or other organizational mechanism can be executed in a reasonable timeframe after selection.

Note: A multijurisdictional group is any combination of State governments, local governments, metropolitan planning agencies, transit agencies, or other political subdivisions of a State for which each member of the group has signed a written agreement to implement the advanced transportation technologies deployment initiative across jurisdictional boundaries, and is an eligible entity under this paragraph.

3. A description of the geographic area or jurisdiction the deployment will service.
4. A description of the real world issues and challenges to be addressed by the proposed technology deployments. Applicants should discuss how the proposed technology deployments address the goals of the initiative, and any applicable technology focus area.
5. A description of transportation systems and services to be included in the

- project.
6. A deployment plan that includes providing long-term operation and maintenance of advanced transportation and congestion management technologies to improve safety, efficiency, system performance, and return on investment.
 7. A description of any challenges in the regulatory, legislative, or institutional environments or other obstacles to deployment.
 8. Quantifiable system performance improvements, such as--
 - a) reducing traffic-related crashes, congestion, and costs;
 - b) optimizing system efficiency; and
 - c) improving access to transportation services.
 9. Quantifiable safety, mobility, and environmental benefit projections such as data-driven estimates of how the project will improve the region's transportation system efficiency and reduce traffic congestion.
 10. Vision, goals, and objectives of the applicant for the technology deployment, including any future related deployments; the vision of the organization and goals, objectives, and activities to be pursued in addressing the identified issues and challenges.
 11. A plan for partnering with the private sector or public agencies, including multimodal and multijurisdictional entities, research institutions, organizations representing transportation and technology leaders, or other transportation stakeholders.
 12. A plan to leverage and optimize existing local and regional advanced transportation technology investments.
 13. A schedule for conducting the technology deployment and for completion of all proposed activities.
 14. Any support or leveraging of the ITS program or innovative technology initiatives (DOT ITS initiatives are described on-line at <http://www.its.dot.gov>.)
- ii. Staffing Description that includes the following:
1. A description of the organization of staffing to manage and conduct the project, including identification of key personnel with résumés, organization, role, and responsibility.
 2. A primary point of contact and provide complete contact information for this individual.

VOLUME 2 – BUDGET APPLICATION

a) Application Standard Forms (SFs)

Volume 2 of the application must include the Standard Form 424 (Application for Federal Assistance), Standard Form 424A (Budget Information for Non-Construction Programs), Standard Form 424B (Assurances for Non-Construction Programs), and the Grants.gov Lobbying Form. Standard Forms (SF) are available online at <http://www.grants.gov/web/grants/forms/sf-424-family.html>.

On the SF-424, the information in block 8a (Applicant's "Legal Name") must be the same as entered for registration in www.SAM.gov and for the Applicant's DUNS number. The title for an applicant's workspace on www.Grants.gov is limited to 240 characters and may be different than the DUNS name.

For applications under this NOFO, the breakdown of the applicable sections of standard form 424A is:

- **Section A:** Since this is an initial application, only columns (a) through (d) and (g) need to be completed. The applicant should enter the proposed project as one program or function; however, as an option, the applicant may subdivide this entry into partial programs (e.g., a Phase I and Phase II).
- **Section B** is a summary of the entire project budget across all years.
- **Section C** is the source of the non-Federal matching share.
- **Section D** is the forecasted funding needs for year one (1).
- **Section E** is the forecasted funding needs for years two (2) and after (i.e., does not include the first year's funding).

In addition to the Standard forms, a separate detailed budget plan for each year and a summary of the information for all years for all activities must be provided. Spreadsheets can be formatted similarly to the format in DOT Form 4220.44, located at: http://www.fhwa.dot.gov/aaa/pdfs/frm4220_44.pdf.

b) Funding / Budget Information

The applicant should show evidence of stable and reliable fund commitments sufficient to cover estimated costs including required non-Federal matching costs (e.g., letters of commitment for cost share); evidence of the financial condition of the project sponsor; and evidence of the grant recipient's ability to manage grants. Applications must include a detailed project budget containing a breakdown of how

the funds will be spent. That budget should estimate costs across project components or tasks, including an identification of funding sources and amounts.

