TRB Snap Search: Operations & Traffic Management

TRB's involvement in research on Operations & Traffic Management from 2022-2023

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- 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: http://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 on Operations & Traffic Management within the past year.

Recent Reports & Publications

- **Airport Cooperative Research Program (ACRP)**
  - [Report 247](#) - Airfield Pavement Markings: Effective Techniques for Removal and Temporary Applications
  - [Report 237](#) - Primer and Framework for Considering an Airport Noise and Operations Monitoring System
  - [Report 231](#) - Evaluating the Traveler's Perspective to Improve the Airport Customer Experience
  - [Report 230](#) - Enhancing Academic Programs to Prepare Future Airport Industry Professionals
  - [Report 229](#) - Airport Collaborative Decision Making (ACDM) to Manage Adverse Conditions
  - [Synthesis 118](#) - Airport Parking Pricing Strategies
  - [Synthesis 117](#) - Agricultural Operations on Airport Grounds

- **Behavioral Traffic Safety Cooperative Research Program (BTSCRCP)**

- **National Cooperative Highway Research Program (NCHRP)**
  - [IDEA Report 228](#) - A Retroreflective Road Lane Marking Tape 1,000X Brighter than Existing Technology
  - [IDEA Report 217](#) - A Real-Time Proactive Intersection Safety Monitoring and Visualization System Based on Radar Sensor Data
  - [IDEA Report 209](#) - An Automated System for Pedestrian Facility Data Collection from Aerial Images
  - [IDEA Report 190](#) - Self-de-icing LED Signals for Railroads and Highway Intersection
  - [Report 1006](#) - Guide to Understanding Effects of Raising Speed Limits
  - [Report 1005](#) - Motorcycle Crashes into Traffic Barriers: Factors Related to Serious and Fatal Injuries
  - [Report 1003](#) - Guide to Alternative Technologies for Preventing and Mitigating Vehicle Intrusions into Highway Work Zones
  - [Report 981](#) - Development of 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
  - [Report 969](#) - Traffic Signal Control Strategies for Pedestrians and Bicyclists
Current & Upcoming Projects

