The Next ITS Strategic Plan (2015-2019)

Connected Vehicle Public Meeting

September 26, 2013
Agenda

- Background
- Stakeholder Engagement Sessions
- Draft Mission and Vision Statements
- MAP 21 Guidance
- Draft Focus Areas of the Plan
- Discussion
Next ITS Strategic Plan 2015-2019

Building on the success of the current ITS Strategic Research Plan, the USDOT is in the process of developing the Next ITS Plan.

- The New Strategic Plan will encompass research, development, and adoption as lifecycle phases that we want to address.

- USDOT and the Intelligent Transportation Systems Joint Program Office (ITS JPO) is focused on working with partners from government, industry, and academia to support the development and adoption of new, impactful ITS technologies.
The ITS Strategic Plan Addresses Three Questions

▪ “Where are we?”
  ▪ Baseline for organizational functions and practices to ensure incremental progress toward achieving the Vision

▪ “Where are we going?”
  ▪ Vision – describes where ITS as a field wants to go (with JPO support)
  ▪ Describes how the vision and mission of ITS JPO can be used to improve ubiquity and impact of ITS programs and technologies

▪ “How will we get there?”
  ▪ Sets the stage – shares big picture for strategy and plan for achieving.
  ▪ Lays out the strategy designed to enable success of the Internal Plan by identifying components necessary to achieve desired results
  ▪ Includes high level program descriptions to establish basic areas of JPO supported work to advance JPO across ITS
Stakeholder Input to the Strategic Plan

- **INTERNAL Engagements**
  - ITS JPO Working Sessions (8)
  - Greater DOT Working Sessions (3)

- **EXTERNAL Engagements**
  - Focused Webinars – 7
    - Targeted Stakeholder Groups (25)
  - Transportation Conferences (4)
    - ITE August 5th
    - NRITS August 27th
    - IEEE September 2nd
    - Connected Vehicles September 27th

- **OPEN Engagements**
  - IdeaScale

Development of the ITS Strategic Plan is designed to be collaborative across all stakeholders.
Draft Mission and Vision Statements

Mission Statement
Conduct research, development, and education to facilitate the adoption of information and communication technology to enable society to move intelligently.

Vision Statement
Transform the way society moves.

ITS JPO will ensure goals and objectives align to the mission statement and support the vision statement
MAP 21 areas for Goal Development

- Encourage the deployment of ITS technologies that will improve the performance of the National Highway System

- **Enhancement of surface transportation efficiency** and **facilitation of intermodalism** and **international trade** to enable existing facilities to meet a significant portion of **future transportation needs**

- **Emphasis on decreasing the number and severity of collisions**

- Accommodation of the needs of all users of surface transportation systems, including operators of **commercial motor vehicles, passenger motor vehicles, motorcycles, bicycles, and pedestrians (including individuals with disabilities)**

- **Improvement of the ability of the United States to respond to security related or other manmade emergencies and natural disasters**
Draft Focus Areas of the Plan

1. Interoperability
   - Focused on working towards allowing ITS-enabled vehicles, devices, infrastructure, and applications to effectively communicate with one another as needed, regardless of where they are built and where they are used.

2. Automation
   - Focused on research about automated vehicles and related technologies that may have a significant impact on many societal issues such as driving safety, personal mobility, energy consumption, operating efficiency, environmental impact, and land use.

3. Big Data / Data Management
   - Focused on enabling systematic data capture from ITS-enabled technologies, including connected vehicles (automobiles, transit, and trucks), mobile devices, and infrastructure. Includes additional focus on enhancing the creation of data environments that enable integration of data from multiple sources for use in transportation management and performance measurement.
Draft Focus Areas of the Plan (cont’d)

4. Smart Cities / Digital Society
   - Focused on investigating smart mobility factors, including local accessibility, national/international accessibility, availability of intelligent infrastructure, and sustainable, innovative, and safe transportation systems.

5. Resilience
   - Focused on understanding methods to enhance a transportation system’s ability to accommodate variable and unexpected conditions without catastrophic failure, both in preparation of large-scale crises and in response to them.

6. Cyber Physical Systems (CPS)
   - Focused on the intersection of information technology and tangible assets, such as vehicles, including connected vehicles. Much of the focus for ITS in this area is concentrated in the connected vehicle program, including developing applications, and addressing human factors considerations.
Discussion
ITS JPO would like to discuss and generate perspectives on “big social trends” as they relate to transportation technology including:

Automation
Distracted Driving
Social Networking
Electric Vehicles
Ride Sharing
Crowd Sourcing
Aging Population
Increase in Urbanization
Application Development (for operators and passengers inside and outside of the vehicle)
With the “big social trends” listed below in mind, please offer your perspective on the following question:

*How will these trends influence the deployment of transportation technology?*

Automation  
Distracted Driving  
Social Networking  
Electric Vehicles  
Ride Sharing  
Crowd Sourcing  
Aging Population  
Increase in Urbanization  
Application Development (for operators and passengers inside and outside of the vehicle)
With the “big social trends” listed below in mind, please offer your perspective on the following question:

*What current research activities address the needs implied by one or more of the trends? (Choose one or two to discuss)*

Automation  
Distracted Driving  
Social Networking  
Electric Vehicles  
Ride Sharing  
Crowd Sourcing  
Aging Population  
Increase in Urbanization  
Application Development (for operators and passengers inside and outside of the vehicle)
With the “big social trends” listed below in mind, please offer your perspective on the following question:

Are there technologies that have not yet been explored that should be considered given these trends?

Automation  
Distracted Driving  
Social Networking  
Electric Vehicles  
Ride Sharing  
Crowd Sourcing  
Aging Population  
Increase in Urbanization  
Application Development (for operators and passengers inside and outside of the vehicle)
With the “big social trends” listed below in mind, please offer your perspective on the following question:

*What other areas of research are needed based on one or more of the trends under discussion? (Choose one or two)*

- Automation
- Distracted Driving
- Social Networking
- Electric Vehicles
- Ride Sharing
- Crowd Sourcing
- Aging Population
- Increase in Urbanization
- Application Development (for operators and passengers inside and outside of the vehicle)
ITS Strategic Planning Process

Launch Strategic Plan Development

Preliminary Information Gathering
- Work Plan
- Survey
- Kick-off

Stakeholder Engagements
- Sessions
- Workshops
- Webinars

Compile / Analyze Inputs

Draft Strategic Plan

Conduct Review Process
- ITS
- SPG
- TRB
- Etc.

Finalize Strategic Plan

Timeline:
April
May
June
July
Aug
Sept
Oct
Nov
Dec
Jan
2014