

TRB TRANSPORTATION RESEARCH BOARD

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>

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](#) at TRB

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

- [ACRP 02-87](#) - Determining Airfield Pavement Deicer and Anti-Icer Contributions to Airport Stormwater
- [Conference Proceedings on the Web 28](#) - Introduction to Blockchain and Airport Operations in a COVID-19 Environment
- [Conference Proceedings on the Web 27](#) - Flight Plan to Recovery: Preparing Airports for the Return of the Traveling Public
- [Conference Proceedings on the Web 26](#) - Public-Private Partnerships: What Are the Lessons Learned?
- [Impacts on Practice](#) - Ensuring Safe Paramotor Operations at Emmett Municipal Airport
- [Impacts on Practice](#) - ACRP in the Classroom: Reimagining the Textbook at the University of North Dakota Department of Aviation
- [Impacts on Practice](#) - Measuring Success at Raleigh-Durham International Airport
- [Legal Research Digest 43](#) - Legal Considerations for Telecommunications at Airports
- [Legal Research Digest 42](#) - Legal Implications of Data Collection at Airports
- [Legal Research Digest 41](#) - Legal Issues Relating to Airport Commercial Contracts
- [Legal Research Digest 40](#) - Permissible Uses of Airport Property and Revenue
- [Legal Research Digest 39](#) - Updated Survey of Laws and Regulations Applicable to Airport Commercial Ground Transportation
- [Legal Research Digest 38](#) - Legal Issues Related to Large-Scale Airport Construction Projects
- [Legal Research Digest 37](#) - Legal Issues Relating to Airports Promoting Competition
- [Legal Research Digest 21](#) - Compilation of DOT and FAA Airport Legal Determinations and Opinion Letters as of December 31, 2019
- [Report 234](#) - Rapid Slab Repair and Replacement of Airfield Concrete Pavement
- [Report 233](#) - Airport Biometrics: A Primer
- [Report 232](#) - Playbook for Cultivating Talent in the Airport Environment
- [Report 231](#) - Evaluating the Traveler's Perspective to Improve the Airport Customer Experience

- [Report 230](#) - Enhancing Academic Programs to Prepare Future Airport Industry Professionals
- [Report 229](#) - Airport Collaborative Decision Making (ACDM) to Manage Adverse Conditions
- [Report 228](#) - Airport Microgrid Implementation Toolkit
- [Report 227](#) - Evaluating and Implementing Airport Privatization and Public-Private Partnerships
- [Report 226](#) - Planning and Design of Airport Terminal Restrooms and Ancillary Spaces
- [Report 225](#) - Rethinking Airport Parking Facilities to Protect and Enhance Non-Aeronautical Revenues
- [Report 224](#) - Understanding Impacts to Airports From Temporary Flight Restrictions
- [Report 223](#) - Performance Measures for State Aviation Agencies
- [Report 222](#) - Collecting and Sharing of Operations and Safety Data
- [Report 221](#) - Measuring Quality of Life in Communities Surrounding Airports
- [Report 220](#) - Guidebook for Developing a Zero- or Low-Emissions Roadmap at Airports
- [Report 219](#) - Advanced Ground Vehicle Technologies for Airside Operations
- [Report 218](#) - Building and Maintaining Air Service Through Incentive Programs
- [Report 217](#) - Guidance for Diversity in Airport Business Contracting and Workforce Programs
- [Report 216](#) - Guidebook for Assessing Collaborative Planning Efforts Among Airport and Public Planning Agencies
- [Report 215](#) - Transportation Network Companies (TNCs): Impacts to Airport Revenues and Operations—
Reference Guide
- [Report 213](#) - Estimating Market Value and Establishing Market Rent at Small Airports
- [Report 214](#) - BIM Beyond Design Guidebook
- [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
- [Report 210](#) - Innovative Solutions to Facilitate Accessibility for Airport Travelers with Disabilities
- [Report 14](#) - Deicing Planning Guidelines and Practices for Stormwater Management Systems, Second Edition
- [Research E-Circular 271](#) - Critical Issues in Aviation and the Environment 2021
- [Synthesis 115](#) - Practices in Airport Emergency Plans
- [Synthesis 114](#) - Visual Arts Programs at Airports
- [Synthesis 113](#) - Airport Workforce Programs Supporting Employee Well-Being
- [Synthesis 112](#) - Airport Operations Training at Small Airports
- [Synthesis 111](#) - Last Mile in General Aviation—Courtesy Vehicles and Other Forms of Ground Transportation
- [Synthesis 110](#) - Airport Renewable Energy Projects Inventory and Case Examples
- [Synthesis 109](#) - Escalator Falls
- [Synthesis 108](#) - Characteristics of the FBO Industry 2018-2019
- [Synthesis 107](#) - Models for Law Enforcement at Airports
- [Web-Only Document 51](#) - Commercial Space Vehicle Emissions Modeling
- [Web-Only Document 50](#) - Research Roadmap on Safety Issues
- [Web-Only Document 49](#) - Research Roadmap on Airport Administration & Human Resource Issues
- [Web-Only Document 48](#) - Evaluating the Use of Spatially Precise Diurnal Population Data in Aviation Noise Studies
- [Web-Only Document 47](#) - Commercial Space Operations Noise and Sonic Boom Measurements
- [Web-Only Document 46](#) - Recovering International Recyclables from In-Flight Service
- [WebResource 10](#) - Periodic Publication on Transformative Technologies at Airports
- [WebResource 9](#) - Airport Emergency Plan Development Tool
- [WebResource 8](#) - Integrating Social Media with Emergency Management at Airports

