TRB Snap Search: Operations & Traffic Management

TRB's involvement in research on Operations & Traffic Management from 2018-2019

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

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.

Subject Webpage

- Operations & Traffic Management Research at TRB

Recent Reports & Publications

- Airport Cooperative Research Program (ACRP)
  - Synthesis 89 - Clean Vehicles, Fuels, and Practices for Airport Private Ground Transportation Providers

- National Cooperative Highway Research Program (NCHRP)
  - Report 884 - Guidelines for Managing Geotechnical Risks in Design–Build Projects
  - Report 858 - Quantifying the Effects of Preservation Treatments on Pavement Performance
  - Synthesis 530 - Construction and Rehabilitation of Concrete Pavements Under Traffic
  - Synthesis 527 - Resilience in Transportation Planning, Engineering, Management, Policy, and Administration
  - Synthesis 521 - Investment Prioritization Methods for Low-Volume Roads
  - Topic Highlight - Roadway Tunnels
  - Web-Only Document 251 - Spot Painting to Extend Highway Bridge Coating Life: Volume 1: Guidance
  - Web-Only Document 247 - Managing Geotechnical Risks in Design–Build Projects

- Policy Studies
  - Special Report 326 – Admissibility and Public Availability of Transit Safety Planning Records

- Transit Cooperative Research Program (TCRP)
  - Legal Research Digest 53 - Legal Considerations in Relationships Between Transit Agencies and Ridesourcing Service Providers
  - Report 199 - Transit Technical Training, Volume 2: Guide to Overcoming Barriers to Implementing Best and Innovative Training
  - Report 198 - The Relationship Between Transit Asset Condition and Service Quality
  - Report 197 - Tools for a Sustainable Transit Agency
  - Report 193 - Tools and Strategies for Eliminating Assaults Against Transit Operators, Volume 1: Research Overview

- Transportation Research Circulars
  - E-Circular 228 - Rebuilding and Retrofitting the Transportation Infrastructure

Updated 11/28/2018
Current & Upcoming Projects

- **Current Projects**
  - ACRP 01-37 - Performance Measures for State Aviation Agencies
  - ACRP 01-29 - Design and Development of a State Aviation Information Database
  - ACRP 02-86 - Understanding Impacts to Airports from Temporary Flight Restrictions
  - ACRP 02-85 - Commercial Space Vehicle Emissions Modeling
  - ACRP 02-82 - Advancing Airport Transportation to Achieve Zero-Emissions Status
  - ACRP 11-02/Task 33 - Research Roadmap on Policy and Planning Issues
  - ACRP 11-02/Task 32 - Airport Environmental Research Roadmap
  - ACRP Synthesis 11-03/Topic S04-23 - Emergency Working Groups
  - ACRP Synthesis 11-03/Topic S01-19 - Data Acquisition and Protocols for Risk Management
  - NCHRP 03-133 - Traffic Signal Design and Operations Strategies for Non-Motorized Users
  - NCHRP 03-129 - Essential Communications
  - NCHRP 03-128 - Business Intelligence Techniques for Transportation Agency Decision Making
  - NCHRP 08-116 - Framework for Managing Data from Emerging Transportation Technologies to Support Decision-Making
  - NCHRP 08-115 - Guidebook for Data and Information Systems for Transportation Asset Management
  - NCHRP 20-112(10) - Cybersecurity Implications of CV/AV Technologies on State and Local Transportation Agencies
  - NCHRP 20-65/Task 77 - Lessons Learned and Impacts to Date of State DOT Implementation of New Federal Transit Asset Management and Public Transportation Agency Safety Requirements
  - NCHRP 20-65/Task 73 - Best Practices and Marketing to Increase Rural Transit Ridership and Investment
  - NCHRP 20-50(21) - Enhancements of Climatic Inputs and Related Models for Pavement ME Using LTPP Climate Tool (MERRA-2)
  - NCHRP 20-44(02) - Implementation of the AASHTO Guide for Enterprise Risk Management
  - NCHRP 20-24(124) - Performance Management Reporting Peer Exchange
  - NCHRP 20-24(121) - Road Usage Charge: Applying Lessons Learned in New Zealand to the United States
  - NCHRP 25-25/Task 109 - Successful Practices for Environmental Commitments in Public/Private Partnerships (P-3) and Design-Build (D-B) Contracts
  - NCHRP 25-25/Task 105 - A Guidebook for Communications between Transportation and Public Health Communities
  - NCHRP Synthesis 20-05/Topic 50-15 - Asset Management Approaches to Identifying and Evaluating Assets Damaged Due to Emergency Events
  - NCHRP Synthesis 20-05/Topic 50-04 - Utility Pole Safety and Hazard Evaluation Approaches
  - TCRP J-11/Task 29 - Strategic Communications to Improve Support for Transit-Priority Projects
  - Transit IDEA J-04/IDEA 90 - sUAS-Based GeoINTEL for Commuter Rail Parking in Rural and Suburban Areas

