FHWA Update

- FAST Act Solicitations
  - Sec 6004 – Advanced transportation and congestion management technologies Deployment
  - Sec 6020 – Surface transportation system funding alternatives
- MAP-21 Congestion & System Performance Measures

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FHWA

FAST ACT TRANSPORTATION MANAGEMENT FUNDING OPPORTUNITIES

I-95 Coalition
Travel Information Services Program Track Committee
April 26, 2016

U.S. Department of Transportation
Federal Highway Administration

Agenda

- ATCMTD Program (Section 6004)
- STSFA Program (Section 6020)
- Application Process
- Application Review Process

ADVANCED TRANSPORTATION AND CONGESTION MANAGEMENT TECHNOLOGIES DEPLOYMENT (ATCMTD) PROGRAM

ATCMTD Program

- FAST Act Section 6004 created new Section 503(c)(4) of the United States Code
  - 23 U.S.C. 503(c)(4): Advanced transportation technologies deployment
  - Establishes 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. [23 USC 503(c)(4)(A)]
- Every fiscal year awards to not less than 5 and not more than 10 eligible entities. [23 USC 503(c)(4)(D)(i)]

ATCMTD Program Funding

- Funding: $60,000,000 for each of fiscal years 2016-2020 [23 USC 503(c)(4)(I)(i)]
- Federal share not to exceed 50% of project cost [23 USC 503(c)(4)(J)]
- No more than 20% of the total amount (i.e. $12M) in a fiscal year to a single recipient [23 USC 503(c)(4)(K)]
  - Recipient may use not more than 5% of the funds awarded each fiscal year to carry out planning & reporting requirements [23 USC 503(c)(4)(L)]

ATCMTD Use of Funds [23 USC 503(c)(4)(E)]

- 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 V2V and V2I communications, technologies associated with autonomous vehicles, and other collision avoidance technologies;
- Integration of ITS 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.

ATCMTD Eligible Entities [23 USC 503(c)(4)(N)(i)]

Eligible applicants include:

- State or local governments;
- Transit agencies;
- Metropolitan planning organizations 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.

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.

ATCMTD Program Vision

- The deployment of advanced technologies and related strategies to address issues & 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 among 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.

ATCMTD Program Vision

- Advanced technologies can also help to revitalize neighborhoods and regions by attracting more business or residential developments to bring opportunities closer to where people live.
- Technologies also help provide transportation options and improved multimodal transportation systems, allowing users to have access to safe, reliable, and affordable connections to employment, education, healthcare, goods delivery, and other services.
- As such, technology helps create pathways to jobs and economic opportunity for traditionally disadvantaged populations.

ATCMTD Program Goals (1 of 2)

- Reduced costs and improved return on investments;
- Environmental benefits from congestion management and streamlined traffic flow;
- Measurement and improvement of transportation networks operations;
- Reduction of traffic crashes and increase in personal safety;
- Real time information to improve mobility, reduce congestion and provide for more efficient and accessible transportation
  - 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;

ATCMTD Program Goals (2 of 2)

- Economic benefits from reduced delays, improved system performance, and throughput, and the efficient and reliable movement of people, goods, and services;
- Accelerated deployment of V2V, V2I, and automated vehicle applications, and autonomous vehicles;
- Advanced technologies integrated into transportation system management and operations;
- Demonstration, quantification, and evaluation of the impact of 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.

ATCMTD Program Focus Areas

Proposals are not limited to these priorities but U.S. DOT is particularly interested in deployment programs and projects in the following areas:

- Transportation elements associated with Smart Cities;
- Systemic applied pedestrian crossing technology;
- Multimodal Integrated Corridor Management (ICM);
- Traffic signal data acquisition, analysis, and management;
- Unified fare collection and payment system across transportation modes and jurisdictions;
- Incorporation of connected vehicle (CV) technology in public sector and first responder fleets;
- Weigh-in-Motion (WIM) facilities for advanced data collection; and
- Dynamic ridesharing.

Surface Transportation System Funding Alternatives (STSFA) Program Overview

STSFA Program Vision

- FAST Act Section 6020 establishes a program to provide grants that demonstrate user-based alternative revenue mechanisms, utilizing a user fee structure, for purposes of maintaining the future long-term solvency of the Federal Highway Trust Fund.