**Current Projects**

- **ACRP 01-36** - Advancing the Practice of State Aviation System Planning
- **ACRP 01-41** - Airport Blockchain Implementation Guidebook
- **ACRP 02-95** - Understanding Airport Air Quality and Public Health Studies Related to Airports: An Update to ACRP Report 135
- **ACRP 03-49** - Effective Collaboration to Plan and Respond to Communicable Disease Threats
- **ACRP 03-52** - Guidelines for Adapting and Managing Airport Common Use Programs
- **ACRP 03-63** - Modernizing Air Cargo Operations and Infrastructure at U.S. Airports
- **ACRP 03-66** - Guidebook for Digital Twin Programs at Airports
- **ACRP 04-26** - Uncontrolled Terminal Evacuations: Planning, Response, and Recovery
- **ACRP 07-17** - Update to ACRP Report 40: Airport Roadway Analysis and Curbside Congestion Management Strategies
- **ACRP 09-21** - Asset Information Handover Guidelines: From Planning and Construction to O&M
- **ACRP 10-31** - Guidebook for Virtual Airport Ramp Control Operations Facilities
- **ACRP 10-32** - U.S. Airport Industry Adoption of Automated Ground Vehicle Systems
- **ACRP 11-02/Task 37** - Periodic Report on Transformative Technology at Airports
- **ACRP 11-08(20-01)** - ACRP Insight Event—Future of Aviation
- **ACRP Synthesis 11-03/Topic S01-26** - The Landscape of the FBO Industry in 2022
- **ACRP Synthesis 11-03/Topic S02-22** - Airport Programs that Reduce Landside Vehicle Carbon Emissions
- **ACRP Synthesis 11-03/Topic S03-17** - Airport Centric Advanced Air Mobility Market Study
- **ACRP Synthesis 11-03/Topic S04-26** - Managing a Flight Diversion with an Emergency Response at Small, Non-Hub, or General Aviation Airports
- **ACRP Synthesis 11-03/Topic S10-19** - Airport Landside Operations Data and Collection Method
- **ACRP Synthesis 11-03/Topic S10-20** - Resilience Partnerships with the Air National Guard and other Military Organizations
- **BTRSCR BTS-06** - MPO and SHSO Coordination on Behavioral Traffic Safety
- **NCHRP 02-26** - Implementation of Life-Cycle Planning Analysis in a Transportation Asset Management Framework
- **NCHRP 03-114(01)** - Planning and Evaluating Active Traffic Management Strategies
- **NCHRP 03-126** - Transportation Operations Manual
- **NCHRP 03-128** - Business Intelligence Techniques for Transportation Agency Decision Making
- **NCHRP 03-129** - Essential Communications
- **NCHRP 03-134** - Determination of Encroachment Conditions in Work Zones
- **NCHRP 03-135** - Wrong-Way Driving Solutions, Policy, and Guidance
- **NCHRP 03-136** - Evaluating the Performance of Right-Turn-On-Red Operation at Signalized Intersections (with single and dual right-turn lanes)
- **NCHRP 03-138** - Application of Big Data Approaches for Traffic Incident Management (TIM)
- NCHRP 03-139 - Next Generation of the USLIMITS2 Speed Limit Setting Expert System
- NCHRP 03-142 - Evaluating the Impacts of Real-Time Warnings and Variable Speed Limits on Safety and Travel Reliability during Weather Events
- NCHRP 03-144 - Leveraging Existing Traffic Signal Assets to Obtain Quality Traffic Counts and Enhance Transportation Monitoring Programs
- NCHRP 05-22A - Gaps and Emerging Technologies in the Application of Solid-State Roadway Lighting
- NCHRP 07-30 - Methods for Assigning Short-Duration Traffic Volume Counts to Adjustment Factor Groups for Estimating AADT
- NCHRP 08-115 - Guidebook for Data and Information Systems for Transportation Asset Management
- NCHRP 08-132 - Accessing America’s Great Outdoors: Forecasting Recreational Travel Demand
- NCHRP 08-135 - Reliability and Quality of Service Evaluation Methods for Rural Highways
- NCHRP 08-140 - Guide for Truck Parking Information Management Systems
- NCHRP 08-145 - Utilizing Cooperative Automated Transportation (CAT) Data to Enhance the Use of Freeway Operational Strategies
- NCHRP 08-147 - Improving Public Transportation in Rural Areas and Tribal Communities
- NCHRP 08-149 - Estimating Benefits of Closing Gaps in Active Transportation Networks
- NCHRP 08-157 - Best Practices for Data Fusion of Probe and Point Detector Data
- NCHRP 10-109 - Modern Solutions to Safe and Efficient Work Zone Travel
- NCHRP 14-42 - Determining the Impact of Connected and Automated Vehicle Technology on State DOT Maintenance Programs
- NCHRP 15-66 - Operational Performance and Safety Effects of Arterial Weaving Sections
- NCHRP 15-73 - Design Options to Reduce Turning Motor Vehicle–Bicycle Conflicts at Intersections
- NCHRP 17-86 - Estimating Effectiveness of Safety Treatments in the Absence of Crash Data
- NCHRP 17-88 - Roadside Encroachment Database Development and Analysis
- NCHRP 17-92 - Developing Safety Performance Functions for Rural Two-Lane Highways that Incorporate Speed Measures
- NCHRP 17-95 - Crash Modification Factors (CMFs) for Intelligent Transportation System (ITS) Applications
- NCHRP 17-98 - Guide for Intersection Control Evaluation
- NCHRP 17-99 - Safety Effectiveness Assessment of Advanced Highway-Rail Grade Crossing Improvements
- NCHRP 17-101 - Assessing Safety Effectiveness of Treatments and Technologies at Highway-Rail Grade Crossings
- NCHRP 17-108 - Developing Crash Modification Factors for Alternative Intersections
- 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 20-50(21) - Enhancements of Climatic Inputs and Related Models for Pavement ME Using LTPP Climate Tool (MERRA-2)
- NCHRP 20-65/Task 811 - Best Practices in Rural Service Assessment
- NCHRP 20-102(16) - Impacts of Connected, Automated Vehicle Technologies on Traffic Incident Management Response
- NCHRP 20-102(28) - Preparing Transportation Agencies for Connected and Automated Vehicles in Work Zones
- NCHRP 20-123(12) - System Mobility and Emerging Technologies (SMET): Strategic Planning Session and Research Roadmap Development
- NCHRP 22-43 - Proposed AASHTO Guidelines for Implementation of MASH for Sign Supports, Breakaway Poles, and Work Zone Traffic Control Devices
- NCHRP 23-13-01 - Telecommuting, Remote Work, and Hybrid Schedules: Managing the Shift to a Flexible Work Future
- NCHRP 23-13(05) - Regulatory Relief of Commercial Vehicle Weight Requirements for Emergency Transportation of Critical Commodities
- NCHRP 23-20 - Guidebook for Implementation of UAS Operational Capabilities
- NCHRP IDEA 20-30/IDEA 225 - An Automated System for Large-Scale Intersection Marking Data Collection and Condition Assessment
- NCHRP Synthesis 20-05/Topic 53-10 - Identifying the Current Practice of Contrast Pavement Markings by Departments of Transportation
- NCHRP Synthesis 20-05/Topic 53-16 - Critical Findings for Tunnel Functional Systems
- NCHRP Synthesis 20-05/Topic 54-05 - Practices for Statewide and MPO Coordination
- NCHRP Synthesis 20-05/Topic 54-13 - Truck Escape Ramp Design and Operation
- TCRP B-49 - Improving Public Transportation in Rural Areas and Tribal Communities
- TCRP Synthesis J-07/Topic SB-36 - Dynamic Optimization on ADA Paratransit Service
- Transit IDEA J-04/IDEA 99 – Bike Love

