

State of the ITS Industry: Federal ITS Program

TRB 83rd Annual Meeting
Washington, DC

January 12, 2004

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Presentation Overview

- Status of Major Initiatives
- Program Evolution
- Reauthorization

Major Initiatives

- Deployment

- 511
- Intelligent Transportation Infrastructure Program
- iFlorida
- Amber Alert
- HHS Coordination
- Architecture Consistency

- R&D

- IVI
- Weather Program
- Hazardous Materials
- E-Seal Test
- VII

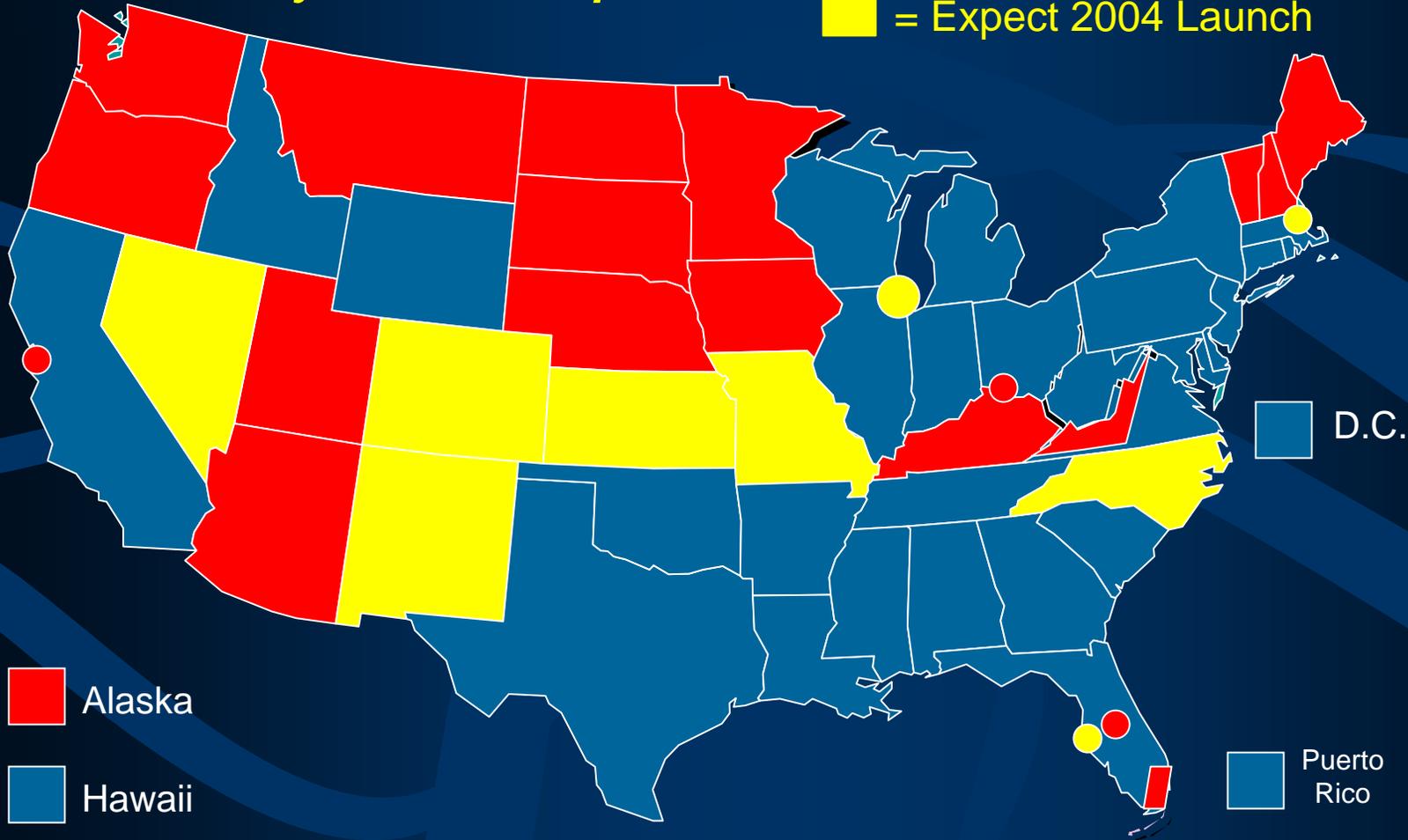
511 Deployment Status

as of December 10, 2003

Accessible by 17.6% of Population

Red = 511 Operational ("Live")

