TRB Snap Search: Connected & Automated Vehicles

TRB’s involvement in research on Connected & Automated Vehicles from 2020-2022

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](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 Connected & Automated Vehicles within the past two years.

Specialty Reports

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

Specialty Websites

- Transformational Technologies

Recent Reports & Publications

- Airport Cooperative Research Program (ACRP)
  - Legal Research Digest 39 - Updated Survey of Laws and Regulations Applicable to Airport Commercial Ground Transportation
  - Report 219 - Advanced Ground Vehicle Technologies for Airside Operations
  - WebResource 10 - Periodic Publication on Transformative Technologies at Airports

- National Cooperative Highway Research Program (NCHRP)
  - NCHRP 20-113F - Topical White Papers for the TRB Forum on Automated Vehicles and Shared Mobility
  - NCHRP 20-102(19) - Update AASHTO's Connected Vehicle/Automated Vehicle Research Roadmap
  - NCHRP 20-24(112) - Connected Road Classification System (CRCS) Development
  - Report 978 - Initiating the Systems Engineering Process for Rural Connected Vehicle Corridors, Volume 1: Research Overview
  - Report 952 - Guidebook for Managing Data from Emerging Technologies for Transportation
  - Report 924 - Foreseeing the Impact of Transformational Technologies on Land Use and Transportation
  - Web-Only Document 310 - Evaluation and Synthesis of Connected Vehicle Communication Technologies
Current & Upcoming Projects

- **Current Projects**
  - ACRP 10-32 - U.S. Airport Industry Adoption of Automated Ground Vehicle Systems
  - NCHRP 03-137 - Algorithms to Convert Basic Safety Messages into Traffic Measures
  - NCHRP 08-145 - Utilizing Cooperative Automated Transportation (CAT) Data to Enhance the Use of Freeway Operational Strategies
  - NCHRP 14-42 - Determining State DOT Maintenance Program Implications of Connected and Automated Vehicles
  - NCHRP 20-24(128) - State-of-the-Art Review of Cooperative Automated Transportation (CAT) Systems
  - 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(15) - Impacts of Connected and Automated Vehicle Technologies on the Highway Infrastructure
  - NCHRP 20-102(16) - Impacts of Connected, Automated Vehicle Technologies on Traffic Incident Management Response
  - NCHRP 20-102(19)B - 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 20-102(28) - Preparing Transportation Agencies for Connected and Automated Vehicles in Work Zones
  - NCHRP Synthesis 20-05/Topic 53-10 - Identifying the Current Practice of Contrast Pavement Markings by Departments of Transportation
  - TCRP I-11/Task 34 - The Effects of Vehicle Automation on the Public Transportation Workforce
  - Transit IDEA 1-04/IDEA 98 - Safety Assessment of the Interaction Between the Autonomous Shuttle Bus and Vulnerable Road Users

- **Upcoming Projects**
  - ACRP 10-33 - Incorporating Emerging Ground Access Technologies at Airports
  - ACRP 11-02/Task 43 - Successful Community Inclusion in Advanced Air Mobility
  - NCHRP 07-32 - Future-Proofing Automatic Traffic Signal Performance Measurement Systems for Scalability, Transferability, and CAV Integration
  - NCHRP 08-156 - Planning for Innovative and Emerging Mobility Futures at Intermodal Passenger Facilities
  - NCHRP 20-06/Topic 26-03 - Multistate Coordination and Harmonization for AV Legislation
  - NCHRP 20-24(116) - Guidance on Roles and Responsibilities in Operation of Automated Vehicles
  - NCHRP 20-24(119) - Strategic Research in Support of the Connected and Automated Vehicle Executive Leadership Team
  - NCHRP 20-102(17) - Deployment Guidance for CV Applications in the Open Source Application Development Portal
  - NCHRP 20-102(20) - Preparing the Transportation Workforce for the Deployment of Emerging Technology
  - NCHRP 20-102(24) - Infrastructure Modifications to Improve the Operational Domain of Automated Vehicles
  - NCHRP 20-102(25) - Readiness and Effectiveness of Freeway-Based Corridor V2X Applications for Improving Congestion and Safety
  - NCHRP 20-102(29) - Incorporating New Mobility Options into Transportation Demand Modeling
  - NCHRP 20-102(33) - Safety of Vulnerable Road Users in a C/AV Future
  - NCHRP 20-102(34) - Toolbox for Navigating the Land Use Impacts of the Automated Vehicle Ecosystem
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- NCHRP 20-123(12) - System Mobility and Emerging Technologies (SMET): Strategic Planning Session and Research Roadmap Development
- NCHRP 23-15 - Guidance on Risks Related to Emerging and Disruptive Transportation Technologies
- NCHRP 23-28 - Changes to 4.9 Ghz Spectrum Access and Authorization – What You Need to Know
- TCRP D-21 - Planning for Innovation & Emerging Mobility Futures at Intermodal Passenger Facilities

Reports from the National Academies Press on Connected & Automated Vehicles

- Advanced Battle Management System: Needs, Progress, Challenges, and Opportunities Facing the Department of the Air Force
- U.S. Army Futures Command Research Program Realignment
- Accelerating Decarbonization of the U.S. Energy System
- Assessment of Technologies for Improving Light-Duty Vehicle Fuel Economy—2025-2035
- The Role of Advanced Technologies in Structural Engineering for More Resilient Communities
- Advancing Aerial Mobility
- Reducing Fuel Consumption and Greenhouse Gas Emissions of Medium- and Heavy-Duty Vehicles, Phase Two

Committees & Panels

Sign-up to be a committee "Friend"

TRB Standing Committees – Search by transportation mode and committee topic

- AED50 - Artificial Intelligence and Advanced Computing Applications
- ACH60 - Vehicle User Education, Training, and Licensing
- ACP15 - Intelligent Transportation Systems
- ACP30 - Vehicle-Highway Automation
- AJL40 - Emerging Technology Law
- ACH40 - Human Factors of Infrastructure Design and Operations

Task Forces - Search for task force under committee here

Panels

- D08120 - Initiating the Systems Engineering Process for Rural Connected Vehicle Corridors
- D08145 - Utilizing Cooperative Automated Transportation (CAT) Data to Enhance the Use of Freeway Operational Strategies
- D1442 - Determining State DOT Maintenance Program Implications of Connected and Automated Vehicles
- D1791 - Assessing the Impacts of Connected, Automated and Autonomous Vehicles on the Future of Transportation Safety
- D20102 - Impacts of Connected and Automated Vehicles on State and Local Transportation Agencies
- D2010211 - Mobility-on-Demand and Automated Driving Systems: A Framework for Public-Sector Assessment
- D2020216 - Preparing TIM Responders for Connected Vehicles and Automated Vehicles
- D2020224 - Infrastructure Enablers for Connected and Automated Vehicles and Shared Mobility—Near-Term and Mid-Term
- D2020227 - Realistic Timing Estimates for Automated Vehicle Implementation
- D2310 - Evaluation and Synthesis of Connected Vehicle Communications Technologies
- D2315 - Prioritization of Risks Related to Connected and Automated Vehicles and Emerging Technologies
- E0005A - Preparing for Automated Vehicles and Shared Mobility

Councils

- A001C – Young Members Coordinating Council

Recent and Upcoming Events

Upcoming Conferences - Use left hand menu to filter events

**TRB's Automated Road Transportation Symposium**  
*July 18-21, 2022*  
Garden Grove, CA

**TRB Annual Workshop on Transportation Law**  
*July 24-27, 2022*
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.

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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

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