Surface Transportation Weather Decision Support Requirements (STWDSR)

Maintenance Decision Support System: Recap for Review 2

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Contents

• MDSS Technical Configuration
• Open System goal
• Demonstration Phase planning
Map to WIST-DSS Components

**Generate Scenario**
- NCAR D
- MDSS Road Weather Forecasting System (Environmental Threat Fusion)

**Monitor Conditions**
- CRREL D
- CRREL E
- CRREL F
- Road Conditions
- Chemical Conc.
- Snow Drift

**Present/Make Decision**
- CRREL B
- MDSS GIS Display System
- CRREL C
- MDSS Decision Support Concepts

**Update Context**
- External Information Resources
- Transportation and Treatment Asset Data
- Ensembles
- Existing Environmental Observing Systems
- Video Processing
- Precipitation Algorithms
- Numerical Models

**Additional Resources**
- ETL Observing System Assessment

*Letters refer to Appendices of MDSS Project Plan*
Option B: Extended Demonstrations

- Prototyping & Review
  - Rev1 DOT
  - Rev2 DOT+VAMS
  - Rev3 DOT+VAMS
  - Rev4 All

- System Development and Demonstration (Evaluation?)
  - Rev 5 All
  - Rev 6 All
  - Rev 7 All

- Deployment

- Functional Prototype Release 1
  - FY 00 Prototype Award
  - FY 01/02 Labs Funding
  - Winter 02/03
  - Winter 03/04

- Selected Demo Site(s)/Voluntary Partners

- Deployable

- Summer 04
Option B: Attributes

• Pro
  — Extended development, more mature and integrated Labs’ releases
  — No real-IOC pressure
  — All VAMS (if not all DOTs) brought along equally

• Con
  — Avoids real integration issues with VAMS
  — Requires end-end, but stovepipe, demo system

• Costs
  — Extended Labs’ costs
    — # demo sites option
    — Added review costs (DOT funding etc.)
Option B: Development Issues

- **System Development and Demonstration (Evaluation?)**
- **Functional Prototype Release 1**
- **Selected Demo Site(s)/Voluntary Partners**
- **Deployment Opportunities (any time)**
- **Tailor to demo site****

Timeline:
- **FY 01/02 Labs Funding**
- **Winter 02/03**
- **Winter 03/04**

- **Rev 4 All**
- **Rev 5 All**
- **Rev 6 All**
- **Rev 7 All**