STSFA Program Goals

- Implementation, interoperability, public acceptance and potential hurdles to adoption of the demonstrated user-based alternative revenue mechanism
- Privacy protection
- Use of independent and private third parties
- Congestion mitigation impacts
- Addressing equity concerns
- Ease of user compliance
- Reliability and security on the use of technology

The proposal may also address:

- Flexibility and user choice
- Cost of administering the system
- Auditing and compliance / enforcement

STSFA Program Funding

- The FAST Act provides that $15 million in FY 2016 and $20 million annually from FY 2017 through FY 2020 will be made available for demonstration project grants

- These grants shall make up no more than 50 percent of total proposed project costs, with the remainder coming from non-Federal sources.

- There is no requirement for annual solicitations

STSFA Program Approach

- Although pilot projects of any size or scope may be proposed, US DOT is most interested in funding larger scale pilots, rather than smaller scale proof of concept projects, and in awarding funds to both single State and multi-State pilots.

- In FY16 US DOT will seek applications for full new demonstration projects, for extensions or enhancements of existing demonstration projects, or for required pre-demonstration activity leading directly to a planned future demonstration project in the near term (less than 18 months from award).

- US DOT anticipates issuing a second solicitation and making a second round of awards in FY 2017 that will commit the remaining anticipated funds for FY 2017-2020 (up to $80 million; subject to availability), focused only on demonstration projects.

- Projects receiving awards for pre-demonstration activities in FY 2016 are not guaranteed to receive future funding for demonstration activities.

STSFA Use of Funds

- Test the design, acceptance, and implementation of 2 or more user-based alternative revenue mechanisms.
- Improve the functionality of such mechanisms.
- Conduct outreach to increase public awareness regarding the need for alternative funding sources for surface transportation programs and to provide information on possible approaches.
- Provide recommendations regarding adoption and implementation of user-based alternative revenue mechanisms.
- Minimize the administrative cost of any alternative revenue mechanisms.
- Minimize the costs associated with the collection of fees.

STSFA Eligible Entities

- Eligible applicants are States or groups of States
- Proposals require that a State DOT serve as the lead agency for administering the program funding through the Federal-aid highway program.
- Another State agency or a State agency in a different State (if multi-state) may be responsible for providing day-to-day project oversight
- It is expected that all relevant state agencies (e.g. Department of Motor Vehicles, Department of Revenue) as needed will be actively involved in the planning and operation of the demonstration.

APPLICATION PROCESS

Application Process

- Applications must be submitted through Grants.gov at www.grants.gov. To submit, applicants must:
  a) Obtain a Data Universal Numbering System (DUNS) number:
  b) Register with the System for Award (SAM) at www.sam.gov;
  c) Create a Grants.gov username and password; and
  d) E-business POC at the applicant's organization must respond to the registration email from Grants.gov and login to authorize the POC as an Authorized Organization Representative.
- Applications due: **May 20 for STSFA**; and **June 3, 2016**
- Note: 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 will not be considered.

Application Process

- Applicants may obtain application forms at Grants.gov under the Notice of Funding Opportunity (NOFO) number.
  - Applicant must complete and submit all forms included in the application package for this NOFO as contained at www.grants.gov.
- Application must include the Standard Form (SF) 424 (Application for Federal Assistance), SF 424A (Budget Information for Non-Construction Programs), SF 424B (Assurances for Non-Construction Programs), Grants.gov Lobbying Form, cover page, and the project narrative.
  - SFs are available online at http://www.grants.gov/web/grants/forms/sf-424-family.html.

Application: Cover Page

Cover Page should including the following information:

- Project Name
- Previously Incurred Project Cost
- Future Eligible Project Cost
- Total Project Cost
- ATCMTD Request
- Total Federal Funding (including ATCMTD)
- Are matching funds restricted to a specific project component? If so, which one?
- State(s) in which the project is located
- Is the project currently programmed in the: TIP, STIP, MPO Long Range Transportation Plan, and/or State Long Range Transportation Plan?

