TRB Snap Search: Planning & Forecasting

TRB’s involvement in research on Planning & Forecasting from 2021-2022

The Transportation Research Board (TRB) provides innovative, research-based solutions to improve how we move. TRB is part of the National Academies of Sciences, Engineering, and Medicine, an independent, non-profit institution that provides objective advice on scientific, engineering, and medical issues.

A resource to the nation and to the transportation community worldwide, TRB provides an extensive portfolio of services:

- Opportunities for information exchange on current transportation research and practice
- Management of cooperative research and other research programs
- Analyses of national transportation policy issues and guidance on federal and other research programs
- Publications and access to research information from around the world

All available Snap Searches can be accessed online here: https://www.trb.org/InformationServices/Snap.aspx

TRB Research

TRID – The world’s largest and most comprehensive bibliographic source on all modes and disciplines of transportation
- Click here to view search results on TRB published research and projects on Planning & Forecasting within the past year.

Subject Webpage
- Planning & Forecasting Research at TRB

Specialty Reports
- Critical Issues in Transportation 2019
- COVID-19 Addendum to Critical Issues in Transportation
- Racial Equity Addendum to Critical Issues in Transportation

Recent Reports & Publications
- Airport Cooperative Research Program (ACRP)
  - Report 236 - Preparing Your Airport for Electric Aircraft and Hydrogen Technologies
  - Report 233 - Airport Biometrics: A Primer
  - Report 232 - Playbook for Cultivating Talent in the Airport Environment
  - Report 229 - Airport Collaborative Decision Making (ACDM) to Manage Adverse Conditions
  - Report 228 - Airport Microgrid Implementation Toolkit
  - Report 227 - Evaluating and Implementing Airport Privatization and Public-Private Partnerships
  - Synthesis 115 - Practices in Airport Emergency Plans
- National Cooperative Highway Research Program (NCHRP)
  - NCHRP 20-123(09) - Feasibility Study for a Platform to Capture Innovations from State Departments of Transportation
  - NCHRP 20-123(02) - Research Roadmap for the AASHTO Council on Active Transportation
  - NCHRP 20-113F - Topical White Papers for the TRB Forum on Automated Vehicles and Shared Mobility
  - NCHRP 20-44(13) - Implementation of NCHRP Research Report 893: The Oregon DOT Statewide Pedestrian and Bicycle Plan
  - NCHRP 20-44(02) - Implementation of the AASHTO Guide for Enterprise Risk Management
  - Report 1002 - Metropolitan Planning Organizations: Strategies for Future Success
  - Report 981 - Guidelines for Quantifying Benefits of Traffic Incident Management Strategies
  - Report 978 - Initiating the Systems Engineering Process for Rural Connected Vehicle Corridors, Volume 1: Research Overview
Current Projects

- **Report 976** - Resilience Primer for Transportation Executives
- **Report 975** - Transportation System Resilience: Research Roadmap and White Papers
- **Report 956** - Guidebook for Data and Information Systems for Transportation Asset Management
- **Synthesis 577** - Collaborative Practices for Performance-Based Asset Management Between State DOTs and MPOs
- **Synthesis 573** - Practices for Integrated Flood Prediction and Response Systems
- **Synthesis 567** - Summary State DOT Practices for Developing and Implementing TSMO Plans
- **Synthesis 564** - Practices for Selecting Pedestrian and Bicycle Projects
- **Synthesis 561** - Use of Vehicle Probe and Cellular GPS Data by State Departments of Transportation
- **Web-Only Document 318** - Safety Prediction Models for Six-Lane and One-Way Urban and Suburban Arterials
- **Web-Only Document 311** - Improving the Efficiency and Consistency of Section 106 Compliance for State DOTs: Strategies for Project-Level Programmatic Agreements
- **Web-Only Document 293** - Deploying Transportation Resilience Practices in State DOTs

**Special Reports / Consensus Studies**

- **Report 338** - Modernizing the U.S. Offshore Oil and Gas Inspection Program for Increased Agility and Safety Vigilance

