



**COLORADO**

Department of  
Transportation

# Advanced Mobility & Planning for Technology



**COLORADO**  
Department of  
Transportation



## Presentation Overview

---

### **Advanced Mobility Overview, Amy Ford**

- Vision for Advanced Mobility
- Making the Connection with Interoperability
- Importance of Collaboration

### **Fiber Planning & Development, Wes Maurer & Bob Fifer**

- Planning Process
- Partnership Development

### **Smart Mobility Planning, Wes Maurer & Bob Fifer**

- Purpose of Smart Mobility Planning
- Scope & Timeline

### **Discussion**



# Advanced Mobility Overview



**COLORADO**  
Department of  
Transportation



# Advanced Mobility Overview

---

## Amy Ford, Advanced Mobility Chief

- Vision for Advanced Mobility
- Making the Connection with Interoperability
- Importance of Collaboration





# FIBER PLANNING & DEVELOPMENT



**COLORADO**  
Department of  
Transportation

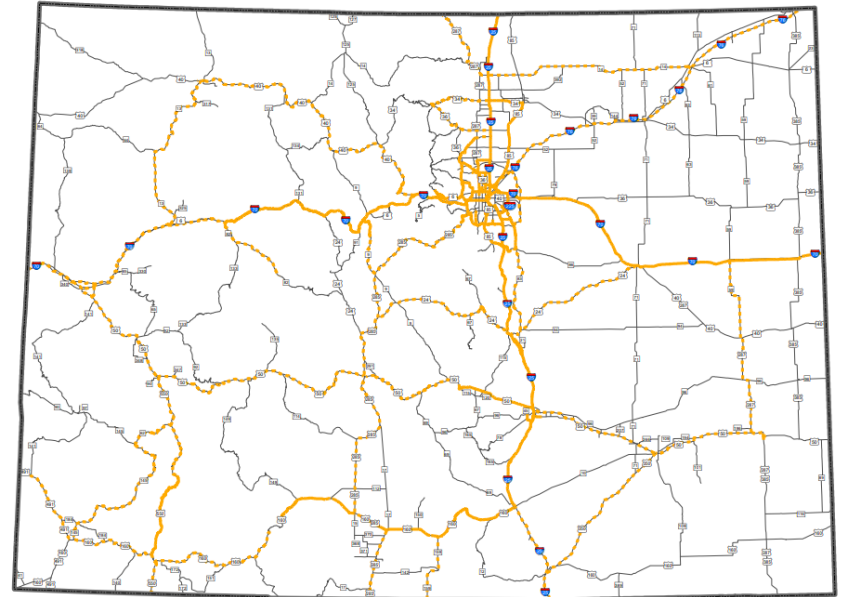


# Intelligent Transportation Systems Planning

---

## Fiber Planning, the foundation...

- Develop a 5-10 year fiber and network strategy to support the future transportation network with connected and autonomous vehicles.
- Identify routes based on a weighted factors, which include CDOT Region input, economic development and public safety needs.
- Building blocks to the Smart Mobility Plan.





## Fiber Public-Private Partnerships

---

### **Building Partnerships to expand CDOT's fiber footprint...**

- Opportunities to partner with Public and Private organizations come to CDOT in many forms.
- Once an opportunity is identified, the entity submits a Unsolicited Proposal to ITS Planning.
- ITS Planning, who chairs Fiber Management Team (FMT) will present the opportunity to the FMT to review and approve.
- Once the terms and conditions are ironed out, ITS Planning submit to the appropriate State and CDOT Departments for finalization.

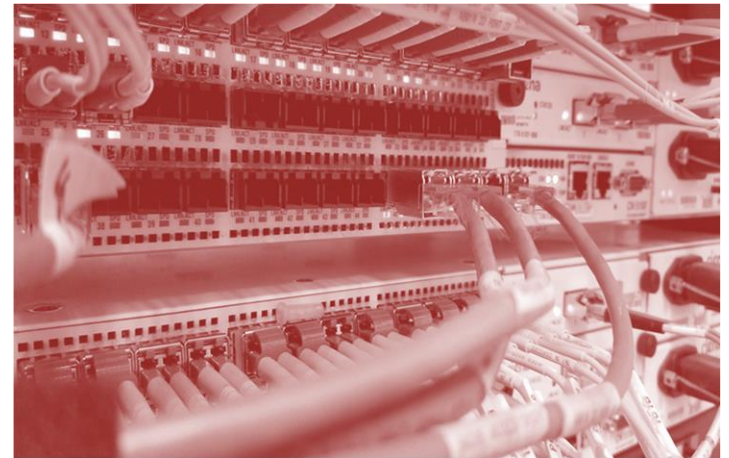


## Fiber Public-Private Partnerships

---

### P3s, why are these partnerships important...

- Create an environment that fosters **communications & technology** advancement for **ALL** of Colorado
- Improve community and State **resiliency**
- Promote **economic development**
- Grow an **interoperable** and **consistent** transportation network system
- To **expand information networks** while leveraging the existing transportation “hard” infrastructure
- **Collecting data** to create **thoughtful, informed decisions** to improve our transportation network, while **enhancing technology abilities locally**