Application: Narrative

Recommended that the Project Narrative use the following basic outline to clearly address the program requirements and make critical information readily apparent:

- Project description;
- Staffing description; and
- Funding description.

Besides a detailed statement of work, detailed project schedule, and detailed project budget, the Project Narrative should include a table of contents, maps, and graphics as appropriate to make the information easier to review.

ATCMTD Project Description (1 of 3)

- 1 to 2-page summary of the proposed technology deployment(s).
- Description of the entity that will be entering into the agreement with FHWA.
- Description of the geographic area or jurisdiction the deployment will service.
- Description of the real world issues and challenges to be addressed by the proposed technology deployments.
  - Discuss how the proposed deployments address the ATCMTD goals and any applicable focus area.
  - Applicants should highlight any proposed linkages to Ladders of Opportunity pathways to jobs and economic opportunities.

ATCMTD Project Description (2 of 3)

- Description of the transportation systems and services in the project.
- Plan to deploy and provide long-term operation and maintenance of the proposed technologies to improve safety, efficiency, system performance, and return on investment.
- Description of any challenges in the regulatory, legislative, or institutional environments or other obstacles to deployment.
- Quantifiable system performance improvements.
- Quantifiable safety, mobility, and environmental benefit projections.

ATCMTD Project Description (3 of 3)

- Vision, goals, and objectives of the applicant for the technology deployment.
- Plan for partnering with the private sector or public agencies.
- Plan to leverage and optimize existing local and regional advanced transportation technology investments.
- Schedule for conducting the technology deployment and for completion of all proposed activities.
- Any support or leveraging of the ITS program or innovative technology initiatives.

STSFA Project Description (1 of 3)

- 1 to 2-page summary of the proposed alternative revenue mechanism.
- Description of the entity that will be entering into the agreement with FHWA.
- Description of the geographic area or jurisdiction the deployment will service.
- Description of the real world issues and challenges to be addressed by the proposed alternative revenue mechanism.
  - Discuss how the proposed alternative revenue mechanism addresses the STSFA goals and objectives
  - Applicants should highlight any proposed linkages to Ladders of Opportunity pathways to jobs and economic opportunities.

STSFA Project Description (2 of 3)

- Plan to deploy and provide long-term operation and maintenance of the alternative revenue mechanism to improve safety, efficiency, system performance, and return on investment.
- Description of any challenges in the regulatory, legislative, or institutional environments or other obstacles to deployment.
- Quantifiable safety, mobility, and environmental benefit projections.

STSFA Project Description (3 of 3)

- Vision, goals, and objectives of the applicant for the alternative revenue mechanism.
- Plan for partnering with the private sector or public agencies.
- Schedule for conducting the alternative revenue mechanism and for completion of all proposed activities.

Staffing Description

- Description of the organization of staffing to manage and conduct the project, including identification of key personnel, organization, role, and responsibility.

- Primary point of contact and complete contact information.

Funding Description

Applications must include a breakdown of estimated costs across project work areas or tasks, including an identification of funding sources and amounts.

ATCMTD

- The maximum amount of funding requested from the ATCMTD program cannot exceed $12 million per year nor exceed 50% of the total cost of the activities proposed to be funded.
- 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.

STSFA

- The maximum amount of funding requested from the STSFA program cannot exceed $15 million for FY16 funding nor exceed 50% of the total cost of the activities proposed to be funded.
- However at least 2 awards are anticipated in FY16
- Selection of an application to receive grant funding in one fiscal year is not a commitment of any future funding.

APPLICATION REVIEW PROCESS

ATCMTD Application Review: Technical Merit

- Degree that the proposed technology deployment aligns with program requirements and U.S. DOT goals.
- Readiness of the proposed technology(ies) to be deployed, and the likelihood of success of the applicant to deploy and sustain the technology(ies).
  - Including 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.
- Clarity, quality, and completeness of the proposal.

STSFA Application Review: Technical Merit

- Alignment with program requirements
- Reasonableness that the demonstration could lead to a viable alternative revenue mechanism
- Maturity or readiness of the technology, if any, to demonstrate the proposed alternative revenue mechanism, including the proposed approaches to addressing any regulatory environmental and other obstacles to deployment
- Ability of the applicant to deploy and sustain the proposed demonstration.
- Scalability or portability of the proposed alternative revenue mechanism to other jurisdictions
- Clarity, quality, and completeness of the proposal

Application Review: Staffing

- Degree that the Application includes a program or 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.

