MDSS Project Accomplishments FY2001

Presented by

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MTS™ MitreTek Systems

ETL

National Severe Storms Laboratory

FSL

NCAR

Overview – MDSS Project Schedule

FY2000: Requirements Analysis
Technology Review by Labs

FY2001: Conceptual Prototype Development
(storyboard concepts & user feedback)

FY2002: Functional Prototype Development
Demonstration
Documentation
Technology Release

FY2001 Major Project Objectives

- To identify the weather needs of the surface transportation community.

- To engage the national labs, DOTs, and vendors in the process of identifying unmet needs for WIST.

- To raise awareness of the AMS for surface transportation weather.

FY2001 Major Project Objectives (cont.)

- To raise awareness of the ITS community for surface transportation weather.

- To bring together the scientific community, vendors, and stakeholders to discuss and review surface transportation weather issues.

- To bring together the scientific community, vendors, and stakeholders to determine what the critical factors are and decision processes required to optimize maintenance actions and consistently provide improved road conditions.

FY2001 Major Project Objectives (cont.)

- To develop prototype MDSS concepts based on the STWDSR results and OCD.
- To present MDSS concepts (software and story board examples) to the stakeholders for review and comment.
- To develop MDSS technical components for transfer to the user community.

MDSS Project Results – FY2001

1) Surface transportation weather awareness was raised significantly this year within the research, provider, and DOT communities.

2) Vendors have listened to the needs of the users and some have started internal R & D processes to develop products that will address the unmet needs.

3) Labs, vendors, and DOTs are discussing options for collaboration.

MDSS Project Results – FY2001

4) MDSS prototype concepts have, in general, been accepted by the stakeholders. Feedback received includes comments such as:

"This project is on the right track" (NH, IA)
"How soon can we get this capability" (TN)
"Timing perfect, also good for training" (AASHTO)

5) The fusion of environmental, road condition, and operational data is the right approach.

MDSS Project Results – FY2001

Shortcomings:

1) **Spin-up needed for labs to fully understand user needs, political issues, and technical aspects of the components, limited the amount of system software development this year.**

2) **Intellectual property issues complicated the process of identifying a clear technology transfer approach. This issue has now been addressed.**

MDSS Project Results – FY2001

Shortcomings:

3) Several key changes were made to the Project Plan, which required a significant amount of coordination between the labs. Complications arising from the FOT plans drained limited resources from core development work.

4) Coding and integration of core system components was limited by the complexity and maturity level of some technologies for this application.

MDSS Project Results – FY2001

Summary

The successes of FY2001 were generally related to building advocacy, understanding user needs, conceptualizing MDSS capabilities, obtaining user feedback, and resolving programmatic and technical complexities.

In FY2002, the focus will be on coding the functional prototype, obtaining stakeholder feedback, documenting the system, and transferring the technologies to the community.