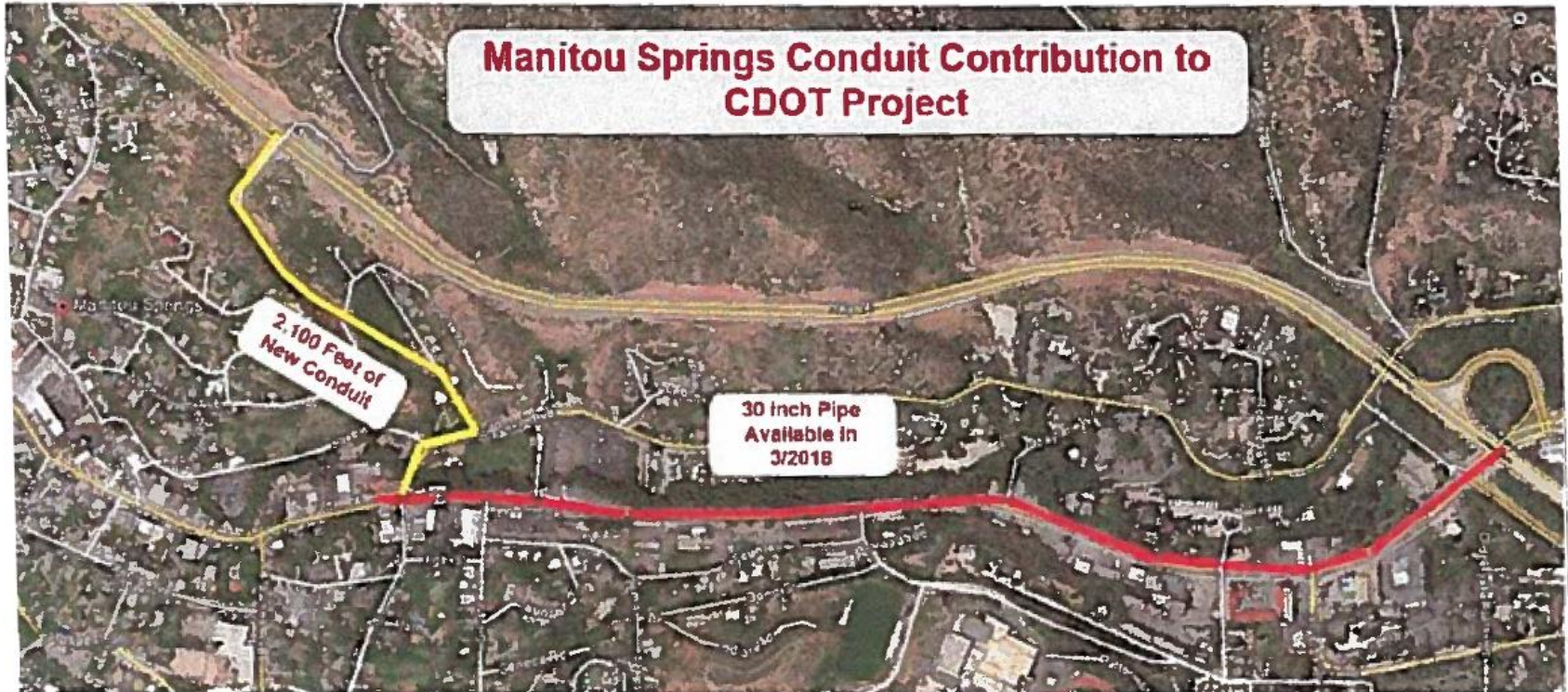






# Public-Public Public-Private Partnerships

---

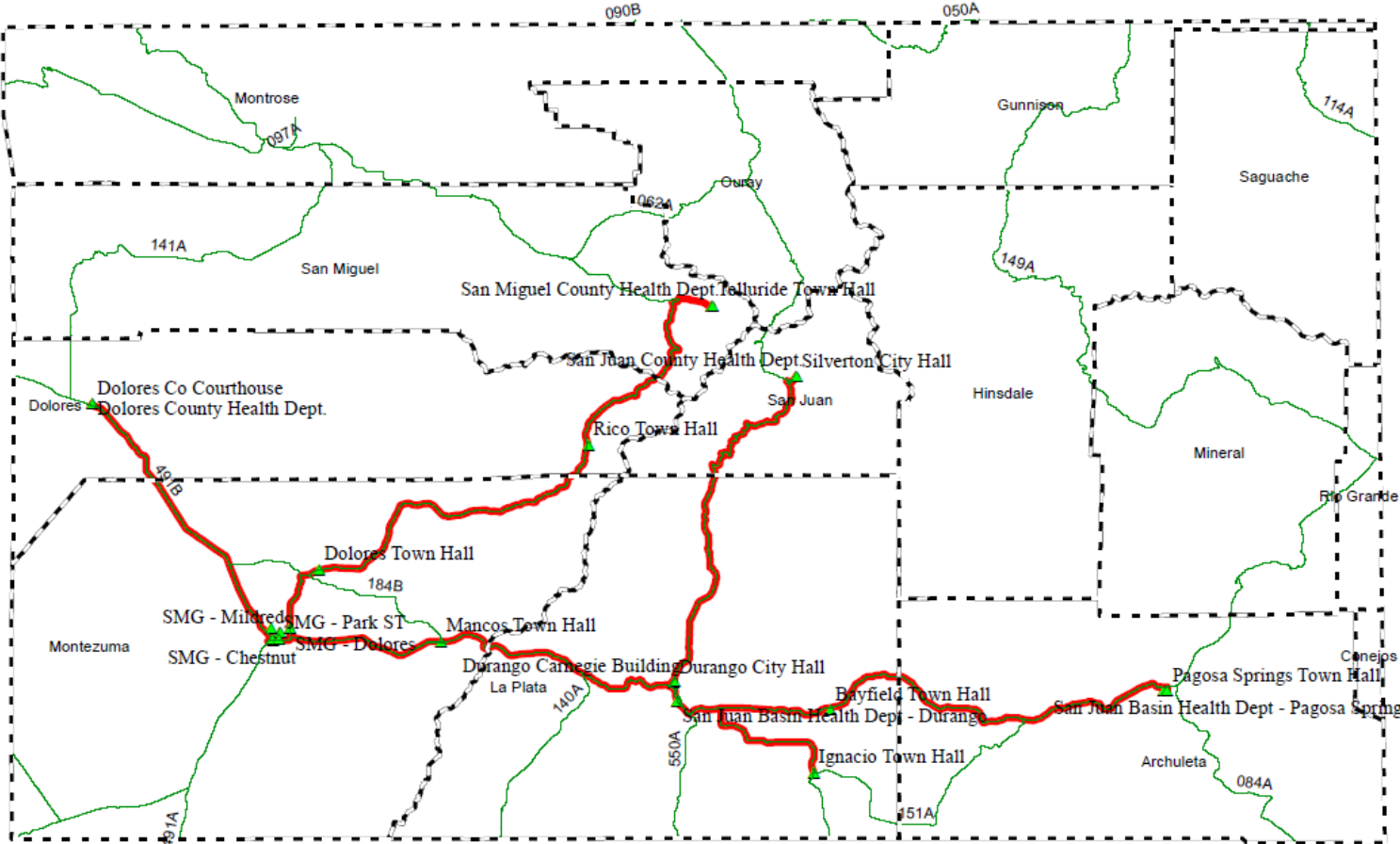


Proposed Opportunity



# Public-Public Public-Private Partnerships

## SWCCOG Proposed Route



Proposed Route

Proposed Opportunity



# Smart Mobility Planning



**COLORADO**  
Department of  
Transportation

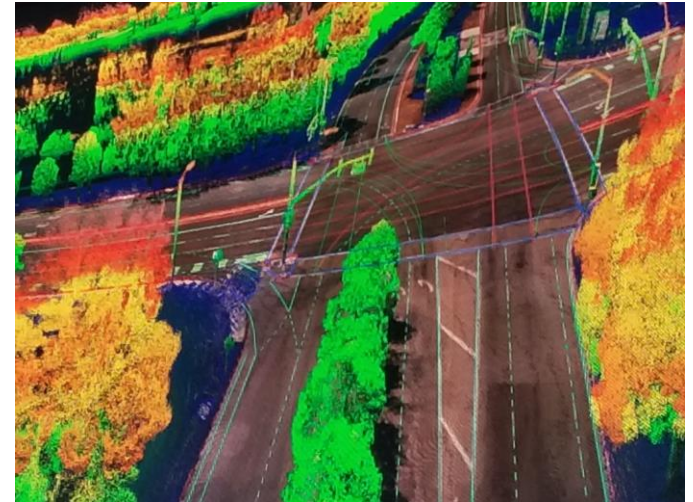


## Smart Mobility Planning

---

### CDOT's Smart Mobility Plan will...

- Create a 5 to 10 year vision and plan for maximizing the benefits of new technologies in the transportation sector.
- Define goals to improve safety and efficiency of Colorado's transportation system through the use of technology.
- Prepare CDOT's assets, data management, communications systems and infrastructure to maximize the benefits of connected and autonomous vehicles.





# Smart Mobility Planning

---

The Technology Toolbox will Provide a Pipeline for Accelerating Innovation





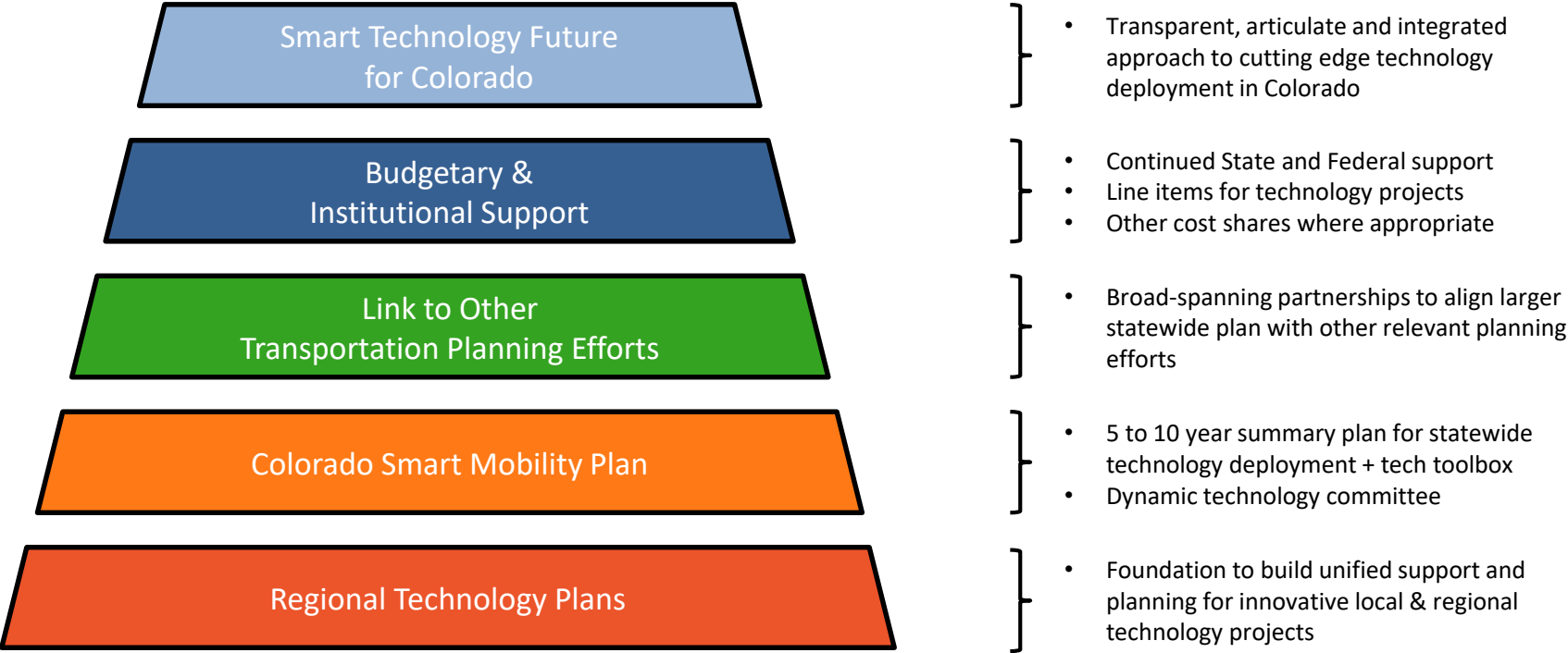
# Smart Mobility Planning

---





# Smart Mobility Planning





# Discussion



**COLORADO**  
Department of  
Transportation





## CDOT Advanced Mobility Group

---

### **CONTACT INFORMATION**

**Amy Ford, Advanced Mobility Chief**

Amy.Ford@state.co.us

**Wes Maurer, Intelligent Transportation Systems Branch Manager**

Wes.Maurer@state.co.us

303.512.5820

**Bob Fifer, ITS Business Development and Planning Manager**

Bob.fifer@state.co.us

303.512.5808

## Rocky Mountain Hyperloop

May 22, 2018, 4:00 – 5:00 PM Mountain Time  
6200 South Quebec Street, Greenwood Village, CO  
and virtual live meeting – **please RSVP below**

Rocky Mountain Hyperloop is one of ten global finalists working in Partnership with Virgin Hyperloop One to make Hyperloop a reality. This venture offers multiple opportunities for additional partners and stakeholders, such as local governments, businesses and community groups, to become part of this venture and to help make Hyperloop a reality in Colorado.