Note: The maximum amount of funding requested from the ATCMTD program cannot exceed \$12 million per year nor exceed 50 percent of the total cost of the activities proposed to be funded. The maximum amount that will be awarded will depend on the number of awards, the reduction in ATCMTD funds due to the imposition of the Federal-aid Highways obligation limitation, and the amount reserved for DOT administrative expenses. Selection of an application to receive grant funding in one fiscal year is not a commitment of any future funding. Applications will be solicited annually for competitively selecting grant recipients for that funding year.

c) Organizational Information

In addition to the forms and budget information noted above, provide the following organizational information in a pdf format:

- a. Identify any exceptions to the anticipated award terms and conditions as contained in Section F, Federal Award Administration Information. Identify any preexisting intellectual property that you anticipate using during award performance, and your position on its data rights during and after the award period of performance.
- b. The use of a Dun and Bradstreet (D&B) Data Universal Numbering System (DUNS) number is required on all applications for Federal grants or cooperative agreements. Please provide your organization's DUNS number in your budget application.
- c. A statement to indicate whether your organization has previously completed an A-133 Single Audit and, if so, the date that the last A-133 Single Audit was completed.
- d. A statement regarding Conflicts of Interest. The Applicant must disclose in writing any actual or potential personal or organizational conflict of interest in its application that describes in a concise manner all past, present or planned organizational, contractual or other interest(s), which may affect the Applicants' ability to perform the proposed project in an impartial and objective manner. Actual or potential conflicts of interest may include but are not limited to any past, present or planned contractual, financial, or other relationships, obligations, commitments or responsibilities, which may bias the Applicant or affect the Applicant's ability to perform the agreement in an impartial and objective manner. The Agreement Officer (AO) will review the

- statement(s) and may require additional relevant information from the Applicant. All such information, and any other relevant information known to DOT, will be used to determine whether an award to the Applicant may create an actual or potential conflict of interest. If any such conflict of interest is found to exist, the AO may (a) disqualify the Applicant, or (b) determine that it is otherwise in the best interest of the United States to contract with the Applicant and include appropriate provisions to mitigate or avoid such conflict in the agreement pursuant to 2 CFR 200.112.
- e. A statement to indicate whether a Federal or State organization has audited or reviewed the Applicant's accounting system, purchasing system, and/or property control system. If such systems have been reviewed, provide summary information of the audit/review results to include as applicable summary letter or agreement, date of audit/review, Federal or State point of contact for such review.
 - f. Terminated Contracts - List any contract/agreement that was terminated for convenience of the Government within the past 3 years, and any contract/agreement that was terminated for default within the past 5 years. Briefly explain the circumstances in each instance.
 - g. The Applicant is directed to review Title 2 CFR §170 (http://www.ecfr.gov/cgi-bin/text-idx?c=ecfr&tpl=/ecfrbrowse/Title02/2cfr170_main_02.tpl) dated September 14, 2010, and Appendix A thereto, and acknowledge in its application that it understands the requirement, has the necessary processes and systems in place, and is prepared to fully comply with the reporting described in the term if it receives funding resulting from this Notice. The text of Appendix A will be incorporated in the award document as a General Term and Condition as referenced under this Notice's Section F, Federal Award Administration Information.
 - h. Disclose any violations of Federal criminal law involving fraud, bribery, or gratuity violations. Failure to make required disclosures can result in any of the remedies described in 2 CFR 200.338 entitled Remedies for Noncompliance, including suspension or debarment. (See also 2 CFR Part 180 and 31 U.S.C. 3321).

3. UNIQUE ENTITY IDENTIFIER AND SYSTEM FOR AWARD MANAGEMENT (SAM)

The Applicant is required to: (i) be registered in SAM before submitting its application; (ii) provide a valid unique entity identifier in its application; and (iii) continue to maintain an active SAM registration with current information at all times during which it has an active Federal award or an application or plan under consideration by a Federal awarding agency.

The Federal awarding agency may not make a Federal award to an Applicant until the Applicant has complied with all applicable unique entity identifier and SAM requirements. If an Applicant has not fully complied with the requirements by the time the Federal awarding agency is ready to make a Federal award, the Federal awarding agency may determine that the Applicant is not qualified to receive a Federal award and use that determination as a basis for making a Federal award to another Applicant.

4. SUBMISSION DATES AND TIMES

The application must be submitted through www.Grants.gov by the application due date/time listed on page 3 of this Notice of Funding Opportunity.

The deadline stated on page 3 is the date and time by which the agency must receive the full and completed application, including all required sections.

