

NATMEC Improving Traffic Data Collection, Analysis, and Use  
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# Section 1201: Requirements for Traveler Information

Presented by:  
Walter T. During, PE  
Transportation Specialist  
Office of Transportation Management  
Federal Highway Administration

# Summary of the Proposed Rule

Section 1201 of the SAFETEA-LU requires the Secretary of Transportation to establish a Real-Time System Management Information Program that must:

1. Provide, in all states, the capability to monitor real-time traffic and travel conditions of the major highways within the United States
2. Share this data with State and local governments and with the traveling public and support other efforts related to congestion relief.
3. The proposed rule establishes minimum parameters and requirements for States to make available and share information regarding traffic and travel conditions via Real-Time Information Programs.

## The Purposes

- (1) Establish, in all States, a system of basic real-time information for managing and operating the surface transportation system;
- (2) Identify longer range real-time highway and travel monitoring needs and develop plans and strategies for meeting such needs; and
- (3) Provide the capability and means to share that data with State and local governments and the traveling public.

Such information would disclose the presence and severity of congestion and other travel impedances that limit traveler mobility and the efficient movement of goods.

# Background Approach

- No new funding provided
  - Explicit Federal-aid eligibility under NHS, STP, CMAQ
- Technology & detailed approach agnostic
  - Information-based requirements
- Build off of existing systems
  - Most States currently have some information
- Potential applications of information
  - Real-time performance monitoring
  - Traveler information
  - Real-Time System Management

# Proposed Rule – NPRM (1/2)

- Two-stage implementation
  - All Interstates within 2 years
  - Other metropolitan “Routes of Significance” (as identified by States within 2 years) within 4 years
- Information to be made available
  - Construction lanes closures
  - Road- or lane-blocking traffic incidents
  - Roadway weather observations
  - Travel times (in Metropolitan areas)
- “Metropolitan” defined as greater than 1 million (approx. Top 50 Metro Areas)

# Proposed Rule (2/2)

Category of Information	Timeliness for Delivery			
	Metropolitan Areas	Non-Metropolitan Areas	Availability	Accuracy
Construction activities: implementing or removing lane closures	10 minutes	20 minutes	90 percent	85 percent
Roadway or lane blocking traffic incident information	10 minutes	20 minutes	90 percent	85 percent
Roadway weather observation updates	20 minutes	20 minutes	90 percent	85 percent
Travel time along highway segments	10 minutes	NA	90 percent	85 percent

# Not in Proposed Rule

- No requirements for dissemination to general public, use of specific technologies or specific applications
- No methods identified or discussed for measuring accuracy or other quality metrics

# Potential Cost For Travel Time Deployment

1. NPRM used lowest-common/worst case based for surveillance costs - hardware  
- \$76,789 / mile
- Cost would be significantly lower with other methods. Private data contract (I- 95 coalition example) = \$9,535 / mile for 10 yrs.



# Benefits of Program (1/2)

- Establishes basic level of information in all States
- Broadly available to agencies, private firms and others.
- Uses include performance monitoring, planning, and traveler information
- Enhanced System Management

# Benefits of Program (2/2)

- Fosters exchange of information between States.
- Facilitates cooperation among agencies in managing congestion, construction, major traffic incidents, special event, evacuations and etc.
- Provides foundation for growing into more robust real-time information to address States' and regions' needs

# Comments to the NPRM

- The Administration received comments from 35 commenters, of which 22 were submitted by State DOTs.
- Comments were also received from the private sector and national associations.

# Major Comments (1/2)

- Some States commented that the data collections goals are already being met or are achievable within the proposed time frame.
- The most common negative responses by state DOTs are that the proposed schedule is too short, and/or that the deployment of the mandated capability would be too expensive.
- Comments from commercial companies tended to favor deployment to an even broader base with the same or more aggressive schedule.

# Major Comments (2/2)

- The roadway weather condition requirements are viewed as either unnecessary, onerous, or too costly (sensors) to implement.
- Travel time information for arterials is undefined, unavailable or too costly
- Some States (generally rural) are not set up to meet the 24/7 requirements of the Program.

