How Research Results Affect Policy

Tom Maze Transportation Seminar

Institute for Transportation (InTrans)

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What is Research?

- Basic investigation
- Conceptualization
- Characterization
- Proof of Concept Testing
- Demonstration and Deployment
- Ordered Information Collection
- Data Analysis
- Operational Improvements
- Syntheses of Existing Information
- Answering a Question

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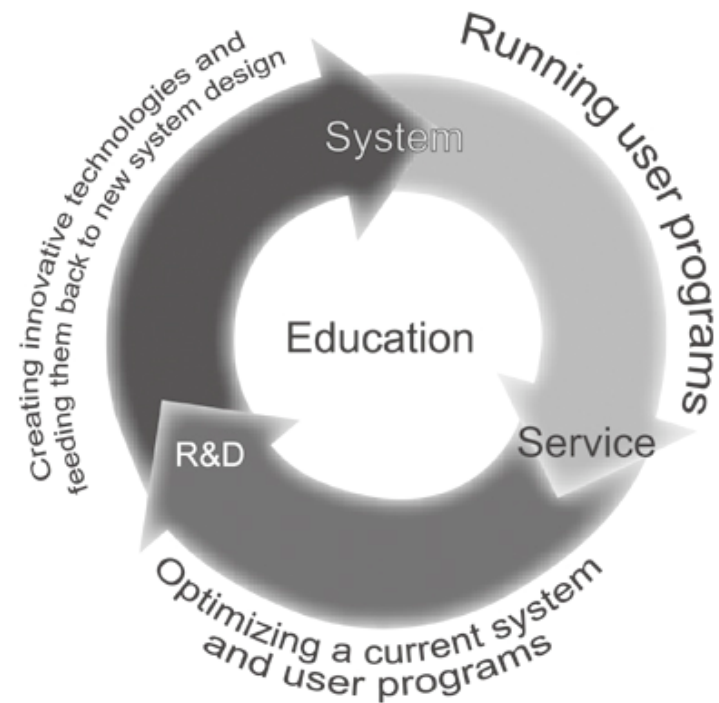
# What is Policy? – Technical Person's View
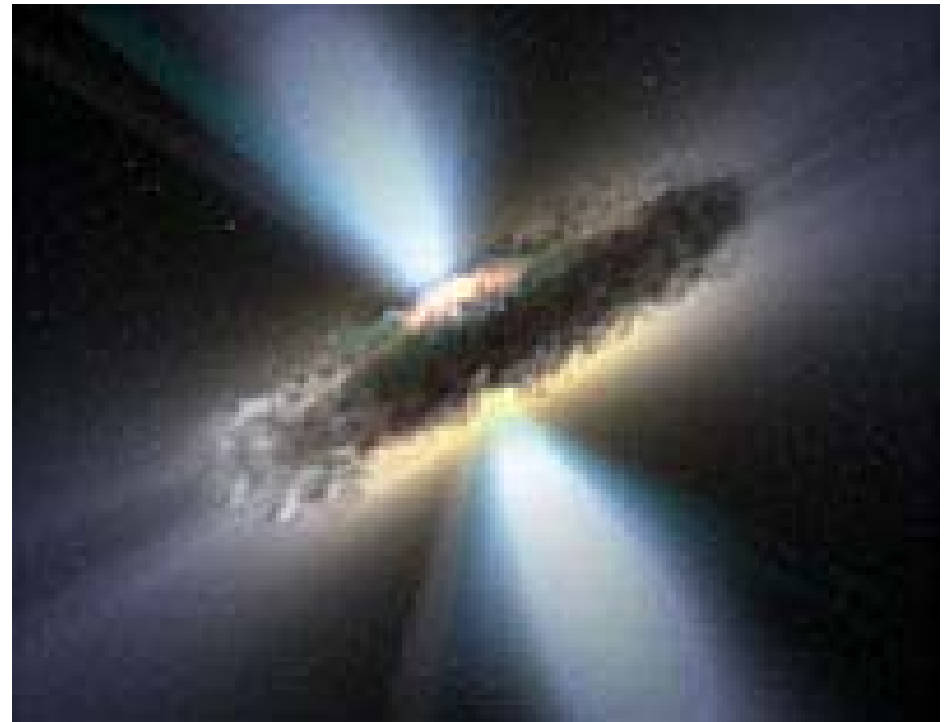
What is Policy?

BROADLY DEFINED: Any <u>decision</u> that affects how a system is selected, implemented, funded and used; and how it affects the people being served by the system

- Legislation
- Treaties and Agreements
- Executive Orders
- Regulations
- Technical Standards
- Design Standards
- Procurement Guidance
- Budgets
- Schedules and Deadlines
- Politics