**Upcoming Projects**
- ACRP 02-98 - Airport Energy Resiliency Primer and Roadmap
- ACRP 03-69 - Identifying Congestion and Safety Risks Due to Heterogeneous Airport Curbside Activity and Remedial Solutions
- ACRP 03-70 - Incorporating Emerging Technologies into Airport In-Terminal Concession Programs
- ACRP 03-74 - ACRP WebResource to Support Research into Air Traveler Choice Models
- ACRP 06-06 - Human Factors in Airport Operations
- ACRP 10-33 - Incorporating Emerging Transportation and Ground Access Technologies at Airports
- ACRP 10-35 - Automatic Dependent Surveillance-Broadcast (ADS-B) Airport Traffic Count Validation and Recommendations
- ACRP 11-08[20-02] - ACRP Insight Event--On-Demand Aviation Services for Passengers and Goods
- NCHRP 03-143 - Warrants for a Pedestrian Traffic Control Signal and for Other Pedestrian Traffic Control Devices
- NCHRP 03-145 - National Traffic Sensor System Evaluation Program
- NCHRP 03-147 - LED Applications on Traffic Control Devices
- NCHRP 03-146 - Guide for Transportation Operations Manual Implementation
- NCHRP 03-148 - Capabilities, Requirements, Planning, and Preparing to Virtually Operate Traffic Management Systems (TMS)
- NCHRP 05-27 - Practitioners’ Guide for Lighting at Innovative Intersections/Interchanges, including Roundabouts
- NCHRP 07-34 - Artificial Intelligence for Transportation Systems Management and Operations Applications
- NCHRP 08-130 - Best Practices in Coordination of Public Transit and Ride Sharing
- NCHRP 08-138 - Guide to the Integration of Transportation Systems Management and Operations into Transportation Asset Management
- NCHRP 08-141 - A Guidebook for Local Truck Parking Regulations
- NCHRP 08-143 - Guide to the Application of Spatial Segmentation on Travel Time Reliability Measures
- NCHRP 08-144 - Best Practices in Determining Rural Transit Fleet Size – How to Provide Service for Changing Demographics of Rural Ridership (Right-sizing of Rural Transit Fleets)
- NCHRP 08-146 - Integrating Resiliency into Transportation System Operations
- NCHRP 15-79 - Development of Guidance for Non-Standard Roadside Hardware Installations
- NCHRP 15-82 - Effects of Operating Speed and Posted Speed Limit in Conjunction with Roadway Geometric Design on Safety Performance for High-Speed Rural Highways and Freeways
- NCHRP 17-111 - Speed Management Strategies to Improve Pedestrian and Bicyclist Safety on Arterials and Higher-Speed Roadways
- NCHRP 17-114 - Integrated Strategies for Managing High Travel Speeds
- NCHRP 17-118 - Understanding the Impacts of Operational Changes on Safety Performance
- NCHRP 17-119 - Conflict-Based Crash Prediction Method for Intersections
- NCHRP 17-122 - Evaluation of Trespassing Detection and Warning Systems in the Vicinity of Highway-Rail Grade Crossings
- NCHRP 19-23 - Revenue-Related Strategies for New Mobility Options
- NCHRP 20-123[18] - Development of a New Transportation System Operations Strategic Plan
- NCHRP 22-42 - Impact Performance Assessment of Barrier Performance at High Speeds
- NCHRP 23-13(04) - Scoping Supply Chain Challenges and Solutions amid COVID-19
- NCHRP 23-13(06) - Assessing the Equity and Workforce Mobility Implications of the Expansion of E-Commerce and Direct-to-Consumer Delivery Services
- NCHRP 23-19 - Practices for Transportation Agency Procurement and Management of Advanced Technologies
- NCHRP 23-28 - Changes to 4.9 Ghz Spectrum Access and Authorization – What You Need to Know
- TCRP B-50 - Accessible Public Bus and Rail Passenger Information for Riders with Vision Disabilities
- TCRP J-11/Task 44 - Improving Access to Public Transportation Services and Facilities with Transit-Oriented Complete Streets

