TRB Snap Search: Aviation

TRB’s involvement in research on Aviation 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 Aviation within the past two years.

**Subject Webpage**
- [Airport Cooperative Research Program](http://www.trb.org/InformationServices/Snap.aspx) at TRB

**Specialty Report**
- [Critical Issues in Transportation 2019](http://www.trb.org/InformationServices/Snap.aspx)
- [COVID-19 Addendum to Critical Issues in Transportation](http://www.trb.org/InformationServices/Snap.aspx)
- [Racial Equity Addendum to Critical Issues in Transportation](http://www.trb.org/InformationServices/Snap.aspx)

**Recent Reports & Publications**
- [ACRP 02-87](http://www.trb.org/InformationServices/Snap.aspx) - Determining Airfield Pavement Deicer and Anti-Icer Contributions to Airport Stormwater
- [Conference Proceedings on the Web 28](http://www.trb.org/InformationServices/Snap.aspx) - Introduction to Blockchain and Airport Operations in a COVID-19 Environment
- [Conference Proceedings on the Web 26](http://www.trb.org/InformationServices/Snap.aspx) - Public–Private Partnerships: What Are the Lessons Learned?
- [Impacts on Practice](http://www.trb.org/InformationServices/Snap.aspx) - Ensuring Safe Paramotor Operations at Emmett Municipal Airport
- [Impacts on Practice](http://www.trb.org/InformationServices/Snap.aspx) - ACRP in the Classroom: Reimagining the Textbook at the University of North Dakota Department of Aviation
- [Impacts on Practice](http://www.trb.org/InformationServices/Snap.aspx) - Measuring Success at Raleigh–Durham International Airport
- [Legal Research Digest 43](http://www.trb.org/InformationServices/Snap.aspx) - Legal Considerations for Telecommunications at Airports
- [Legal Research Digest 42](http://www.trb.org/InformationServices/Snap.aspx) - Legal Implications of Data Collection at Airports
- [Legal Research Digest 41](http://www.trb.org/InformationServices/Snap.aspx) - Legal Issues Relating to Airport Commercial Contracts
- [Legal Research Digest 40](http://www.trb.org/InformationServices/Snap.aspx) - Permissible Uses of Airport Property and Revenue
- [Legal Research Digest 39](http://www.trb.org/InformationServices/Snap.aspx) - Updated Survey of Laws and Regulations Applicable to Airport Commercial Ground Transportation
- [Legal Research Digest 38](http://www.trb.org/InformationServices/Snap.aspx) - Legal Issues Related to Large-Scale Airport Construction Projects
- [Legal Research Digest 37](http://www.trb.org/InformationServices/Snap.aspx) - Legal Issues Relating to Airports Promoting Competition
- [Legal Research Digest 21](http://www.trb.org/InformationServices/Snap.aspx) - Compilation of DOT and FAA Airport Legal Determinations and Opinion Letters as of December 31, 2019
- [Report 240](http://www.trb.org/InformationServices/Snap.aspx) - Primer for Airport Organizational Redesign
- [Report 237](http://www.trb.org/InformationServices/Snap.aspx) - Primer and Framework for Considering an Airport Noise and Operations Monitoring System
- [Report 236](http://www.trb.org/InformationServices/Snap.aspx) - Preparing Your Airport for Electric Aircraft and Hydrogen Technologies
- [Report 234](http://www.trb.org/InformationServices/Snap.aspx) - Rapid Slab Repair and Replacement of Airfield Concrete Pavement