To submit an application through Grants.gov, applicants must:

- a. Obtain a Data Universal Numbering System (DUNS) number;
- b. Register with the SAM at www.sam.gov;
- c. Create a Grants.gov username and password; and
- d. The E-business Point of Contact (POC) at the applicant's organization must respond to the registration email from Grants.gov and login to authorize the POC as an Authorized Organization Representative. Please note that there can only be one Authorized Organization Representative per organization.

Please note that the Grants.gov registration process usually takes 2–4 weeks to complete and late applications that are the result of failure to register or comply with Grants.gov applicant requirements in a timely manner will not be considered. For information and instruction on each of these processes, please see instructions at <http://www.grants.gov/web/grants/applicants/applicant-faqs.html>. If interested parties experience difficulties at any point during the registration or application process, please

call the Grants.gov Customer Service Support Hotline at 800-518-4726, from 7:00 a.m. to 9:00 p.m., e.t., Monday through Friday.

Only applicants who comply with all submission deadlines described in this notice and submit applications through Grants.gov will be eligible for award. Applicants are strongly encouraged to make submissions in advance of the deadline.

Applicants interested in applying are encouraged to email ATCMTD@dot.gov no later than May 12, 2017 with applicant name, State in which project is located, approximate total project cost, amount of the ATCMTD grant request, and a two- to three-sentence project description. The DOT seeks this early notification of interest to inform its allocation of resources for application evaluations and to facilitate timely and efficient awards.

Applications received after the deadline will not be considered except in the case of unforeseen technical difficulties or issues with Grants.gov that are beyond the applicant's control. In that case, the applicant must contact ATCMTD@dot.gov prior to the application deadline with the user name of the registrant and details of the technical issue experienced. The applicant must provide:

- a. Details of the technical issue experienced;
- b. Screen capture(s) of the technical issues experienced along with corresponding Grants.gov grant tracking number;
- c. The legal business name for the applicant that was provided in the SF-424;
- d. The AOR name submitted in the SF-424;
- e. The DUNS number associated with the application; and
- f. The Grants.gov Help Desk Tracking Number.

To ensure a fair competition of limited discretionary funds, the following conditions are not valid reasons to permit late submissions: (1) Failure to complete the registration process before the deadline; (2) failure to follow Grants.gov instructions on how to register and apply as posted on its Web site; (3) failure to follow all of the instructions in this notice; and (4) technical issues experienced with the applicant's computer or information technology environment. After DOT staff review all information submitted and contact the Grants.gov Help Desk to validate reported technical issues, DOT staff will contact late applicants to approve or deny a request to submit a late application through Grants.gov. If the reported technical issues cannot be validated, late applications will be rejected as untimely.

5. INTERGOVERNMENTAL REVIEW

An application under this Notice of Funding Opportunity is not subject to the State review under E.O. 12372.

6. FUNDING RESTRICTIONS

The FHWA will not reimburse any pre-award costs or application preparation costs.

7. INTENT TO RELEASE APPLICATIONS AND NAMES OF APPLICANT

The FHWA intends to release publicly the names of all Applicants shortly after the application due date.

In order to expand public awareness of ATCMTD technologies, concepts, and ideas, the FHWA intends to release publicly all Volume 1 Technical Application after award.

By submitting an application in response to this Notice of Funding Opportunity, the Applicant provides the FHWA permission to:

- Release publicly the names of all applicants; and
- Release publicly Volume 1 Technical Application document (without the résumés of key personnel) after selection of the ATCMTD awardees.

SECTION E – APPLICATION REVIEW INFORMATION

1. CRITERIA FOR SELECTION OF ATCMTD AWARDS

The Government will evaluate applications on following criteria, which are of equal importance.

TECHNICAL MERIT:

- Degree that the proposed technology deployment aligns with vision, goals and focus areas in Section A of this announcement.
- Readiness of the proposed technology(ies) to be deployed, and the likelihood of success of the applicant to deploy and sustain the proposed technology(ies), including the proposed approaches to addressing any regulatory environment and other obstacles to deployment.
- Scalability or portability of the proposed technology deployment to other jurisdictions.
- Commitment to evaluate the effectiveness (i.e., cost-benefit) of activities proposed.

STAFFING:

- Degree that the Application includes a program/project management structure or organization that will successfully oversee the proposed technology deployment.
- Expertise and qualifications of key personnel for managing or conducting appropriate aspects of the proposed technology deployment through the period of performance.

