

Real-time Information to the Public

ITS Georgia Annual Meeting

September 28, 2015

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Background

- SAFETEA-LU, Subtitle B, §1201
- Final Rule published on November 8, 2010
- New Section 511 under Title 23
- Established a Real-Time System Management Information Program (RTSMIP) in every state
- Monitor traffic and travel conditions
- Share information to address congestion
- Improve security of surface transportation system

General

- No new funding provided
- Eligible under NHS, STP, CMAQ
- No requirement for specific applications or technologies
- No requirement for dissemination
- Required to make information available
- No methods specified for measuring data quality
- Metropolitan area > 1 million population

Requirements

- Information to be made available
 - Construction activities
 - Incidents
 - Weather
 - Travel time
- Two-stage implementation
 - All interstate routes within 4 yrs (Nov 8, 2014)
 - Metropolitan Routes of Significance*(RoS) within 6 yrs (Nov 8, 2016)

*RoS determined by State in collaboration with local partners

Requirements

- Construction and Incident Information required within 20 minutes outside metro areas and within 10 minutes in metro areas
- Roadway Weather Information required within 20 minutes of detection
- Minimum accuracy shall be 85 percent
- Minimum availability shall be 90 percent

RTSMIP Summary

| Information | Metro Area | Non-metro | Accuracy | Availability |
|--------------|------------|-----------|----------|--------------|
| Construction | 10 min | 20 min | 85% | 90% |
| Incidents | 10 min | 20 min | 85% | 90% |
| Weather | 20 min | 20 min | 85% | 90% |
| Travel Time | 10 min | NA | 85% | 90% |

Compliance

- States shall develop methods to ensure data quality in collaboration with partners.
- FHWA shall concur that methods provide reasonable checks of data quality.
- States shall demonstrate how selected methods measure accuracy and availability of information and the remedial actions if information falls below specified levels.

GDOT Preparation for 1201

- Workshop – July 2014
 - Discuss current status
 - Develop plan for filling in gaps
- Implementation Plan – October 2014
 - Documents current practices
 - Lists activities for compliance