Late last year, CDOT and Virgin Hyperloop One, working with AECOM, kicked off the Hyperloop Study, which will examine the technological and financial viability of a Hyperloop transportation system in Colorado, based on an initial concept presented to Virgin Hyperloop One by CDOT and AECOM in 2016 (see map at right.)

In addition to technical and economic aspects, the study will explore the regulatory issues and identify the government agencies and regulations that would be needed in making this venture a reality.

The May 22 meeting will include updates on:

### Hyperloop Coming to Your Location:

Building from the initial concept, there are several opportunities and possibilities for alignments that make meaningful connections throughout metro areas across Colorado. The Team is seeking input from stakeholders and interested partners in the development of the places to connect during a potential Phase 1 effort.

### Getting on Hyperloop via Portals (Stations):

Portals connect the Hyperloop system to the communities/developments/existing transportation systems and are a key focus in developing a system. As such, this meeting will provide an opportunity for feedback from communities, agencies, and business development interests in how they could participate, contribute, integrate, and make Hyperloop a reality in their community.

### What's in it for me:

A Hyperloop system will not only create extraordinary transportation options for Colorado residents and businesses, but also significant economic and transportation-oriented development. Preliminary data and analysis regarding transportation potential and economic modeling of a Colorado Hyperloop system will be shared.

### Partnership Possibilities

The briefing will discuss case studies to illustrate potential partnerships and project delivery mechanisms. Colorado-specific programs, such as the CDOT High Performance Transportation Enterprise will be discussed.



**You must RSVP to join the meeting here: [hyperloop@aecom.com](mailto:hyperloop@aecom.com)**  
You can use the same email to ask questions about the meeting.  
Once RSVP'd, you will receive more information about the virtual meeting.



**COLORADO**  
 Department of Transportation  
 Office of Policy and Government Relations

**MEMORANDUM**

**TO:** STATEWIDE TRANSPORTATION ADVISORY COMMITTEE  
**FROM:** HERMAN STOCKINGER (OPGR) AND DEBRA PERKINS SMITH (DTD)  
**DATE:** APRIL 27, 2018  
**SUBJECT:** ~~TIGER IX~~ BUILD FEDERAL TRANSPORTATION DISCRETIONARY GRANTS

**Background**

On April 20, 2018, the U.S. Department of Transportation (USDOT) announced the application process for the Better Utilizing Investments to Leverage Development, or BUILD Transportation Discretionary Grants program. BUILD is largely similar to previous TIGER grant rounds.

**Funding Amounts and Match Requirements**

- \$1.5 billion is available to be awarded (compared to \$500 million under TIGER last year).
- Grant size is \$5 million (\$1 million in rural areas) to \$25 million in urban areas, and no more than \$150 million to a single state.
- Not less than \$450 million (30%) shall be for projects in rural areas
- Up to \$300 million (up to 20%) to pay subsidy and administrative costs for a project receiving TIFIA credit assistance.
- Up to \$15 million for planning, preparation or design of eligible projects
- Grant *may* be for 80% of project costs, or more for rural projects

**Grant Timing**

- Notice of Funding Opportunity (NOFO) issued April 20, 2018
- Applications due by July 19, 2018
- Grants awards will be made by December 18, 2018.
- *STAC meets April 27, May 18, June 22, July 27*
- *TC meets May 16, June 21, July 19*

**Eligible Applicants**

- State, local and tribal governments, transit agencies, port authorities, MPOs and other political subdivisions of State or local governments. 3 application limit. Joint applications ok, but lead applicant must be identified.

**Project Timing**

- Obligation by September 30, 2020
- Funds expended by September 30, 2025

**Previous TIGER Awards**

- Recipients of TIGER funds may apply for support of additional phases of a project, but should demonstrate the extent to which the previous award has met estimated project schedules and budgets, as well as realize the expected project benefits.

**Project Cost/Benefit and Selection Criteria**

- Very similar to TIGER, see attached side-by-side comparison for details.

**How Does BUILD Coincide With Other Grants?**

- BUILD is for federal FY '18 <https://www.transportation.gov/BUILDgrants/about>

- INFRA applications pending and expected to be awarded in June, 2018 are for federal FY '17 & '18 (so in essence BUILD is “catching up” to INFRA)  
<https://www.transportation.gov/buildamerica/infragrants>
- Other pending grants include:
  - Advanced Transportation & Congestion Management Technologies Deployment (ATCMTD). \$60 million. Due June 18 .  
<https://www.fhwa.dot.gov/pressroom/fhwa1806.cfm>
  - Surface Transportation System Funding Alternatives (STSFA). \$20 million. Due August 14. <https://www.grants.gov/web/grants/view-opportunity.html?opId=303186>
  - Consolidated Rail Infrastructure & Safety Improvements (CRISI). \$65 million. Due June 21. <https://www.fra.dot.gov/Page/P1079>

For questions, please contact Herman Stockinger at (303-757-9077) or [herman.stockinger@state.co.us](mailto:herman.stockinger@state.co.us) or Tim Kirby at 303-757-9619 or [timothy.kirby@state.co.us](mailto:timothy.kirby@state.co.us).



U.S. Department of Transportation

### BUILD vs TIGER Fact Sheet

The Better Utilizing Investments to Leverage Development (BUILD) Transportation Grants solicitation will make \$1.5 billion available to surface transportation projects that align with the merit criteria described in the Notice of Funding Opportunity (NOFO). BUILD replaces the pre-existing TIGER grants program. Like TIGER, FY 2018 BUILD Transportation Grants are for investments in surface transportation infrastructure and are to be awarded on a competitive basis for projects that will have a significant local or regional impact. For this round of BUILD, no more than \$150 million can be awarded to a single State.

To reflect the Administration’s Infrastructure Initiative, DOT plans to award a greater share of BUILD Transportation funding to projects located in rural areas that align well with the merit criteria than to those in urban areas. Rural applicants can highlight their needs in response to several of the evaluation criteria, including to deploy rural broadband as part of an eligible transportation project. BUILD encourages local governments to proactively raise new sources of revenue with a new criterion to evaluate local activities to generate additional non-Federal revenue for transportation infrastructure.

BUILD applications will be evaluated based on the following merit criteria: safety, economic competitiveness, quality of life, environmental protection, state of good repair, innovation, partnership, and additional non-Federal revenue for infrastructure investments. Below is a side-by-side comparison of the merit criteria used in TIGER and BUILD:

<b>TIGER</b>	<b>BUILD</b>
<p><b>Merit criteria</b></p> <p><i>Primary criteria</i></p> <ul style="list-style-type: none"> <li>• Safety</li> <li>• State of Good Repair</li> <li>• Economic Competitiveness</li> <li>• Environmental Sustainability</li> <li>• Quality of Life</li> </ul> <p><i>Secondary criteria</i></p> <ul style="list-style-type: none"> <li>• Innovation</li> <li>• Partnership</li> </ul> <p><i>Other criteria</i></p> <ul style="list-style-type: none"> <li>• Demonstrated Project Readiness</li> <li>• Project Costs and Benefits</li> <li>• Cost Sharing or Matching</li> </ul> <p><i>Additional considerations</i></p> <ul style="list-style-type: none"> <li>• Geographic diversity among recipients</li> </ul>	<p><b>Merit criteria</b></p> <ul style="list-style-type: none"> <li>• Safety</li> <li>• State of Good Repair</li> <li>• Economic Competitiveness</li> <li>• Environmental Protection</li> <li>• Quality of Life</li> <li>• Innovation</li> <li>• Partnership</li> <li>• Non-Federal Revenue for Transportation Infrastructure Investment</li> </ul> <p><i>Other criteria</i></p> <ul style="list-style-type: none"> <li>• Demonstrated Project Readiness</li> <li>• Project Costs and Benefits</li> </ul> <p><i>Additional considerations</i></p> <ul style="list-style-type: none"> <li>• Geographic diversity among recipients</li> </ul>

*For additional explanation of the criteria, please see the BUILD NOFO*

#### **What stayed the same from TIGER competitions?**

The eligible costs and project types have not changed. The minimum and maximum project award sizes are the same as in FY 2017.

## CRISI Program

CRISI = Consolidated Rail Infrastructure and Safety Improvement

<https://www.federalregister.gov/documents/2018/02/21/2018-03534/notice-of-funding-opportunity-for-consolidated-rail-infrastructure-and-safety-improvements>

**Grant Application Due Date:** 5:00 PM EDT, June 21, 2018

**Funds Available Nationally:** \$65.2 Million, with a minimum of \$17 Million for rural areas

**Match Requirement:** Minimum 20% non-federal match, with preference given to 50% non-federal match

**Eligible Applicants:** State(s), Interstate Compact(s), Cities/Counties or similar, Amtrak or other Intercity Passenger Rail Entity, "Short Line" (Class II or II) Freight Railroad, Transportation Research Board, University, Non-Profit Rail Labor Organization

**Eligible Projects:** Planning, Environmental Clearance, Design, or Construction (identify which phase) for railroad safety technology including PTC, capital intercity passenger rail project, rail congestion project, highway-rail grade crossing, rail line relocation or consolidation, short line rail project, regional/corridor rail planning, multi-modal rail project, or rail safety program. Overall intent is to support infrastructure and safety improvements for freight and passenger rail.