Updated 07/26/2022
- Airport Biometrics: A Primer
- Playbook for Cultivating Talent in the Airport Environment
- Evaluating the Traveler's Perspective to Improve the Airport Customer Experience
- Enhancing Academic Programs to Prepare Future Airport Industry Professionals
- Airport Collaborative Decision Making (ACDM) to Manage Adverse Conditions
- Airport Microgrid Implementation Toolkit
- Evaluating and Implementing Airport Privatization and Public-Private Partnerships
- Planning and Design of Airport Terminal Restrooms and Ancillary Spaces
- Rethinking Airport Parking Facilities to Protect and Enhance Non-Aeronautical Revenues
- Understanding Impacts to Airports From Temporary Flight Restrictions
- Performance Measures for State Aviation Agencies
- Collecting and Sharing of Operations and Safety Data
- Measuring Quality of Life in Communities Surrounding Airports
- Guidebook for Developing a Zero- or Low-Emissions Roadmap at Airports
- Advanced Ground Vehicle Technologies for Airside Operations
- Building and Maintaining Air Service Through Incentive Programs
- Guidance for Diversity in Airport Business Contracting and Workforce Programs
- Guidebook for Assessing Collaborative Planning Efforts Among Airport and Public Planning Agencies
- Transportation Network Companies (TNCs): Impacts to Airport Revenues and Operations — Reference Guide
- Estimating Market Value and Establishing Market Rent at Small Airports
- BIM Beyond Design Guidebook
- Airports and Unmanned Aircraft Systems, Volume 1: Managing and Engaging Stakeholders on UAS in the Vicinity of Airports
- Airports and Unmanned Aircraft Systems, Volume 2: Incorporating UAS into Airport Infrastructure— Planning Guidebook
- Airports and Unmanned Aircraft Systems, Volume 3: Potential Use of UAS by Airport Operators
- Innovative Solutions to Facilitate Accessibility for Airport Travelers with Disabilities
- Critical Issues in Aviation and the Environment 2021
- Agricultural Operations on Airport Grounds
- Examples of Facility Space Provided for Community Use at Airports
- Practices in Airport Emergency Plans
- Visual Arts Programs at Airports
- Airport Workforce Programs Supporting Employee Well-Being
- Airports and Operations Training at Small Airports
- Last Mile in General Aviation—Courtesy Vehicles and Other Forms of Ground Transportation
- Airport Renewable Energy Projects Inventory and Case Examples
- Escalator Falls
- Characteristics of the FBO Industry 2018-2019
- Models for Law Enforcement at Airports
- Command-Level Decision Making for Transportation Emergency Managers
- Commercial Space Vehicle Emissions Modeling
- Research Roadmap on Safety Issues
- Research Roadmap on Airport Administration & Human Resource Issues
- Evaluating the Use of Spatially Precise Diurnal Population Data in Aviation Noise Studies
- Commercial Space Operations Noise and Sonic Boom Measurements
- Recovering International Recyclables from In-Flight Service
- Construction Safety and Phasing Plans
- Periodic Publication on Transformative Technologies at Airports
- Airport Emergency Plan Development Tool
- Integrating Social Media with Emergency Management at Airports

