

TRB TRANSPORTATION RESEARCH BOARD

TRB Snap Search: Cybersecurity

TRB's involvement in research on Cybersecurity from 2018-2022

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: <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 Cybersecurity within the past four years.

Subject Webpage

- [TRB Cybersecurity Resource Center](#)

Specialty Report

- [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 \(ACRP\)](#)
 - [Legal Research Digest 42](#) - Legal Implications of Data Collection at Airports
- [Conference Proceedings](#)
 - [Proceedings on the Web 28](#) - Introduction to Blockchain and Airport Operations in a COVID-19 Environment
- [National Cooperative Highway Research Program \(NCHRP\)](#)
 - [NCHRP 03-127](#) - Cybersecurity of Traffic Management Systems
 - [Report 975](#) - Transportation System Resilience: Research Roadmap and White Papers
 - [Report 931](#) - A Guide to Emergency Management at State Transportation Agencies
 - [Report 930](#) - Security 101: A Physical & Cybersecurity Primer for Transportation Agencies
 - [Web-Only Document 266](#) - Developing a Physical and Cyber Security Primer for Transportation Agencies
- [Special Reports / Consensus Studies](#)
 - [Report 335](#) - Leveraging Unmanned Systems for Coast Guard Missions
- [Transit Cooperative Research Program \(TCRP\)](#)
 - [Synthesis 146](#) - Transit Security Preparedness

Current & Upcoming Projects

- [Current Projects](#)
 - [ACRP 01-41](#) - Airport Blockchain Implementation Guidebook
 - [ACRP 03-57](#) - A Guidebook to Prepare Airports for Transformations in Wireless Connectivity
 - [NCHRP 08-119](#) - Data Integration, Sharing, and Management for Transportation Planning and Traffic Operations
 - [NCHRP 17-91](#) - Assessing the Impacts of Automated Driving Systems (ADS) on the Future of Transportation Safety

- [NCHRP 20-102\(27\)](#) - Realistic Timing Estimates for Automated Vehicle Implementation
- [NCHRP 20-124](#) - Deploying Transportation Security Practices in State DOTs
- [NCHRP 23-02](#) - Guidelines on Collaboration and Information Security for State DOTs
- [NCHRP 23-03](#) - Guidelines for State Transportation Agency Chief Executive Officers on Cybersecurity Issues and Protection Strategies
- [TCRP Synthesis J-07/Topic SA-50](#) - Cyber Security in Transit Systems
- [Upcoming Projects](#)
 - [NCHRP 23-13\(01\)](#) - Telecommuting, Remote Work, and Hybrid Schedules: Managing the Shift to a Flexible Work Future

Reports from the [National Academies Press](#) on Cybersecurity

- [Looking Ahead at the Cybersecurity Workforce at the Federal Aviation Administration](#)
- [Necessary DoD Range Capabilities to Ensure Operational Superiority of U.S. Defense Systems](#)
- [Energizing Data-Driven Operations at the Tactical Edge](#)
- [Nuclear Proliferation and Arms Control Monitoring, Detection, and Verification](#)
- [The Future of Electric Power in the United States](#)
- [Key Challenges for Effective Testing and Evaluation Across Department of Defense Ranges](#)
- [Empowering the Defense Acquisition Workforce to Improve Mission Outcomes Using Data Science](#)
- [Advanced Technologies for Gas Turbines](#)
- [Communications, Cyber Resilience, and the Future of the U.S. Electric Power System](#)
- [Advancing Aerial Mobility](#)
- [Safeguarding the Bioeconomy](#)
- [Air Force Software Sustainment and Maintenance of Weapons Systems](#)
- [Models to Inform Planning for the Future of Electric Power in the United States](#)
- [A Quadrennial Review of the National Nanotechnology Initiative](#)
- [A Strategic Vision for Biological Threat Reduction](#)
- [Implications of Artificial Intelligence for Cybersecurity](#)
- [Beyond Spectre: Confronting New Technical and Policy Challenges](#)
- [Robust Machine Learning Algorithms and Systems for Detection and Mitigation of Adversarial Attacks and Anomalies](#)
- [Decrypting the Encryption Debate - A Framework for Decision Makers](#)
- [Recoverability as a First-Class Security Objective](#)
- [Emerging Trends and Methods in International Security](#)
- [Emergency Alert and Warning Systems - Current Knowledge and Future Research Directions](#)

Committees & Panels

[Sign-up to be a committee "Friend"](#)

[TRB Standing Committees](#) – Search by transportation mode and committee topic

- [AJL40](#) - Emerging Technology Law
- [AMR10](#) - Critical Transportation Infrastructure Protection
- [AMR40](#) - Systems, Enterprise, and Cyber Resilience
- [AV090](#) - Aviation Security and Emergency Management

[Task Forces](#) - Search for *task force* under committee here

Project Panels

- [D03127](#) - Cybersecurity of Traffic Signals and Related ITS Equipment
- [D205948](#) - Protection of Transportation Infrastructure from Cyber Attacks
- [D2303](#) - Targeted Guidance and Information Support to State DOT CEOs on Cybersecurity Issues and Protection Strategies
- [DA0503](#) - Mitigating and Responding to Airport Cybersecurity Events
- [STSA50](#) - Cyber Security in Transit Systems

Councils

- [A001C](#) – Young Members Coordinating Council

Recent and Upcoming Events

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

18th Biennial National Harbor Safety Committee Conference

June 13-15, 2022

Boston, MA

TRB Conference on Scenario Planning in Transportation

September 19, 2022

Washington, D.C.

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

Contact or Questions: TRBLibrary@nas.edu