Real-Time Customer Service
ITS in Missouri

- Over 230 Dynamic Message Signs
- Over 680 CCTV Cameras
- Over 750 Vehicle Detection Sensors
- 34 Road Weather Sensors
- Over 1,300 connected signalized intersections
ITS in Missouri

- Over 230 Dynamic Message Signs
  - Nearly 30% rural freeways
- Over 680 CCTV Cameras
  - About 10% rural freeways
- Over 750 Vehicle Detection Sensors
  - Virtually all in St. Louis or Kansas City
What’s Missing?

• No real-time traffic data outside of SL and KC
  • No travel times/delay info on rural DMS
• No performance data for work zones or incidents
• No measurable impacts of weather
• Statewide detector installation not feasible
New Opportunities

• Private sector traffic data
  • Based on “probes”
  • Vast roadway coverage
  • Potentially lower life-cycle cost
• New contract in place with HERE
  • “Statewide” coverage
  • Real-time traffic data on over 12,000 centerline miles in MO
  • Immediate data access
  • Data analytics
How We Can Use It

- Enhanced Traveler Information
  - Travel times
  - Estimated delays
  - Live traffic speeds

30 mph Traffic
3 Miles Ahead
Prepare to Stop

Crash at MM 93
Left Lane Closed
13 Minute Delay
How We Can Use It

- Smarter Work Zones
  - Real-time monitoring
  - Advance warning
- Work zone performance
How We Can Use It

- Improved Incident Response
  - Real-time traffic monitoring
  - Quicker, more complete notification
  - Measurable impacts
How We Can Use It

- Improved Incident Management
  - Quicker, more inclusive detection

Total Traffic Crash Impact, I-70 EB at MO 740
November 14, 2013
How We Can Use It

• Visualizing & Measuring Weather Impacts
How We Can Use It

- Weather Impacts & Agency Response
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- Weather Impacts & Agency Response

Map showing congestion levels before and after a weather event from February 3, 2014 to February 4, 2014.
How We Can Use It

- Weather Impacts & Agency Response
How We Can Use It

• Robust Performance Measures
  • Better information, better decisions
  • More coverage
  • Quicker analysis
Maximizing Benefits of DMS

• More active management/messaging
• Adverse weather
  - Tornado Warning Issued
  - Turn Off Cruise During Wet Conditions
  - Ice and Snow Covered Roadway Ahead
  - Turn Off Cruise During Snow/Ice Conditions
• Maintenance Operations
  - 10 MPH MdDOT Vehicles Ahead
Outstanding Customer Service

- More equipped CS reps
- Real-time information directly to customers
- Improved response times
- What’s next?