

# SAFETEA-LU §1201: Real-Time Systems Information Management Program

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# Docket Summary Caveat

Conclusions and opinions provided in this presentation are a summary of responses received in the docket and do **NOT** represent the opinion of or any commitment from the USDOT.

- 38 responses received by July 3, excluding duplicate postings
- 42 receive total: FHWA considering comments that were received after the July 3 closing date

# Legislation

## SAFETEA-LU, Subtitle B, Section 1201

- *Congestion Relief*
- *Real-Time System Management Information Program*

“The Secretary shall establish a real-time system management information program to provide, in all States, the capability to monitor, in real-time, the traffic and travel conditions of the major highways of the United States and to share that information to improve the security of the surface transportation system, to address congestion problems, to support improved response to weather events and surface transportation incidents, and to facilitate national and regional highway traveler information.”

# Legislation (cont.)

## *Data Exchange Formats*

- “Not later than 2 years after the date of enactment of this Act, the Secretary shall establish **data exchange formats** to ensure that the data provided by highway and transit monitoring systems, including statewide incident reporting systems, can readily be exchanged across jurisdictional boundaries, facilitating nationwide availability of information.”
- “States shall incorporate the **data exchange formats** established by the Secretary ... to ensure that the data provided by highway and transit monitoring systems may readily be exchanged with State and local governments and may be made available to the traveling public.”

# Program Context & Funding

## *Context*

- Information needs for transportation systems management & operations
- To Base Decisions on the Performance of the Transportation Network

## *Funding*

- No funding specific to Program
- Federal-aid eligibility
  - NHS
  - STP
  - CMAQ
- SPR may be used for planning real-time monitoring systems

# USDOT Approach

- Craft proposed description of the Program
- Address existing systems
- RFI published in May 4 *Federal Register*
  - Program Description
  - Request for Information (60-day comment period)
    - Data Exchange Formats
    - Goals & Outcomes
    - Program Definitions
    - Program Parameters

# Program Description: Data Exchange Formats

- Assess existing standards for feasibility and applicability
- Center-to-Center standards as basis
- Example list of 24 standards in RFI, including TMDD, IEEE 1512, SAE – ATIS, Location referencing, NTCIP – ESS, TCIP
- Inventory of existing systems will provide additional information

# Program Description: Goals & Outcomes

## Goals *(By September 30, 2009)*:

- Establish in all States a basic real-time information system
- Identify longer range real-time monitoring needs; develop plans & strategies
- Provide capability to share data

## Outcomes

- Publicly available Web site
- 511
- Regional ITS Architectures reflect systems
- Access to data through Internet



# Program Description: Goals & Outcomes (cont.)

## Questions: Goals

*Does September 30, 2009, represent a reasonable time period for implementing the Real-time System Management Information Program?  
What potential obstacles would prevent program implementation by this date?  
What would be a reasonable time frame for implementing the program?*

- Most generally agreed with scope; some disagreed with the timeline
- Suggested alternatives included a 5-year delay and a phased approach by region, coverage, data content, or data quality
- State DOTs: could meet some program goals by 2009
- Private Sector: 2009 reasonable & program goals can be achieved more quickly

# Program Description: Goals & Outcomes (cont.)

## Questions: Outcomes

*Are the proposed outcomes appropriate for gauging the success of a system implemented under the program? What other measures for success would be useful?*

- **Proposed outcomes reasonable for USDOT but states would need different, additional measures to determine performance of their specific system (local)**
  - geographic coverage
  - customer acceptance
  - data quality

# Program Description: Program Definitions

- Major Highways
  - NHS, limited-access roads
  - Major arterials in metro areas
- Traffic & Travel Conditions
  - Road & lane closures (construction, incidents, weather)
  - Adverse roadway weather conditions
  - Congestion
  - Travel times in congested metro areas
  - Transit service disruptions in metro areas

# Program Description: Program Definitions (cont.)

## Questions

*Is this proposed definition of “major highways” adequate and appropriate for the purposes of the Real-time System Management Information Program?*

