# Office of the Federal Coordinator for Meteorological Services and Supporting Research (OFCM)

# Leveraging Road Weather Partnerships to Improve Services & Capabilities

Clarus / MDSS Stakeholder Meeting Albuquerque, New Mexico September 7, 2011

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#### **Overview**

- Who is OFCM?
- OFCM coordination and collaboration activities linked to road weather capabilities



- 4D Weather Cube (NextGen) Overview
- NextGen Aviation Weather R&D Plan
- Re-engage OFCM WIST Working Group





#### **OFCM Mission**

To ensure the effective use of federal meteorological resources by leading the systematic coordination of operational weather requirements, services, and supporting research, among the 15 stakeholding federal agencies and offices.

#### **High-Level Focus:**

- Address needs, issues, and problems
- Resolve differences, find common threads
- Leverage partnerships and collaboration
- Studies, reports, plans, and handbooks
- Crosscut reviews, assessments, and analyses

Strengthen science and research ← Improve products and services

#### **Integrating Across the Road Weather Community**

- OFCM leading coordination and collaboration on a number of activities with direct linkages to road weather capability
  - NOWCON
  - NextGen Aviation Weather R&D Plan
  - WIST Working Group
  - National Space Weather Program
  - Multifunction Phased Array Radar
  - Joint Urban Testbeds
  - Social Science Integration
  - Data Assimilation & Numerical Modeling Skills





# **Community Effort – NOWCON**

#### Federal Weather Community Response to the NRC Report

- Network of Weather and Climate Observing Networks (NOWCON)
  - Coordinate and collaborate reduce chaotic, patchwork effort without stifling energy and innovation
  - Help resolve boundary layer obs shortfalls
  - Make more data available for road weather applications
  - Use road weather data to improve forecasts for all
  - Set standards, establish architecture, define metadata

#### Next Steps

- Finalize metadata standard recommendation
- Develop strategy for implementation of metadata
- Address architecture and data management issues
- Track National Mesonet initiative
- Develop approach to:
  - Validating mesoscale observation needs
  - Completing a gap analysis
  - Planning for new capabilities to fill gaps



## **Community Effort – 4D Weather Cube**

- NextGen weather vision:
  - Multiple-user common weather picture
  - Net-centric (net-enabled) capability
  - Data storage approach containing observations & forecasts
  - 4D Weather Cube will have benefits beyond aviation
  - Automated decision assistance tools for road weather and other agencies
- 4D Weather Cube Road Map
  - Initial Operational Capability (2014)
  - Intermediate Capability (2018)
  - Full Operational Capability (2022)



4-D Weather Cube could be a data delivery tool for Road Weather Management products & services!

# Community Effort NextGen Aviation Weather R&D Plan

Purpose: Develop Aviation Weather R&D Strategy / Roadmap to Help Meet NextGen Aviation Weather Requirements

- ICMSSR approved OFCM effort to lead interagency collaboration
- Steps to develop strategy / roadmap (12-month timeline)
  - Identify requirements
  - Determine current capabilities and gaps
  - Inventory ongoing R&D and identify additional R&D needed to meet capability gaps
  - Develop aviation weather R&D strategy / roadmap
  - Track R&D progress & results to meet requirements
- Propose OFCM WIST Working Group re-engage
  - Focus on R&D priorities (similar to aviation community)
  - Leverage capabilities amongst federal partners

# Community Effort – OFCM WIST WG

#### **Next Steps**

- Re-engage WIST Working Group
  - Next meeting: Fall 2011
  - Discuss R&D common issues
    - NOWCON
    - 4-D Weather Cube
    - Connected vehicles
    - Other initiatives (PBL, etc.)
  - Begin to identify R&D priorities, shortfalls
- Goal: partner and leverage resources to enhance <u>needed</u> R&D to ultimately improve WIST products and services
- Explore possible WIST symposium / workshop in 2012









# Questions?

Visit our web site at <a href="http://www.ofcm.noaa.gov">http://www.ofcm.noaa.gov</a>