ATCMTD Application Review: Other Information

- DOT will prioritize projects that also enhance personal mobility and accessibility. Such projects include, but are not limited to:
  - Investments that better connect people to essential services such as employment centers, health care, schools and education facilities, healthy food, and recreation;
  - Remove physical barriers to access; strengthen communities through neighborhood redevelopment;
  - Mitigate the negative impacts of freight movement on communities; and
  - Support workforce development, particularly for disadvantaged groups, which include low-income groups, persons with visible and hidden disabilities, elderly individuals, and minority persons and populations.

Application Review: Other Information

- DOT will review all eligible applications received before the application deadline.
  - Technical Evaluation Teams will determine whether each project satisfies statutory requirements and rate how well it addresses selection criteria.
  - Senior Review Team will consider the applications and the technical evaluations to determine which projects to advance to the Secretary for consideration.
  - Evaluations in the technical evaluation and senior review phases will place projects into rating categories, not numerical scores.
- The Secretary will select the projects for award.
- A panel of Agency experts will conduct a risk assessment of the applicant prior to award.

Awards / Reporting

- DOT anticipates making ATCMTD and STSFA project awards by September 2016

- Each recipient 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.

ATCMTD Reporting [23 USC 503(c)(4)(F)]

- Recipient shall submit annual reports describing:
  - Deployment and operational costs of the project compared to the benefits and savings the project provides; and
  - How the project has met the original expectations in the deployment plan submitted with the application, such as:
    - Data on how the project has helped reduce traffic crashes, congestion, costs, and other benefits of the deployed systems;
    - Data on the effect of measuring and improving transportation system performance through the deployment of advanced technologies;
    - Effectiveness of providing real time integrated traffic, transit, and multimodal transportation information to the public to make informed travel decisions; and
    - Lessons learned and recommendations for future deployment strategies to optimize transportation efficiency and multimodal system performance.

Questions

Questions may be sent to:

- ATCMTD@dot.gov
- STSFA@dot.gov

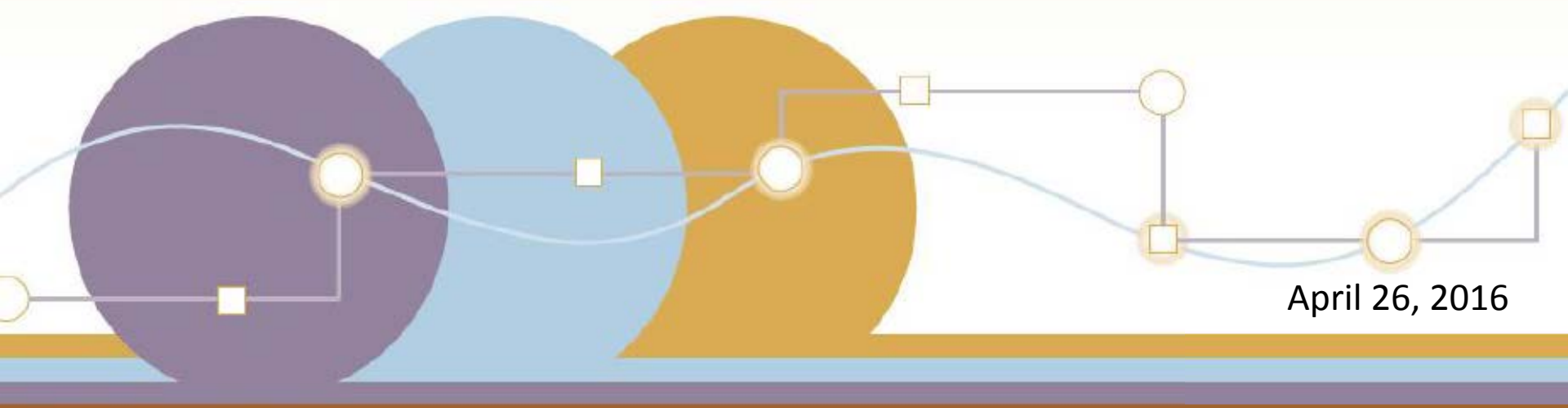
Questions & Answers will be posted to:

- www.Grants.gov
  - Information also available at:
  - www.ops.fhwa.dot.gov/fastact/

National Performance Management Measures NPRM

Assessing Performance of the National Highway System, Freight Movement on the Interstate System, and the Congestion Mitigation and Air Quality Improvement Program

Presentation for I-95 CC TISPTC



April 26, 2016

Proposed Measures: Performance of the NHS and Freight Movement on the Interstate

Measure Area	Proposed Performance Measures
Performance of the National Highway System (Subpart E)	• Percent of the Interstate System providing for Reliable Travel Times* • Percent of the non-Interstate NHS providing for Reliable Travel Times*
	• Percent of the Interstate System where Peak Hour Travel Times meet expectations* • Percent of the non-Interstate NHS where Peak Hour Travel Times meet expectations*
Freight Movement on the Interstate System (Subpart F)	• Percent of the Interstate System Mileage providing for Reliable Truck Travel Times** • Percent of the Interstate System Mileage Uncongested**

*These measures contribute to the National Highway Performance Program (NHPP)
**These measures contribute to the National Highway Freight Program (NHFP)

Proposed Measures: CMAQ Program

Measure Area	Proposed Performance Measures
Measures for Assessing the CMAQ Program – Traffic Congestion (Subpart G)	• Annual Hours of Excessive Delay Per Capita
Measures for Assessing the CMAQ Program – On-Road Mobile Source Emissions (Subpart H)	• Total Emission Reductions

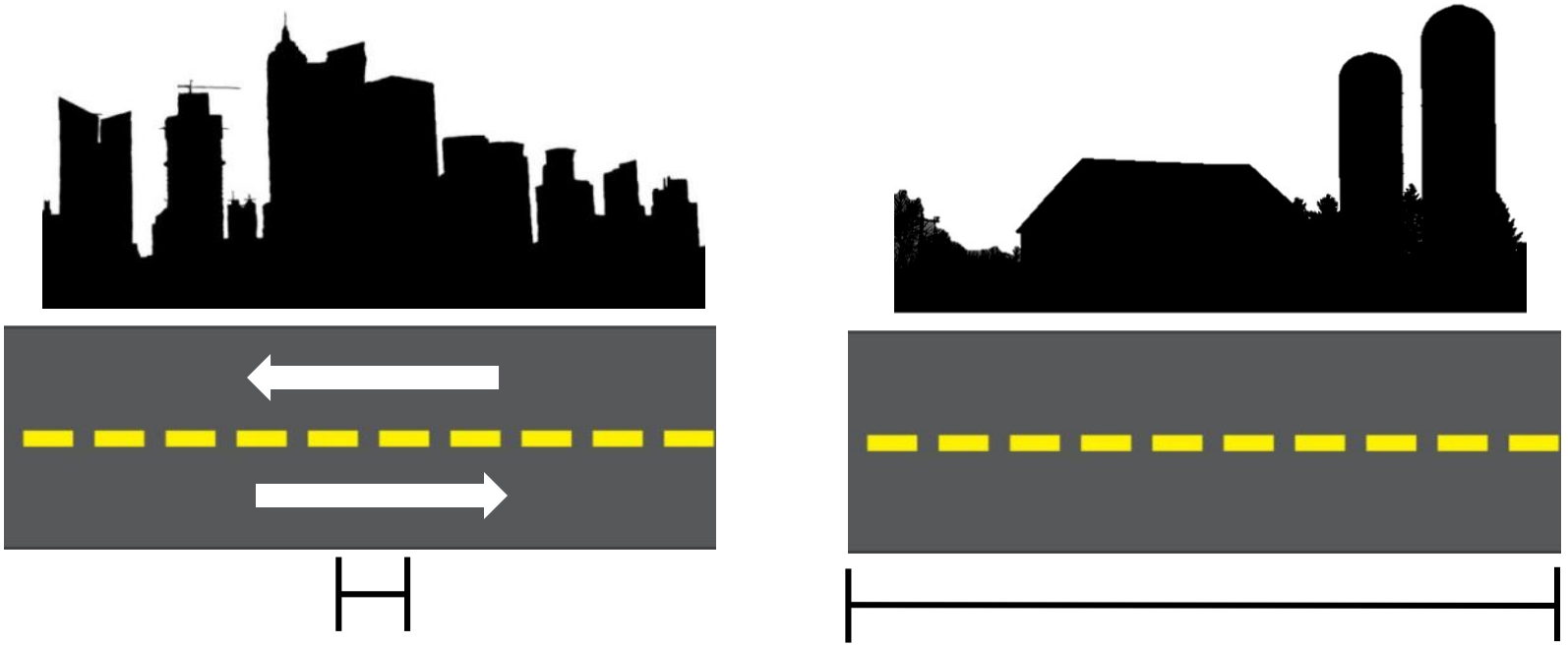
What is the National Performance Management Research Data Set (NPMRDS)?

