“Value of Transportation Infrastructure”
Task Force

U.S. Department of Transportation
Bureau of Transportation Statistics

March 17, 2016
In 1991, the Intermodal Surface Transportation Efficiency Act (ISTEA) created BTS to:

- administer transportation data collection, analysis, and reporting; and
- ensure the most cost-effective use of resources to monitor:
  - Transportation’s contributions to the economy
  - Transportation’s implications, e.g., safety, environment

BTS is one of the 13 Principal Federal Statistical Agencies

- Policy-neutral, objective broker of information
- Special abilities to protect confidentiality
Task Force Overview

- The goal is to develop data and methods to quantify the value of transportation to
  - The economy, and
  - The quality of life

- Task Force is managed by the Transportation Research Board (TRB) with funding support from the Bureau of Transportation Statistics
Phases

Phase 1. Explore existing data and methods
- Including methods used by the Bureau of Economic Analysis and others both in the private and public sectors
- Evaluate relative strengths and weaknesses of existing and alternative methods

Phase 2. Develop a methodological framework

Phase 3. Develop long term research data collection program and analysis needs
# Timeline and Milestones

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<tr>
<td>Webinar “Towards a US-Oriented Approach for Transportation Infrastructure Valuation”</td>
<td>Present at the 2015 and 2016 Annual TRB Sessions</td>
<td>Publish TRB Circular 192 summarizing workshop</td>
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<td>“Valuing Transportation Infrastructure” White Paper</td>
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<td>Present at Annual TRB Session</td>
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Phase 1: Evaluation of Current Methods

Based on a white paper by Randy Eberts

- Focused on highway
- Currently, four ways are used to value highway system
  1. **Valuing the capital itself**
     - **Advantage**: based on engineering costs.
     - **Disadvantage**: does not show value to society of using the infrastructure.
  2. **Relating capital stock to national output**
     - **Advantage**: ties to national income accounts
     - **Disadvantage**: considers the value of highway capital stock in place and not the marginal value of an additional unit of highway capital so unable to assist with future investment scenarios
3. Conducting Benefit-Cost analyses and valuation of individual elements needed for this methodology

**Advantage**: lays-out each direct and indirect benefit & cost.

**Disadvantage**: each benefit/cost requires a credible and accepted value, which often are not available. Also there are extensive data requirements.

4. Estimating production functions

**Advantage**: captures all the benefits to households and producers

**Disadvantage**: unable to directly tie benefits to expenditures. No cause and effect analysis
What is Next?

- Alternative strategies to consider/explore:
  - State DOT Current Valuation Methods/Practices
  - Measuring the Value of Economic Infrastructure Through Productivity
  - International Practices in Assessing the Value of Transportation Infrastructure

- Develop final report
# Task Force Members

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<tr>
<th>Members</th>
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