- **Upcoming Projects**
  - ACRP 09-19 - Airfield Pavement Markings - Effective Techniques for Removal and Temporary Applications
  - ACRP 09-18 - Rapid Airfield Concrete Pavement Slab Replacement and Patching
  - ACRP 08-03 - Construction Safety and Phasing Plans
  - ACRP 06-08 - Human Factors in Airport Operations
  - ACRP 06-05 - Guidance for Diversity in Airport Businesses Contracting and Workforce Programs
  - ACRP 03-49 - Effective Collaboration to Plan and Respond to Communicable Disease Threats
  - ACRP 01-43 - Conducting Consumer Research of Air Passengers
  - ACRP 01-40 - Evaluating the Traveler’s Perspective to Improve the Airport Customer Experience
  - BTSCR P BTS-08 - MPO and SHSO Coordination on Behavioral Traffic Safety
  - BTSCR P BTS-02 - Variable Message Signs
  - BTSCR P BTS-01 - Guidance for Employer-Based Behavioral Traffic Safety Programs for Drivers in the Workplace
  - NCHRP 02-27 - Making Targets Matter: Managing Performance to Enhance Decision-Making
  - NCHRP 02-26 - Implementation of Life-Cycle Planning Analysis in a Transportation Asset Management Framework
  - NCHRP 03-96A - Analysis of Oversaturated Traffic Flow Conditions on Freeway Facilities
  - NCHRP 06-18 - Guide for Snow and Ice Control Operations
  - NCHRP 08-121 - Accessibility Measures in Practice: Guidance for Transportation Agencies
  - NCHRP 08-118 - Risk Assessment Techniques for Transportation Asset Management
  - NCHRP 08-113 - Integrating Effective Transportation Performance, Risk, and Asset Management Practices
NCHRP 10-102 - A Guidebook for Risk-Based Construction Inspection
NCHRP 25-59 - Pollinator Habitat Conservation Along Roadways
NCHRP 20-65/Task 81 - Best Practices in Rural Service Assessment
NCHRP 14-42 - Determining the Impact of Connected and Automated Vehicle Technology on State DOT Maintenance Programs
NCHRP 20-44(09) - Quantitative and Qualitative Methods for Capturing the Impacts and Value of NCHRP Research
NCHRP 20-44(05) - Dissemination of “NCHRP Domestic Scan 14-01: Leading Management Practices in Determining Funding Levels for Maintenance and Preservation”
TCRP F-27 - Characteristics and Elements of Non-Punitive Employee Safety Reporting Systems for Public Transportation
TCRP J-05/Topic 18-05 - Fix It, Sign It, or Close It: State of Good Repair in an Era of Budget Constraints

Reports from the National Academies Press on Operations & Traffic Management

Human-Automation Interaction Considerations for Unmanned Aerial System Integration into the National Airspace System
In-Time Aviation Safety Management - Challenges and Research for an Evolving Aviation System
Assessing the Risks of Integrating Unmanned Aircraft Systems (UAS) into the National Airspace System

Committees & Panels

Sign-up to be a committee "Friend"

TRB Standing Committees – Search by transportation mode and committee topic

AFB10 – Geometric Design
AH000 – Operations and Preservation Group
AHB00 – Operations
AHB10 – Regional Transportation Systems Management and Operations
AHB15 – Intelligent Transportation Systems
AHB20 – Freeway Operations
AHB25 – Traffic Signal Systems
AHB30 – Vehicle-Highway Automation
AHB35 – Managed Lanes
AHB40 – Highway Capacity and Quality of Service
AHB45 – Traffic Flow Theory and Characteristics
AHB50 – Traffic Control Devices
AHB55 – Work Zone Traffic Control
AHB60 – Highway/Rail Grade Crossings
AHB65 – Operational Effects of Geometrics
AHB70 – Access Management
AHD10 – Maintenance and Operations Management
AHD15 – Maintenance and Operations Personnel
AHD55 – Signing and Marking Materials
AHB75 – Roundabouts

Task Forces - Search for task force under committee here

Policy Study

B0024 - Research and Technology Coordinating Committee (FHWA)

CRP Panels

Project Panels Related to Operations & Traffic Management

Councils

A0040T – Young Member Council

Recent and Upcoming Events

Upcoming Conferences - Left hand menu “upcoming conferences by topic”
(Conferences cosponsored by TRB are denoted with an asterisk.)

17th National Transportation Planning Applications Conference
June 2-5, 2019
Portland, Oregon
Webinars – View upcoming webinars, suggest a webinar or add registration information

Past Webinars
  o Operations and Traffic Management

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:

TRID – The world's largest and most comprehensive bibliographic source on all modes and disciplines of transportation - trid.trb.org

Publications Index (PubsIndex) Database – The papers, articles and reports published by the Transportation Research Board, Highway Research Board, Strategic Highway Research Programs or the Marine Board - pubsindex.trb.org

Research in Progress (RiP) Database – Current or recently completed transportation research projects - rip.trb.org

Research Needs Statements (RNS) – Research needs as identified by TRB Technical Activities standing committees - rns.trb.org

Contact the Library at TRBLibrary@nas.edu or 1 (202) 334-2989