

TRANSPORTATION RESEARCH BOARD

Transportation Research Board Overview

2017 Mid-Continent Transportation Research Symposium

August 16, 2017

About TRB

- Part of the National Academies of Sciences, Engineering, and Medicine
- Private, non-profit institution
- Independent, non-partisan, objective
Research – Convene – Advise

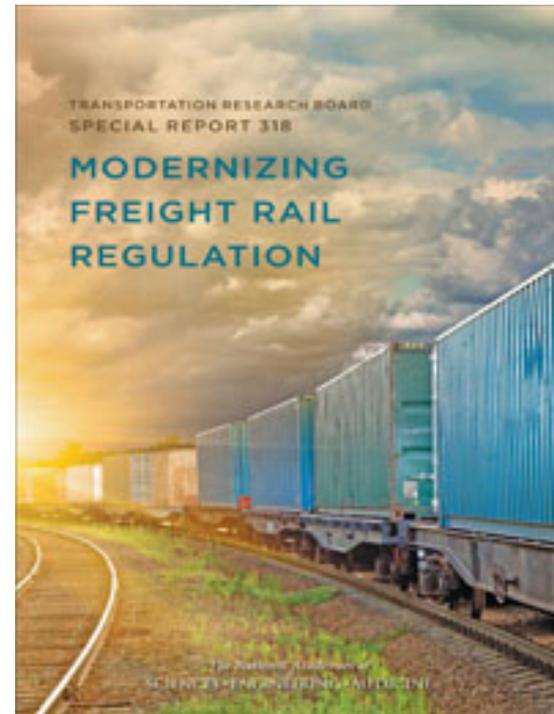
Transportation Research Board (TRB)

- Research
 - Highway, Transit, Airport Cooperative Research Programs
 - 900+ papers published in *Transportation Research Record/yr.*
 - TRID: 1.1 million records of transportation research citations



Transportation Research Board (TRB)

- Advise
 - Independent, objective, evidence-based, thorough, fair, non-partisan policy studies done in accordance with National Academies of Sciences, Engineering, and Medicine procedures



Transportation Research Board (TRB)

- Convene
 - 13,300 attendees at TRB annual meeting
 - 220 technical committees, 330 subcommittees, 18 task forces
 - 50-70 conferences & workshops; 100+ webinars per year



Connect

A group of four diverse people (three men and one woman) are sitting around a wooden table in a meeting. They are looking at laptops and talking. The man in the center is wearing a red and white checkered shirt. The woman on the right is wearing a blue denim jacket. The background shows a bookshelf and a window.

Connect with Us

- Join the 7,000+ engineers, scientists, and researchers TRB connects with each year.
- Become a friend or member of a TRB standing committees and/or request to be part of Cooperative Research Program panel.
- We encourage diversity of background, race, ethnicity, and gender in all of the work that we undertake.

Stay Informed

- Attend the TRB Annual Meeting or one of the 70+ conferences offered each year around the world
- Attend one or more of the 100+ TRB webinars each year
- Subscribe to the TRB weekly E-Newsletter, *TRNews* Magazine, and 200+ publications
- Follow TRB on Twitter, Facebook, LinkedIn, and Google+

Other TRB Resources

- TR News Research Pays Off Series
- Practice-Ready Papers Database
- TRB Annual Meeting Online

TR News Research Pays Off

Research Pays Off articles highlight research results that provide innovative, cost-effective solutions to important transportation-related problems.

- Implementing Sustainability Research Saves Illinois Tollway More Than \$200 Million (June 2017)
- Stream Channel Maintenance at Bridge Crossings in Ohio: Collaborative Approach Leads to Innovation and Implementation (August 2017)

Practice-Ready Papers Database

- Each year standing committees in the Technical Activities Division identify peer-reviewed papers that could be of potential interest to practitioners as practice-ready. Practice-ready papers are defined as those in which the research results presented and discussed make a contribution to the solution of current or future problems or issues for practitioners.

