TRB Snap Search: Connected & Automated Vehicles

TRB’s involvement in research on Connected & Automated Vehicles from 2018-2020

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)
  - ACRP 01-35 - Transportation Network Companies (TNCs): Impacts to Airport Revenues and Operations

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

- National Cooperative Highway Research Program (NCHRP)
  - Report 924 - Foreseeing the Impact of Transformational Technologies on Land Use and Transportation
  - Report 896 - Updating Regional Transportation Planning and Modeling Tools to Address Impacts of Connected and Automated Vehicles, Volume 1: Executive Summary
  - Report 896 - Updating Regional Transportation Planning and Modeling Tools to Address Impacts of Connected and Automated Vehicles, Volume 2: Guidance
  - Report 891 - Dedicating Lanes for Priority or Exclusive Use by Connected and Automated Vehicles
  - Web Only Document 253 - Implications of Connected and Automated Driving Systems, Vol. 3: Legal Modification Prioritization and Harmonization Analysis

- Policy Studies
  - Letter Report - Research and Technology Coordinating Committee: November 9, 2018
  - Letter Report - Transit Research Analysis Committee: August 24, 2018

Updated on 11/26/2019
• Special Reports
  o Report 331 - The Vital Federal Role in Meeting the Highway Innovation Imperative
  o Report 329 - Renewing the National Commitment to the Interstate Highway System: A Foundation for the Future

• Transportation Research E-Circulars
  o E-Circular 253 - Transformational Technologies in Transportation: Impacts on Traditional Research Processes and Programs
  o E-Circular 252 - TRB Forum on Preparing for Automated Vehicles and Shared Mobility: Mini-Workshop on the Transition Toward Shared Automated Vehicles
  o E-Circular 247 - TRB Forum on Preparing for Automated Vehicles and Shared Mobility: Mini-Workshop on the Importance and Role of Connectivity
  o E-Circular 244 - Mobility on Demand: A Smart, Sustainable, and Equitable Future
  o E-Circular 236 - National Academies–TRB Forum on Preparing for Automated Vehicles and Shared Mobility
  o E-Circular 232 - Automated Vehicles Symposium 2017: Summary of a Symposium

Current & Upcoming Projects

• Current Projects
  o ACRP 03-47 - Rethinking Airport Parking Facilities to Protect and Enhance Non-Aeronautical Revenue
  o ACRP 03-48 - Advanced Ground Vehicle Technologies (AGVT) for Airside Operations
  o NCHRP 03-127 - Cybersecurity of Traffic Management Systems
  o NCHRP 03-137 - Algorithms to Convert Basic Safety Messages into Traffic Measures
  o NCHRP 08-116 - Framework for Managing Data from Emerging Transportation Technologies to Support Decision-Making
  o NCHRP 08-120 - Initiating the Systems Engineering Process for Rural Connected Vehicle Corridors
  o NCHRP 17-91 - Assessing the Impacts of Connected, Automated and Autonomous Vehicles on the Future of Transportation Safety
  o NCHRP 20-24(112) - Connected Road Classification System (CRCS) Development
  o NCHRP 20-24(128) - State-of-the-Art Review of Cooperative Automated Transportation (CAT) Systems
  o NCHRP 20-102 - Impacts of Connected Vehicles and Automated Vehicles on State and Local Transportation Agencies--Task-Order Support
  o NCHRP 20-102(10) - Cybersecurity Implications of CV/AV Technologies on State and Local Transportation Agencies
  o NCHRP 20-102(11) - Mobility-on-Demand and Automated Driving Systems: A Framework for Public-Sector Assessment
  o NCHRP 20-102(12) - Business Models to Facilitate Deployment of CV Infrastructure to Support AV Operations
  o NCHRP 20-102(15) - Impacts of Connected and Automated Vehicle Technologies on the Highway Infrastructure
  o NCHRP 20-102(19) - Update AASHTO's Connected Vehicle/Automated Vehicle Research Roadmap
  o NCHRP 20-102(22) - State and Local Impacts of Automated Freight Transportation Systems
  o TCRP I-11/Task 27 - Low-Speed Automated Vehicles (LSAV) in Public Transportation
  o Transit IDEA I-04/IDEA 95 - Connected and Automated Parking Feasibility/MDOT MTA Dorsey Run Pilot Project