COST:

- Cost will be considered in the award decision. The cost information will be analyzed to assess cost reasonableness and conformance to applicable cost principles. Applicants must provide the required matching funds, and supporting detail for these funds.
- Funding availability will also be considered in the award decision. This evaluation factor will not be rated, but will be considered in the award selection.

The Department will prioritize projects that also enhance personal mobility and accessibility. Such projects include, but are not limited to, investments that better connect people to essential services such as employment centers, health care, schools and education facilities, healthy food, and recreation; remove physical barriers to access; strengthen communities through neighborhood redevelopment; mitigate the

negative impacts of freight movement on communities; and support workforce development, particularly for disadvantaged groups, which include low-income groups, persons with visible and hidden disabilities, elderly individuals, and minority persons and populations. The Department may consider whether a project's design is likely to generate benefits for all users of the proposed project, including non-driving members of a community adjacent to or affected by the project.

2. REVIEW AND SELECTION PROCESS

The DOT will utilize the following merit review process to evaluate applications:

The DOT will review all eligible applications received before the application deadline. The ATCMTD process consists of a technical evaluation phase and senior review. In the technical evaluation phase, teams of technical experts will determine whether each project satisfies statutory requirements and rate how well it addresses selection criteria. The senior review team will consider the applications and the technical evaluations to determine which projects to advance to the Secretary for consideration. Evaluations in both the technical evaluation and senior review phases will place projects into rating categories of Highly Recommended, Recommended, and Not Recommended, and will not assign numerical scores. The Secretary will select the projects for award. The DOT reserves the right to use outside expertise and/or contractor support to perform application evaluation. A panel of Agency experts will conduct a risk assessment of the applicant prior to award.

The DOT will award the applications that are considered the most advantageous to DOT using the criteria cited above, and subject to the results of an Applicant risk assessment. In addition, per 23 USC 503(c)(4)(D)(i) and (ii), DOT shall ensure, to the extent practicable, that grant recipients represent diverse geographic areas of the United States, including urban and rural areas, and that grant recipients represent diverse technology solutions.

Prior to award, each selected applicant will be subject to a risk assessment required by 2 CFR 200.205. If the Federal awarding agency determines that a Federal award will be made, special conditions that correspond to the degree of risk assessed may be applied to the Federal award. The DOT must review and consider any information about the applicant that is in the designated integrity and performance system accessible through SAM (currently the Federal Awardee Performance and Integrity Information System (FAPIIS)). An applicant may review information in FAPIIS and comment on any information about itself. The DOT will consider comments by the

applicant, in addition to other information in FAPIIS, in making a judgment about the applicant's integrity, business ethics, and record of performance under Federal awards when completing the risk assessment. The DOT reserves the right to deny an award based on the results of the risk assessment.

The Secretary of Transportation is the official responsible for final award selections. The DOT is not obligated to make any award as a result of this notice.

Risk Assessment

The DOT will assess the risks posed by an Applicant before they receive an award. If the Federal awarding agency determines that a Federal award will be made, special conditions that correspond to the degree of risk assessed may be applied to the Federal award. This Risk Assessment will include evaluation of some or all of the following items relative to the Applicant and/or sub-applicants as applicable:

- (1) Applicant's financial stability;
- (2) Applicant's quality of management systems and ability to meet the management standards prescribed in 2 CFR Part 200;
- (3) Applicant's history of performance;

Note: History of performance includes the Applicant's record in managing Federal awards, if it is a prior Recipient of Federal awards, including timeliness of compliance with applicable reporting requirements, conformance to the terms and conditions of previous Federal awards, and if applicable, the extent to which any previously awarded amounts will be expended prior to future awards. The Government will evaluate the relevant merits of the Applicant's history of performance based on its reputation and record with its current and/or former customers with respect to quality, timeliness and cost control. The history of performance will be reviewed to assure that the Applicant has relevant and successful experience and will be considered in the risk assessment. In evaluating history of performance, the Government may consider both written information provided in the application, as well as any other information available to the Government through outside sources.