**Application Submission:** Must be via Grants.gov application package  
Must complete series of "Standard Forms" for FRA  
No more than 25 total pages in length, preferably e-document  
How this project meets eligibility requirements  
Detailed project description including beneficiaries and users  
Project location, geographically, and whether "rural" or not  
Response to evaluation criteria  
Project Management approach  
Benefit Cost Analysis (BCA)

**Evaluation Criteria:** Review of eligibility & completeness  
Review of Benefit Cost Analysis and related project support docs  
Federal share of cost  $\leq$  50% total project & is leveraged well  
Economic vitality  
Innovative approaches to improve safety & expedite delivery  
Accountability for federal funds and project delivery  
Performance reporting on slow orders, gross tons, auto crossings eliminated, track weight capacity, and track miles by condition.



**COLORADO**  
**Department of Transportation**  
 Transportation Systems  
 Management & Operations

**Memorandum**

To: Statewide Transportation Advisory Committee (STAC)  
 From: Lisa Streisfeld, Planning Performance and TDM Manager  
 CC: Ryan Rice, Director of Transportation Systems Management and Operations (TSM&O)  
 Date: April 26, 2018  
 Subject: New Grant Opportunity of Advanced Transportation and Congestion Management Technologies Deployment (ATCMTD)  
 Attachments: “Frequently Asked Questions on the ATCMTD Program” & “Notice of Funding Opportunity”

---

**Summary:** The US Department of Transportation (USDOT) and Federal Highway Administration (FHWA) announced the availability of the Advanced Transportation and Congestion Management Technologies Deployment Program (ATCMTD) grant for Federal Fiscal year 2018 funds on April 18, 2018. The grant is authorized under the “Fixing America’s Surface Transportation (FAST) Act” and authorizes of to \$60 million in funds to promote new technologies which improve transportation efficiency and safety. This memo will provide information on eligible applicants, types of projects, and a schedule to ensure grant applications are complete and submitted by the deadline. CDOT asks than internal applications or outside eligible parties, wanting to partner with CDOT on a project, coordinate with the Department on the grant submittals to the USDOT.

**Who is eligible?** State departments of transportation, transit agencies, metropolitan planning organizations, publicly owned tolling authorities, a multi-jurisdictional group or consortia of research or academic institutions, and public private partnerships are all eligible to apply for ATCMTD funds.

**What kinds of projects?** The types of projects should improve the performance of transportation systems, reduce congestion, improve safety, improve infrastructure, and improve connections between rural communities. Specific projects will integrate data from different systems, such as integrated corridor management, real-time traveler information, traffic data, and ITS (intelligent transportation systems technologies.) Specifically, grant recipients may use funds under this program to deploy advanced transportation and congestion management technologies, including:

- advanced traveler information systems;
- advanced transportation management technologies;
- infrastructure maintenance, monitoring, and condition assessment;
- advanced public transportation systems;
- transportation system performance data collection, analysis, and dissemination systems;
- advanced safety systems, including vehicle-to-vehicle and vehicle-to-infrastructure communications;
- technologies associated with autonomous vehicles (including the purchase of an autonomous vehicle), and other collision avoidance technologies, including systems using cellular technology;
- integration of intelligent transportation systems with the Smart Grid and other energy distribution and charging systems;
- electronic pricing and payment systems; or
- advanced mobility and access technologies, such as dynamic ridesharing and information systems to support human services for elderly and disabled individuals



**COLORADO**  
**Department of Transportation**  
 Transportation Systems  
 Management & Operations

The Notice of Funding Opportunity noted that the US DOT is particularly interested in projects in the following areas:

- Multi-Modal Integrated Corridor Management,
- Installation of connected vehicle technologies at intersections and pedestrian crossing locations;
- Unified fare collection and payment systems across transportation modes and jurisdictions,
- Freight Community System;
- Technologies to support connected communities (one example could be a ridesharing platform); and
- Rural technology deployments.

**Funding Available:** The award ceiling is \$12 million for a grant applicant for a single year. Cost sharing or matching is required with the maximum Federal share being 50%. Therefore, the minimum match provided by applicants is 50%. Matches may be non-monetary.

**Grant recipient requirements:** Grant recipients shall provide annual reports to the Secretary of the US Department of Transportation on the costs and benefits of the project and how the project meets expectations described in the grant application. Funds must be obligated by the end of the third fiscal year for which they are authorized (e.g., FY 2018 funds must be obligated by September 30, 2021).

**Preliminary Schedule:**

<i>Date</i>	<i>Action</i>	<i>Responsible Party</i>
April 18	Grant opportunity is announced	US DOT
April 27	Provide information on ATCMTD to STAC	CDOT
April 27-May 8	Provide grant information to stakeholders	CDOT
May 8	CDOT produces draft candidate projects for ATCMTD grant due	Grant Applicants
May 16-17	Transportation Commission prioritizes project list	Transportation Commission
May 18	STAC Reviews grant project list	STAC
TBD	Notify US DOT of which projects Colorado will submit grant applications in June	CDOT
May 19-June 2	Prepare grant applications	Grant applicants
May 23	Webinar for Funding Opportunity Information	Applicants are required to register for webinar : <a href="https://connectdot.connectsolutions.com/ec7kdok48rh3/event/registration.html">https://connectdot.connectsolutions.com/ec7kdok48rh3/event/registration.html</a>
June 2	Draft of grant applications due to CDOT for review	Grant applicants
June 15	Final version of applications due to CDOT	Grant applicants
June 16	Submit complete grant application on the "Grants.gov" website	CDOT
<b>June 18</b>	<b>Grant Applications Due to US DOT</b>	
September, 2018	Awards announced	US DOT

**For more information:** The CDOT point of contact is: Lisa Streisfeld, TSM&O. She may be reached by phone: (303) 757-9876 or email at: [Lisa.Streisfeld@state.co.us](mailto:Lisa.Streisfeld@state.co.us).

Additionally, The Notice of Funding Opportunity available at the following website: <https://www.grants.gov/web/grants/view-opportunity.html?oppld=303763>





U.S. Department of Transportation

Notice of Funding Opportunity Number

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

Issue Date: 04/18/2018

Application Due Date: 06/18/2018

## 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	17
E	APPLICATION REVIEW INFORMATION	30
F	FEDERAL AWARD ADMINISTRATION INFORMATION	35
G	FEDERAL AWARDED AGENCY CONTACTS	36

The FHWA is using [www.Grants.gov](http://www.Grants.gov) for issuance of this Notice of Funding Opportunity (NOFO). Applicants must register at Grants.gov under NOFO Number 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**

<b>Funding Opportunity Summary:</b>	<b>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.</b>
<b>Federal Agency Name:</b>	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
<b>Funding Opportunity Title:</b>	Advanced Transportation and Congestion Management Technologies Deployment (ATCMTD) Initiative
<b>Announcement Type:</b>	This is the initial announcement of this funding opportunity. This is not a follow-on notice.
<b>Funding Opportunity Number:</b>	693JJ318NF00010
<b>Type of Award:</b>	Cooperative Agreements or Allocations to State Departments of Transportations
<b>Catalog of Federal Domestic Assistance (CFDA) Number:</b>	20.200 Highway Research & Development
<b>Application Due Date:</b>	<b>Submission Deadline: Applications Due by 06/18/2018 at 11:59 PM Eastern Time</b> through <a href="http://www.Grants.gov">www.Grants.gov</a>
<b>Questions:</b>	Submit Questions to: <a href="mailto:ATCMTD@dot.gov">ATCMTD@dot.gov</a>

## **Funding Opportunity Informational Webinar**

The U.S. 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:** To Be Determined

**TIME:** 1:00 pm Eastern Time

#### **INFORMATION AND REGISTRATION:**

**Note:** The DOT will also consider conducting additional virtual and/or in person workshops regarding the Advanced Transportation and Congestion Management Technologies Deployment Initiative Funding Opportunity.

### **Substantive Changes from Fiscal Year 2017 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.**

Departmental objectives have been added on page 13.

Additional deliverables were added to the deliverable table on pages 13 – 15.

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 17 has been revised to split the application into two Volumes – a Technical Application and a Budget Application.

The information requested on pages 18 – 19 for the table on the application’s cover page has been revised.

The content requirements of the Project Narrative on pages 19 - 22 have been revised.

Added additional elements of the project narrative (#13) on page 20.

Résumés of key personnel are required on page 21 under Section e), Appendix – Resumes for Key Personnel.

The page limit for the Project Narrative on page 22 has been increased to 30 pages, and clarity added related to paper sizes on page 21.

The content requirements of the Budget Application on pages 22 and 23 has been revised.

The Funding / Budget Information of Volume 2 on page 23 has been expanded.

More information has been added on pages 17 and 22 regarding the submission of applications and required forms on [Grants.gov](http://Grants.gov), and a request for a detailed budget plan added under Volume 2 on pages 23 and 24.