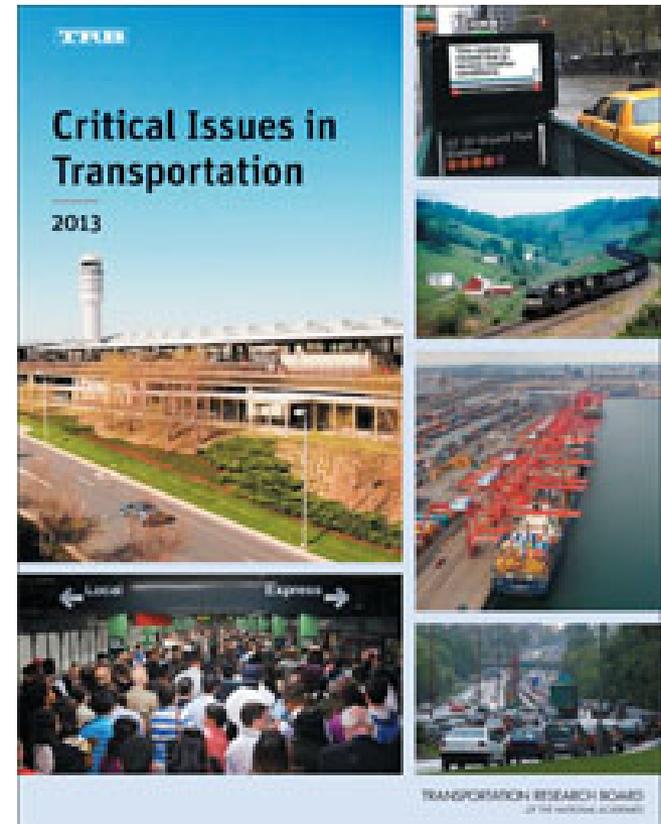
TRANSPORTATION RESEARCH BOARD

**Critical Transportation Issues
in the United States and
Worldwide**

We Want Your Input!

“Critical Issues in Transportation”

- Last produced in 2013
- Identifies and discusses the most important issues in transportation
- TRB is beginning process to update
- Seeking global input



Historical Background

- “Critical Issues in Transportation” has been produced approximately every 2-5 years since 1976
- Used as input to updates of TRB strategic plan
- Produced by TRB Executive Committee’s Subcommittee on Policy & Planning Review
- Has been focused primarily on current issues addressed in TRB reports
- Limited external input
- Audience: primarily TRB stakeholders

Broader Societal Goals That Transportation Supports

- Safety and security
- Economic vitality/growth
- Quality of life
- Sustainability
- Equity in providing opportunity
- Public health

TRB Wants Your Input

- Are these the right topics?
- Are there any missing?
- Would you drop any?
- What specific issues under each topic need research?
- What insights would you like to offer on the topics proposed?
- How do we get policy makers to address future and emerging policy topics?

Making the System Safe and Secure

- Reversing increases in fatalities of 2015-2016
- Expectations of autonomous vehicles and other technology
- Acceptance of crashes and fatalities with autonomous vehicles. Liability issues?
- Preventing terrorist attacks
- Cybersecurity



Credit: Car-Accidents.com

Achieving a State of Good Repair

- Definition of “state of good repair”
- Magnitude of backlog
- Asset management versus “worst first”
- Generating policy and funding support
- Roles of different levels of government



Credit: eremediamedia.com

Automation/Technology/Innovation

- Promoting and incentivizing innovation while ensuring safety
- How to get policy to drive technology, instead of technology driving policy
- Role of shared mobility in transit
- Cybersecurity issues
- Roles of different levels of government



Credit: U.S. Dept. of Transportation

Efficient Freight/Goods Movement

- Role of autonomous vehicles in freight deliveries
- How to prioritize freight bottleneck projects
- Major changes in freight flows due to global changes
- Public-private partnerships
- Operator shortages



Credit: seanews.com.tr

Resilience/Climate Change/ Clean Energy

- Addressing increasing frequency of severe storms and sea level rise
- Protection of transportation from terrorist attacks
- Clean energy
- Reducing greenhouse gas emissions



Credit: housingworks.com

Economic Development/ Growth

- Ensuring investments support economic development and long term job creation
- Investments for growth in global marketplace
- Growth concentration in megaregions
- Rural access/interregional travel
- Priority of economic growth vs. safety and state of good repair



Credit: asianjournal.com

Reliability/Congestion Relief

- Increasing priority on reliability
- Role of automation and operational improvements in addressing congestion
- Role of pricing in congestion management
- Use of real time data for congestion and reliability management



Credit: scmp.com

Equity Issues

- Ensuring access and mobility for elderly, disabled, economically disadvantaged
- Rural vs. urban accessibility and investments
- Implications of private financing on equity
- Impacts of technology solutions on non-technologically savvy travelers



Credit: BBC News

Governance Issues

- Federal vs. state vs. local role
- Decision making for multi-jurisdictional megaregions and corridors
- Multi-modal decisions
- Aligning private sector investment decisions with the public good
- Generational equity in decision making



Credit: popularmechanics.com

Financing/Revenues/Expenditures

- Future of user fee based financing
- How to build support for raising needed revenues
- Role for private financing for what has historically been publicly financed
- Funding for high cost projects that benefit many jurisdictions
- Multi-modal funding decisions



Credit: keywordsuggest.com

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Thank You

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