**Transit Cooperative Research Program (TCRP)**

- **IDEA Report 96** - Multi-stage Planning for Electrifying Transit Bus Systems with Multi-format Charging Facilities
- **IDEA Report 93** - An Open Platform for Transit Agencies to Improve the Quality of Their Real-Time Data
- **Report 231** - Recent Decline in Public Transportation Ridership: Analysis, Causes, and Responses
- **Report 225** - A Pandemic Playbook for Transportation Agencies (NCHRP Report 963)
- **Report 223** - Guidebook and Research Plan to Help Communities Improve Transportation to Health Care Services
- **Report 221** - Redesigning Transit Networks for the New Mobility Future
- **Synthesis 154** - Innovative Practices for Transit Planning at Small to Mid-Sized Agencies
- **Web-Only Document 74** - Recent Decline in Public Transportation Ridership: Hypotheses, Methodologies, and Detailed City-by-City Results

**Transportation Research Circulars**

- **E-Circular 277** - 13th National Conference on Transportation Asset Management
- **E-Circular 275** - Measuring and Managing Freight Resilience Workshop
- **E-Circular 269** - 2020 Commodity Flow Survey Workshop

**Current & Upcoming Projects**

**Current Projects**

- **ACRP 01-36** - Guidebook for Developing State Aviation System Plans
- **ACRP 01-41** - Airport Blockchain Implementation Guidebook
- **ACRP 01-49** - The Evolution of Knowledge Management at Airports
- **ACRP 02-93** - Guidebook for PFAS Management at Airports
- **ACRP 02-92** - Creating Self-Directed Resiliency Plans at GA Airports
- **ACRP 02-99** - Incorporating Environmental Justice and Equity Principles and Data into Airport Decision-Making
- **ACRP 03-49** - Effective Collaboration to Plan and Respond to Communicable Disease Threats
- **ACRP 03-50** - An Airport-Centric Study of the Urban Air Mobility Market
- **ACRP 03-59** - Strategies to Address Homelessness at Airports
- **ACRP 03-60** - Incorporating Shock Events into Aviation Demand Forecasting and Airport Planning
- **ACRP 03-63** - Modernizing Air Cargo Operations and Infrastructure at U.S. Airports
- **ACRP 03-62** - A Toolkit for Establishing Airport Catchment Areas
- **ACRP 04-24** - Guidelines to Develop an Anti-Human Trafficking Action Plan for Airports
- **ACRP 04-25** - Airports and Communicable Diseases—Preparedness and Response
- **ACRP 08-03** - Construction Safety and Phasing Plans
- **ACRP 09-20** - Quantifying the Impacts of Delayed Maintenance of Airport Assets
- **ACRP 10-30** - Evaluating the Effectiveness of an Airport's Wildlife Hazard Management Program
- ACRP 11-02/Task 40 - Quick Response: Primer for Airport Organizational Redesign
- ACRP 11-02/Task 41 - Toward a Touchless Airport Journey
- ACRP 11-05 - Tactical Initiatives from the ACRP Strategic Plan
- ACRP 11-08(20-01) - ACRP Insight Event--Future of Aviation
- NCHRP 02-27 - Making Targets Matter: Managing Performance to Enhance Decision-Making
- NCHRP 03-128 - Business Intelligence Techniques for Transportation Agency Decision Making
- NCHRP 07-30 - Methods for Assigning Short-Duration Traffic Volume Counts to Adjustment Factor Groups for Estimating AADT
- NCHRP 08-118 - Risk Assessment Techniques for Transportation Asset Management
- NCHRP 08-119 - Developing Data Standards and Guidance for Transportation Planning and Traffic Operations - Phase 1
- NCHRP 08-121 - Accessibility Measures in Practice: Guidance for Transportation Agencies
- NCHRP 08-129 - Incorporating Resilience Concepts and Strategies in Transportation Planning
- NCHRP 08-131 - Access to Jobs, Economic Opportunities, and Education in Rural Areas
- NCHRP 08-132 - Accessing America's Great Outdoors: Forecasting Recreational Travel Demand
- NCHRP 08-134 - Integrating Freight Movement into 21st Century Communities' Land Use, Design, and Transportation Systems
- NCHRP 08-135 - Reliability and Quality of Service Evaluation Methods for Rural Highways
- NCHRP 08-142 - Determining the Impact of Connected and Automated Vehicle Technology on State DOT Maintenance Programs
- NCHRP 13-06A - Guide for the Formulation of Long-Range Plans and Budgets for Replacement of Highway Operations Equipment
- NCHRP 13-09 - Maximizing Proceeds from the Fleet Asset Disposal Sales Process
- NCHRP 14-42 - Determining the Impact of Connected and Automated Vehicle Technology on State DOT Maintenance Programs