Information regarding how to register and submit an application in Grants.gov has been added on pages 26-29.

Information regarding technical difficulties and the submission of late applications has been revised on page 29.

“Cost” has been added under the “Criteria for Selection of ATCMTD Awards” on page 31.

The rating categories for the applications have been added on page 32 under the “Review and Selection Process” section.

More information has been added to pages 32 – 34 to describe the two-phase process for selection, choosing an award method, and post-selection award discussions.

## **SECTION A – PROGRAM DESCRIPTION**

Section 503(c)(4) of Title 23 of the United States Code (23 U.S.C. 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 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 increased mobility, particularly for persons with visible and hidden disabilities and elderly individuals.

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 (FAST) Act, codified at 23 U.S.C. § 503(b).

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, which could include:

- 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 publicly 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 proposals 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 help 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 systems 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, 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 persons with visible and hidden disabilities and elderly individuals. Any of these example technologies should consider 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.

After applying the above preferences, the FHWA Administrator will take into account the following key Departmental objectives:

- Supporting economic vitality at the national and regional level;
- Leveraging Federal funding to attract other, non-Federal sources of infrastructure investment, as well as accounting for the life-cycle costs of the project;
- Using innovative approaches to improve safety and expedite project delivery; and,
- Holding grant recipients accountable for their performance and achieving specific, measurable outcomes identified by grant applicants.

**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?
Preliminary Kick-off Meeting – Conduct a preliminary kick-off meeting with DOT at mutually-agreed-upon location.	Within 6 weeks after announcement of project selection.	No
<p>Draft Cooperative Agreement completed. The Cooperative Agreement shall include a Project Management Plan. The Project Management Plan, shall include, at a minimum:</p> <p>a) <b>Statement of Work</b>, with a description of <b>Tasks and Sub-Tasks</b> by which the project work activities will be organized, executed, and monitored.</p> <p>b) A <b>Project Schedule</b> (Gantt Chart or equivalent) displaying begin and end times for each Task and Sub-Task, plus achievement of Project Milestones.</p>	Within 6 weeks after preliminary kick-off meeting.	No

<p>c) A description of major <b>Project Milestones</b>, including key Reports, start of operations of important systems or subsystems, and other important deliverables or events.</p> <p>d) A <b>Staffing Table</b>, which identifies a single Project Manager, plus project staff and/or consultants that will lead and support each Task (or Sub-Task if appropriate).</p> <p>A <b>Project Budget</b>, displaying planned expenditures for each Task, with a further breakdown by Cost Element for each Task, and by the Federal share vs. non-Federal share.</p>		
<p>Cooperative Agreement fully executed.</p>	<p>Within 6 weeks after completion of draft agreement.</p>	<p>No</p>
<p>Kick-off Meeting – Conduct a kick-off meeting with DOT at mutually-agreed-upon location.</p>	<p>Within 4 weeks after execution of cooperative agreement.</p>	<p>No</p>
<p>Monthly Progress Reports – submit progress reports to document activities performed, anticipated activities, and any changes to schedule or anticipated issues.</p>	<p>Monthly</p>	<p>No</p>
<p><b>Systems Engineering Documents</b></p> <p>In accordance with 23 CFR 940.11, the Recipient shall submit electronic copies of the milestone Systems Engineering documents applicable to this project, for approval by FHWA. This shall include, at minimum:</p> <p>a) Systems Engineering Review Form (SERF)  b) Concept of Operations (ConOps)  c) Systems Engineering Management Plan (SEMP).</p>	<p>As applicable</p>	<p>No</p>
<p><b>Project Evaluation Plan.</b></p> <p>The Recipient shall submit to FHWA for approval an Evaluation Plan, which shall include, at a minimum:</p> <p>a) Statement of <b>Project Objectives</b>,  b) List of <b>Evaluation Criteria</b> (e.g. quantitative performance metrics and/or qualitative assessments) tailored to the Project Objectives,  c) Description of <b>data-collection</b> procedures tailored to these criteria, which could include, for example, before/after data, surveys, interviews, system-monitoring data, or other data needed to report on achievement of project objectives.</p>	<p>Within 90 days after the Effective Date</p>	<p>No</p>

d) Outline of <b>Evaluation Report</b> (1-page, <u>draft</u> list of topics to be addressed)		
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 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 third 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 1 and 4 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 5 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 must submit their applications via [Grants.gov](https://www.Grants.gov) under the Notice of Funding Opportunity Number cited herein. Applications must be submitted through the Grants.gov Workspace. Please note: legacy PDF packages are no longer available.

The Applicant must complete and submit all forms included in the application package for this Notice as contained at [www.Grants.gov](https://www.Grants.gov).

### 2. CONTENT AND FORM OF APPLICATION SUBMISSION

Applicants shall submit an application consisting of the following application volumes and sections:

Table D.2 – Application Volumes

Volume	Section	Page Limitations
Volume I. Technical Application	I - Cover Page	One (1) file, 30-page limit
	II - Project Description	
	III – Management Structure	
	IV - Staffing Plan and Résumés	
	Appendix - Résumés	No page limit

Volume II. Budget Application	I - Application Standard Forms	One (1) file, no page limit
	II – Summary Budget Information	
	III – Cost Share Information	
	IV - 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.

The 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) Section I - 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"> <li>• Transportation Improvement Program (TIP)</li> </ul>	Yes/No – <i>please specify in which plans the project is currently programmed</i>

<ul style="list-style-type: none"> <li>• Statewide Transportation Improvement Program (STIP)</li> <li>• MPO Long Range Transportation Plan</li> <li>• State Long Range Transportation Plan</li> </ul>	
Technologies Proposed to Be Deployed (briefly list)	

**b) Section II - Project Narrative**

The Project Narrative must include all the necessary information required for DOT to determine that the project satisfies the ATCMTD Program requirements described in Sections A, B, and C, and for DOT to evaluate the project in relation to 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 expects applications to be complete upon submission.

The DOT recommends that the project narrative, at a minimum, provide the following information: table of contents, detailed statement of work, detailed project schedules, staffing description, and any appropriate exhibits or attachments that will aid in the review and assessment of the application. All exhibits and attachments must clearly identify what technical area of the project description that the document supports. At a minimum, the Project Description should address the following content:

1. An introduction that provides a clear, concise description of the project and the proposed technology deployment(s).
2. A description of the geographic area or jurisdiction the deployment will service.
3. 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.
4. A description of transportation systems and services to be included in the project.
5. 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.
6. A description of any challenges in the regulatory, legislative, or institutional environments or other obstacles to deployment.
7. 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.
8. 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.
  9. 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.
  10. A plan to leverage and optimize existing local and regional advanced transportation technology investments.
  11. A schedule for conducting the technology deployment and for completion of all proposed activities.
  12. 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>.)
  13. A table (or other summary) clearly identifying which of the 9 technologies in Section A.3. and the 11 DOT goals, 7 focus areas and 4 DOT objectives in Section A.4. will be implemented and/or addressed by the proposal.

### **c) Section III – Management Structure**

The Applicant shall provide a description of the proposed management structure that will oversee the implementation of the project and provide administration of the agreement. The Applicant shall include all of the following information to describe their proposed Management Structure:

1. A description of the Applicant's organization that will be designated as the recipient entering 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.
2. 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.

3. Designation of all proposed sub-recipients, and their role in delivering the project. See 2 CFR § 200.330 for the definition and distinction between a sub-recipient and a sub-contractor.
4. A diagram or flow chart depicting the organizational structure of the project team. Organizations that are designated as sub-recipients or subcontractors should be clearly identified.
5. 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.

#### **d) Section IV - Staffing Description**

Applicants shall provide a staffing description that includes the following information:

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.

#### **e) Appendix - Résumés for Key Personnel**

Applicants shall provide the résumés for all designated Key Personnel. The applicant shall designate no more than five (5) Key Personnel.

#### **e) Formatting**

The DOT recommends that the project description 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.) All application pages shall be consecutively numbered.

#### **f) Page Limitations**

The project description shall not exceed 30 pages in length, excluding cover pages, the table of contents, and exhibits and attachments. Exhibits and attachments shall not exceed 30 pages in length, and shall be limited to documents that support the assertions or conclusions made in the 30-page project description.

The staffing description shall not exceed five pages in length. There is no overall page limitation for résumés of Key Personnel in the appendix; however, individual resumes shall not exceed four (4) pages in length, and shall only contain relevant experience pertinent to the subject matter of this NOFO.

### **VOLUME 2 – BUDGET APPLICATION**

#### **a) Section I - 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](http://www.SAM.gov) and for the Applicant's DUNS number. The title for an applicant's workspace on [www.Grants.gov](http://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).

