



TRANSPORTATION RESEARCH BOARD

TRB Snap Search: Aviation

TRB's involvement in research on Aviation from 2017-2018

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

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 year.

Subject Webpage

- [Airport Cooperative Research Program](#) at TRB

Recent Reports & Publications

- [Report 179](#) - Dispersion Modeling Guidance for Airports Addressing Local Air Quality Health Concerns
- [Report 178](#) - Guidance for Usage of Permeable Pavement at Airports
- [Report 177](#) - Enhancing Airport Wayfinding for Aging Travelers and Persons with Disabilities
- [Report 176](#) - Generating Revenue from Commercial Development On or Adjacent to Airports
- [Report 175](#) - Improving Intelligibility of Airport Terminal Public Address Systems
- [Report 174](#) - Green Stormwater Infrastructure – Volume 2
- [Report 174](#) - Green Stormwater Infrastructure – Volume 1
- [Report 173](#) - Use and Potential Impacts of AFFF Containing PFASs at Airports
- [Report 172](#) - Guidebook for Considering Life-Cycle Costs in Airport Asset Procurement
- [Report 171](#) - Establishing a Coordinated Local Family Assistance Program for Airports
- [Report 170](#) - Guidebook for Preparing Public Notification Programs at Airports
- [Report 169](#) - Clean Water Act Requirements for Airports
- [Report 168](#) - Runway Protection Zones (RPZs) Risk Assessment Tool Users' Guide
- [Report 167](#) - Guidebook for Developing Ramp Control Facilities
- [Report 166](#) - Interpreting the Results of Airport Water Monitoring
- [Synthesis 85](#) - Alternative Fuels in Airport Fleets
- [Synthesis 84](#) - Transportation Network Companies: Challenges and Opportunities for Airport Operators
- [Synthesis 83](#) - Preparing Airports for Communicable Diseases on Arriving Flights
- [Synthesis 82](#) - Uses of Social Media to Inform Operational Response and Recovery During an Airport Emergency
- [Synthesis 81](#) - Food and Beverage and Retail Operators: The Costs of Doing Business at Airports
- [Synthesis 80](#) - Estimating Truck Trip Generation for Airport Air Cargo Activity
- [Synthesis 79](#) - Funding Industrial Aviation.
- [Research Results Digest 26](#) - Synthesis of Information Related to Airport Practices
- [Legal Research Digest 33](#) - Overview of Airport Duties and Standards of Care in Airfield Accident Cases
- [Legal Research Digest 32](#) - Evolving Law on Airport Implications by Unmanned Aerial Systems
- [Legal Research Digest 31](#) - Preemption of Worker-Retention and Labor-Peace Agreements at Airports
- [Web-Only Document 34](#) - Assessing Aircraft Noise Conditions Affecting Student Learning–Case Studies
- [Web-Only Document 32](#) - Inn Improving AEDT Noise Modeling of Mixed Ground Surfaces
- [Web-Only Document 31](#) - Improving Stakeholder Engagement in Aircraft Accident Response Planning
- [Web-Only Document 30](#) - Development of a NOx Chemistry Module for EDMS/AEDT to Predict NO2 Concentrations
- [Impact on Practice](#) - ACRP and Higher Education: Building the Next Generation of Airport Professionals
- [Impact on Practice](#) - Integrating Airport Research and Decision-making: A Case Study
- [WebResource 2](#) – Airport Passenger Terminal Design Library

- [WebResource 1](#) – Aligning Community Expectations with Airport Roles
- [Miscellaneous Publications](#)
 - [ACRP CRP-CD-137](#) – The Vector-Borne Disease Airport Importation Risk Tool
- [TRB Special Reports](#)
 - [Report 320](#) - Interregional Travel: A New Perspective for Policy Making
- [Transportation Research Circulars](#)
 - [E-Circular 217](#) – Exploring New Directions for the National Household Travel Survey: Phase Two Report of Activities
- [Transportation Research Record: Journal of the Transportation Research Board](#)
 - [Volume 2626](#) – Aviation
 - [Volume 2603](#) – Public-Sector Aviation