- NCHRP 17-82 - Proposed Guidance for Fixed Objects in the Roadside Design Guide
- NCHRP 17-98 - Guide for Intersection Control Evaluation
- NCHRP 17-100 - Leveraging Artificial Intelligence and Big Data to Enhance Safety Analysis
- NCHRP 19-18 - Transitioning Fuel Tax Assessments to a Road Usage Charge
- NCHRP 20-06/Topic 25-07 - Review of Statutory and Case Law on Planning and Environmental Linkages
- NCHRP 20-24(131) - Mapping the Common Interests of AASHTO Committees
- NCHRP 20-24(138) - Collective and Individual Actions for State Departments of Transportation Envisioning and Realizing the Next Era of America’s Transportation Infrastructure – Phase I
- NCHRP 20-44(30) - Measuring the Effectiveness of Public Involvement at Five State Departments of Transportation: Implementation of the NCHRP Research Report 905 Toolkit
- NCHRP 20-65/Task 78 - Impact of Decline in Volunteerism on Rural Transit Systems
- NCHRP 20-65/Task 81 - Best Practices in Rural Service Assessment
- NCHRP 20-65/Task 82 - Issues Associated with Providing Customized, Client-Based Transportation Services Models
- NCHRP 20-102 - Impacts of Connected Vehicles and Automated Vehicles on State and Local Transportation Agencies--Task-Order Support
- NCHRP 20-102(11) - Mobility-on-Demand and Automated Driving Systems: A Framework for Public-Sector Assessment
- NCHRP 20-102(16) - Impacts of Connected, Automated Vehicle Technologies on Traffic Incident Management Response
- NCHRP 20-102(19B) - Updated Research Roadmap for NCHRP 20-102, Impacts of Connected Vehicles and Automated Vehicles on State and Local Transportation Agencies
- NCHRP 20-102(22) - State and Local Impacts of Automated Freight Transportation Systems
- NCHRP 20-102(26) - Dynamic Curbside Management: Keeping Pace with New and Emerging Mobility and Technology in the Public Right of Way
- NCHRP 20-102(27) - Realistic Timing Estimates for Automated Vehicle Implementation
- NCHRP 20-123(01) - Transportation Asset Management Strategic Planning and Research Roadmap Development
- NCHRP 20-123(04) - Development of a Risk Management Strategic Plan and a Research Roadmap
- NCHRP 20-123(10) - AASHTO Committee on Bridges and Structures Strategic Plan, Operating Guidelines, and Research Roadmap Development
- System Mobility and Emerging Technologies (SMET): Strategic Planning Session and Research Roadmap Development
- Strategies for Incorporating Resilience into Transportation Networks
- Support for Critical Issues in Transportation and Commitment to the Future HIS
- Programmatic Issues of Future System Performance
- State Transportation Agency Multifaceted Decision-Making for Future System Performance
- Advancing Practices of In Situ Nondestructive Evaluation of Highway System Asset
- Foundational Condition and Capability
- Business Case and Communications Strategies for State DOT Resilience Efforts
- Emergency Response: Organizational and Operational Models Used by State DOTs
- Development of Crash Prediction Models for Short-Term Durations
- Targeted Guidance and Information Support to State DOT CEOs on Cybersecurity Issues and Protection Strategies
- Effective Methods for Setting Transportation Performance Targets
- Implementing and Leveraging Machine Learning at State Departments of Transportation
- Methods for State DOTs to Reduce Greenhouse Gas Emissions from the Transportation Sector
- State DOT Practice for Developing and Implementing TSMO Plans
- Practices for Balancing Safety Investments in a Comprehensive Safety Program
- Practices in the Collection and Use of Utility As-Built Information for Minimizing Project Risks
- Strategies and Programs For Electric Vehicle Charging
- Use of Probe Data for Freight Planning and Operations
- Integrating Freight into Policies, Planning, and Project Development for Active Transportation
- Quantitative Procedures for Designing and Operating Ferry Transit Services
- Impact of Transformational Technologies on Underserved Populations
- Racial Equity, Black America and Public Transportation
- Incorporating Emerging Transportation and Ground Access Technologies at Airports
- Integration of Contingency Planning for Small Airports
- Assessing Equity and Identifying Impacts Associated with Bus Network Redesigns
- Inclusive Public Participation in Transit Decision Making