**b) Section II - Summary Budget Narrative**

The Applicant shall provide a summary budget narrative that describes all of the planned project costs (i.e., direct labor, travel, equipment, supplies, contractual, construction, & other) and how these planned costs are connected to the project scope. The summary budget narrative must be sufficiently clear, concise, and detailed to describe how funds will be spent under the project. The applicant shall also provide a summary budget table that provides estimated costs across project components or tasks, and across all years of the project. The summary budget should represent the total cost of the project, inclusive of both the Federal share and the required matching non-Federal cost share. An example of a summary level budget table is provided below:

Table 2. Example of Summary Budget Figures

	Year 1 Costs	Year 2 Costs	Year 3 Costs
Description of Project Component or Task			
Description of Project Component or Task			
Description of Project Component or Task			
Description of Project Component or Task			
Total Federal Share =			
Total Non-Federal Share =			

**c) Section III - Cost Share Information**

The Applicant should show evidence that funding has been identified for the project that will cover the 50 percent non-Federal cost share requirement. The Applicant should include letters of commitment from organizations that will provide a portion of the cost share, and identify the source of those funds (e.g., general treasury funds, revolving loan fund, capital budget, in-kind labor, in-kind equipment, etc.).

**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.

**d) Section IV - 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](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 (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. HOW TO REGISTER TO APPLY THROUGH GRANTS.GOV**

a. *Instructions:* Read the instructions below about registering to apply for FHWA funds. Applicants should read the registration instructions carefully and prepare the information requested before beginning the registration process. Reviewing and assembling the required information before beginning the registration process will alleviate last-minute searches for required information.

The registration process can take up to 4 weeks to complete. Therefore, registration should be done in sufficient time to ensure it does not impact your ability to meet required application submission deadlines.

If individual applicants are eligible to apply for this grant funding opportunity, refer to: <https://www.grants.gov/web/grants/applicants/individual-registration.html>

Organization applicants can find complete instructions here: <https://www.grants.gov/web/grants/applicants/organization-registration.html>

1) *Obtain a DUNS Number.* All entities applying for funding, including renewal funding, must have a Data Universal Numbering System (DUNS) number from Dun & Bradstreet (D&B). Applicants must enter the DUNS number in the data entry field labeled "Organizational DUNS" on the SF-424 form.

For more detailed instructions for obtaining a DUNS number, refer to: <https://www.grants.gov/web/grants/applicants/organization-registration/step-1-obtain-duns-number.html>

2) *Register with SAM:* In addition to having a DUNS number, organizations applying online through Grants.gov must register with the System for Award Management (SAM). All organizations must register with SAM in order to apply online. Failure to register with SAM will prevent your organization from applying through Grants.gov.

For more detailed instructions for registering with SAM, refer to: <https://www.grants.gov/web/grants/applicants/organization-registration/step-2-register-with-sam.html>

3) *Create a Grants.gov Account.* The next step in the registration process is to create an account with Grants.gov. Applicants must know their organization's

DUNS number to complete this process. Completing this process automatically triggers an email request for applicant roles to the organization's E-Business Point of Contact (EBiz POC) for review. The EBiz POC is a representative from your organization who is the contact listed for SAM. To apply for grants on behalf of your organization, you will need the Authorized Organizational Representative (AOR) role.

For more detailed instructions about creating a profile on Grants.gov, refer to: <https://www.grants.gov/web/grants/applicants/organization-registration/step-3-username-password.html>

4) *Authorize Grants.gov Roles:* After creating an account on Grants.gov, the EBiz POC receives an email notifying them of your registration and request for roles. The EBiz POC will then log in to Grants.gov and authorize the appropriate roles, which may include the AOR role, thereby giving you permission to complete and submit applications on behalf of the organization. You will be able to submit your application online any time after you have been approved as an AOR.

For more detailed instructions about creating a profile on Grants.gov, refer to: <https://www.grants.gov/web/grants/applicants/organization-registration/step-4-aor-authorization.html>

5) *Track Role Status:* To track your role request, refer to: <https://www.grants.gov/web/grants/applicants/organization-registration/step-5-track-aor-status.html>

b. *Electronic Signature:* When applications are submitted through Grants.gov, the name of the organization's AOR that submitted the application is inserted into the signature line of the application, serving as the electronic signature. The EBiz POC **must** authorize individuals who are able to make legally binding commitments on behalf of the organization as an AOR; **this step is often missed and it is crucial for valid and timely submissions.**

## 5. How to Submit an Application to FHWA via Grants.gov

Grants.gov applicants can apply online using Workspace. Workspace is a shared, online environment where members of a grant team may simultaneously access and edit different webforms within an application. For each funding opportunity announcement (FOA), you can create individual instances of a workspace.

Below is an overview of applying on Grants.gov. For access to complete instructions on how to apply for opportunities, refer to:

<https://www.grants.gov/web/grants/applicants/apply-for-grants.html>

1) *Create a Workspace*: Creating a Workspace allows you to complete it online and route it through your organization for review before submitting.

2) *Complete a Workspace*: Add participants to the Workspace, complete all the required forms, and check for errors before submission.

a. *Adobe Reader*: If you decide not to apply by filling out Webforms you can download individual PDF forms in Workspace so that they will appear similar to other Standard or FHWA forms. The individual PDF forms can be downloaded and saved to your local device storage, network drive(s), or external drives, then accessed through Adobe Reader.

NOTE: Visit the Adobe Software Compatibility page on Grants.gov to download the appropriate version of the software at:

<https://www.grants.gov/web/grants/applicants/adobe-software-compatibility.html>

b. *Mandatory Fields in Forms*: In the forms, you will note fields marked with an asterisk and a different background color. These fields are mandatory fields that must be completed to successfully submit your application.

c. *Complete SF-424 Fields First*: The forms are designed to fill in common required fields across other forms, such as the applicant name, address, and DUNS number. To trigger this feature, an applicant must complete the SF-424 information first. Once it is completed, the information will transfer to the other forms.

3) *Submit a Workspace*: An application may be submitted through workspace by clicking the Sign and Submit button on the Manage Workspace page, under the Forms tab. Grants.gov recommends submitting your application package at least 24-48 hours prior to the close date to provide you with time to correct any potential technical issues that may disrupt the application submission.

4) *Track a Workspace*: After successfully submitting a workspace package, a Grants.gov Tracking Number (GRANTXXXXXXXX) is automatically assigned to the package. The number will be listed on the Confirmation page that is generated after submission.

For additional training resources, including video tutorials, refer to:  
<https://www.grants.gov/web/grants/applicants/applicant-training.html>

*Applicant Support.* Grants.gov provides applicants 24/7 support via the toll-free number 1-800-518-4726 and email at [support@grants.gov](mailto:support@grants.gov). For questions related to the specific grant opportunity, contact the number listed in the application package of the grant you are applying for.

If you are experiencing difficulties with your submission, it is best to call the Grants.gov Support Center and get a ticket number. The Support Center ticket number will assist the FHWA with tracking your issue and understanding background information on the issue.

## **6. SUBMISSION DATES AND TIMES**

Applications must be submitted through [www.grants.gov](http://www.grants.gov) by submission deadline of 06/18/2018, 11:59 PM ET.

Applicants interested in applying are encouraged to email [ATCMTD@dot.gov](mailto:ATCMTD@dot.gov) no later than the submission deadline 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.

### Late Applications

The Grants.gov registration process usually takes 2–4 weeks to complete. 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. Only applicants who comply with the submission deadline described in this notice and submit applications through the Grants.gov Workspace will be eligible for award. Applicants are strongly encouraged to make submissions in advance of the deadline. Applications received after the deadline will not be considered except in the case of unforeseen technical difficulties with Grants.gov that are beyond the applicant's control. In those instances, the applicant must contact the Grants.gov help desk prior to the application deadline with the user name of the registrant and details of the technical issue experienced. Please note: applicants must obtain a Grants.gov Help Desk Tracking Number if they are experiencing technical difficulties. After the submission deadline, the applicant must contact the [ATCMTD@dot.gov](mailto:ATCMTD@dot.gov) email address, and provide the following information:

- 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.

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.

## **7. INTERGOVERNMENTAL REVIEW**

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

## **8. FUNDING RESTRICTIONS**

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

## **9. INTENT TO RELEASE APPLICATIONS AND NAMES OF APPLICANT**

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 after selection of the ATCMTD awardees; 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 program requirements and DOT goals, including safety, innovation, and opportunity.
- 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, including the applicant's activities to maximize the non-Federal share of the project funding.
- 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 persons with visible and hidden disabilities and elderly individuals. 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 a two-phased approach for the review and selection of applications. During Phase I, DOT will use a merit review process to evaluate applications and make selections for award. In Phase II, DOT will conduct award discussions with selected applicants to determine the method of award, clarify and request additional budgetary information, and obtain a project statement of work.

### a) Phase I - Application Review and Selection

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 confirmation 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.

b) Phase II – Post-Selection Discussions and Method of Award

In Phase II, the DOT and the applicant will reach an agreement on the method for award. There are two possible options for award: award through an allocation to the State DOT, or a direct award from FHWA. In Phase II, the DOT will also conduct discussions with the selected applicant to clarify elements of the applicant's technical and budget applications. Discussions will include a request for detailed and itemized cost information, including: direct labor categories, hours and rates, fringe benefit rates, travel, equipment, supplies, sub-recipient/contractor/consultant costs and supporting documentation, construction costs, other direct costs, indirect cost rates, and additional supporting budget narrative. The selected applicant will also be required to provide a project statement of work.

### 3. ANTICIPATED FEDERAL AWARD DATES

The DOT anticipates awarding funds for advanced transportation and congestion management technologies deployments no later than September 2018.