- Requests for flexibility in deciding which roads to cover
- Rural & urban areas might have different needs for coverage

# Program Description: Program Definitions (cont.)

## Traffic & Travel Conditions/Real-Time

- Construction closures / openings within 30 minutes; 15 minutes in metro areas
- Confirmed road or lane blocking incident information within 15 minutes
- Roadway weather conditions updated at least 30 minutes
- Congestion information updated at least 15 minutes
- Travel times reflect conditions no older than 10 minutes
- Transit disruptions updated at least 30 minutes

# Program Description: Program Definitions (cont.)

## Questions: Traffic & Travel Conditions

*How well do the proposed traffic and travel conditions represent reasonable and appropriate basic requirements for the Real-time System Management Information Program?*

- General support for including travel times and speeds, with extent & degree of congested conditions
- Disagreement to include information on public transportation disruptions & weather & construction information

# Program Description: Program Definitions (cont.)

## Questions: Real-Time

*How well do the proposed criteria for real-time information represent reasonable and appropriate minimums for systems implemented under the Real-time System Management Information Program?*

- General support for proposed definition of “real-time” for congestion, travel time, & lane blockage information
- Several respondents, including state DOTs, noted that more stringent — 5 minutes or less — would be more useful to the public

# Program Description: Program Parameters

Information Quality – “Good”

## Accuracy

- Minimum of 85% accuracy

## Availability

- Minimum of 90% availability

**Based on “Data Gap Workshop” results**  
“Good” – “Better” – “Best” descriptions



# Program Description: Program Parameters (cont.)

## Questions: Information Quality

*How well do the proposed attributes present reasonable minimum requirements for systems implemented under the Real-time System Management Information Program? Are any other minimum requirements necessary?*

- Alternatives for quality and accuracy proposed but no general consensus
  - more stringent measures suggested
  - weaker measures suggested
  - agreement with proposed USDOT measures

# Existing Systems

Program would:

- be developed to take advantage of existing systems & information sharing
- build upon existing system where applicable
- complement current performance reporting systems

# Existing Systems (cont.)

## Questions

*What system used? What types of information? How is information shared with the public? How broadly is information shared with other agencies? What data standards are used?*

- Nearly all respondents provided information on systems deployed systems in their area

# Summary

- Overall, scope of the program was reasonably supported
- Despite dissenting opinions, the suggested alternatives were not widely supported
  - *meaning no specific alternative was more popular with regards to data elements, data quality, coverage, etc., than the parameter proposed in the RFI*

To review the docket submissions, visit the Document Management System (DMS) at <http://dms.dot.gov/submit>.

Use docket number FHWA-06-24219

# Conclusions

- Overall, in favor of concept
- Continue detailed overview of comments to refine Program
  - *Definitions*
- Implementation TBD
  - *Program Guidance by end of year*

## Informal Response to Rural Transportation Community

- “...to support improved response to weather events and surface transportation incidents, and to facilitate national and regional highway traveler information.”
  - Systems need to be in place to assist in the future
  - USDOT will continue reaching out to Rural for input

# Next steps

Leverage organizations' activities

– ITS America

- Annual Meeting
- Web conferences

– I-95 Information Forum

– TRB / AASHTO mid-year meetings

Coordination with NCHRP 20-7, Task 215

– “Statewide Incident Reporting Systems”

Develop & Issue Program Guidance Based on  
Comments

# Resources & Contacts

“Closing the Data Gap: Guidelines for Quality Advanced Traveler Information System (ATIS) Data” that is available from the DOT at [http://www.itsdocs.fhwa.dot.gov/JPODOCS/REPT\\_MIS/13580.html](http://www.itsdocs.fhwa.dot.gov/JPODOCS/REPT_MIS/13580.html) (Intelligent Transportation Society of America, ATIS Committee; September 2000)

## § 1201 Program Team Leader

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# Thank you



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