Reports from the [National Academies Press on Operations & Traffic Management](https://www.nationalacademies.org)
Transportation and Infrastructure » Operations and Traffic Management

- Planning the Future Space Weather Operations and Research Infrastructure
- Enhancing Operational Effectiveness of U.S. Naval Forces in Highly Degraded Environments: Autonomy and Artificial Intelligence in Unmanned Aircraft Systems
- Enabling DoD's Test Ranges and Infrastructure to Meet Threats and Operational Needs in the 21st Century
- Aviation After a Year of Pandemic

Committees & Panels

Sign-up to be a committee "Friend"

**TRB Standing Committees** - Search by transportation mode and committee topic

- **ACP00** - Operations
- **ACP10** - Regional Transportation Systems Management and Operations
- **ACP15** - Intelligent Transportation Systems
- **ACP20** - Freeway Operations
- **ACP25** - Traffic Signal Systems
- **ACP30** - Vehicle-Highway Automation
- **ACP35** - Managed Lanes
- **ACP40** - Highway Capacity and Quality of Service
- **ACP50** - Traffic Flow Theory and Characteristics
- **ACP55** - Traffic Control Devices
- **ACP60** - Access Management
- **ACP80** - Traffic Simulation
- **AKD10** - Performance Effects of Geometric Design
- **AKD80** - Roundabouts and other Intersection Design and Control Strategies
- **AKR10** - Maintenance and Operations Management
- **AMR20** - Disaster Response, Emergency Evacuations, and Business Continuity
- **ARB00** - Vehicle-Highway Automation
- **AV095** - New Users of Shared Airspace

**Task Forces** - Search for task force under committee here

Policy Study

- **B0024** - Research and Technology Coordinating Committee (FHWA)

CRP Panels

- **D03146** - Transportation Operations Manual Best Practices Guide
- **D08119** - Developing Data Standards and Guidance for Transportation Planning and Traffic Operations – Phase I
- **D08138** - Connecting Transportation Asset Management (TAM) and Transportation System and Management Operations (TSMO)
- **D08146** - Integrating Resiliency into Transportation System Operations
- **D17101** - Applying the Safe System Approach to Transportation Planning, Design, and Operations in the United States
- **D2007424** - Best Practices for the Operations of Movable Bridges from Remote Locations
- **D2010212** - Business Models to Facilitate Deployment of CV Infrastructure to Support AV Operations
- **D2012318** - Development of a New Transportation System Operations Strategic Plan
- **DA0135** - Transportation Network Companies (TNCs): Impacts to Airport Revenues and Operations
- **DA0289** - Industry Survey - Benefits and Costs for Airport Noise and Operations Monitoring Systems
- **DA0348** - Advanced Ground Vehicle Technologies (AGVT) for Airside Operations
- **DA0356** - Airside Planning, Design and Operations: Electronic Resource Delivery
- **DA0363** - Modernizing Air Cargo Operations and Infrastructure at U.S. Airports
- **DA0608** - Human Factors in Airport Operations
- **DA0717** - Update ACTP Report 40: Airport Curbside and Terminal Area Roadway Operations
- **DA0921** - Guidelines for the Effective Transition of Asset Data from Design/Construction to Operations and Maintenance
- **DA1031** - Guidebook for Virtual Airport Ramp Control Operations Facilities
- **DA1032** - Airside Automated Ground Vehicle Technology (AGVT) Demonstration to Support Airport Operations
- **SAS1016** - Airport Operations Training at Small Airports
- **SAS1019** - Airport Landside Operations Data and Collection Method
- **SNS314** - Use of Probe Data for Freight Planning and Operations
- **SNS5401** - Practices to Identify and Mitigate PFAS Impacts on Highway Construction Projects and Maintenance Operations
- **SN5422** - Practices for Capturing Costs of Maintenance Operations in Maintenance Management Systems
Recent and Upcoming Events

Upcoming TRB Conferences – Use left hand menu to filter events

- **International Conference on Road Weather and Winter Maintenance**
  
  *May 9-10, 2023*
  
  Washington, D.C.

- **National Aviation System Planning Symposium**
  
  *May 15-18, 2023*
  
  Irving, CA

- **Innovations in Travel Analysis and Planning Conference**
  
  *June 4-6, 2023*
  
  Indianapolis, IN

- **Marine Transportation System Innovative Science and Technologies Toward Greater Sustainability**
  
  *June 19-22, 2023*
  
  Washington, D.C.

- **National Conference on Transportation Asset Management**
  
  *July 8-11, 2023*
  
  Boston, MA

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

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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)

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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
- **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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