Current & Upcoming Projects

- [Current Projects](#)
 - [ACRP 01-29](#) - Design and Development of a State Aviation Information Database
 - [ACRP 01-30](#) - Airport Management Guide for Providing Aircraft Fueling Services
 - [ACRP 01-31](#) - Innovative Solutions to Facilitate Accessibility for Airport Travelers with Disabilities
 - [ACRP 01-32](#) - Updating ACRP Report 16: Guidebook for Managing Small Airports
 - [ACRP 01-33](#) - Preparing for the Connected Airport and the Internet of Things
 - [ACRP 01-34](#) - Developing Innovative Strategies for Aviation Education and Participation
 - [ACRP 02-47](#) - Assessing Aircraft Noise Conditions Affecting Student Achievement--Case Studies
 - [ACRP 02-55](#) - Enhanced AEDT Modeling of Aircraft Arrival and Departure Profiles
 - [ACRP 02-67](#) – Airport Air Quality Management Guidebook and Resource Library
 - [ACRP 02-68](#) – Strategies for Reducing Local Stormwater Utility Fees for Airports
 - [ACRP 02-69](#) – Integrating Airport Sustainability and the NEPA Process
 - [ACRP 02-70](#) – Wetland Mitigation--A Guidebook for Airports
 - [ACRP 02-71](#) – Guidebook and Decision Tool for Managing Airport Stormwater Containing Deicers
 - [ACRP 02-72](#) – Developing a Comprehensive Renewable Resources Strategy
 - [ACRP 02-73](#) – Interactive Tool for Understanding NEPA at General Aviation Airports
 - [ACRP 02-74](#) – Integrating Climate Change Risk into Airport Management Systems
 - [ACRP 02-75](#) – Benefit-Cost Analyses Guidebook for Airport Stormwater
 - [ACRP 02-76](#) – Optimizing the Use of Electric Pre-Conditioned Air (PCA) and Ground Power Systems at Airports
 - [ACRP 02-77](#) – Revolving Funds for Sustainability Projects at Airports
 - [ACRP 02-78](#) – Climate Resilience and Benefit Cost Analysis--A Handbook for Airports
 - [ACRP 02-79](#) – Improving AEDT Modeling for Aircraft Noise Reflection and Diffraction from Terrain and Manmade Structures
 - [ACRP 02-80](#) – Quantifying Emissions Reductions at Airports from the Use of Alternative Jet Fuels
 - [ACRP 02-81](#) – Commercial Space Operations Noise and Sonic Boom Measurements
 - [ACRP 03-36](#) - Using Disaggregated Socioeconomic Data in Air Passenger Demand Studies
 - [ACRP 03-37](#) - Using GIS for Collaborative Land Use Compatibility Planning Near Airports
 - [ACRP 03-38](#) – Understanding FAA Grant Assurance Obligations
 - [ACRP 03-40](#) - Air Demand in a Dynamic Competitive Context with the Automobile
 - [ACRP 03-41](#) - Common Performance Metrics for Airport Infrastructure and Operational Planning
 - [ACRP 03-43](#) - Integrating Airport Ground Access and Metropolitan Surface Transportation Planning Efforts
 - [ACRP 03-44](#) - Building and Maintaining Air Service Through Incentive Programs
 - [ACRP 03-45](#) - Collecting and Sharing of Operational and Safety Data
 - [ACRP 04-04B](#) - Emergency Management Training for Airport Critical Incidents
 - [ACRP 04-19](#) – Airport Emergency Planning Template: NIMS - Incident Command System Compliance
 - [ACRP 04-20](#) – Design Considerations for Airport EOCs
 - [ACRP 04-21](#) – Emergency Communication Models for Persons with Disabilities and Non-English Speakers
 - [ACRP 04-22](#) – Evaluating Compatibility Zoning at General Aviation Airports
 - [ACRP 06-04](#) – Identifying and Evaluating Airport Workforce Requirements
 - [ACRP 08-02](#) – Integrating Collaborative Partnering for Airport Projects
 - [ACRP 09-15](#) – Building Information Modeling (BIM) Beyond Design
 - [ACRP 09-16](#) – Best Practices for Airport Obstruction Management
 - [ACRP 09-17](#) – Collecting, Applying, and Maintaining Pavement Condition Data at Airports
 - [ACRP 11-01](#) – Legal Aspects of Airport Programs
 - [ACRP 11-01/Topic 08-01](#) – Legal Issues Related to the Implementation and Operation of Safety Management