- Strategic Futuring of Airports and their Role in the U.S. Airport System
- Update ACRP Report 99: Guidance for Treatment of Airport Stormwater Containing Deicers
- Airport Energy Resiliency Primer and Roadmap
- ACRP Policy and Planning Product Updates
- Guidebook for Digital Twin Programs at Airports
- Integration of Contingency Planning for Small Airports
- Update to ACRP Report 25: Airport Passenger Terminal Planning and Design
- Incorporating Emerging Transportation and Ground Access Technologies at Airports
- Successful Community Inclusion in Advanced Air Mobility
- Knowledge Transfer of Lessons Learned From ACRP Product Implementation
- Informing the Selection of Countermeasures by Evaluating, Analyzing, and Diagnosing Contributing Factors that Lead to Crashes
- Guide to the Contextual Application of Overhead Lighting on Highways
- Institutionalizing Safe Systems and Safety Culture in the Transportation Planning Process
- Impacts of E-Commerce on Travel and Land Use Patterns
- Frameworks, Guidance, and Tools to Support Post-Implementation Evaluation of Transportation Projects
- Equity, Diversity, and Inclusion and Other Indicators to Improve Transportation Asset Management Impact and Outcomes
- Integrating Active Transportation Data into Transportation Decision-Making
- Institutional Integration of Active Transportation
- Cultivating Accountability Through Meaningful Public Engagement
- Guidance for Implementing Equitable Transportation Decision-Making
- Planning for Innovative and Emerging Mobility Futures at Intermodal Passenger Facilities
- Guidance for Agencies to Incorporate Uncertainty into Long-Range Transportation Planning
- A guide for the development and use of truck traffic forecasts in design
- Strategies for advancing equity in transportation planning by increasing diversity, equity, and inclusiveness in the transportation planning profession
- Valuation of transportation equity in active transportation and safety investments
- Integrating resiliency into transportation system operations
- Best practices in determining rural transit fleet size – how to provide service for changing demographics of rural ridership (right-sizing of rural transit fleets)
- A guidebook for local truck parking regulations
- Guide to the integration of transportation systems management and operations into transportation asset management
- Guidance on using performance-based management approaches for maintenance
- Snapshots of planning practices
- Work zone intrusion frequency and characteristics
- Future equity impacts of existing fuel taxes
- New mobility and the user fee concept
- Strategic research in support of the connected and automated vehicle executive leadership team
- National automation readiness framework: coast-to-coast automated mobility by 2025
- Understanding knowledge management in context with other organizational practices
- Deploying transportation resilience practices in state DOTs: implementation
- Infrastructure modifications to improve the operational conditions of automated vehicles
- Readiness and effectiveness of freeway-based corridor V2X applications for improving congestion and safety
- Toolbox for navigating the land-use impacts of the automated vehicle ecosystem
- Strategic plan and research roadmap for the AASHTO committee on planning
- Development of a new transportation system operations strategic plan
- Transportation research related to COVID-19
- Research roadmap for knowledge management
- Guidance on risks related to emerging and disruptive transportation technologies
- Implementing and leveraging machine learning at state departments of transportation
- Methods to allow agencies to incorporate quantitative risk assessment at project and network level
- Guidance in planning for managed retreat as an extreme weather and climate adaptation strategy
- Mobile devices as a tool for digitalized project documentation and inspection
- Practices for statewide and MPO coordination
- Visualization for public involvement
- Practices for integrating performance-based plans with long-range transportation plans and statewide transportation investment programs
- Programmatic implementation of alternative delivery methods by state transportation agencies
- Practices to address climate change in the transportation planning process
- Transportation emergency response application (TERA): migration options beyond 2020
- Planning for innovation & emerging mobility futures at intermodal passenger facilities
- Legal issues surrounding disasters and evacuations
- Transit agency goals and non-traditional performance indicators focused on equity
- RFQ: demographic and technological trends impacting the DMV of the future

