



COLORADO Department of Transportation

Division of Transportation Development
Multimodal Planning Branch
4201 E. Arkansas Ave, Shumate Bldg.
Denver, CO 80222

DATE: May 8, 2018
TO: Transportation Commission
FROM: Debra Perkins-Smith, Director, Division of Transportation Development (DTD) and
Lisa Streisfeld, Transportation Systems Management and Operations (TSM&O)
SUBJECT: New Federal Grant Opportunity: ATCMTD (Advanced Transportation and Congestion Management Technologies Deployment)

Purpose

This memo describes the ATCMTD grant, the project selection criteria and process for the recommended candidate project, and the funding request from the Transportation Commission for the grant match.

Action

The Commission will be asked to approve by resolution, the provisional commitment of state match for proposed Region 5 project: US 160 Wolf Creek Project Technology Deployment for the ATCMTD Grant--should the proposed grant project be awarded to CDOT. The funding would serve as a 50% match to fund the \$8.765 million project.

Background

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 up 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 project selection for CDOT's proposed grant submission.

The USDOT's consideration of ATCMTD grant applications will be based on eight key program objectives:

- reduce costs and improve return on investments, including through the enhanced use of existing transportation capacity;
- deliver environmental benefits that alleviate congestion and streamline traffic flow;
- measure and improve the operational performance of the applicable transportation network;
- reduce the number and severity of traffic crashes and increase driver, passenger, and pedestrian safety;
- collect, disseminate, and use real-time traffic, transit, parking, and other transportation-related information to improve mobility, reduce congestion, and provide for more efficient and accessible transportation;
- monitor transportation assets to improve infrastructure management, reduce maintenance costs, prioritize investment decisions, and ensure a state of good repair;
- deliver economic benefits by reducing delays, improving system performance, and providing for the efficient and reliable movement of goods and services; or
- accelerate the deployment of vehicle-to-vehicle, vehicle-to-infrastructure, autonomous vehicles, and other technologies.

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 projects are eligible for the grant?

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

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 maximum award for the ATCMTD grant 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.

Details

Proposed Project for CDOT to Submit for the ATCMTD Grant:

The proposed project is the US 160 Wolf Creek Pass Advanced Technology Deployment project. CDOT Region 5 has identified this as a priority for safety and mobility needs. The project limits on US 160 are from milepost 153.5 to milepost 168.0. At a cost of \$8,765,000, the ITS (Intelligent Transportation System) technology improvements will enable connected vehicle communication. CDOT will be able to observe roadway conditions and provide real time information to drivers. Additionally, commercial vehicles will receive mobility benefits from the Weigh in Motion technology. Design begins in the Summer of 2018 with the project being ready for construction by the Summer of 2020.

Per the grant requirements, CDOT's match would be 50% of the project costs. The match from Colorado then needs to be a minimum of \$4,382,500. In the past, CDOT has successfully worked with potential partners of the Southwest Council of Governments (SWCOG), the San Luis Valley Electric Co-Op, and La Plata Electric Rural Co-op to help with funding for fiber optic projects. Staff are currently engaging with their representatives to look for an opportunity for a financial partnership to help provide match for the federal funds. Staff will also investigate other options for state match including SB 1; but requests that the Transportation Commission Reserve be used as backstop funding if the other match sources are not feasible.



Project Name	Technologies to be deployed	Project Cost	Federal Grant Funding Request	CDOT Funds to Match	Potential Partners	Region 5 Contact
US 160 Wolf Creek Pass Advanced Technology Development	Dedicated Short Range Communications Roadside (DSRC) Units to Allow Vehicle to Infrastructure and Infrastructure to Vehicle Communication, Weigh in Motion Technology and Dynamic Warning Signs, Road Sensor Systems, Variable Speed Limits, Cameras, Variable Message Signs, Fiber Optic, and Electric Power Networks	\$8,765,000	\$4,382,500	\$4,382,500 with source from the Transportation Commission Reserve	San Luis Valley Rural Electric Co-Op, La Plata Electric Rural Co-op, Southwest Council of Governments, ITS	Julie Constan, Traffic and Safety Program Engineer

CDOT Project Selection Criteria and Process

The project should meet the criteria of the grant application and should be readily able to be deployed. CDOT notified the Statewide Transportation Advisory Committee (STAC) on May 4 about the availability of the grant. Subsequently, both CDOT Region Planning staff and Region Traffic Program Engineers were notified about the ATCMTD grant. Two submittal ideas were received, one for I-25 through Colorado Springs Ramp Metering and one for the US 160 Wolf Creek Pass Advanced Technology Deployment.

