Partnerships in ITS:
The Minnesota Experience

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Minnesota: Land of 10,000 Lakes
The State of Minnesota

- Total area: 86,943 sq mi, 225,182 sq km.
- Population (2000): 4,919,479
  - 60% Urban
  - 40% Rural
- Miles of roadway: 135,000
  - 12,000 miles of that are Interstate, U.S., or Minnesota State highways
  - 9% of the total
Statewide Transportation System
Strategic Plan

Helping Minnesotans Travel Safer, Smarter & More Efficiently
Strategic Plan Principles

- Commitment to Mission
- Focus on Customers
- Simplify Government
- Manage for Results
- Improvement by Innovation
Mn/DOT’s Strategic Vision

“A coordinated transportation network that meets the needs of Minnesota's citizens and businesses for safe, timely and predictable travel.”
Strategic Direction

• Safeguard what exists
• Make the transportation network operate better
• Make Mn/DOT work better
New initiatives

- Exploring:
  - GIS applications
  - GPS machine control
  - Intelligent Transportation Systems (ITS) traffic management technology
  - HOT lanes and FAST lanes
  - Demand-based variable tolling
Brief History of ITS In Minnesota

• 1969-90
  – Freeway management, traffic control systems and traveler information (radio and 800#)

• 1991-2004
  – Minnesota Guidestar
  – Statewide ITS Needs Study
  – New Focus:
    • Research and Operational Testing
    • Seed $ for ITS Deployment Initiatives
Dimensions of ITS Program

• **Statewide ITS Activities**
  – Twin Cities and Mid-Sized Urban Centers
  – Smaller Urban Centers and Rural Areas

• **ITS Activities Included**
  – Research / Operational Tests
  – Initial Deployment
  – Mainstreaming
Minnesota Guidestar
Board of Directors

• Formed in 1991 to provide policy direction for intelligent transportation system activities in Minnesota and advises the Commissioner of Transportation.

• Board of Directors
  – 50% public sector (Mn/DOT, U of M-CTS, DPS, MSP, Counties, Cities, MPOs, Met Council, etc.)
  – 50% private sector
Partners Critical

• Minnesota relies heavily on partnerships to research, plan, design, test and deploy ITS technology

• Types of partnerships:
  – Public – Private(s)
  – Public – Public
  – Public – Academia
  – Public – Private – Academia
Mn Guidestar and Research

- Strong University ITS Partnership since 1991
- U of M Researchers compliment Mn/DOT in the pursuit of new and innovative strategies to solve transportation problems
- Also provide technical expertise on advances in technology and new tools for traffic engineers
Minnesota Partnership Legislation

- Partnership Legislation was an important element that allowed the program to flourish.
Partnership Enabling Language

WHEREAS, pursuant to Minnesota Statutes Section 174.02, subdivision 6a, STATE may enter into agreements with non-governmental entities for research and experimentation; for sharing facilities, equipment, staff, data, or other means of providing transportation related services; or for other cooperative programs that promotes efficiencies in providing governmental services or that further the development of innovation in transportation for the benefit for the citizens of Minnesota.

1990
Minnesota Guidestar Partnerships

• 1991 – 1996: Launched 60 initiatives; Over 70 public, private, academic partners
• 1997 – 2004: 62 initiatives
• Today: Approximately 40 initiatives underway
Sample Partnership List

- Mn/DOT
- FHWA
- DPS/State Patrol
- Local Cities, Counties
- Local Transit
- Emergency Services
- Homeland Security Office
- 3M
- ADDCO
- Nissan
- International Partners:
  - Finland, Norway, Sweden
  - Russia, New Zealand
- GM/OnStar
- International Truck
- ISS
- Lockheed Martin
- TC&W Railroad
- UofM
- Altra Technologies
- C3 Trans Systems
- EDC
- Ford
Safeplow Intelligent Vehicle Initiative
Nine Transportation Operations and Communication Centers

- Co-located Mn/DOT and State Patrol dispatching
- Transportation operations and traveler information

Partner: Minnesota State Patrol, Department of Public Safety
Northwest Passage Corridor

Partners: WI, ND, SD, MT, WY, ID, WA
Minnesota Traveler Information

Partners: CARS Consortium States

Minnesota Guidestar
www.dot.state.mn.us/guidestar
Twin Cities
Regional Transportation Management Center
Mayday Emergency Notification System

Minnesota Guidestar
www.dot.state.mn.us/guidestar
Thank You

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