• Upcoming Projects
  o NCHRP 14-42 - Determining State DOT Maintenance Program Implications of Connected and Automated Vehicles
  o NCHRP 20-24(116) - Guidance on Roles and Responsibilities in Operation of Automated Vehicles
  o NCHRP 20-24(119) - Strategic Research in Support of the Connected and Automated Vehicle Executive Leadership Team
  o NCHRP 20-102(05) - Strategic Communications Plan for NCHRP Project 20-102
  o NCHRP 20-102(16) - Preparing TIM Responders for Connected Vehicles and Automated Vehicles
  o NCHRP 20-102(18) - Minimum Safety Data Needed for Automated Vehicle Operations and Crash Analysis
  o NCHRP 20-102(19B) - Updated Research Roadmap for NCHRP 20-102, Impacts of Connected Vehicles and Automated Vehicles on State and Local Transportation Agencies
  o NCHRP 20-102(20) - Workforce Capability Strategies for State and Local Agencies
  o NCHRP 20-102(21) - Infrastructure Modifications to improve the Operational Domain of Automated Vehicles
  o NCHRP 20-102(23) - Potential Impacts of Highly Automated Vehicles and Shared Mobility on Traveler Behavior
  o NCHRP 20-102(24) - Infrastructure Enablers for Connected and Automated Vehicles and Shared Mobility--Near-Term and Mid-Term
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 in the Era of CAVs, SAVs, Scooters, Transportation Network Companies (TNCs), and Traditional Vehicles

NCHRP 20-102(27) - Realistic Estimates of CAV Implementation Timing

NCHRP 20-102(28) - Best Practices in Work Zones for AVs and CVs

NCHRP 20-102(29) - Incorporating New Mobility Options into Transportation Demand Modeling

NCHRP 20-102(29F) - Topical White Papers for the TRB Forum on Automated Vehicles and Shared Mobility

TCRP J11/Task 34 - The Effects of Vehicle Automation on the Public Transportation Workforce

Reports from the National Academies Press on Connected & Automated Vehicles

- Enhancing Urban Sustainability with Data, Modeling, and Simulation
- Beyond Spectre: Confronting New Technical and Policy Challenges
- Autonomy on Land and Sea and in the Air and Space
- Frontiers of Engineering - Reports on Leading-Edge Engineering from the 2017 Symposium

Committees & Panels

Sign-up to be a committee "Friend"

TRB Standing Committees – Search by transportation mode and committee topic

- A0099F - European-U.S. Transportation Research Symposia--Symposium #6: Socioeconomic Impacts of Connected and Automated Vehicles
- ABI70 - Artificial Intelligence and Advanced Computing Applications
- AHB15 - Intelligent Transportation Systems
- AHB30 - Vehicle-Highway Automation
- AL040 - Emerging Technology Law
- AND20 - User Information Systems
- AP040 - Automated Transit Systems
- E0005A - TRB Forum on Preparing for Automated Vehicles and Shared Mobility

Task Forces - Search for task force under committee here

- ABI92T - Understanding Big Data in Freight Transportation

Panels

- D20102 - NCHRP Project Panel on Impacts of Connected and Automated Vehicles on State and Local Transportation Agencies
- DA0330 - ACRP Project Panel on Impact of Commercial Unmanned Aerial Vehicles on Airports

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.)

8th International Conference on Innovations in Travel Modeling (ITM)
June 14-17, 2020
Seattle, Washington

Third International Traffic Signal Control Forum*
July 1-3, 2020
Chongqing, China

ITS World Congress 2020*
October 4-8, 2020
Los Angeles, California
Workshop on Traffic Simulation and CAV Modeling
November 16-18, 2020
Irvine, California

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

Past Webinars
  - Programs to Support the Deployment of the Electric Vehicle Infrastructure - April 3, 2019
  - Disruptive Technologies: Impacts on Transportation Revenues - September 6, 2018
  - Technology Changes Influencing the Decline of Vehicle Emissions – April 25, 2018

TRB’s Transportation Research Information Services (TRIS)

TRIS includes the TRB Library and the TRIS Databases (listed below) which are available for 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 l (202) 334-2989