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Research Goal

To structure a comprehensive research agenda that enables a successful and sustainable deployment of critical ITS safety applications by identifying and addressing policy and institutional issues and delivering options for a solid policy foundation.

Research Outcomes

Through a structured, comprehensive research and analysis agenda the Policy and Institutional Issues program will provide:

- A range of viable options for policies that address legislative and regulatory decisions, governance structures and authorities, investment strategies, and resolutions to critical institutional issues related to deployment.
- The combination of the options with basic concepts of operations to illustrate a set of feasible and detailed deployment scenarios.
- Policy analysis and options that will be presented for discussion.

At a technical level, the Policy and Institutional Issues program works closely with ITS research programs to deliver policy analysis and options specific to:

- Safety
(Vehicle-to-Vehicle and Vehicle-to-Infrastructure)
- Mobility
(Real-Time Data Capture Management and Dynamic Mobility Applications)
- AERIS
(Applications for the Environment Real-time Information Synthesis)
- Adoption of ITS safety applications by the trucking community
- Adoption of ITS safety applications by the transit community

ITS JPO Policy and Institutional Issues

INTRODUCTION

The program for ITS JPO Policy and Institutional Issues was established to identify, research, analyze, and present policy options to enable successful connected vehicle deployments. The program is a cross-cutting support program to a multimodal research program led by the Intelligent Transportation Systems Joint Program Office (ITS JPO) within the U.S. Department of Transportation's (U.S. DOT) Research and Innovative Technology Administration (RITA). The focus is to make surface transportation safer, smarter and greener by leveraging the potentially transformative capabilities of wireless technology.

The mission of the Policy and Institutional Issues program is to identify critical issues that may hinder or present challenges to successful deployment of ITS technologies. Policy issues fall into two categories: (a) those that are global and cross-cutting, and will be researched through the Policy program and (b) those that are specific to a program's technical roadmap, and thus require research and resolution in tandem with the technical research staff and partners to ensure continued progress.

CROSS-CUTTING POLICY RESEARCH

In general support to deployment, the Policy and Institutional Issues program is designed to identify and research issues regarding:

- The roles and responsibilities of the entities that will be involved (i.e., governance, authority, enforcement)
- Investment strategies and partnership opportunities (i.e., funding, financing, partnerships, costs/benefits)
- Institutional issues that may present barriers to deployment (i.e., privacy, intellectual property, liability, etc.)

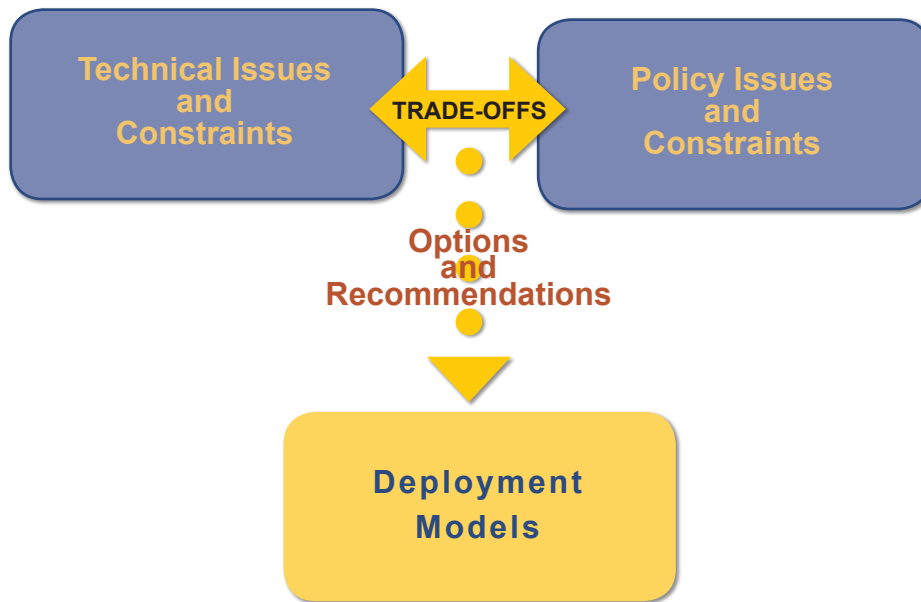
TECHNICAL POLICY RESEARCH

In support to the technical research programs, the ITS JPO Policy program is designed to: 1) identify the specific trade-offs that occur along the path of research and development, prototyping, testing, and model deployments; and 2) to facilitate discussion among stakeholders and decision makers to enable continued progress in the technical research. One such example is the potential trade-off between privacy and system security. For the technical team to move forward in designing a working prototype for testing, such "technical policy issues" require analysis.

The end result of the policy research and analysis is better clarity on policy options and their implications.



POLICY OPTIONS and IMPLICATIONS



Many Issues affect ITS JPO Policy Analysis

RESEARCH PLAN

Track 1: DEPLOYMENT SCENARIOS-The first track is focused on developing a set of systems definitions and scenarios that describe alternative visions for ITS deployment. The scenarios enable stakeholders to identify infrastructure requirements, standards, interoperability, security, and other key requirements. The scenarios also form the basis for U.S. DOT, stakeholders, and technical experts to identify where further research is needed and to analyze opportunities and options.

Track 2: FINANCING AND INVESTMENT MODELS-In Track 2, models and strategies are developed and analyzed to understand how and by whom ITS safety applications can be funded, invested in, and/or financed. Further analysis is conducted to explore whether there are any elements that can be self-sustaining, based on market forces.

Track 3: GOVERNANCE MODELS-Focuses on an analysis of which elements of the system need to be governed and identify governance options.

Track 4: INSTITUTIONAL ISSUES-Involves analysis to help identify the major institutional, legal, and policy issues that limit or challenge successful deployment. Based on the identification of issues, further analysis leads to the delivery of options in support of technical research. Public concerns for privacy and mitigation of distracted driving behaviors are also addressed.

Track 5: FINAL REPORT-Combines the options, analyses, and conclusions resulting from the execution of a comprehensive research agenda. The final report will present the outcomes of Tracks 1-4, address the implications, and provide a policy foundation.

The U.S.DOT ITS JPO is actively working to engage a wide range of stakeholders to help guide policy research so that it is based on sound, real-world application of the new technologies.

The research is focused in part on the following policy questions:

- Is any new policy or legislation required to successfully launch and sustain critical ITS safety applications?
- Are the options publicly acceptable?
- What entities will potentially fund, own, and govern critical ITS safety systems, components, and data?

The program's goals are to:

- Work closely with the multimodal, technical research teams to identify policy and institutional issues that limit or challenge the successful deployment of ITS safety technologies.
- Scope the issues by engaging with stakeholders on the essence of the issue and eliciting their requirements.
- Engage experts for analysis and identify best practices within other industries.
- Re-engage decision makers and stakeholders for input on and validation of the draft options.
- Provide final implications and set of options in support of deployment.

To learn more about Policy and Institutional Issues program, contact:

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