How To Get These Worlds to Connect?
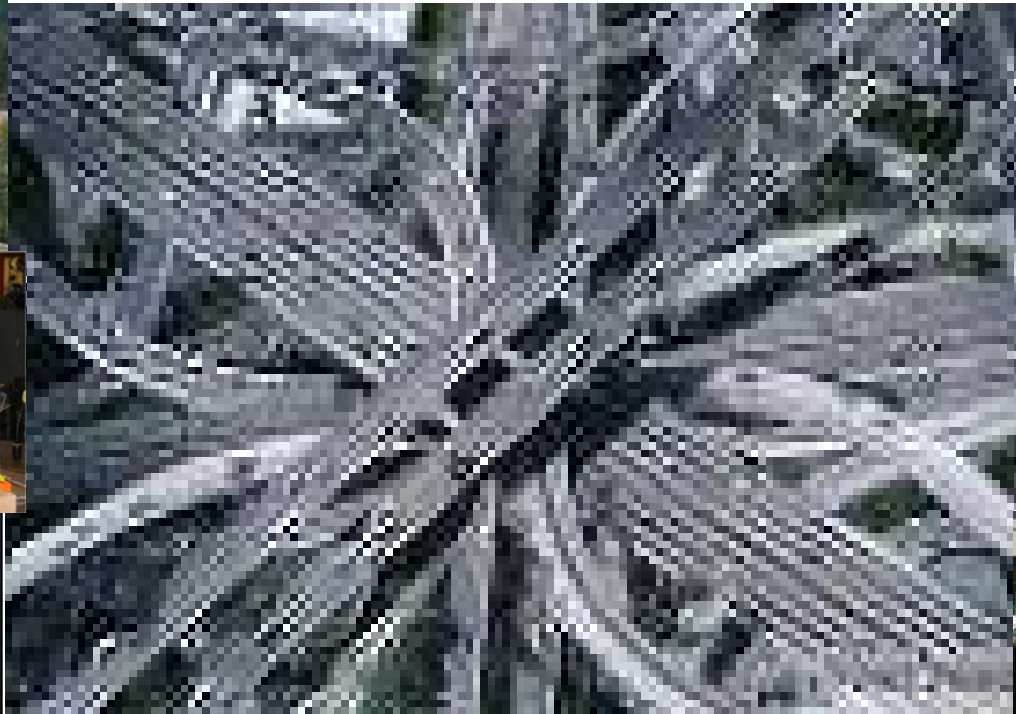
This is where I live – and most things happen in the middle!

Recognize That Each Side Needs the Other

Technical View	Policy View

Technical View

- Provides problem solving analyses and technologies
- Provides information for decision-making
- Are the keepers of technical knowledge
- Enables/causes actual deployment, standard-setting, etc.
- Evaluates research, demonstrations and deployment results

Policy View

- Provides problem solving processes
- Provides summarized information for decision-making
- Are keepers of "art of the possible" knowledge
- Enables budget, other decisions for deployment/ implementation
- Evaluates for future policy changes

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Recognize That Thinking Styles are Radically Different

Technical View	Policy View

Technical View
- Logic Model
- Initiates from data or direct observation
- Develops research plan
- Collects verifiable data in detail using verifiable assumptions and processes
- Analyzes results that leads to "right answer"
- Takes time to do the work to get "right answer"

Policy View
- Multirational Model
- Initiates from idea, conversation, political direction
- Develops information collection/decision plan
- Collects snippets of data to develop policy position
- Makes "recommendations"
- Usually on a short time scale

Recognize That Both Are Problem Solvers

Technical View	Policy View

- Freight Delays
  - Identify causes by collecting and analyzing data
  - Characterize impacts on travel models, efficiency, economy
  - Seek localized solutions in infrastructure or operations
  - Develop technology if indicated by research results
  - Deploy indicated solutions with little fanfare

- Freight Delays
  - Identify issues by meeting with stakeholders
  - Characterize impacts on people, budgets and politics
  - Seek regional/national standardized solutions
  - Develop technology if indicated by external forces
  - Deploy as broadly as possible, with media coverage

To make research that impacts policy, need to translate and communicate non-technically
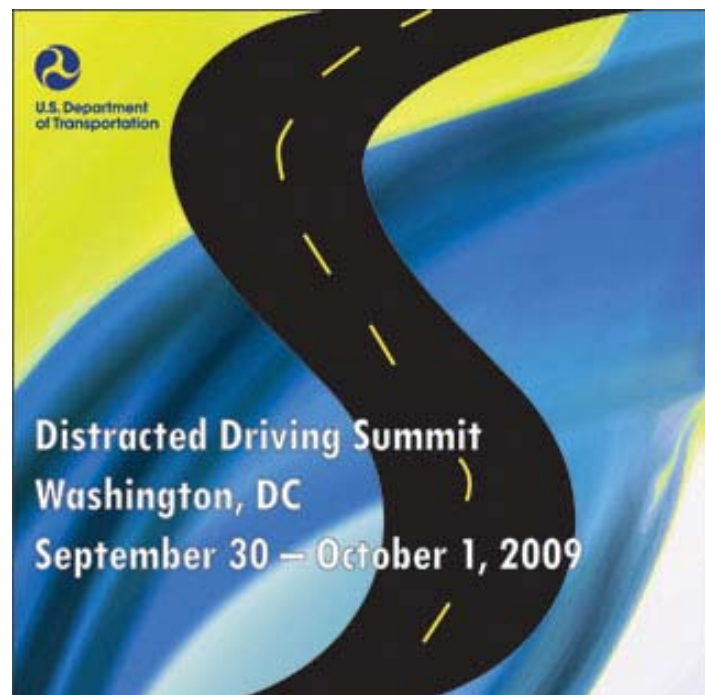
To Have Impact – Be Prepared and Be Patient

Know your results, be able to communicate swiftly and with little preparation

- Policy Timing is not Technology Timing
- Timing Driven by External Forces
- Readiness Required – Know Your Field and Others' Work in It
- Network with Those with Access to Policymakers
- Watch for Opportunities
- Learn Oral Presentation Skills
- Don't Trust that the Power of the Research Will Get it Noticed

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Case Study on Impact – Distracted Driving

- Secretary Decides to Make Combating Distracted Driving a National Multimodal Policy
- Timing Driven by Events, Media
- Regulatory Goals Enabled by as much as 15 Years of Cognitive Research
- Researchers Took Opportunity
- Used Oral Presentation Skills
- Got White House Approval and Executive Order

Total Elapsed Time for Policy Development = 2 Weeks

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