- Is a data set provided by FHWA **monthly to State DOTs and MPOs**
- Includes **travel times derived from all traffic using the highway system**, in 5-minute bins
- Includes a breakdown of travel times of **freight vehicles** and **all traffic (freight and passenger vehicles)**
- Uses travel times that are reported via vehicle probes on **contiguous segments of roadway** covering the entire mainline NHS
- **Uses vehicle probes** that could include mobile phones, vehicle transponders, and portable navigation devices

Equivalent Data Source Requirements

- Include contiguous segments that cover the full NHS, as defined in 23 U.S.C. 103, within the State boundary and/or MPA
- Include average travel times for at least the same number of 5-minute intervals and the same locations that would be available in the NPMRDS
- Be populated with actual measured vehicle travel times and shall not be populated with travel times derived from imputed methods (historic travel times or other estimates)
- For each segment at 5-minute intervals throughout a full day (24 hours) for each day of the year, include the average travel time, recorded to the nearest second, representative of at least one of the following:
  - All traffic on each segment of the NHS (freight and passenger)
  - Freight vehicle traffic on each segment of the Interstate System

Reporting Segments – Mainline NHS



Maximum
Urban Length
½ mile*

Maximum
Rural Length
10 miles*

**Unless an individual Travel Time Segment is longer*

Measures to Assess Performance of the NHS – Travel Time Reliability

	Each Reporting Segment		Entire Applicable Network
	METRICS **Level of Travel Time Reliability (LOTTR) of each time period of each reporting segment for the full extent:** **1. Interstate System** **2. Non-Interstate NHS**	**THRESHOLD** **LOTTR < 1.50 for the reporting segment = reliable**	**MEASURES** **Percent of system providing for reliable travel times.** **1. Interstate System** **2. Non-Interstate NHS**
Interstate Example	30 sec (80th percentile)/ 15 sec (50th percentile) **LOTTR = 2.00**	2.00 > 1.50 = **Not Reliable**	8,125 reliable miles/ 10,000 total Interstate miles = **81.3% reliable**

Measure vs. Target

Entire Applicable Network

	MEASURES	TARGETS
	Percent of system providing for reliable travel times. Threshold: < 1.50 **1. Interstate System** **2. Non-Interstate NHS**	**1. % of Interstate System provides reliable travel times;** **2. % of non-Interstate NHS provides reliable travel times**
Interstate Example	**81.3%** Interstate miles providing for reliable travel times	Target: 80.0 % Actual: 81.3 % ✓ **Target Achieved**

Rulemaking Resources

Office of TPM website: http://www.fhwa.dot.gov/tpm/

In-Depth Webinars on Proposed Measures

- 4/25: Freight Movement on the Interstate System (Subpart F) – Technical Review
- 4/26: Performance of the NHS (Subpart E)
- 5/3: CMAQ – Traffic Congestion and On-Road Mobile Emissions (Subparts G and H)
- TBD: Freight Movement on the Interstate System (Subpart F) – Industry Overview

Fact sheets, published NRPMs, webinar registration, and related information at http://www.fhwa.dot.gov/tpm/rule/pm3_nprm.cfm

Submit Comments to:

www.regulations.gov

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For clarifying questions or more information, please contact:

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Thank you!