Systems for Airports

- [ACRP 11-01/Topic 08-04](#) – Legal Consideration in the Funding and Development of Multi-Modal Facilities
 - [ACRP 11-01/Topic 09-01](#) – Airport Public Health Preparedness & Response: Legal Rights, Powers & Duties
 - [ACRP 11-01/Topic 09-02](#) – Legal Issues Relating to Airports Promoting Competition
 - [ACRP 11-01/Topic 09-03](#) – Permitted Airport Involvement in Economic Development Efforts
 - [ACRP 11-02](#) – Quick Response for Special Needs
 - [ACRP 11-02/Task 27](#) – Update to Models for Risk Assessment of Runway Safety Areas
 - [ACRP 11-02/Task 28](#) – Recovering International Recyclables from In-flight Service
 - [ACRP 11-02/Task 29](#) – Research Roadmap in the Area of Airport Operations and Maintenance
 - [ACRP 11-03](#) – Synthesis of Information Related to Airport Practices
 - [ACRP 11-04](#) – Graduate Research Award Program on Public-Sector Aviation Issues
 - [ACRP 11-05](#) – Tactical Initiatives from the ACRP Strategic Plan
 - [ACRP 11-05/Task 4](#) – ACRP Problem Statement Process Assessment and Recommendations
 - [ACRP 11-08](#) – Task Order Support for ACRP Insight Events
 - [ACRP 11-08\(16-01\)](#) – Forum on Challenges to Implementing Successful Land Use Strategies at Airports
 - [ACRP 11-08\(16-02\)](#) – Forum on Economic and Social Sustainability at Airports
 - [ACRP 11-08\(16-03\)](#) – Forum on Airport Roles in Reducing Communicable Diseases Transmission
 - [ACRP Synthesis 11-03/Topic S01-12](#) – Airport Participation in Oil & Gas Development
 - [ACRP Synthesis 11-03/Topic S01-15](#) – Airport Operator Options for Delivery of FBO Services
 - [ACRP Synthesis 11-03/Topic S01-16](#) – Microgrids and their Application for Airports and Public Transit
 - [ACRP Synthesis 11-03/Topic S01-17](#) – Attracting Investment at General Aviation Airports Through Public-Private Partnerships
 - [ACRP Synthesis 11-03/Topic S02-16](#) – Airport Community, Water Quality Events, and the Aircraft Drinking Water Rule
 - [ACRP Synthesis 11-03/Topic S02-17](#) – Sustainability’s Role in Enhancing Airport Capacity
 - [ACRP Synthesis 11-03/Topic S02-18](#) – Airport Waste Management and Recycling Practices
 - [ACRP Synthesis 11-03/Topic S02-19](#) – Clean Vehicles, Fuels, and Practices for Airport Private Ground Transportation Providers
 - [ACRP Synthesis 11-03/Topic S03-14](#) – Simulation Options for Airport Planning
 - [ACRP Synthesis 11-03/Topic S03-15](#) – How Airports Plan for Changing Aircraft Capacity-the Effects of Upgauging
 - [ACRP Synthesis 11-03/Topic S04-19](#) – Incorporating ADA and Functional Needs in Emergency Exercises
 - [ACRP Synthesis 11-03/Topic S04-20](#) – Airport Incident Reporting Practices
 - [ACRP Synthesis 11-03/Topic S09-08](#) – Practices to Mitigate Alkali Silica Reaction (ASR) Effected Pavement at Airports
- [Upcoming Projects](#)
 - [ACRP 01-36](#) - Guidebook for Developing State Aviation System Plans
 - [ACRP 01-37](#) – Best Practices for State Aeronautics Division Performance Measures
 - [ACRP 01-38](#) – Fair Market Values at Small Airports
 - [ACRP 02-82](#) – Advancing Airport Transportation to Achieve Zero-Emissions Status
 - [ACRP 02-83](#) – Measuring Quality of Life in Communities Surrounding Airports
 - [ACRP 02-84](#) – High Resolution Spatiotemporal Population Distribution Data and Modeling for Aviation Noise Research Studies
 - [ACRP 02-85](#) – Commercial Space Vehicle Emissions Modeling
 - [ACRP 02-86](#) – Measuring the Impact of Temporary Flight Restrictions on Airports
 - [ACRP 02-87](#) – Methods for Evaluating Airfield Pavement Deicer Contributions to Airport Stormwater Quality
 - [ACRP 03-46](#) – Benefits and Challenges of Privatization: Guidance for Airport Policy-makers
 - [ACRP 03-47](#) – Redeveloping Airport Parking Facilities for New Sources of Non-Aeronautical Revenue
 - [ACRP 03-48](#) – Automation of Airside Vehicle Operations
 - [ACRP 06-05](#) – Handbook of Diversity and Inclusion Best Practices for Airports
 - [ACRP 10-26](#) – Airport Micro-grid Implementation Toolkit
 - [ACRP 11-02/Task 32](#) – Research Roadmap on Environmental Issues

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

- [America's Future in Civil Space: Proceedings of a Workshop-in Brief](#)
- [Transportation of Laboratory Animals: Proceedings of a Workshop](#)
- [An Assessment of ARPA-E](#)

Committees & Panels

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

[Technical Activities Division 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
- [AV050](#) - Airport Terminals and Ground Access
- [AV060](#) - Airfield and Airspace Capacity and Delay
- [AV070](#) - Aircraft/Airport Compatibility
- [AV080](#) - Light Commercial and General Aviation
- [AV090](#) - Aviation Security and Emergency Management

CRP Panels

- [Project Panels Related to Aviation](#)

Councils

- [A0040T](#) – Young Member Council

Recent and Upcoming Events

[Conferences \(co-sponsored by TRB\)](#) - Left hand menu “upcoming conferences by topic”

[Insight Event on Airport Roles in Reducing Transmission of Communicable Diseases](#)

March 6-7, 2018

Washington, D.C.

[Tenth National Aviation System Planning Symposium](#)

May 20-22, 2018

Anchorage, Alaska

[Webinars](#) – View upcoming webinars, suggest a webinar or add registration information

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](#)

Practice Ready Papers (PRP) Database - Papers with information that is ready for immediate implementation or requires minimal additional research or implementation effort - [prp.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