Reports from the National Academies Press on Planning & Forecasting

- Offshore situation room - enhancing resilience to offshore oil disasters in the Gulf of Mexico: proceedings of a workshop
- Planning the future space weather operations and research infrastructure
- Army medical research and development infrastructure planning
- Emergency evacuation and sheltering during the COVID-19 pandemic

Committees & Panels

Sign-up to be a committee "Friend"
**TRB Standing Committees** – Search by transportation mode and committee topic
- AEP10 - Transportation Planning Policy and Processes
- AEP15 - Transportation Planning Analysis and Application
- AEP20 - Transportation Needs of National Parks and Public Lands
- AEP30 - Traveler Behavior and Values
- AEP35 - Effects of Information and Communication Technologies (ICT) on Travel Choices
- AEP40 - Transportation Network Modeling
- AEP50 - Transportation Demand Forecasting
- AJE40 - Public Engagement and Communications
- AMR40 - Systems, Enterprise, and Cyber Resilience
- AME50 - Extreme Weather and Climate Change Adaptation
- AMS50 - Economic Development and Land Use
- AP025 - Public Transportation Planning and Development
- AT015 - Freight Transportation Planning and Logistics
- AV020 - Aviation System Planning
- AV040 - Aviation Economics and Forecasting

**Task Forces** - Search for *task force* under committee here
- A0020T – Climate Change and Energy

**CRP Panels**
- Project Panels Related to Planning and Forecasting

**Councils**
- A001C – Young Members Coordinating Council

**Recent and Upcoming Events**

**Upcoming TRB Conferences** – Use left hand menu to filter events

1. **18th Biennial National Harbor Safety Committee Conference**
   *June 13-15, 2022*
   *Boston, MA*

2. **Automated Road Transportation Symposium**
   *July 18-21, 2022*
   *Garden Grove, CA*

3. **Geospatial Data Acquisition Technologies in Design and Construction Summer Committee Meeting**
   *July 25-27, 2022*
   *Washington, D.C.*

4. **Conference on Scenario Planning in Transportation Planning**
   *September 19-21, 2022*
   *Washington, D.C.*

5. **Symposium on Visualization in Transportation**
   *November 3-4, 2022*
   *Washington, D.C.*

6. **TRB International Conference on Low Volume Roads**
   *July 23-26, 2023*
   *Cedar Rapids, IA*

**Upcoming Events** – In the Upcoming Events tab under Types, choose what event you are interested in, search titles by keyword

**Past Events** - In the Past Events tab under Types, choose what event you are interested in, search titles by keyword

**TRB’s Transportation Research Information Services (TRIS)**

TRIS includes the [TRB Library](#) and the [TRIS Databases](#) (listed below) which are available free on TRB’s website.
The TRB Library provides information services to TRB staff, sponsors, TRB Committee members and panels and researchers. Access to the TRB Library is a benefit to TRB sponsors and TRB committee members.

In cooperation with your State DOT Library or Information Service, the TRB Library provides:

- Reference and research assistance
- Literature searches
- Articles for TRB Committee work

The TRB Library provides training on effective and efficient use of the following TRIS resources:

- **Transportation Research International Documentation (TRID)** – [trid.trb.org](http://trid.trb.org) - The world's largest and most comprehensive bibliographic source on all modes and disciplines of transportation
- **Transportation Research Thesaurus (TRT)** – [trt.trb.org](http://trt.trb.org) - A tool to improve the indexing and retrieval of transportation information.
- **Research in Progress (RiP) Database** – [rip.trb.org](http://rip.trb.org) - Current or recently completed transportation research projects
- **Research Needs Statements (RNS)** – [rns.trb.org](http://rns.trb.org) - Research needs as identified by TRB Technical Activities standing committees
- **Publications Index (PubsIndex) Database** – [pubsindex.trb.org](http://pubsindex.trb.org) - The papers, articles and reports published by the Transportation Research Board, Strategic Highway Research Programs or the Marine Board

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