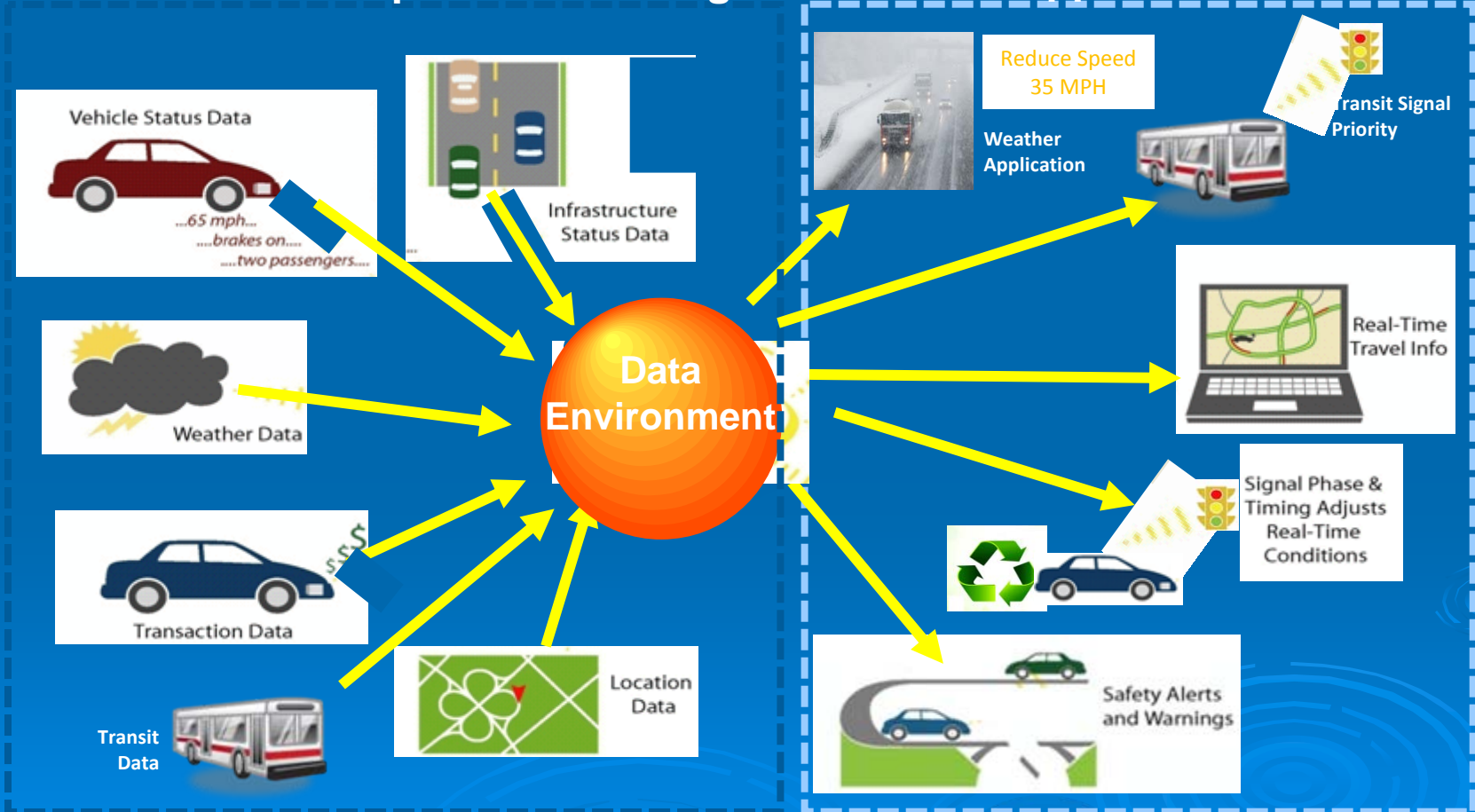
# Addressing the Comments

- FHWA has reviewed comments received and made changes to address them; draft Rule is undergoing internal DOT Review.
- Until the Rule is published, FHWA cannot discuss its contents.
- Staff believes that the Rule may be published within the next 6 months

