KDOT I-70 Corridor ITS
Fast Track Deployment

Presented by:

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Agenda

- Project Background
- Project Design
- KDOT Advance Procurement
- Subsystem Testing
- Deployment Status
- Lessons Learned
Project Background
Project Background

Existing Method

• District 3 (Western Kansas) - Portable DMS during the winter months

• Closure coordinated with District 2 (Central Kansas), CDOT and District 1 (Eastern Kansas)
Project Background

• Planning Began October 2007

• Phase 1 Initial Deployment:
  Colorado Border to Topeka

• Phase 2 Deployment
  I-70 from Topeka to Kansas City
Project Background

Goals

• Deployment of permanent DMSs and cameras along I-70 by late 2008
• ITS Traveler Information Web page
• Emphasis is safety, not congestion for most rural areas
Project Background

Stakeholder Meetings – Dec 2007

Site Visits - Jan-Feb 2008
Project Background

Letting - May 2008

Construction - June 2008
Project Design

- Use Existing KDOT Statewide Fiber - Communications Backbone
- VANUS - Designer/Integrator
- Telvent - MIST Software
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Project Design

I-70 Sign & Camera Fast Track Proposal
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Project Design

25 Permanent DMSs (10 Signs Existing Signs)
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Project Design

Design Plans Coordinated with District
3 Snow Gate Project
Project Design

25 CCTV Cameras
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Project Design

2 Queue Detectors
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KDOT Advance Procurement

- Sign and Camera Statewide RFP
- Camera Poles and Lowering Device
- Camera Cabinets
- Cisco Ethernet Switches, Moxa Media Converters and Terminal Servers, and Cornet Video Encoders
- Wavetronix Detectors
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Subsystem Tests

DMS Subsystem Testing - July 2008
Subsystem Tests

CCTV Assemblies Subsystem Testing – August 2008
Stand-Alone Testing

- DMS & CCTV Field Tests - November 2008
- Remote Communications - December 2008
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Topeka Operational - December 2008
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Deployment Status

• Integration 95% Complete

• Maintenance RFP in Development
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Deployment Status
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Topeka Camera Image
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Lincoln Hill Camera Image
Branding Efforts

- Website: www.kandrive.org/cameras
- Statewide marketing effort
- Logo Development
Virtual TMC Operation

• Each KDOT District Can Access MIST for Sign and Camera Control

• Procedures for Coordination Between Districts Already Developed

• Control by KDOT Headquarters, Emergency Management During Statewide Events, and Amber Alerts
Virtual TMC Operation

- KCSCOUT to Backup Statewide Operations After Hours
- Statewide SOP in Final Draft
- Coordination With KHP, Emergency Management, Local Law Enforcement Will Continue to Develop
Lessons Learned

- Soil Borings Use Worst Case Analysis
- Weekly Coordination Conference Calls
- Schedules
Lessons Learned

• Training KDOT Inspectors for ITS Construction

• Firewall Issues, Bandwidth Issues With BCS
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Lessons Learned

Usage of Empty Conduits
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Not a Good Place to be in a Blizzard
KDOT I-70 Corridor Virtual TMC Operation

Thank You

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