Yellow = Expect 2004 Launch



Accessible by 33% of Population in 2004

Intelligent Transportation Infrastructure Program (ITIP)

- **Goal:** To enhance availability of real-time traveler information and develop an ability to measure the operating performance of the roadway system in the major metropolitan areas.
- **Status:**
 - Contract with Mobility Technologies.
 - 29 metro areas eligible.
 - Systems in **Pittsburgh, Philadelphia, and Chicago** operational.
 - Construction begun in **Providence and Boston**.
 - Design under way in **San Diego and Tampa**.
 - Local agreements signed for **Washington, DC** and **Los Angeles**.
 - Negotiations active in 13 additional areas.

iFlorida Model Deployment

- **Goal:** National model for how security, reliability and safety can be enhanced through the widespread availability of real-time information.
- **Components:**
 - Orlando metro area information system.
 - Statewide conditions reporting system.
 - Hurricane evacuation route monitoring.
 - Weather response.
 - Critical infrastructure security monitoring.
 - Travel and weather information, including 511.

iFlorida Model Deployment

- Status:
 - Began May 1, 2003.
 - System design complete.
 - Operational in May 2005.
 - 2 years of operational evaluation.

Amber Alert

- **Goal:** To integrate the communication/response capability of transportation and public safety agencies to improve Amber Alert and other emergency response capabilities.
- **Status:**
 - Approximately 40 grants to State DOT's to facilitate coordinated programs.
 - Grants focus on electronic linkage between transportation and public safety entities.
 - 93 Amber plans in place.
 - Child recoveries to date – 117.

Human Service Transportation Coordination Program

- **Goal:** To improve the quality and efficiency of subsidized transportation services through the application of advanced technology.
- **Status:**
 - Several operational tests underway or planned to demonstrate how ITS might be applied under various institutional structures.
 - DOT/HHS coordination workshops being provided regionally to facilitate the planning necessary for coordinated services (Departments of Education and Labor now engaged).
 - National leadership forum planned on human service transportation coordination (part of FTA “United We Ride” Initiative).

Architecture Consistency

- **Goal:** To encourage the development of regional ITS architectures and use for planning integrated ITS deployments.
- **Status:**
 - Regions must have regional architectures in place by April 2005.
 - 300 regional architectures identified.
 - 119 regional ITS architecture completed.
 - Another 129 under development.

Intelligent Vehicle Initiative

- **Purpose:** To help drivers prevent hazardous mistakes through the application of advanced driver assistance systems.
- **Current Activities**
 - National IVI Meeting and Demonstration - June 2003. About 250 attendees, 10 demonstrations, national press coverage (this included the opening of the Advanced Intersection Collision Avoidance Test Facility at TFHRC).
 - March 2003 - Started on road testing of GM Rear-end Collision Avoidance System FOT. 10 Buick LeSabres in Michigan.
 - Completed Phase 1 of road departure FOT (system validation and test planning). Currently building test vehicles and starting on road testing this year.
 - Awarded Heavy Vehicle Electronically Controlled Brake System FOT to a team led by Freightliner and WalMart.
 - Naturalistic Driving Study - March 2003 - Have a fleet of 100 cars on the road capturing natural driving data.

Surface Transportation Weather Program

- **Purpose:** To minimize the impact of weather on surface transportation.
- **Current Activities:**
 - FHWA & NOAA Administrators met in August and agreed to forge road weather partnership; anticipate plan in the spring.
 - American Meteorological Society hosted a policy forum on Weather and Highways in November; recommendations forthcoming.
 - National Academies just released a report that makes the strong case for a formal National Road Weather Research Program.
 - MDSS Version 2.0 has just been released; system is being demonstrated in Iowa this winter.