# IntelliDrive<sup>SM</sup> Mobility

## Real-time Data Capture and Management

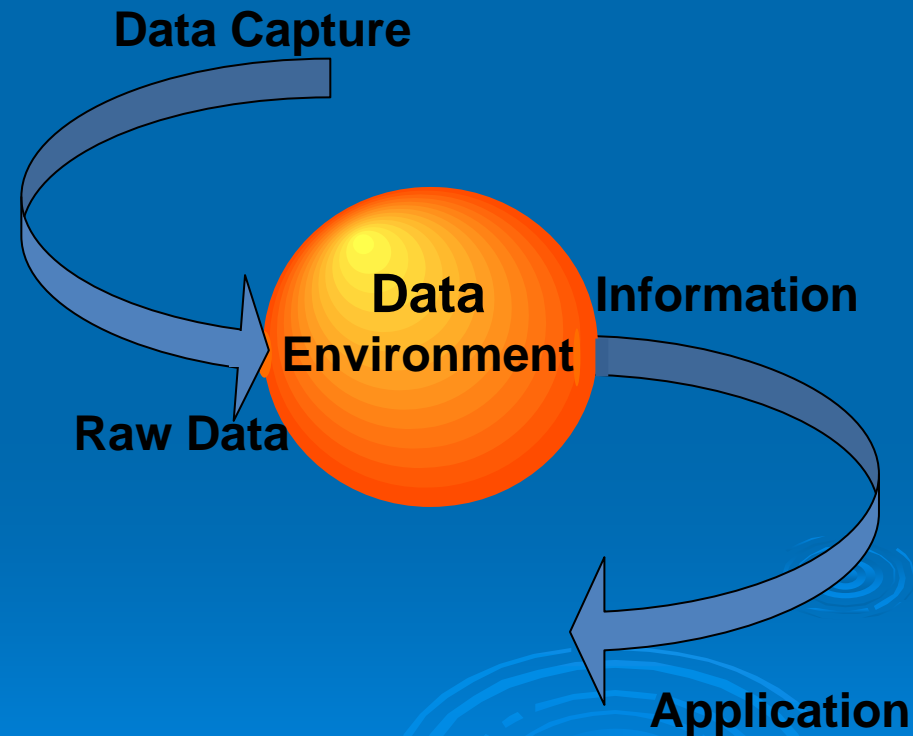
## Mobility and Environmental Applications



# Creating a Data Environment

## Data environment:

- well-organized collection of data of specific type and quality
- captured and stored at regular intervals from one or more sources
- systematically shared in support of one or more applications





# Progress Summary


- Vision and program roadmaps
- Inventory of USDOT/Federally funded data warehousing projects
- White paper on Federal role in Data Capture and Management
  
- Prototype data environment
  - [www.datacapture.noblis.org](http://www.datacapture.noblis.org) (temporary development site)
  - Flagged, documented data from POC and NCAR tests posted
  - Proposed terms of use and rules of engagement developed
  
- Procurements in development
  - Data capture state of the practice and innovation scan
  - Standards plan
  - Institutional and policy assessment and plan
  - Test data set BAA
  - Evaluation Contractor