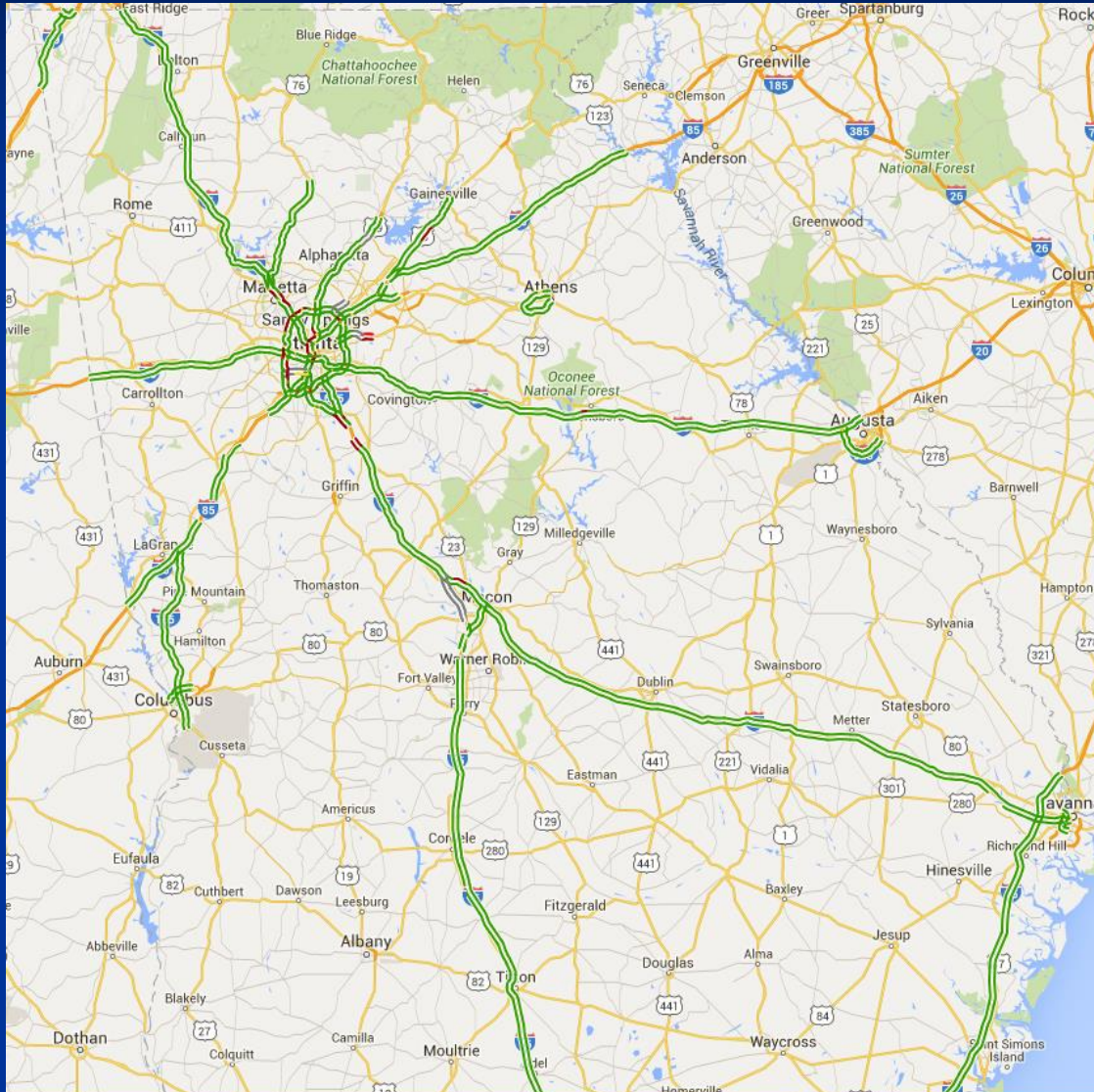
GDOT Preparation for 1201

- When rule first came out, GDOT generally felt they were in a good position to meet deadlines
 - Mature ATMS (since 1996)
 - Good relationships with 911 centers around state (for incident info)
 - Wide detection coverage (over 3000 sensors)
 - Statewide construction tracking method (TIRs)
- Some work remained to be done

Interstate Travel Time Data

- GDOT had excellent detection coverage in place in metro Atlanta, but little elsewhere
- Needed way to collect data from the more rural Interstates outside of Atlanta
- GDOT is now purchasing probe data from INRIX and HERE to close gaps in coverage
- 100% of rural Interstates now have traffic data coming into Navigator at 2-minute intervals

Interstate Travel Time Data



Map from 511 website showing full Interstate coverage

Coverage comes from:

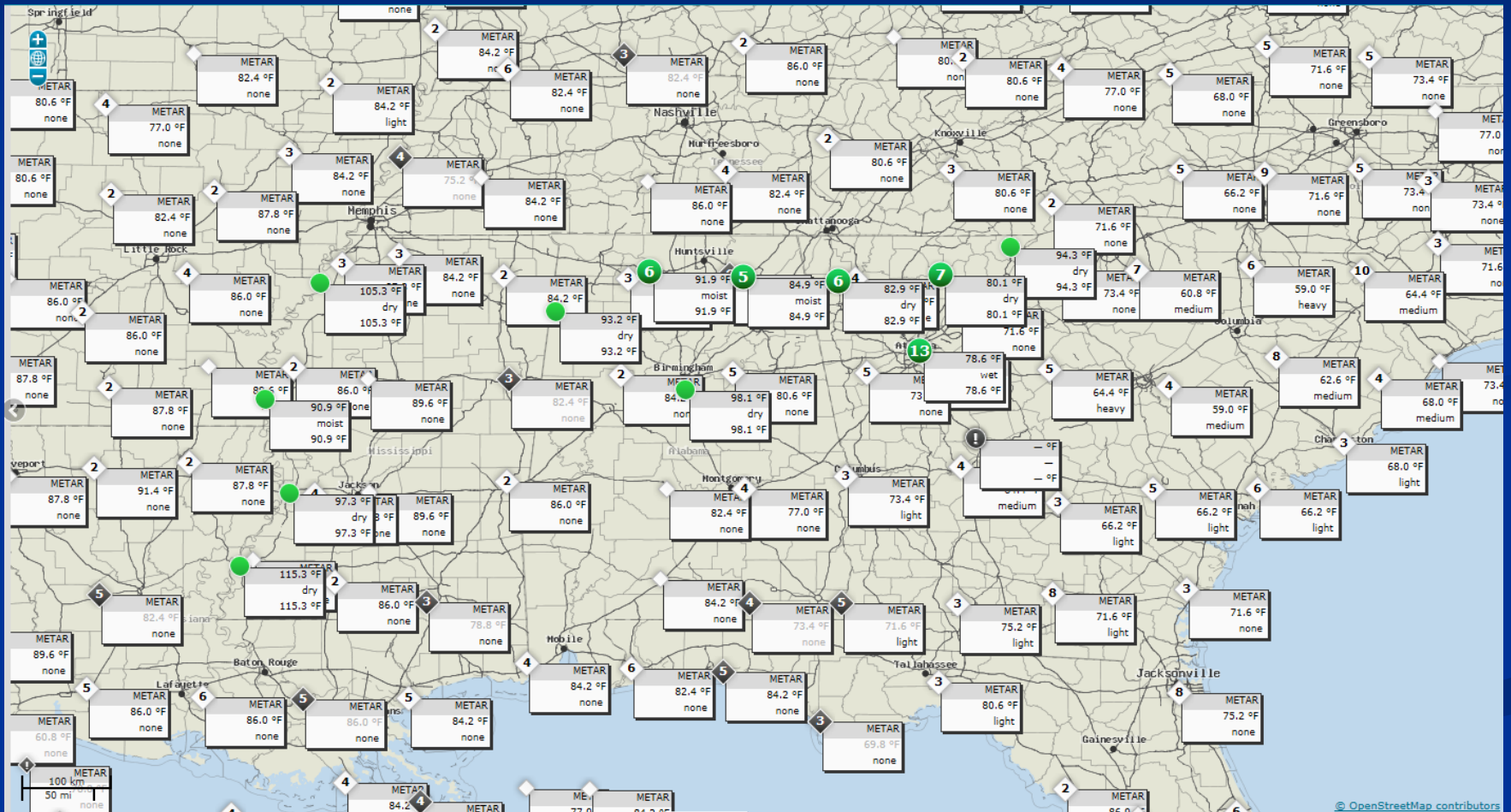
- GDOT sensors
- INRIX data
- HERE data

Users can calculate travel times using trip time calculator on site

Roadway Weather Data

- When rule first came out, GDOT had no weather stations active
- GDOT now has 27 self-owned weather stations active around North/Central Georgia
- GDOT also has access to a large network of weather stations across the Southeast, including sensors from other DOTs and airport data

SE Weather Data Network



Roadway Weather Data

- Any weather condition reports that are entered into Navigator are published to the 511 website and apps. Ex: Icy spots, fog, flooding
- GDOT is now working to make even more roadway weather condition information available to the public by integrating Navigator directly with the weather stations

Construction Data

- GDOT uses a distributed method to ensure all statewide construction events are tracked
 - Personnel in field involved with projects submit traffic interruption reports (TIRs) via email
 - Staff at TMC (in Macon) enters them into Navigator
 - Field personnel must then call TMC at beginning and end of lane closures, or if anything changes
 - Helps ensure construction info is accurate

Incident Data

- Incident reports come in from these sources:
 - HEROs
 - Camera visuals
 - Motorists calling 511
 - 911 centers calling TMC/State Patrol console on floor
 - GDOT staff calling TMC
 - Detection turning red on map
- All incidents entered into Navigator immediately becoming visible to public via signs and 511

Info Availability and Accuracy

- Navigator is a 24-hour operation
- Nearly 20 years of experience in streamlining the process of incident tracking
- Website has had almost no downtime since rule began
- 511 phone system has not been out of service since inception

Remaining Work

- GDOT needs to get with local jurisdictions and decide which routes should fall into “State-Designated metropolitan routes of significance” (for Nov 2016 deadline)
- Many RTOP corridors will fall into this category and already have detection
- Once final list is determined, efforts need to be taken to ensure travel time, incident and construction data are made available

Questions?

Thank you!

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