Hazardous Materials Safety and Security Operational Test

- **Purpose:** Demonstrate the use of existing technology to improve the safety and security of HazMat transportation and quantify the costs and benefits.
- **Current Activities:**
 - 100 trucks have been equipped to provide location monitoring and status of driver, vehicle, and cargo.
 - The test is 3 months into the 6-month test period.
 - Testing will be completed in April.
 - The final reports will be completed by September.

Pacific Northwest E-Seal Test

- **Purpose:** To test the potential for electronic seals to support the efficient, safe, and legal transport of marine containers.
- **Current Activities:**
 - A public/private partnership was formed.
 - Test was coordinated with Operation Safe Commerce.
 - Three scenarios to be tested this year.
 - Linking e-seal with CVISN transponder.
 - Incorporating the Free and Secure Trade Program elements.
 - Integrating additional program elements such as agricultural inspection requirements.

Vehicle Infrastructure Integration

- **Purpose:** To explore the potential of cooperative vehicle highway systems to provide real-time information and support advanced safety applications.
- **Current Activities:**
 - **DSRC:**
 - FCC recently issued licensing rules.
 - Standards testing has been initiated.
 - **DOT/AASHTO/Automaker Dialogue:**
 - Initial set of public sector use cases developed.
 - Model under development to allow analysis of system requirements.
 - Potential “partnership” being explored.

Program Evolution

- Advisory Committee
- Management Council Direction
- Proposed Reorganization

Advisory Committee

- DOT decided to establish a formal ITS Advisory Committee.
- Charter has been developed.
- Members have been identified.
- First meeting planned for March.
- New agreement has been negotiated with ITS America for continued program support.