# 511 Deployment Status

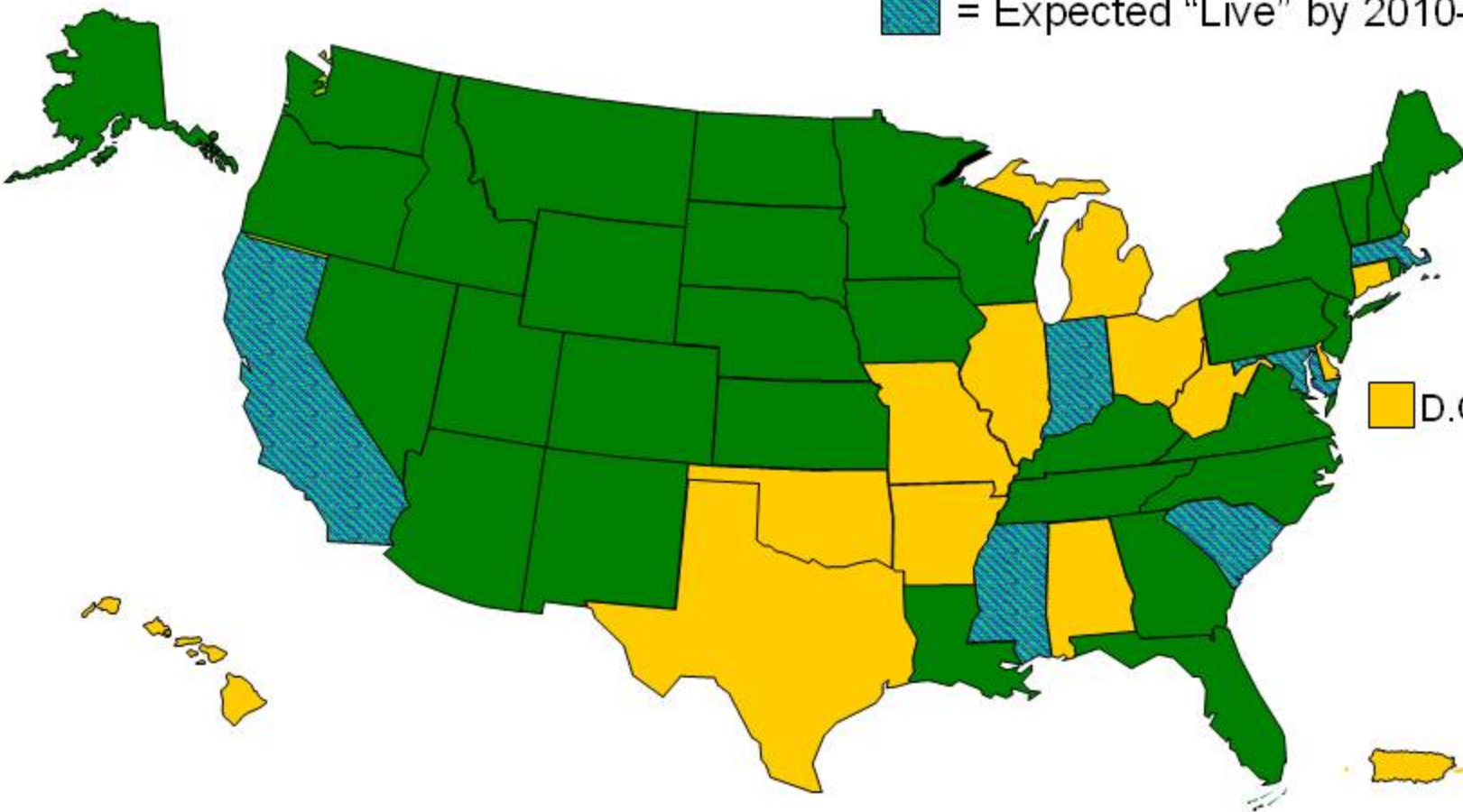
(State-basis)

as of May 2010

 = 511 Operational (32)