Current & Upcoming Projects

- **Current Projects**
 - [ACRP 01-36](#) - Advancing the Practice of State Aviation System Planning
 - [ACRP 01-39](#) - Creative Marketing Techniques to Improve Revenue Generation Partnerships
 - [ACRP 01-41](#) - Airport Blockchain Implementation Guidebook
 - [ACRP 01-42](#) - Review of Airport Governance Structures
 - [ACRP 01-43](#) - Conducting Consumer Research of Air Passengers
 - [ACRP 01-44](#) - 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 02-89](#) - A Primer and Framework for Considering an Airport Noise and Operations Monitoring System
(NOMS)

- [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 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 03-51](#) - Electric Aircraft of the Horizon -- An Airport Planning Perspective
- [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 03-56](#) - Airside Planning, Design, Construction, Operations, and Maintenance: WebResource
- [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 04-24](#) - Guidelines to Develop an Anti-Human Trafficking Action Plan for Airports
- [ACRP 04-25](#) - Airports and Communicable Diseases—Preparedness and Response
- [ACRP 04-27](#) - 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 08-03](#) - Construction Safety and Phasing Plans
- [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 11-01/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 S01-24](#) - Examples of Airports Providing Facility Space for Community Use
- [ACRP Synthesis 11-03/Topic S01-25](#) - Airport Parking Pricing Strategies
- [ACRP Synthesis 11-03/Topic S03-16](#) - Project Prioritization and Selection Processes for State Aviation Funding
- [ACRP Synthesis 11-03/Topic S04-26](#) - Managing an Emergency or Incident Associated with Flight Diversion at Airports
- [ACRP Synthesis 11-03/Topic S09-09](#) - Automated Pavement Condition Survey Practices at Airports
- [ACRP Synthesis 11-03/Topic S10-17](#) - Agricultural Operations on Airport Grounds
- [ACRP Synthesis 11-03/Topic S10-18](#) - Considerations for Establishing and Maintaining Successful Bee Programs on Airports
- **[Upcoming Projects](#)**
 - [ACRP 01-50](#) - Guidance for Improved Data Privacy Management for Airports
 - [ACRP 01-51](#) - Enhancing DBE and ACDBE Participation at Airports
 - [ACRP 01-52](#) - Championing the Airport System--Challenges the Paradigm

- [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](#) - Updates to ACRP Environmental Reports 11, 43, 147 & 160
- [ACRP 02-98](#) - Airport Energy Resiliency
- [ACRP 02-99](#) - Use of Equity and Environmental Justice Data to Support Airport Decision Making
- [ACRP 02-100](#) - Pathways to Airport Net Zero Carbon Emissions
- [ACRP 02-101](#) - Airport Employee Onboarding Environmental Guidebook
- [ACRP 03-65](#) - ACRP Policy and Planning Product Updates
- [ACRP 03-66](#) - Digital Twins for Airports
- [ACRP 03-67](#) - Peer-to-Peer Car Sharing Challenges and Opportunities at Airports
- [ACRP 03-68](#) - Integrated Contingency Planning for Small and Non-Hub Airports
- [ACRP 04-26](#) - Uncontrolled Terminal Evacuations: Planning, Response, and Recovery
- [ACRP 04-29](#) - Transportation Emergency Response Application (TERA): Migration Options Beyond 2020
- [ACRP 05-03](#) - Mitigating and Responding to Airport Cybersecurity Events
- [ACRP 06-08](#) - Human Factors in Airport Operations
- [ACRP 10-33](#) - Incorporating Emerging Ground Access Technologies at Airports
- [ACRP 10-34](#) - Airport Microgrid Toolkit Upgrade to ACRP WebResource
- [ACRP 11-01/Topic 12-02](#) - Legal Considerations for General Aviation (GA) Development at Airports
- [ACRP 11-02/Task 40](#) - Quick Response: Airport Organizational Redesign
- [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](#) - Review ACRP Website

Reports from the [National Academies Press](#) on Aviation

- [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

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

[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
- [AV070](#) - Aircraft/Airport Compatibility
- [AV090](#) - Aviation Security and Emergency Management
- [AV095](#) - New Users of Shared Airspace

CRP Panels

- [Project Panels Related to Aviation](#)

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.)

[TRB Virtual Careers in Motion Networking Fair](#)

December 8, 2021

Washington, DC

[11th International Conference on the Bearing Capacity of Roads, Railways, and Airfields*](#)

June 28, 2022

Trondheim, Norway

[Geospatial Data Acquisition Technologies in Design and Construction Summer Committee Meeting](#)

July, 2022

Austin, Texas

[TRANSED: Mobility, Accessibility, and Demand Response Transportation Conference](#)

September 12, 2022

online

[TRB Scenario Planning Conference](#)

September 19, 2022

Washington, D.C.

[National Aviation System Planning Symposium](#)

May 1, 2023

Irvine, California

[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 - 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

Contact or Questions: TRBLibrary@nas.edu