## **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](mailto:ATCMTD@dot.gov)

**Advanced Transportation and Congestion Management Technologies Deployment  
(ATCMTD) Program  
FAST Act § 6004, 23 U.S.C. 503(c)(4)**

**Frequently Asked Questions**

**Q1. Is this a new program?**

A1. The ATCMTD program is authorized under 23 U.S.C. 503(c)(4), as established by section 6004 of the Fixing America's Surface Transportation (FAST) Act in December 2015. This is year three of the program.

**Q2. What is the purpose of the ATCMTD program?**

A2. The ATCMTD program is intended to provide funding 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. (23 U.S.C. 503(c)(4)(A)).

**Q3. Was there other outreach or information on the ATCMTD program beyond these FAQs?**

A3. Yes, the recording of an informational webinar (and presentation) about the ATCMTD program is available at: <http://www.ops.fhwa.dot.gov/fastact>.

**Q4. Will the ATCMTD program continue beyond this solicitation?**

A4. Yes, a maximum of \$60 million will be available for ATCMTD grant awards for each of the federal fiscal years 2016-2020.

**Q5. Who is an eligible entity?**

A5. Eligible entities include: State or local governments, transit agencies, metropolitan planning organizations (MPOs) representing a population of over 200,000, 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. (23 U.S.C. 503(c)(4)(N)). FHWA encourages applicants for funding under this program to partner with the private sector or public agencies, including multimodal and multijurisdictional entities, research institutions, organizations representing transportation and technology leaders, or other transportation stakeholders.

**Q6. Does an ATCMTD award need to be used within a single year?**

A6. No. While ATCMTD award funds must be obligated by the end of the third fiscal year after the year for which the funds are authorized (e.g., FY 2018 funds must be obligated by September 30, 2021), once obligated, they can be expended until proposal objectives are carried out consistent with FHWA requirements for managing inactive obligations. FHWA recommends that an applicant include in its submission an estimated schedule of expenditure.

**Q7. How many grants will the Department award per year?**

A7. Each year, the Department anticipates awarding grants to at least 5 but not more than 10 eligible entities. (23 U.S.C. 503(c)(4)(D)).

**Q8. How much funding is available per grant?**

A8. A grant award in a fiscal year to a single grant recipient may not exceed 20 percent of that year's total ATCMTD funding (i.e., maximum award of \$12 million per year). Federal funding may not exceed 50% of project costs. (23 U.S.C. 503(c)(4)(J)-(K)).

**Q9. Can the match be non-monetary?**

A9. Yes, provided that the non-monetary match complies with the Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards specified in [2 CFR Part 200](#), including [section 200.306 of Part 200](#) on Cost Sharing or matching.

**Q10. Can a proposal include multi-year phases and request funding (up to \$12 million per phase) in future years as well?**

A10. Yes, but each phase would need to have independent utility to be considered, and phases in future years would need to re-compete in future solicitations. An award in year one of a multi-year phased plan does not guarantee funding for all phases.

**Q11. Can other Federal funds be used in conjunction with the proposal?**

A11. Other Federal funds using the appropriate matching share and eligibility requirements may be leveraged for the deployment but cannot be considered as part of the match for the ATCMTD funds, unless otherwise supported by statute.

**Q12. If there is not a sufficient amount of qualified proposals, what happens to the unused funds authorized for the ATCMTD program?**

A12. If, by August 1 of each fiscal year, the Secretary determines that there are not enough qualified grant applications for the fiscal year, the Secretary must transfer the excess funding to the programs that served as the original sources of funding for the ATCMTD program (the Highway Research and Development Program under 23 U.S.C. 503(b), the Technology and Innovation Deployment Program under 23 U.S.C. 503(c), and the Intelligent Transportation Systems Program under 23 U.S.C. 512-519). (23 U.S.C. 503(c)(4)(M)).

**Q13. What types of projects are eligible for ATCMTD grants?**

A13. Funds awarded under the ATCMTD program may be used to deploy diverse technologies that improve the efficiency, safety, or state of good repair of surface transportation systems, including intelligent transportation systems. These include:

- i. advanced traveler information systems;
- ii. advanced transportation management technologies;
- iii. infrastructure maintenance, monitoring, and condition assessment;
- iv. advanced public transportation systems;
- v. transportation system performance data collection, analysis, and dissemination systems;
- 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;
- vii. integration of intelligent transportation systems with the Smart Grid and other energy distribution and charging systems;
- viii. electronic pricing and payment systems; or
- ix. advanced mobility and access technologies, such as dynamic ridesharing and information systems to support human services for elderly and disabled individuals.

(23 U.S.C. 503(c)(4)(E)).

**Q14. Do the focus areas of interest that are listed in the ATCMTD program Notice of Funding Opportunity (NOFO) have priority over other types of technology deployments?**

A14. No. Applications that propose technology deployments in the interest areas identified in the NOFO will not receive any special priority consideration. The Department has identified these focus areas only to promote their deployment for this NOFO. All applications conforming to the statutory eligibilities will be reviewed according to the “Application Review Information” in Section E of the NOFO.

**Q15. How should proprietary or business sensitive information be noted in any response to the NOFO?**

A15. Write either “confidential” or “business sensitive” in a visible location on the relevant section of the application. This will provide FHWA with a clear request not to release the information on that page or section of the application without prior notice and coordination with your business. Please note that FHWA is required to comply with the Freedom of Information Act when responding to public requests for information. See [49 C.F.R. Part 7](#).

**Q16. Can an eligible entity submit multiple applications?**

A16. There is no limit on the number of applications that may be submitted by an eligible entity, as long as each application addresses the requirements of the NOFO, such as non-Federal match and key personnel. However, the maximum amount awarded annually to a single recipient is

limited to \$12 million, and 23 U.S.C. 503(c)(4)(D)(ii) requires, to the extent practicable, that grant recipients represent diverse geographic areas of the United States, including urban and rural areas.

**Q17. Does the ATCMTD program NOFO provide any changes to the competitive solicitation requirements for applicants, such as requirements related to partnerships with the private sector?**

A17. Specific acquisition requirements, including requirements for competition, depend on the type of funding awardee. If the applicant/awardee is a State, please see [2 CFR 200.317](#), which states that when procuring property or services under a Federal award, a State must follow the same policies and procedures it uses for procurements from its non-Federal funds. All other applicants must comply with [2 CFR 200.318 through 2 CFR 200.326](#); specifically, sections [2 CFR 200.319](#) and [2 CFR 200.320](#) provide detailed information on competition requirements.

**Q18. How does an entity get a Dun and Bradstreet number?**

A18. Entities must register at <https://fedgov.dnb.com/webform>.

**Q19. Are universities eligible to apply?**

A19. Any eligible entities that can register with Grants.gov may submit an application for the ATCMTD program; however, as noted in the NOFO to be eligible, a university must be part of a consortia of research institutions or academic institutions:

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.  
[emphasis added]

**Q20. Will there be debrief sessions for applicants not selected for an ATCMTD grant to improve their application in future years?**

A20. Debriefs are not required by [2 CFR 200](#). However, upon request, FHWA typically does provide a courtesy debrief to go over strengths and weaknesses of an application with an applicant. Requests for debriefs should be sent to [ATCMTD@dot.gov](mailto:ATCMTD@dot.gov).

**Q21. What does a competitive non-Federal match look like?**

A21. The NOFO states that cost will be considered in the award decision. Volume 2 (budget application) 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. Therefore, only the minimum



50% match as required by 23 U.S.C. 503(c)(4)(J) is needed for this NOFO.

**Q22. Will solicitations for the ATCMTD program be continuous or annual?**

A22. There will be annual solicitations for ATCMTD program applications for competitive selections each fiscal year through 2020.

**Q23. Should we provide DOT with our plan to submit an ATCMTD application?**

A23. Yes. Applicants interested in applying are encouraged to email [ATCMTD@dot.gov](mailto:ATCMTD@dot.gov) no later than Month Day, 2018 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. While not required, DOT seeks this early notification of interest to inform its allocation of resources for application evaluations and to facilitate timely and efficient awards. Please note though that official applications must be submitted via Grants.gov – official applications sent by email will not be considered.

**Q24. Will selected ATCMTD applicants have to enter grant agreements?**

A24. Yes. ATCMTD recipients will be required to execute a grant agreement whether the funds are issued directly through a cooperative agreement with FHWA or through an allocation of funds to a State.

**Q25. Will there be a promotion of using open standards so that implemented systems can be implemented more easily in other urban areas?**

A25. Portability of the proposed deployment is included in the technical merit review, so the use of open data and other open standards may increase the ability to widely implement successful ATCMTD deployments. In general, Federal procurements encourage open standards, and for Federally-funded ITS projects, conformance with ITS architecture and standards is addressed at [23 CFR 940.11](#).

**Q26. When will ATCMTD selections be made?**

A26. 23 U.S.C. 503(c)(4)(D)(i) requires that DOT make ATCMTD awards every fiscal year, and the Federal fiscal year ends on September 30. DOT seeks to make its selections earlier than this deadline.

**Q27. What is the role of an MPO in the ATCMTD program?**

A27. MPOs serving populations greater than 200,000 are eligible entities and may submit applications for the ATCMTD program. There is no other specified role for MPOs regarding the ATCMTD program. In general, MPOs may be valuable resources when dealing with multiple public agencies in a metropolitan area for services such as communication, facilitation, convening, or other various roles as appropriate for individual metropolitan areas.

