The ENTERPRISE Pooled Fund Program

A International Multi-Agency ITS Collaboration

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What is a Pooled Fund Program?

- The Transportation Pooled Fund (TPF) Program allows federal, state, and local agencies and other organizations to combine resources to support transportation needs.
- A federal, state, regional, or local transportation agency may initiate pooled fund studies. Private companies, foundations, and colleges/universities may partner with any or all of the sponsoring agencies to conduct pooled fund projects.
- Approved by FHWA

www.pooledfund.org
The Program

Evaluating New TEchnologies for Roads
PRogram Initiatives in Safety and Efficiency

Enterprise.prog.org
• Currently brings together 11 States, one Province, and 3 National & International Transportation Organizations.

• TPF formally established in 1991.
  – The idea for the program started in 1989

• Michigan is the administrative state, and is the 3rd state to administer the program after Colorado and Iowa.

• Michigan was one of the founding ENTERPRISE members
Program Membership

• Current Program Participants:
  – Arizona DOT
  – Idaho Transportation Department
  – Iowa DOT
  – Kansas DOT
  – Illinois DOT
  – Michigan DOT
  – Minnesota DOT
  – Oklahoma DOT
  – Texas DOT
  – Virginia DOT
  – Washington State DOT
  – Ontario Ministry of Transport
  – Transport Canada
  – Rijkswaterstaat (Netherlands)
  – FHWA
• The ENTERPRISE program is intended to facilitate rapid progress in the development and deployment of (creative) ITS technologies.

• The principle objective of the ENTERPRISE program is to accelerate the systematic advancement of selected ITS projects. Within this theme, program members will carry out ITS projects and activities including fundamental research efforts, technology development, demonstration and standardization, and fully operational system deployment.
In early 1993 the ENTERPRISE Program Management Plan was adopted which has been the foundation of the program to date. It set in place the annual work plan process.

The first “formal” work plan was compiled in 1994, although the program was already focused on some efforts prior to that.

There have been yearly work plans since 1994.
• The program’s Management Plan includes the:
  – Organization Charter which covers:
    • Program Board (everyone is a volunteer)
      – Structure & responsibilities
      – Chair & Vice-Chair
    • Program Administrator (also a volunteer)
  – Operating Rules which covers:
    • Project idea development, voting procedures, project delivery, travel, etc
• Meeting Structure:
  – Program Board with elected Chair
  – Twice yearly conference calls & twice yearly meeting

• Program Management/Technical Consultant:
  – Handles meeting logistics & program website
  – Produces the Work Plan Document
  – Provides some project support,
  – Provides program reporting
  – Contracted by the administrative state
Program Operations

- **Spring:**
  - Annual program check-in & planning for the coming year
  - Project reports and wrap-up
  - Kick off of new projects
- **Mid-year:**
  - Project reports, status and issues
  - Start to develop the work plan for the coming year
  - Planning for the Summer meeting
- **Summer (in conjunction with NRITS):**
  - Project reporting
  - Draft work plan developed, discussed and voted on.
- **Winter**
  - Project reporting
  - Approval for the coming years final work plan
  - Determine the future directions of the program
**Work Plan Process**

- **Yearly work plan development process:**
  - Solicit Board members for ideas:
    - Review past project work, and past proposed but unfunded projects.
    - Look at trends and issues nationally and internationally.
    - Identify agency specific needs.
  - Board reviews and ranks project ideas, request full proposals for most promising projects; which may require modification based on review and discussion.
  - Final proposals are reviewed, ranked, and prioritize for funding
• A Board member is assigned as the Project Champion who:
  – Is responsible for delivering the project.
    • On time/on budget
  – Develops a project review team.
  – Determines project contracting needs, 2 options:
    • Consultant & contractor services for projects contracted & co-managed with the administrative state.
    • Technical/management consultant
  – Coordinates with and reports to the Program Board.
Early Projects

• ENTERPRISE has completed nearly 50 projects over the years, some early efforts:
  – The application of Variable Speed Limit systems
  – Coordination of Road & Weather Information Systems
  – Framework for expanding HCRS to the national level
  – Application of ITS to support maintenance activities
  – Siting guide for wireless communication towers
  – Message dissemination for unplanned dynamic incidents
  – Use of dedicated short range communications
Later Projects

• Some later projects:
  – Using HD Radio for Traveler Information
  – Best practices guide for 511 deployment
  – Automated HOV occupancy detection system
  – Best practices for determining travel times
  – Creating guidelines for deploying portable DMS on short notice
  – Evaluating video imaging to determine travel times
  – Using ITS to support mass evacuations
  – Application of ATIS in scenic byways
Latest Projects

• 2008 Work Plan
  – The Application of IP Cameras
  – Autonomous Monitoring Station
  – Nationwide Advanced Traveler Information
  – Intersection Collision Avoidance
  – Development and Field Evaluation of a Renewable Electric Power Stations for Rural ITS Application
  – Warranting ITS Devices

• 2009 Work Plan
  – Warranting ITS Devices-Phase 2
  – Mobile Advanced Traffic Management Systems
  – Creating Partnerships with 3rd Party Mapping Providers
  – Feasibility Study on Intelligent Highways
Latest Projects

• 2010 Work Plan
  – Low-cost ITS Safety Solution Systems
  – Impacts of Travel Information on the Overall Network
  – Next-Gen Traffic Data & Incident Detection from Video
  – Crashworthiness & Protection of ITS Field Devices

• 2011 Work Plan Projects Under Review
  – Transitioning the ITS Warrants Program to a Permanent Home
  – Understanding the Utilization of 3rd Party Travel Data
  – ConOps for Integration of IntelliDrive Data
  – Understanding Intersection Warning Systems
  – Interpretable Travel Information – Use and Impacts
Benefits of The Program

• Has allowed investigation of higher risk projects with less commitment.
• Has facilitated a collaborative peer based environment for information sharing which often reaches beyond the focus of the TPF.
• Has helped leverage and share a deep pool of ITS and operations experience.
• Has helped implement cross agency sharing and coordination.
www.acconsultants.org/itswarrants