Current & Upcoming Projects

- Advancing the Practice of State Aviation System Planning
- Creative Marketing Techniques to Improve Revenue Generation Partnerships
- Airport Blockchain Implementation Guidebook
- Review of Airport Governance Structures
- Conducting Consumer Research of Air Passengers
- Airport Insurance Requirements
○ **ACRP 01-45** - Selecting, Procuring, and Implementing Airport Capital Project Delivery Methods
○ **ACRP 01-46** - A Guide for Geospatial Data Governance Policies and Procedures
○ **ACRP 01-47** - A Guide to Developing a Culture of Innovation at Airports
○ **ACRP 01-48** - Assessing Airport Programs for Travelers with Disabilities and Older Adults
○ **ACRP 01-49** - The Evolution of Knowledge Management at Airports
○ **ACRP 02-90** - Development of Airport Construction Emission Inventory Tool (ACEIT) Version 2.0
○ **ACRP 02-91** - Development of PFAS Source Differentiation Guidelines for Airports
○ **ACRP 02-93** - Guidebook for PFAS Management at Airports
○ **ACRP 02-94** - Update ACRP WebResource 4: Airport Air Quality Resource Library
○ **ACRP 02-100** - Carbon Removal and Reduction to Support Airport Net-Zero Goals
○ **ACRP 03-49** - Effective Collaboration to Plan and Respond to Communicable Disease Threats
○ **ACRP 03-50** - An Airport-Centric Study of the Urban Air Mobility Market
○ **ACRP 03-52** - Guidelines for Adapting and Managing Airport Common Use Programs
○ **ACRP 03-53** - Airport Baggage Handling System Decision-Making Based on Total Cost of Ownership
○ **ACRP 03-57** - A Guidebook to Prepare Airports for Transformations in Wireless Connectivity
○ **ACRP 03-58** - Measuring and Understanding the Relationship Between Air Service and Regional Economic Development
○ **ACRP 03-59** - Strategies to Address Homelessness at Airports
○ **ACRP 03-60** - Incorporating Shock Events into Traffic and Forecasting and Airport Planning
○ **ACRP 03-61** - Implementing and Improving Data Analytics Capabilities at Airports
○ **ACRP 03-62** - A Toolkit for Establishing Airport Catchment Areas
○ **ACRP 03-63** - Modernizing Air Cargo Operations and Infrastructure at U.S. Airports
○ **ACRP 03-67** - Guidelines for Accommodating Peer-to-Peer Car Sharing at Airports
○ **ACRP 04-24** - Guidelines to Develop an Anti-Human Trafficking Action Plan for Airports
○ **ACRP 04-25** - Airports and Communicable Diseases—Preparedness and Response
○ **ACRP 04-26** - Uncontrolled Terminal Evacuations: Planning, Response, and Recovery
○ **ACRP 04-27** - Alternative Methods to Manage Tree Growth Near Airports
○ **ACRP 04-28** - Developing Alternative Aircraft Arresting Systems
○ **ACRP 07-17** - Airport Roadway Analysis and Curbside Congestion Management Strategies
○ **ACRP 07-18** - Develop Airfield Design Guidelines for Large Unmanned Aerial Systems (UAS)
○ **ACRP 09-18** - Rapid Airfield Concrete Pavement Slab Replacement and Patching
○ **ACRP 09-19** - Airfield Pavement Markings - Effective Techniques for Removal and Temporary Applications
○ **ACRP 09-20** - Quantifying the Impacts of Delayed Maintenance of Airport Assets
○ **ACRP 09-21** - Asset Information Handover Guidelines: From Planning and Construction to O&M
○ **ACRP 10-28** - Practical Guide for Integrating Crisis Management and Business Continuity
○ **ACRP 10-29** - Aircraft Jet Blast Estimation Tool
○ **ACRP 10-30** - Evaluating the Effectiveness of an Airport's Wildlife Hazard Management Program
○ **ACRP 10-31** - Guidebook for Virtual Airport Ramp Control Operations Facilities
○ **ACRP 10-32** - U.S. Airport Industry Adoption of Automated Ground Vehicle Systems
○ **ACRP 10-33** - Incorporating Emerging Transportation and Ground Access Technologies at Airports
○ **ACRP 10-01/Topic 11-02** - Accommodation of Federal Agencies – Rights and Obligations of Host Airports
○ **ACRP 11-01/Topic 11-03** - Analysis of Laws, Regulations, and Case Laws Regarding Airport Customer Facility Charges
○ **ACRP 11-01/Topic 14-01** - Legal Considerations for Airports Responding to Pandemics
○ **ACRP 11-02/Task 30** - Research Roadmap in the Area of Design and Construction of Airport Facilities and Infrastructure
○ **ACRP 11-02/Task 37** - Periodic Report on Transformative Technology at Airports
○ **ACRP 11-02/Task 41** - Toward a Touchless Airport Journey
○ **ACRP 11-05** - Tactical Initiatives from the ACRP Strategic Plan
○ **ACRP 11-08(20-01)** - ACRP Insight Event--Future of Aviation
○ **ACRP 11-08(21-01)** - ACRP Insight Event--Future of Airport Finances
○ **ACRP 11-08(21-02)** - ACRP Insight Event--Issues on Systemic Racism
○ **ACRP Synthesis 11-03/Topic S01-23** - Airport Software Solutions and Services Sourcing
○ **ACRP Synthesis 11-03/Topic S01-25** - Airport Parking Pricing Strategies
○ **ACRP Synthesis 11-03/Topic S01-27** - State of Airport Loyalty Programs
○ **ACRP Synthesis 11-03/Topic S02-22** - Airport Programs that Reduce Landside Vehicle Carbon Emissions
○ **ACRP Synthesis 11-03/Topic S03-16** - Project Prioritization and Selection Processes for State Aviation Funding
○ **ACRP Synthesis 11-03/Topic S03-18** - Communication, Implementation, and Outcomes of Airport Economic Impact Studies
- ACRP Synthesis 11-03/Topic S04-26 - Managing an Emergency or Incident Associated with Flight Diversion at Airports
- ACRP Synthesis 11-03/Topic S06-07 - Evolution of Airport Work Models and Strategies
- ACRP Synthesis 11-03/Topic S09-09 - Automated Pavement Condition Survey Practices at Airports
- ACRP Synthesis 11-03/Topic S10-18 - Considerations for Establishing and Maintaining Successful Bee Programs on Airports
- ACRP Synthesis 11-03/Topic S10-20 - Resilience Partnerships with the Air National Guard and other Military Organizations

