States Visited
March 26 - April 7
Places Visited

STATES

- Minnesota DOT
- Colorado DOT
- Utah DOT
- Indiana DOT
- Virginia DOT

plus
- I - 470 Toll Road in Denver, CO
- Eisenhower Tunnel, CDOT
- Holland Tunnel, CDOT

CITIES

- Denver, CO
- Ft. Collins, CO
- Grand Junction, CO
Winter Scan in the Snow?
SCAN TEAM MEMBERSHIP

Ben McKeever
FHWA
Co-Chair

Bill Hoffman
Nevada DOT
Co-Chair

Terry Nye
PennDOT

Dave Ray
ODOT

Steve Lund
MnDOT

Mike Schwartz
VDOT
ARORA STAFF

Rod Pletan  
Subject Matter Expert  
Retired MnDOT

Armando Perez  
American Trade Initiatives (ATI)  
Logistics Coordinator
Focus Areas

- Maintenance Decision Support Systems (MDSS)
- Automatic Vehicle Location Systems (AVL)
- Equipment Technologies
- Training and Development
- Management Issues
- Integration of Weather, Traffic and Maintenance Operations
MDSS Findings

- Data Transmission capability, real-time with truck
- Wide variety of Data Elements and uses
- Year-round applications
- Cost-Benefits becoming identifiable
- Marketing strategies vary from top down to bottom up
- Positive impact for both employee and management
MDSS - In-cab Displays
MDSS - Touch Screen Input

@ CDOT
MDSS - Cameras in Cab

@ CDOT
MDSS Training

@ INDOT
MDSS - Coping with Change

How do we respond to change emotionally?

Tony McClellan - INDOT

INdiana D epartment of t ransportation
Driving Indiana’s Economic Growth

MDSS Implementation Team

7th Clarus & 11th MDSS Stakeholder Meetings, Sept 14-17, 2009, Charlotte, NC
MDSS Recommendations

• Publish Successes in Winter Operations
• Continue Use for Year-Round Maintenance Activities
• Continue Marketing and Implementation strategies
• Continue Efforts to Develop Automated 511 & MMS Data Uploads
• Continue to Develop Winter Severity Index
Equipment Technologies

- Plows & Wings
- Tow Plows
- Cutting Edges
- Saddle Tanks
- Spreaders
- FAST Systems
- RWIS Stations
- Friction Measurement
- Chemical Storage
- Brine Making
- Truck Washing Facilities
- Salt Brine Runoff Control
Training and Development

- Flexible Work Force
- Cross Training
- Simulators, Academy Development, CBT
Management Issues

- Inter-jurisdictional Relations to Promote Consistency across Boundaries
- Outcome-based & Customer-Oriented Performance Measures
- Dedicated Funding for Maintenance Research
Integration of Weather, Traffic and Maintenance Operations

- Integration of multi-disciplines in TOC
- Conveying real-time traveler information (weather-related)
- Implementation of special signal-timing plans during winter events
Next Steps

• Final NCHRP Report on Domestic Scan due out this fall
• Possible TRB Session in January 2010