

**TRB** TRANSPORTATION RESEARCH BOARD

## TRB Snap Search: UAS / UAV (Unmanned Aerial Systems / Unmanned Aerial Vehicles)

### TRB's involvement in research on UAS / UAV from 2019-2022

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 on UAS / UAV within the past three years.

### 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 \(ACRP\)](#)
  - [Report 212](#) - Airports and Unmanned Aircraft Systems, Volume 1: Managing and Engaging Stakeholders on UAS in the Vicinity of Airports
  - [Report 212](#) - Airports and Unmanned Aircraft Systems, Volume 2: Incorporating UAS into Airport Infrastructure—Planning Guidebook
  - [Report 212](#) - Airports and Unmanned Aircraft Systems, Volume 3: Potential Use of UAS by Airport Operators
  - [Synthesis 104](#) - Current Landscape of Unmanned Aircraft Systems at Airports
  - [Web-Only Document 42](#) - Toolkits and Resource Library for Airports and Unmanned Aircraft Systems
- [IDEA Safety Program](#)
  - [Report 42](#) - Railroad Tunnel Inspections for Maintenance and Replacement Prioritization Using Untethered Ground Penetrating Radar and LIDAR Capable Unmanned Aerial Vehicles (UAVs)
- [National Cooperative Highway Research Program \(NCHRP\)](#)
  - [Report 952](#) - Guidebook for Managing Data from Emerging Technologies for Transportation
  - [Report 924](#) - Foreseeing the Impact of Transformational Technologies on Land Use and Transportation
  - [Synthesis 534](#) - Emerging Technologies for Construction Delivery
- [Special Reports / Consensus Studies](#)
  - [Report 335](#) - Leveraging Unmanned Systems for Coast Guard Missions
- [Transit Cooperative Research Program \(TCRP\)](#)
  - [IDEA Report 90](#) - sUAS-based GeoINTEL1 for Commuter Rail Parking in Rural and Suburban Areas
- [Transportation Research Circulars](#)

- [E-Circular 273](#) - TRB Centennial Circular: History and Future Perspectives on Foundation Design for Transportation Structures

## Current & Upcoming Projects

- [Current Projects](#)
  - [ACRP 03-50](#) - An Airport-Centric Study of the Urban Air Mobility Market
  - [ACRP 07-18](#) - Develop Airfield Design Guidelines for Large Unmanned Aerial Systems (UAS)
  - [NCHRP 12-122](#) - Proposed AASHTO Guidelines for Applications of Unmanned Aerial Systems Technologies for Element-Level Bridge Inspection
  - [NCHRP 20-44\(17\)](#) - Implementing the Results of NCHRP Project 20-68A, Domestic Scan 17-01: Successful Approaches for the Use of Unmanned Aerial Systems by Surface Transportation Agencies
  - [NCHRP Synthesis 20-05/Topic 52-01](#) - State of Practice on Infrastructure Inspections for the Digital Age
  - [NCHRP Synthesis 20-05/Topic 52-04](#) - Use of Unmanned Aircraft Systems for Departments of Transportation
  - [NCHRP Synthesis 20-05/Topic 53-09](#) - Use of Unmanned Aerial Systems for Highway Stormwater Inspections
  - [Safety IDEA Project 37](#) - Measuring Behavior of Railroad Bridges under Revenue Traffic using Lasers and Unmanned Aerial Vehicles (UAVs) for Safer Operations: Implementation
- [Upcoming Projects](#)
  - [NCHRP 23-20](#) - Guidebook for Implementation of UAS Operational Capabilities

## Reports from the [National Academies Press](#) on UAS / UAV

- [Leveraging Commercial Space for Earth and Ocean Remote Sensing](#)
- [Looking Ahead at the Cybersecurity Workforce at the Federal Aviation Administration](#)
- [Energizing Data-Driven Operations at the Tactical Edge](#)
- [Assessing NASA's University Leadership Initiative](#)
- [Powering the U.S. Army of the Future](#)
- [Advancing Aerial Mobility - A National Blueprint](#)
- [Evolving the Geodetic Infrastructure to Meet New Scientific Needs](#)
- [Innovations in the Food System - Exploring the Future of Food](#)
- [The Convergence of Violent Extremism and Radiological Security](#)

## Committees & Panels

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

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

- [AV000](#) - Aviation Group
- [AV020](#) - Aviation System Planning
- [AV095](#) - New Users of Shared Airspace

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

### CRP Panels

- [D12122](#) - Evaluating and implementing unmanned aerial systems (UAS) into bridge management methods through element-level data collection
- [D2320](#) - Operational Oversight of Drones – UAS Development and Deployment: Jurisdictional Issues and Options
- [DA0342](#) - Integrating UAS into Airports
- [DA0718](#) - Develop Airfield Design Guidelines for Large Unmanned Aerial Systems (UAS)
- [SN5204](#) - Construction Use of Unmanned Aircraft Systems for Departments of Transportation
- [SN5309](#) - Use of Unmanned Aerial Systems for Highway Stormwater Inspections

### 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.)

### [National Aviation System Planning Symposium](#)

May 1, 2023

Irvine, California

### [Conference on Sustainability and Emerging Transportation Technology](#)

May 31 - June 2, 2022

Irvine, CA

**[18th Biennial National Harbor Safety Committee Conference](#)**

*June 13-15, 2022*

**Boston, MA**

**[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](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 (PubsIndex) 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](mailto:TRBLibrary@nas.edu)