**Upcoming Projects**
- ACRP 01-50 - Data Protection and Privacy Management Guidelines for Airports
- ACRP 01-51 - Improving Airport Organizational Practices to Enhance ACDBE/DBE Participation
- ACRP 01-52 - Strategic Futuring of Airports and their Role in the U.S. Airport System
- ACRP 02-95 - Understanding Airport Air Quality and Public Health Studies Related to Airports: An Update to ACRP Report 135
- ACRP 02-96 - Update ACRP Report 99: Guidance for Treatment of Airport Stormwater Containing Deicers
- ACRP 02-97 - Update to the Guidelines, Tools, and Resources Related to ACRP Reports 11, 147, and 160
- ACRP 02-97A - Update ACRP Report 43: Improving Environmental Performance at Small Airports
- ACRP 02-98 - Airport Energy Resiliency Primer and Roadmap
- ACRP 02-99 - Incorporating Environmental Justice and Equity Principles and Data into Airport Decision-Making
- ACRP 02-101 - Environmental Stewardship and Compliance Training for Airport Employees
- ACRP 02-102 - A Balanced Look at Local Airport Activity and Climate Change
- ACRP 03-65 - ACRP Policy and Planning Product Updates
- ACRP 03-66 - Guidebook for Digital Twin Programs at Airports
- ACRP 03-68 - Integrated Contingency Planning for Small and Non-Hub Airports
- ACRP 04-29 - Transportation Emergency Response Application (TERA): Migration Options Beyond 2020
- ACRP 05-03 - Guidebook on Airport Cybersecurity and Incident Response
- ACRP 06-08 - Human Factors in Airport Operations
- ACRP 07-19 - Update to ACRP Report 25: Airport Passenger Terminal Planning and Design
- ACRP 10-33 - Incorporating Emerging Ground Access Technologies at Airports
- ACRP 10-34 - Migrating ACRP Research Report 228 Toolkit to an ACRP WebResource
- ACRP 11-01/Topic 12-02 - Legal Considerations for General Aviation (GA) Development at Airports
- ACRP 11-08(20-02) - ACRP Insight Event--On-Demand Aviation Services for Passengers and Goods
- ACRP 11-11 - Facilitating Implementation of ACRP Products
- ACRP 11-12/Task 01 - Knowledge Transfer of Lessons Learned From ACRP Product Implementation

Reports from the National Academies Press on Aviation
- Flying in the COVID-19 Era: Science-based Risk Assessments and Mitigation Strategies on the Ground and in the Air
- Aviation After a Year of Pandemic: Economics, People, and Technology
- Looking Ahead at the Cybersecurity Workforce at the Federal Aviation Administration
- Assessing NASA's University Leadership Initiative
- Planning the Future Space Weather Operations and Research Infrastructure
- Strengthening U.S. Air Force Human Capital Management
- Airborne Platforms to Advance NASA Earth System Science Priorities
- Advanced Technologies for Gas Turbines
- Advancing Aerial Mobility – A National Blueprint
- Human Spaceflight: Apollo 50 Years On

**Committees & Panels**

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**TRB Standing Committees** – Search by transportation mode and committee topic
- AV000 - Aviation Group
- AV010 - Intergovernmental Relations in Aviation
- AV020 - Aviation System Planning
- AV030 - Environmental Impacts of Aviation
- AV040 - Aviation Economics and Forecasting
- AV040(1) - Air Cargo Subcommittee
- AV050 - Airport Terminals and Ground Access
- AV060 - Airfield and Airspace Capacity and Delay
Recent and Upcoming Events

**Upcoming TRB Conferences** – Use left hand menu to filter events

**TRANSED: Mobility, Accessibility, and Demand Response Transportation Conference**  
*September 12-16, 2022*  
*Online*

**Conference on Scenario Planning in Transportation Planning**  
*September 19-21, 2022*  
*Washington, D.C.*

**National Aviation System Planning Symposium**  
*May 15-18, 2023*  
*Irving, CA*

**Upcoming Events** – In the Upcoming Events tab under Types, choose what event you are interested in, search titles by keyword

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**TRB’s Transportation Research Information Services (TRIS)**

TRIS includes the [TRB Library](https://library.trb.org) and the [TRIS Databases](https://www.trb.org) (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