



“Value of Transportation Infrastructure” Task Force

U.S. Department of Transportation
Bureau of Transportation Statistics

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BTS Overview

- 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

2014
Year 1

- TRB Workshop on Current Data and Methods
- Webinar “Towards a US-Oriented Approach for Transportation Infrastructure Valuation”
- “Valuing Transportation Infrastructure” White Paper

2015
Year 2

- Publish TRB Circular 192 summarizing workshop <http://onlinepubs.trb.org/onlinepubs/circulars/ec192.pdf>
- Present at the 2015 and 2016 Annual TRB Sessions

2016
Year 3(+)

- Develop Methodological Framework and Research Data Collection
- Publish TRB Circular 192 summarizing workshop
- Present at Annual TRB Session



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

Evaluation of Current Methods (cont'd)

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

| Members | Affiliation |
|-----------------------------|--|
| Paul Bingham, Co-Chair | EDR Group |
| Mary Lynn Tischer, Co-Chair | Federal Highway Administration (retired) |
| James Bridges | 200 Consult (retired Louisiana DOT Chief Engineer) |
| Barbara Fraumeni | University of Southern Maine (retired Chief Economist, BEA) |
| Jeffrey Holt | Bank of Montreal Capital Markets |
| Jari Kauppila | OECD/ITF |
| Brian Moyer | Commissioner, Bureau of Economic Analysis |
| Francis Mulvey | Commissioner, Surface Transportation Board (retired) |
| Karen White | Office Director, Bureau of Transportation Statistics |
| Stephen Van Beek | ICF International (retired USDOT Assistant Deputy Secretary) |
| Frederick (Bud) Wright | Executive Director, AASHTO |
| Kathryn Zimmerman | Applied Pavement Technology, Inc. |