**Q28. How soon after ATCMTD grant awards are announced do you expect an entity to**

**implement its proposal?**

A28. The time period for fully deploying ATCMTD projects after they are awarded will depend on what technologies are proposed, how complex the deployments may be, or how broadly the technologies may be implemented. The NOFO suggests a time period (or “period of performance”) of two to four years. Time periods much longer than this may affect the utility or portability of the deployments.

**Q29. Will DOT conduct independent evaluations or provide guidance or other support for local evaluations?**

A29. DOT intends to conduct independent evaluations of the ATCMTD deployments but also encourages local evaluation. Guidelines for evaluating ITS – which are also applicable to evaluating technology deployments – are available at:  
<http://www.its.dot.gov/evaluation/eguide.htm>.

**Q30. Can an eligible applicant apply simultaneously both for an ATCMTD grant and another Federal grant, such as DOT’s INFRA or TIGER programs?**

A30. Yes. There is no restriction on submitting applications to multiple Federal funding opportunities, assuming all applicable program requirements are addressed.

**Q31. Does the ATCMTD program replace previous DOT grant programs?**

A31. No. The ATCMTD program is a Federal grant program established by the FAST Act, and while it includes similar goals and objectives as other Federal programs, it is not a replacement for any other program.

**Q32. Is ATCMTD funding available for projects beyond vehicle-to-vehicle (V2V) or vehicle-to-infrastructure (V2I)?**

A32. Yes. Funds awarded under the ATCMTD program may be used to deploy technologies that improve the efficiency, safety, or state of good repair of surface transportation systems, and are not limited only to connected vehicle technologies.

**Q33. What types of metrics are sought in ATCMTD applications that include a technology that has already been deployed?**

A33. The performance measures described in the NOFO for ATCMTD projects are not technology driven but system performance based. Measures may include reducing traffic-related crashes, congestion, and costs; or optimizing system efficiency or improving access to transportation services. Generally, DOT is seeking quantifiable safety, mobility, and environmental benefit projections from data-driven estimates of how the project will improve the region's transportation system efficiency and reduce traffic congestion.

**Q34. Can the costs of the installation of associated infrastructure for the deployment of new technology be included as part of the ATCMTD project application?**

A34. Yes. ATCMTD project costs associated with the deployment of the proposed technologies should be included in the application and appropriately described under the “Funding Description” part of the application. This information will be used in the technical review to help determine the best technology deployments that align with the ATCMTD program and DOT’s goals, and present the best investment of ATCMTD program funding.

**Q35. May a consultant register for an account on Grants.gov on behalf of a State agency?**

A35. Anyone can register at Grants.gov. The registration process includes identifying a specific point of contact that can be authorized as an Authorized Organization Representative for matters dealing with Grants.gov.

**Q36. Is there a minimum ATCMTD grant amount?**

A36. No. There is no statutory minimum grant amount; however, with a maximum number of awards per fiscal year (10) and a maximum amount per recipient (\$12M), the number of smaller awards may be limited.

**Q37. Is there a requirement that an ATCMTD project be included in the Transportation Improvement Program (TIP) or Statewide Transportation Improvement Program (STIP)?**

A37. No. There is no requirement for proposed projects to be included in any planning documents, but the status of project planning may be applicable in the technical review related to the readiness of the technology and the likelihood of successful deployment.

**Q38. Are letters of support required in ATCMTD applications?**

A38. No. There is no requirement for letters of support or endorsements from any entity in ATCMTD applications. Letters of support may, however, be applicable during DOT’s technical review in assessing the proposed deployment’s readiness and likelihood of success.

**Q39. Can maintenance and operation costs be included in the ATCMTD application?**

A39. Operation costs that are eligible under Federal-aid may be proposed for Federal participation in an application. Additionally, operations, maintenance, and other costs that are borne by non-Federal resources may be considered for the required non-Federal match.

**Q40. If a prospective ATCMTD grant applicant has already incurred costs for an ATCMTD-eligible project, can those funds be counted as non-Federal match?**

A40. Generally, only funds expended during the period of performance of an agreement can be counted toward non-Federal match; however, please see [2 CFR 200.306 for more information on cost sharing or matching](#). It is the applicant’s responsibility to explain in its ATCMTD application how the cost share meets the requirements of this section.

**Q41. Are projects to upgrade existing advanced transportation technologies eligible for ATCMTD grants? (e.g. Upgrading an analog system to a digital system).**

A41. Yes. DOT seeks the best technology deployments that align with the ATCMTD program and DOT goals, and that present the best investment of ATCMTD program funding, regardless of whether the technologies are being newly deployed or if the proposed technologies build on existing deployments.

**Q42. Can an ATCMTD application include multiple project components?**

A42. Yes. DOT encourages applicants in their applications to identify any project components that have independent utility and to detail separately the costs and requested ATCMTD funding for each component. If the application identifies one or more independent project components, the application should clearly identify how each independent component addresses the selection criteria and how it produces benefits on its own. The application should also describe how the full proposal, of which the independent component is a part, addresses the selection criteria.

**Q43. Do all team members need to be identified in the ATCMTD application, or can applicants go through their procurement process for selecting system designers, system installers, etc., after an award?**

A43. No. As described in the Notice of Funding Opportunity (NOFO), a complete budget application is required. It is reasonable that if staff, subcontractors, or subawardees are not yet selected, these positions may be listed as “TBD” in the application. However, an estimate of these costs is required for the submission of a complete budget application.

**Q44. Are toll credits allowable as part of the required non-Federal cost share?**

A44. Yes. When the State is the lead in administering ATCMTD grant funds (i.e., the eligible entity applying), toll credits may be used for the non-Federal share for ATCMTD projects as allowed for Federal-aid projects under section 120(i) of title 23, United States Code ([23 U.S.C. 120\(i\)](#)), and, as applicable, the Federal Highway Administration’s “Interim Guidance – Toll Credit for Non-Federal Share” (dated November 20, 2015) (available at <http://www.fhwa.dot.gov/specialfunding/151120.cfm>). However, the NOFO states that “Funding availability will also be considered in the award decision. This evaluation factor will not be rated, but will be considered in the [ATCMTD] award selection.” Firm commitments of cash that indicate a complete funding package and demonstrate local support for a project are generally more competitive than other forms of cost sharing. If a State intends to use toll credits toward the non-Federal share, the amount of such credits should be specified in the State’s ATCMTD application, and should be based on balances that have been approved by the State’s FHWA Division Office at the time of application. States should refer to 23 U.S.C. 120(i) for detailed information on the terms governing the use of toll credits.

**Q45. In the NOFO, applicants are asked to list any contract or agreement that was terminated for convenience of the Government within the past 3 years, and any contractor agreement that was terminated for default within the past 5 years. Does this apply only to contracts and agreements with Federal clauses?**

A45. No, the question is not limited to only contracts and agreements with Federal clauses. ATCMTD applications are to list all terminations made against the prime applicant. The question is not asking for terminations made by the prime applicant against vendors, but rather, is asking for any terminations made against the prime applicant where the prime applicant was the performing organization. If there are none, the application may indicate “N/A” or “none” as applicable.

**Q46. What “supporting detail” is necessary in the ATCMTD application package for proposed non-Federal matching funds? Do applicants need to provide some kind of verification of the existence of such funds or simply reflect the match in a proposed budget?**

A46. The “supporting detail” for the non-Federal matching funds would include the applicant’s description of where within the work areas or tasks of the application the cost share would be applied, and how it would be funded. The applicant does not have to demonstrate having the cost-share funds on-hand ready to go, but rather how the cost will be shared and where the resources will be coming from. For example, the applicant could state that it is going to fund part of the salaries, or that the Facilities and Administration (F&A) indirect rate would be waived or applied at a level lower than their approved indirect rate agreement. Supporting detail for cost-share needs to be at the same level of detail as the supporting detail for the Federal share being requested. Section 200.306 of title 2, Code of Federal Regulations ([2 CFR Part 200.306](#)) provides more information on “Cost sharing or matching.”

**Q47. Can any of the Federal funding under the ATCMTD program award be used for developing an incentive program, such as for vehicle participation in a connected vehicle application?**

A47. Yes. There is no prohibition on incentive programs. All costs proposed must be reasonable and allocable to the project proposed, as per the *Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards* specified in [2 CFR Part 200](#).

**Q48. Does FHWA intend to release the technical Volume 1 information for all applicants or only for the awardees?**

A48. In order to expand public awareness of ATCMTD technologies, concepts, and ideas, the FHWA intends to release publicly all Volume 1 Technical Applications after award.

**Q49. Can the purchase of autonomous vehicles be part of an ATCMTD project?**

A.49. Yes, the purchase of autonomous vehicles could be part of an ATCMTD project. The application should describe the readiness for deployment of the proposed autonomous technologies as part of the deployment project. Note, ATCMTD project costs associated with the deployment of the proposed technologies should be included in the application and appropriately described under the “Funding Description” part of the application. This information will be used in the technical review to help determine the best technology deployments that align with the ATCMTD program and DOT’s goals, and present the best investment of ATCMTD program funding.