The US 160 project was selected for the ATCMTD grant based upon the criteria listed below.

- **Project Readiness** - Project is starting design Summer 2018, and would be ready for construction by summer 2020.
- **Meets ATCMTD Program Objectives** - meets 7 of the 8 objectives as listed in the NOFO (see Background section above)
- **Meets ATCMTD Program Areas of Interest** – Installation of connected vehicle technologies; freight community system; rural technology deployment
- **Strategic Nature** - Regional & Statewide Significance - The project allows further fiber connectivity from the I-25 Corridor across southwest Colorado. It will help with communications to HLT (Hanging Lake Tunnel operations), and amongst smaller communities in Southwest Colorado.
- **Stakeholder Support** - Wolf Creek safety improvements have been identified as a high priority by Region and Southwest Transportation Planning Region (TPR) and San Luis Valley TPR.
- **Statewide Plan Goal Area: Safety** This project will improve safety by allowing vehicle to infrastructure communication, and infrastructure to vehicle communication. This project will allow for better detection of traffic and road conditions during winter storms, it will also allow for better detection of crashes or incidents on the pass for quicker response times. It will also significantly improve communications to HLT when incidents do occur on the highway, and can be provided to the traveling public.
- **Leveraging Other Funds** - This project could potentially leverage contributions or partnerships from local electrical and fiber providers, and as well as SWCOG.
- **Supports Statewide System** - US Hwy 160 is a major east / west corridor in southern Colorado. Improving safety will reduce truck crashes, which will improve mobility. Improving communication will allow for notification to traveling public when incidents are occurring on the pass.

Options and Recommendation

The options for Transportation Commission are:

1. Approve resolution to submit Wolf Creek Pass project for ATCMTD grant with state funds match. (Staff Recommendation)
2. Do not approve resolution or submission of Wolf Creek Pass project for ATCMTD grant.



3. Approve submission of Wolf Creek Pass project for ATCMTD grant, but revise resolution or state fund match.

Next Steps

Following the Transportation Commission review and approval of the US 160 Wolf Creek Pass project as CDOT's preferred candidate for the ATCMTD grant, the following steps will occur:

- The STAC will be informed about the project selection on May 18.
- Region 5 staff from CDOT will prepare the grant application and OPGR will submit prior to June 18th.
- US DOT should announce grant awards in September of 2018.

Attachment A - ATCMTD Resolution



Resolution Number TC-

Instructing the Department to submit an application under the Advanced Transportation and Congestion Management Technologies Deployment Program (ATCMTD) Discretionary Grant program and support a priority project submitted for the Colorado Department of Transportation.

WHEREAS, the Fixing America's Surface Transportation (FAST) Act, Pub. L. No. 114-94, 129 Stat. 1312 (2015) established the Advanced Transportation and Congestion Management Technologies Deployment Program (ATCMTD) (FAST Act § 6004; 23 U.S.C. 503(c)(4)); and

WHEREAS, a Notice of Funding Opportunity was issued by the U.S. Department of Transportation (USDOT) on April 18, 2018 for the ATCMTD Program for federal FY 2018, subject to further appropriations; and

WHEREAS, applications for the ATCMTD grant program are due to the U.S. Secretary of Transportation on June 18, 2018; and

WHEREAS, the USDOT's consideration of ATCMTD grant applications will be based on eight key program objectives:

- reduce costs and improve return on investments, including through the enhanced use of existing transportation capacity;
- deliver environmental benefits that alleviate congestion and streamline traffic flow;
- measure and improve the operational performance of the applicable transportation network;
- reduce the number and severity of traffic crashes and increase driver, passenger, and pedestrian safety;
- collect, disseminate, and use real-time traffic, transit, parking, and other transportation-related information to improve mobility, reduce congestion, and provide for more efficient and accessible transportation;
- monitor transportation assets to improve infrastructure management, reduce maintenance costs, prioritize investment decisions, and ensure a state of good repair;
- deliver economic benefits by reducing delays, improving system performance, and providing for the efficient and reliable movement of goods and services; or
- accelerate the deployment of vehicle-to-vehicle, vehicle-to-infrastructure, autonomous vehicles, and other technologies. [23 U.S.C. 503(c)(4)(B)]; and

WHEREAS, the Colorado Department of Transportation (CDOT) staff evaluated and analyzed potential projects for the Department to submit under the ATCMTD discretionary grant program and identified one project to be submitted by CDOT with a commitment of matching funds by the Transportation Commission; and

NOW THEREFORE BE IT RESOLVED, the Department is instructed to submit a single application for the following project under the ATCMTD grant program:

- US 160 Wolf Creek Pass Technology Development Project

Attachment A: ATCMTD Resolution

NOW THEREFORE BE IT FURTHER RESOLVED, in order to show the Department's financial commitment to the US 160 Wolf Creek Pass Technology Development project and because a state match is required and enhances the viability of the application, the Commission commits to funding up to \$4.4 million of state match, if the ATCMTD grant application is successful.