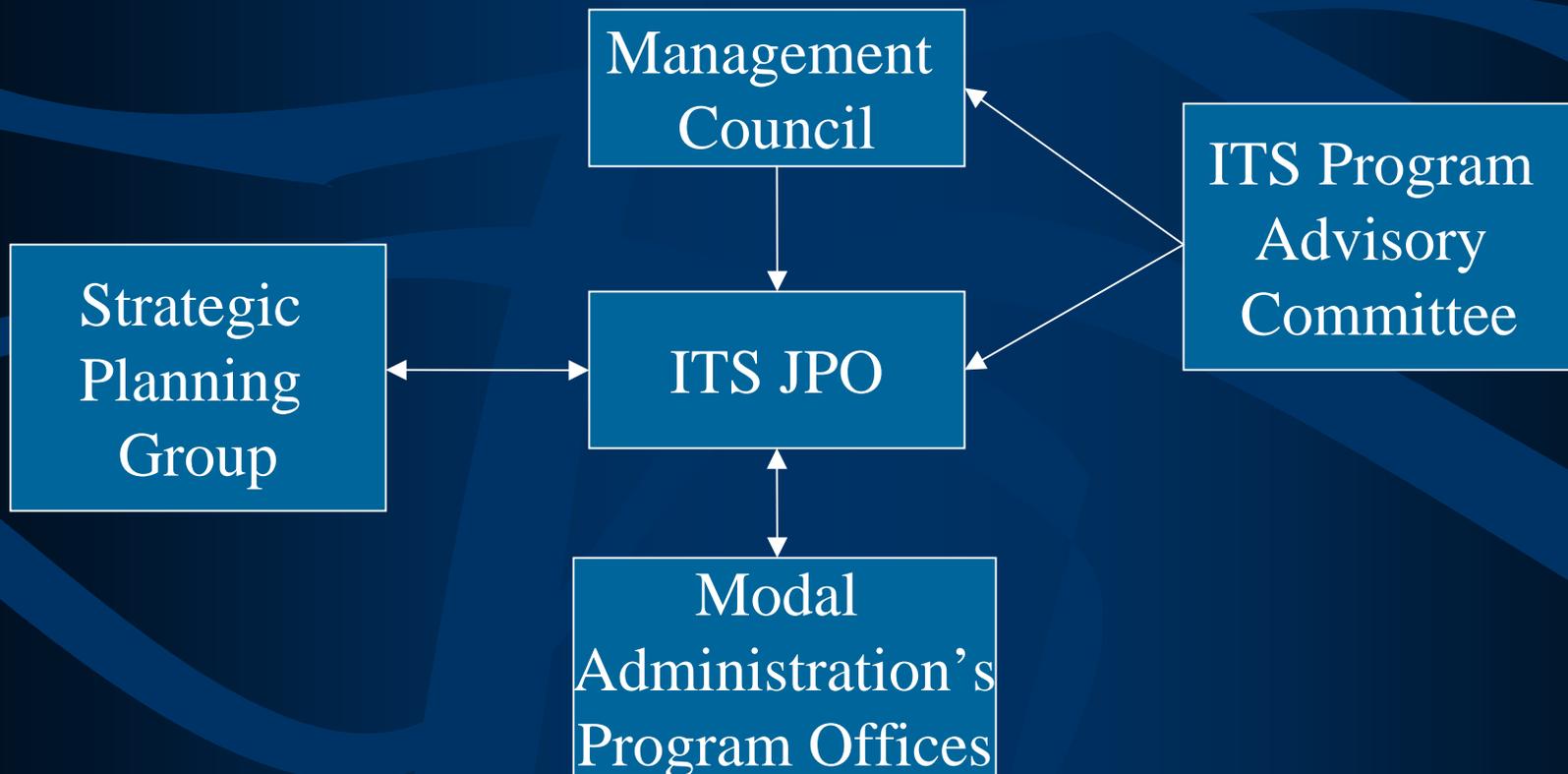
Management Council Direction

- Intent is to reorient the program to include fewer, larger, high-payoff initiatives.
- Expectation is that these initiatives will be multi-modal in nature, engage the private sector, have a clear Federal role, and be results oriented.
- Allow for continuation efforts, near-term wins, and exploratory studies.
- Fund cross-cutting efforts that support the overall goals of the ITS program.

Proposed Reorganization

- RSPA to be transformed to new agency--
Research and Innovative Technology
Administration (RITA).
- RITA will retain responsibility for R&D functions
of RSPA.
- ITS JPO and BTS would be moved to RITA.
- RITA will have a strong coordination and review
function for all DOT R&D programs.

Management Structure



Reauthorization Status

- Administration bill submitted to Congress.
- Senate EPW Committee has marked up bill.
- House T&I Committee has circulated draft House bill for comment.
- House Science Committee has circulated separate draft of research provisions for comment.

Features of SAFETEA

- A strong continued ITS Research and Development Program.
- Elimination of the ITS Deployment Program.
- A New ITS Performance Incentive Program.
- A CVISN Deployment Grant Program.
- Real-time System Management Information Program.
 - Statewide incident reporting systems.
 - Data exchange format.
- Increased emphasis on management and operations.

Features of Congressional Legislation

- Both House and Senate propose strong research program.
- Senate language does not provide deployment funds.
- House language provides for ITS deployment grants and ITS set aside funds.
- Both House and Senate support CVISN funding.
- Both House and Senate propose a real-time system management information program.
- Both House and Senate support increased emphasis on management and operations.

Funding Summary

Provision	Admin.	Senate	House T&I	House Science
R&D	\$121M	\$120-135M	\$138M	\$130-\$145M
Deployment Incentive	\$135M	n/a	n/a	n/a
Deployment Grants	n/a	n/a	\$25M (511)	n/a
Set Aside Funds	n/a	n/a	\$500M	n/a
CVISN	\$25M	\$30M (from R&D)	\$25M	n/a
I-95 Corridor Coalition	n/a	\$8-12M (from R&D)	n/a	n/a

Conclusion

- 2003 was year of significant progress both from deployment and R&D perspectives.
- ITS becoming increasingly visible to profession and to public.
- Federal program continues to evolve.
- ITS Program well positioned in reauthorization, whenever it happens.