- (4) Applicant's audit reports and findings from audits performed on the Applicant pursuant to 2 CFR Part 200 Subpart F—Audit Requirements or the reports and findings of any other available audits;

(5) Applicant's ability to effectively implement statutory, regulatory, or other requirements imposed on non-Federal entities;

(6) Applicant's potential for conflict of interest if applicable; and

Note: The FHWA will review information provided by the Applicant, and any other relevant information known to DOT, to determine whether an award to the Applicant may create an actual or potential conflict of interest. If any such conflict of interest is found to exist, the FHWA may (a) disqualify the Applicant, or (b) determine that it is otherwise in the best interest of the United States to award to the Applicant and include appropriate provisions to mitigate or avoid such conflict in the Agreement pursuant to 2 CFR 200.112.

(7) Applicant's eligibility to receive Federal funding. Per the guidelines on government-wide suspension and debarment in 2 CFR Part 180, the Government will confirm that the Applicant and any named sub-applicants are not debarred, suspended or otherwise excluded from or ineligible for participation in Federal programs or activities.

Pursuant to 2 CFR Part 200.205, prior to making a Federal award, the Federal awarding agency is required to review information available through any OMB-designated repositories of government-wide eligibility qualification or financial integrity information, such as Federal Awardee Performance and Integrity Information System (FAPIIS), Dun and Bradstreet, and Sam.gov. The Government's review of this information will occur as part of the risk assessment.

3. ANTICIPATED FEDERAL AWARD DATES

The DOT anticipates awarding funds for advanced transportation and congestion management technologies deployments no later than September 2017.

SECTION F – FEDERAL AWARD ADMINISTRATION INFORMATION

1. FEDERAL AWARD NOTICES

Following the evaluation outlined in section E, DOT will notify the selected applicants and announce the selected projects. Notice that an applicant has been selected as a recipient does not constitute approval of the application as submitted. Before the award, DOT will contact the POC listed in the SF 424 to initiate negotiation of a project specific agreement. If the negotiations do not result in an acceptable submittal, DOT reserves the right to terminate the negotiation and decline to fund the applicant.

2. ADMINISTRATIVE AND NATIONAL POLICY REQUIREMENTS

All awards will be administered pursuant to the Uniform Administrative Requirements, Cost Principles and Audit Requirements for Federal Awards found in 2 CFR 200, as adopted by DOT at 2 CFR 1201. Applicable Federal laws, rules, and regulations set forth in 23 U.S.C. and 23 CFR also apply. For a list of the applicable laws, rules, regulations, executive orders, polices, guidelines, and requirements related to ATCMTD projects, please see <http://www.fhwa.dot.gov/aaa/generaltermsconditions.cfm>.

3. REPORTING

a. Progress Reporting on Grant Activity. Each applicant selected for an ATCMTD grant must submit the Federal Financial Report (SF-425) on the financial condition of the project, its progress, and an Annual Budget Review and Program Plan to monitor the use of Federal funds and ensure accountability and financial transparency in the ATCMTD program.

b. Reporting of Matters Related to Integrity and Performance. If the total value of a selected applicant's currently active grants, cooperative agreements, and procurement contracts from all Federal awarding agencies exceeds \$10 million at any time during the period of performance, then the applicant must maintain the currency of information reported to the SAM and made available in the FAPIIS about civil, criminal, or administrative proceedings described in paragraph 2 of the award terms and conditions. This is a statutory requirement under section 872 of Public Law 110-417, as amended (41 U.S.C. 2313). As required by section 3010 of Public Law 111-212, all information posted in the designated integrity and performance system on or after April 15, 2011, except past performance reviews required for Federal procurement contracts, will be publicly available.

c. Reporting to the Secretary. Per 23 U.S.C. 503(c)(4)(F), not later than 1 year after receiving an ATCMTD grant, and each year thereafter, the recipient shall submit a report to the Secretary that describes:

i. Deployment and operational costs of the project compared to the benefits and savings the project provides; and

ii. How the project has met the original expectations projected in the deployment plan submitted with the application, such as:

- a. data on how the project has helped reduce traffic crashes, congestion, costs, and other benefits of the deployed systems;
- b. data on the effect of measuring and improving transportation system performance through the deployment of advanced technologies;
- c. the effectiveness of providing real time integrated traffic, transit, and multimodal transportation information to the public to make informed travel decisions; and
- d. lessons learned and recommendations for future deployment strategies to optimize transportation efficiency and multimodal system performance.

SECTION G – FEDERAL AWARDING AGENCY CONTACTS

Address any questions to:

ATCMTD@dot.gov