

TR NEWS



Transportation and the Economy

*Interconnections,
Interventions, and
Interdependencies*

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TR NEWS

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TRANSPORTATION AND THE ECONOMY

3 INTRODUCTION

Transportation and the Economy: Exploring the Conundrum

Andrew C. Lemer

Questions about transportation's role in economic development and about the value of investments in transportation continue. Precise and convincing measurements of the benefits of investments in the system are surprisingly elusive. Articles offer a sampling of approaches, methods, and perspectives.

8 Investment in Transportation Infrastructure: A Case for Benefit–Cost Analysis

Alexander Heil, Mark Seaman, and David Vautin

Applications of benefit–cost analysis by two large regional agencies demonstrate the power and effectiveness of the approach—and its appropriate contexts—in prioritizing and implementing projects. At a minimum, the authors maintain, the results of an analysis can inform debate on the merits of proposed projects.

12 Applying Benefit–Cost Analysis at the Metropolitan Transportation Commission

14 Innovative Freight Production Models Using the Commodity Flow Survey: Improving Accuracy and Timeliness for Planning with Available Data

José Holguín-Veras

A National Cooperative Freight Research Program project has demonstrated that freight production models based on microdata from the national Commodity Flow Survey can provide an efficient mechanism to monitor geographic patterns of freight activity—and changes in the use of infrastructure—with publicly available employment data.

20 The Economic Value of Using Transportation Assets and Services: Figures from the Transportation Satellite Accounts

Theresa Firestine and Karen White

Transportation Satellite Accounts show not only the dollars expended on transportation for the production of goods and services but also the contribution of transportation to the total U.S. gross domestic product. The accounts offer a step toward measuring the economic value of the transportation used by industries and households, the authors note.

24 Valuing a Mature Highway System: In Search of the Holy Grail

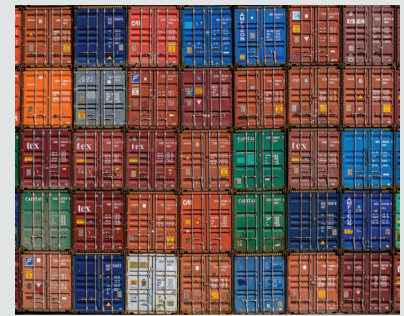
Randall W. Eberts

The search for methods to value the highway system with accuracy must start by developing appropriate evaluation frameworks for the realities of the present system, accounting for the integration of new technologies into the infrastructure, and incorporating the wider benefits of highways into benefit–cost analyses, the author maintains.

30 Transportation Investments in Response to Economic Downturns: Increasing the Effectiveness of Federal Stimulus Programs

Joseph Morris

Using the American Recovery and Reinvestment Act of 2009 as a case study, a Transportation Research Board committee examined the value of transportation investments as a stimulus and explored the structure and management of a transportation stimulus program that would produce the greatest benefit.



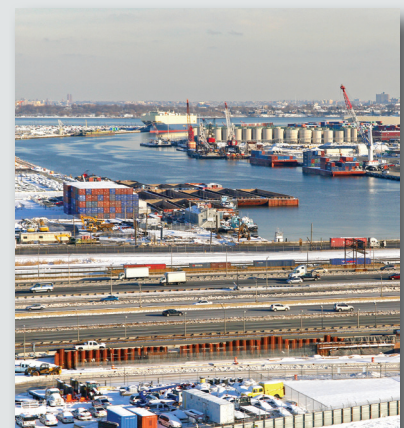
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COVER: Infrastructure improvements at the Port Newark Container Terminal in New Jersey helped reduce truck congestion and greenhouse gas emissions. Articles in this theme issue examine the economic effects of transportation and infrastructure investments, methods for asset valuation, innovative freight modeling, and more. (Photo: Doc Searls/Flickr)

TR NEWS

features articles on innovative and timely research and development activities in all modes of transportation. Brief news items of interest to the transportation community are also included, along with profiles of transportation professionals, meeting announcements, summaries of new publications, and news of Transportation Research Board activities.

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35 From Preservation to Adaptation: Right Sizing as an Investment Strategy

Chandler Duncan and Anne Morris

Right sizing integrates several longstanding concepts for a more efficient transportation system into a high-level paradigm for decision making—the primary economic objective is to direct agency resources to adapt the transportation system in the long term to a changing economy. The authors explore right sizing and present two case studies.

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PHOTO COURTESY ACCIONA CONSTRUCTION S.A.

Research and development for major projects by Spanish contractor Acciona Construction—such as building information modeling and composite materials—facilitate technology transfer to the construction industry as a whole.

Moving research into practice is the theme of feature articles in the July–August magazine—the implementation of new technologies and research findings in the real world of the practitioner and the transportation system user. Authors describe today's successes, present a systematic approach that has proved effective at a state department of transportation, describe federal programs encouraging innovations at the state level, discuss initiatives by research programs to promote and document the implementation of results, and offer insights on technology transfer in the United States and in Europe, as well as tips on effective public relations, gathering practical ideas at conferences, assessing an agency's technological readiness, and more.