NOW THEREFORE BE IT FURTHER RESOLVED, the Department may provide letters of support for priority projects submitted for an ATCMTD grant by other Colorado applicants.

Herman Stockinger, Secretary
Transportation Commission of Colorado

Date



COLORADO
Department of Transportation
Division of Transit & Rail

4201 E. Arkansas Ave., Rm. 227
Denver, CO 80222

DATE: May 8, 2018
TO: Transportation Commission, STAC, and TRAC
FROM: David Krutsinger, Director - Division of Transit & Rail
SUBJECT: Consolidated Rail Infrastructure & Safety Improvements (CRISI) Program - Grant Funding Opportunity

Summary

The U.S. Department of Transportation announced the Notice of Funding Opportunity (NOFO) for this program on February 21st, with proposals due by 5:00 PM EDT, June 21, 2018.

Who is Eligible

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

What Kinds of 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.

Funding Available

There is \$65.2 Million available nationally, with a minimum of \$17 Million set aside for rural areas. There are no pre-determined minimum or maximum dollar thresholds for awards.

Application Requirements

The application must be made via Grants.gov application package. The application package requires completion of a series of "Standard Forms" for the Federal Railroad Administration (FRA), and the applications can be no more than 25 total pages in length. The application must describe how the proposed project meets eligibility requirements by providing a detailed project description including beneficiaries and users. The project's location, and whether it is rural or not, should be identified. The project application should respond to project evaluation criteria which include project readiness, experience of personnel who will carry out the project, legal / financial / technical capacity to manage a federal grant, ability of the project to support economic vitality, and how well the federal funds are leveraged with other funds. Nominally a 20% match is required, with preference to projects that have 50% or more non-federal match. A positive benefit cost analysis (BCA) ratio is expected, based on the type of project: rail safety, rail congestion relief, rail planning, rail relocation, etc. Example BCA performance measures include: reduction of slow orders, increase in gross tons, auto crossings eliminated, track weight capacity, and track miles by condition and improvement level.

Preliminary Schedule

The schedule is similar to other grant opportunities with deadlines near the third week of June, based on Transportation Commission and STAC Review.



<i>Date</i>	<i>Action</i>	<i>Responsible Party</i>
May 8	CDOT Produces draft candidate project list for review	CDOT
May 11	Transit & Rail Advisory Committee (TRAC) review of candidate list	TRAC
May 15-16	Transportation Commission prioritizes candidate list	Transportation Commission
May 18	STAC reviews candidate list	STAC
May 19-June 1	Prepare grant applications and/or support letters	CDOT & Grant applicants
June 2	Draft of grant applications due to CDOT for review	Grant applicants
June 19	Submit complete grant application on the Grants.gov website	CDOT & Grant applicants
June 21	CRISI Grant Application Due Date	USDOT & Grant applicants
September 2018	Awards Announced	USDOT

For More Information

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

Draft Candidate Project List

The following project list was generated from input from external partners, and from internal CDOT Regions & Divisions. This is based on information received as of the close of business May 7th, 2018, sorted by location alphabetically, but not prioritized.

<i>Location</i>	<i>Project Description</i>	<i>Project Phase</i>
Adams County	US 85 Corridor study Commerce City to Brighton re UP and BN separations needed at 104 th , 120 th in Adams County	1 - Planning
Albuquerque NM	Lamy NM or Madrid NM to Albuquerque PTC on Rail Runner Track w/ Amtrak SW Chief. CDOT would potentially only provide a support letter. Part of overall Amtrak Southwest Chief effort.	2 - PE/NEPA
I-25 / Santa Fe / Kalamath	Evaluate design options to grade separate or eliminate the crossing just north of Alameda and Santa Fe / Kalamath in central Denver. Addresses part of I-25 PEL.	2 - PE/NEPA
I-76 / CR 49	North of Hudson economic development project with truck, rail, and pipeline in Weld County.	1 - Planning
Otero & Pueblo Counties	PTC design to accommodate Amtrak Train on Freight Railroad Track between La Junta and Pueblo.	2 - PE /NEPA
US 85 / UPRR	Address one or more of the most beneficial crossings or signal improvements in Weld County	2 - PE/NEPA

