TRB Snap Search: Connected & Automated Vehicles

TRB’s involvement in research on Connected & Automated Vehicles from 2019-2021

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 on Connected & Automated Vehicles within the past two years.

Specialty Report
  - Critical Issues in Transportation 2019

Specialty Websites
  - Transformational Technologies

Recent Reports & Publications

- Airport Cooperative Research Program (ACRP)

- Conference Proceedings
  - Proceedings 56 - Socioeconomic Impacts of Automated and Connected Vehicles

- National Cooperative Highway Research Program (NCHRP)
  - NCHRP 20-24(112) - Connected Road Classification System (CRCS) Development
  - Report 924 - Foreseeing the Impact of Transformational Technologies on Land Use and Transportation

- Transportation Research E-Circulars
  - E-Circular 261 - Forum on Preparing for Automated Vehicles and Shared Mobility: Mini-Workshop on the Economic Implications of Automated Vehicles and Shared Mobility
  - E-Circular 258 - Forum on Preparing for Automated Vehicles and Shared Mobility: Mini-Workshop on the Roles of Government and the Private Sector
  - E-Circular 253 - Transformational Technologies in Transportation: Impacts on Traditional Research Processes and Programs
  - E-Circular 252 - TRB Forum on Preparing for Automated Vehicles and Shared Mobility: Mini-Workshop on the Transition Toward Shared Automated Vehicles
  - E-Circular 247 - TRB Forum on Preparing for Automated Vehicles and Shared Mobility: Mini-Workshop on the Importance and Role of Connectivity
  - E-Circular 244 - Mobility on Demand: A Smart, Sustainable, and Equitable Future

Current & Upcoming Projects

- Current Projects
  - ACRP 03-47 - Rethinking Airport Parking Facilities to Protect and Enhance Non-Aeronautical Revenue
  - ACRP 03-48 - Advanced Ground Vehicle Technologies (AGVT) for Airside Operations
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- NCHRP 03-127 - Cybersecurity of Traffic Management Systems
- NCHRP 03-137 - Algorithms to Convert Basic Safety Messages into Traffic Measures
- NCHRP 08-116 - Framework for Managing Data from Emerging Transportation Technologies to Support Decision-Making
- NCHRP 08-120 - Initiating the Systems Engineering Process for Rural Connected Vehicle Corridors
- NCHRP 14-42 - Determining State DOT Maintenance Program Implications of Connected and Automated Vehicles
- NCHRP 17-91 - Assessing the Impacts of Connected, Automated and Autonomous Vehicles on the Future of Transportation Safety
- 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(10) - Cybersecurity Implications of CV/AV Technologies on State and Local Transportation Agencies
- NCHRP 20-102(11) - Mobility-on-Demand and Automated Driving Systems: A Framework for Public-Sector Assessment
- NCHRP 20-102(12) - Business Models to Facilitate Deployment of CV Infrastructure to Support AV Operations
- NCHRP 20-102(15) - Impacts of Connected and Automated Vehicle Technologies on the Highway Infrastructure
- NCHRP 20-102(19) - Update AASHTO's Connected Vehicle/Automated Vehicle Research Roadmap
- NCHRP 20-102(22) - State and Local Impacts of Automated Freight Transportation Systems
- NCHRP 23-10 - Evaluation and Synthesis of Vehicle-to-X Technologies
- TCRP J-11/Task 27 - Low-Speed Automated Vehicles (LSAV) in Public Transportation
- TCRP J-11/Task 34 - The Effects of Vehicle Automation on the Public Transportation Workforce
- Transit IDEA J-04/IDEA 95 - Connected and Automated Parking Feasibility/MDOT MTA Dorsey Run Pilot Project
- Transit IDEA J-04/IDEA 98 - Safety Assessment of the Interaction Between the Autonomous Shuttle Bus and Vulnerable Road Users

- Upcoming Projects
  - NCHRP 08-145 - Utilizing Cooperative Automated Transportation (CAT) Data to Enhance the Use of Freeway Operational Strategies
  - 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(05) - Strategic Communications Plan for NCHRP Project 20-102
  - NCHRP 20-102(16) - Preparing TIM Responders for Connected Vehicles and Automated Vehicles
  - NCHRP 20-102(18) - Minimum Safety Data Needed for Automated Vehicle Operations and Crash Analysis
  - 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(20) - Workforce Capability Strategies for State and Local Agencies
  - NCHRP 20-102(21) - Infrastructure Modifications to improve the Operational Domain of Automated Vehicles
  - NCHRP 20-102(23) - Potential Impacts of Highly Automated Vehicles and Shared Mobility on Traveler Behavior
  - 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(26) - Dynamic Curbside Management: Keeping Pace with New and Emerging Mobility and Technology in the Public Right of Way
  - NCHRP 20-102(27) - Realistic Estimates of CAV Implementation Timing
  - NCHRP 20-102(28) - Preparing Transportation Agencies for Connected and Automated Vehicles in Work Zones
  - 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) - Land Use Impacts of Shared and Private AVs
  - NCHRP 20-113F - Topical White Papers for the TRB Forum on Automated Vehicles and Shared Mobility
  - NCHRP 23-15 - Prioritization of Risks Related to Connected and Automated Vehicles and Emerging Technologies

Reports from the National Academies Press on Connected & Automated Vehicles

- 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
Enhancing Urban Sustainability with Data, Modeling, and Simulation
Beyond Spectre: Confronting New Technical and Policy Challenges

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
- AIL40 - 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
- D2310 - Evaluation and Synthesis of Connected Vehicle Communications Technologies
- D2315 - Prioritization of Risks Related to Connected and Automated Vehicles and Emerging Technologies
- TJ1127 - Analysis of Low-Speed Automated Vehicle (LSAV): Pilots and Deployment

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.)

**Workshop on Traffic Simulation and CAV Modeling**
November 16-18, 2020
Irvine, California

**Advancing the Marine Transportation System through Automation and Autonomous Technologies: Trends, Applications and Challenges**
March 15-17, 2021
Washington, DC

**2021 Conference on Sustainability and Emerging Transportation Technology**
June 29 - July 1, 2021
Irvine, CA

Webinars – View upcoming webinars, suggest a webinar or add registration information

Past Webinars
- Capacity Impacts of Connected and Autonomous Vehicles – September 29, 2020
- Framework for Managing Data from Emerging Technologies - September 10, 2020
- Accelerating Automated Vehicle Acceptance – July 14, 2020
- Programs to Support the Deployment of the Electric Vehicle Infrastructure - April 3, 2019

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 (PubIndex) 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

Contact or Questions: TRBLibrary@nas.edu