What 15 Years Of ITS Deployment Tracking Teaches Us

ITS Committee Meeting

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Tracking Our Success

- Tracking the deployment of ITS technology for more than 15 years
- Administered approximately every 20 months
- Initially covered 78 metro areas then expanded to include 108
2010 Deployment Tracking Results

- [www.itsdeployment.its.dot.gov](http://www.itsdeployment.its.dot.gov)

- Nearly 1,600 Public Agencies Surveyed
  - Freeway Management
  - Arterial Management
  - Transit Management
  - TMCs
  - Electronic Toll Collection
  - Public Safety – Fire Rescue
  - Public Safety – Police

Deployment of ITS: A Summary of the 2010 National Survey Results

[www.its.dot.gov/index.htm](http://www.its.dot.gov/index.htm)
Final Report — August 2011
FHWA-JPO-11-132
Tracking Our Success

- Investment in ITS has nearly **tripled**
Tracking Our Success

- Most areas within ITS grew over the years.
Tracking Our Success

- Some technologies have achieved near **universal deployment**.
Analyzing the Data

- Quantitative analysis of deployment data
- Examined historical diffusion patterns
- Investigated influences on adoption and deployment focusing on policy levers
Historical Trends

- Current generation markets appear to be mature
- Found that markets are driven by imitators
  - Initial adoption rate is slow but increases over time
- 2010 results (at right) support this finding

### Importance of Technology Already Being Used by Other Agencies (n = 234)

- Not at all important: 9
- Not very important: 20
- Neutral: 73
- Somewhat important: 100
- Very important: 32
Rise and Fall of Gadgets

NOTE: 2010 data are estimates and 2011 data are projections.
How Policy Influences Deployment

- Planning requirements (e.g. Regional Architectures) can increase adoption

- Increased budget can increase adoption and deployment levels

- Targeted funds for projects (i.e. earmarks) are ineffective in spurring adoption or deployment
Insight: Regional Architecture stimulates deployment

**Emergency Vehicle Priority—Fire and Rescue**
- **Baseline predicted adoption probability for median agency**
  - Budget: 15%
  - Architecture: 15%
- **Increase in adoption probability after a major increase in annual budget or architecture implementation**
  - Budget: 29%
  - Architecture: 27%

**Vehicle Data Collection**
- **Baseline predicted adoption probability for median agency**
  - Budget: 10%
  - Architecture: 8%
- **Increase in adoption probability after a major increase in annual budget or architecture implementation**
  - Budget: 90%
  - Architecture: 90%
Insight: Markets are sensitive to training and policy

- Deployment tracking survey allows highlights effectiveness of various interventions
- Can be used to understand how to encourage adoption over lifecycle of technology
Next Steps

- Starting to develop 2013 survey
  - Change survey to reflect changing market
  - Important to keep some continuity to track changes over time
- Connected vehicle technologies
  - Important to catch early in deployment lifecycle
  - Apply lessons learned from other technologies to connected vehicle
For More Information

www.its.dot.gov

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