 = Expected "Live" by 2010-11

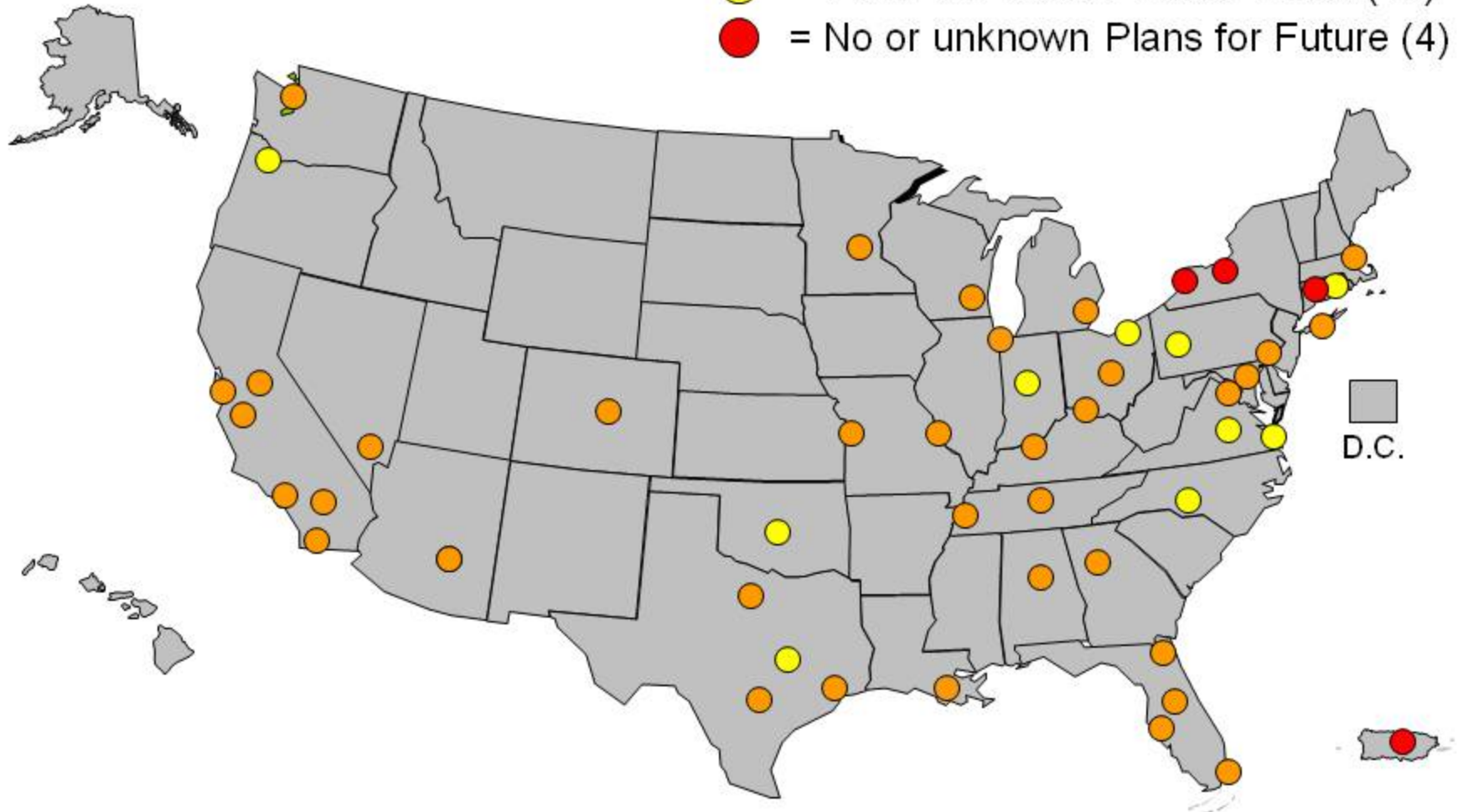
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# Travel Times on DMS Status

Over 1 Million (as of March 9, 2010)

- = Provide Travel Times (36)
- = Plans to Provide Travel Times (10)
- = No or unknown Plans for Future (4)



# Next Steps (after publication)

- “Roll-out” information
  - Webcasts & other broad announcements
- Implementation Guidance for States & other transportation agencies

# Other Efforts

To address many of the root causes of recurring and non-recurring congestions on the Nation's roads, rails, runways, and waterways FHWA is concentrating on congestion relief by promoting a variety of technology and techniques, including:

- Tolling and Pricing
- Public and Private Partnerships
- Real-Time Traveler Information
- Traffic Incident Management
- Road Weather Management
- Work Zone Mobility
- Traffic Signal Timing and
- Performance Management/Measurement<sup>21</sup>

## For Further Information Contact

- Mr. Robert Rupert, Team Lead  
FHWA Office of Operations,  
(202) 366–2194, or via email at [robert.rupert@dot.gov](mailto:robert.rupert@dot.gov)
- Mr. Walter During, PE  
FHWA Office of Operations,  
(202) 366–8959 or via email at [Walter.During@dot.gov](mailto:Walter.During@dot.gov)
- Mr. Tom Stout, PE  
FHWA Office of Operations,  
(202) 366–6054 or via email at [Tom.Stout@dot.gov](mailto:Tom.Stout@dot.gov)

For legal questions, please contact

- Ms. Lisa MacPhee,  
Attorney Advisor, FHWA Office of the Chief Counsel,  
(202) 366–1392, or via email at [lisa.macphee@dot.gov](mailto:lisa.macphee@dot.gov)

**THANK YOU**

# Program Administration (1/2)

This proposed rule will be subject to the provisions set forth in section 1.36 of Title 23 of the Code of Federal Regulations which states:

“[I]f the Administrator determines that a State has violated or failed to comply with the Federal laws or the regulations in this part with respect to a project, he may:



# Program Administration (2/2)

1. Withhold payment to the State of Federal funds on account of such project,
2. Withhold approval of further projects in the State, and
3. Take such other actions that he deems appropriate under the circumstances, until compliance or remedial action has been accomplished by the State to the satisfaction of the Administrator.”