FHWA’s
Road Weather Management Program Update

MDSS Annual Meeting #9
Kansas City, MO
Sept 2007

Paul Pisano
Team Leader, Road Weather Management Program
Federal Highway Administration
The Congestion Pie

- Traffic Incidents: 25%
- Capacity Constrained: 40%
- Bad Weather: 15%
- Work Zones: 10%
- Traffic Incidents: 25%
- Special Events: 5%
- Timing: 5%
- Poor Signal: 5%
- Capacity Constrained: 40%
What Does Success Look Like?

“Anytime, Anywhere Road Weather Information”

Goal: Improve Mobility and Safety by alleviating the impacts of weather on the surface transportation system
Program Objectives

• Stakeholder Coordination
• Applied Research
• Technology Transfer, Training & Education
• Performance Management & Evaluation
Three Applied Research Tracks

- Road Weather Observing Systems
  - *Clarus* Initiative
    - System development & evaluation
    - Regional demonstrations to foster participation by transportation agencies & to develop new capabilities using *Clarus* data
  - Vehicle Infrastructure Integration (VII)

- Decision Support Tools

- Weather-responsive Traffic Management
Vehicle Infrastructure Integration (VII)

- Determine the viability of using vehicle-based probe data in weather applications
- Evaluate vehicle-based data against fixed observations
- Integrate vehicle-based data with other data sets to create new road weather observations (e.g. road condition)
- Develop framework for a ‘Weather Data Translator’ to process raw probe data into more useful observations
Additional RWM Activities

- Integrating weather into TMC operations
- Development of weather-based traffic analysis tools
- Development of road weather management performance metrics
- Evaluation of Environmental Sensor Station (ESS) Siting Guidelines
- Road Weather Resource Identification Tool
- Updating RWM Best Practices
On the Immediate Horizon

- **Courses**
  - Web version of Principles & Tools for Road Weather Mgmt.
  - Intro. to RWIS Equipment & Operations
  - Surface Transportation Weather Short Course (@ AMS, Jan.)

- **TRB Conferences** (June, Indianapolis)
  - 6th Intl. Symposium on Snow Removal and Ice Control Tech.
  - 4th National Surface Transportation Weather Symposium

- **Reports & Products**
  - MDSS Release 5.0
  - MDSS Lessons Learned - Maine
  - MODSS Concept of Operations
  - Road Weather Management Performance Metrics
  - TMC Weather Integration Self-Evaluation & Planning Guide
  - ESS Siting Guidelines, rev. 2