GRITS State of the State
MDOT ITS

Mike Stokes
mstokes@mdot.ms.gov
National Rural ITS Conference and GRITS Annual Meeting
September 17, 2012
MDOT ITS Program - 2012

- Software
- Operations
- Projects
- Program
Advanced Traffic Management System (ATMS) Software Migration Underway

(8/23/2012) Complete Final Phase 1 UAT (Release 3): 2 out of 4 reqs to be completed
(8/24/2012) Deploy Final Phase 1 UAT (Release 3): software to be validated in MDOT environment
(8/28/2012) Conduct Final Phase 1 UAT (Release 3): 4 reqs to be validated

- Install & Deployment (3/2/12)
- Acceptance Test 1 (4/29/12)
- Training (5/3/12)
- Deploy Phase 1 UAT (Release 1)
- Deploy Final Phase 1 UAT (Release 3)
- Conduct Final Phase 1 UAT (Release 3)

Dates | Action
--- | ---
7/12 | Deployed
4/12 | System Software Architecture
3/12 | Test Plan
4/12 | Test Procedures
4/12 | UAT
4/12 | Training
5/12 | Deployed
6/12 | Test Plan
6/12 | Test Procedures
6/12 | Unit
7/12 | Deployment
7/12 | Training
ATMS Software Migration

- ATMS will assist with collection, dissemination, and management of ITS systems
- Provide freeway and arterial traffic management capabilities at the Statewide TMC and Regional TMCs.
- Being deployed using a phased approach
Operations

24/7 Operations at Statewide TMC Soon!
24/7 Operations during recent Hurricane Isaac

- 24/7 Operations were implemented during recent Hurricane Isaac.

<table>
<thead>
<tr>
<th>Region</th>
<th>Mon</th>
<th>Tue</th>
<th>Wed</th>
<th>Thur</th>
<th>Fri</th>
<th>Sat</th>
<th>Sun</th>
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<td>Jackson:</td>
<td>8,797</td>
<td>10,218</td>
<td>39,474</td>
<td>15,282</td>
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<td>Lyman:</td>
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<td>114,751</td>
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<td>8,375</td>
<td>15742</td>
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<td>Southaven:</td>
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<td>3,678</td>
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<td>730</td>
<td>933</td>
<td>588</td>
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<td><strong>192,007</strong></td>
<td><strong>151,891</strong></td>
<td><strong>33,533</strong></td>
<td><strong>17,354</strong></td>
<td><strong>19,720</strong></td>
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</tbody>
</table>
Operations

Gulf Coast TMC Plans developed

Office Building - Exterior

Office Building - Overall - Floor Plan
Operations

Mississippi 511 Coming Soon!

- 511 – Dedicated traveler information number
- Integrated with mdottraffic.com and statewide DMS
- Kickoff meeting August 23
- Operations expected early 2013
Traffic Incident Management (TIM) Program

- Increase coordination among emergency response agencies
- Share valuable information, lessons learned, and input to improve TIM procedures
- Use ITS technologies and leverage MDOT Traffic network to support information exchange
- Reduce incident response and clearance times
Projects

Mississippi River Bridges Incident Management, Freight Movement and Security Project (MSRITS)
MSRITS

- Tiger III Grant and private partners funds
- Highway/Port Multimodal ITS project
- Address 4 rural bridges between Memphis, TN and Baton Rouge, LA
- Major Benefits
  - Improved mobility for highway and maritime traffic
  - Improved safety and security
  - Improved incident management
  - Improved regional event and emergency management
Road Weather Information Systems

- Install RWIS stations at two bridge sites:
  - I-69 at Hurricane Creek Bridge
  - I-55 at Coldwater River Bridge

- Monitor, report, and forecast roadway related weather conditions using a combination of sensors measuring ice and rain

- ITS elements include:
  - CCTV
  - RDS
  - Traffic Signal Conduit

- Construction begins this fall
I-55 Split Diamond Interchange Project

- Reconstruction of major interstate
  - Adding an interchange
  - 2 additional interstate lanes
  - Additional frontage roads

- ITS elements include:
  - DMS
  - CCTV
  - Fiber Optic Cable
  - Networking Equipment
  - Smart Work Zone
Projects

Video Migration

Before Migration

Before Migration
Video Migration

- Migration to H.264 format provides live streaming video across multiple platforms
- Reduces network bandwidth, equipment needs, costs, system complexity and power and energy consumption.
- Creates a more sustainable environment for the future.
- Power consumption of equipment reduced from roughly 39,000 to 3,000 watts, heat from 123,000 BTU to 8,400 BTU.
- Savings of an estimated $35,000 in electricity costs per year.
- Project awarded “Best New Innovative Application” at 2011 NRITS
Hattiesburg ITS Master Plan developed

- Preliminary plan for the deployment of communication and ITS infrastructure in the area and adjacent regional facilities
- Help to plan projects and services that best meet the needs of the area
- Multiple stakeholder meetings in 2011
Program

Iphone Application now available!

- **Alerts**
  - Accident
    - I-20 past Gallatin EX 45
    - 1.9 Miles
  - Bridge Repair/Inspection
    - Southbound State Street/US 51 to I-5...
    - 2.0 Miles
  - Detour
    - I-20 Eastbound to State Street
    - 2.1 Miles
  - Detour
    - I-55 Northbound to State Street
    - 2.8 Miles
  - Accident
    - I-20 between Pearson Rd. and Airport...
    - 5.3 Miles
  - Ramp Construction
    - I-55 Southbound Exit Ramp to Siwell...
    - 9.0 Miles
  - Wide Load Alert

- **Camera Detail**
  - High St East at Jefferson
    - High Street east at the Jefferson St intersection towards I-55.
Iphone Application now available!

- Real time traffic alerts
  - Alert Map View
  - Alert Detail
  - Alerts List View

- Real time streaming video of
  Traffic cameras
  - Camera Map view
  - Camera Detail
  - Cameras list view
Ipad Application coming soon!
MDOT Traffic website updates
MDOT Traffic website updates

• New name
  ▪ Mstraffic is now MDOT Traffic

• Enhanced user customization
  ▪ Updated interface
  ▪ Added tools

• My Commute feature
  ▪ Users can draw personalized areas on map from which to receive alerts.

• First responder’s section

• 100 cameras from Gulf Coast region added to the website
Traffic Incident Management (TIM) program

Did you know?

- 50% of traffic delay is caused by incidents
- 25% of these incidents are non-recurring incidents
- 20% of incidents are secondary crashes
- 20% of secondary crashes involve fatalities

Percentages are according to the 2010 Traffic Incident Management Handbook published by the U.S. DOT and FHWA.
Program

First Responder’s site
Program

First Responder’s site

• Exclusive area of MDOT Traffic Website
  ▪ Serve emergency responders throughout state

• Assist in managing traffic incidents

• Users can log in and view high-resolution streaming video of the state’s CCTV

• Set a mock video wall

• View remotely
MDOT ITS Design Manual published

- Ensure uniformity in design and implementation of ITS projects
- Guide engineers through development of design concept, plan and specifications

INCLUDES
- ITS Standard drawings
- Typical ITS plan sheets
- Special Provisions
- Notice to Bidders
MDOT Utilizing Sharepoint 2010

Optimizing Productivity and Reducing Costs
Program

Smart Workzone Guidelines
MDOT ITS Program

GoMDOT ITS webpage

www.mdottraffic.com

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www.twitter.com/mdot_i20

MDOT Traffic Facebook
Questions ???

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