

INTRODUCTION TO ACRP

A HIGH-LEVEL OVERVIEW OF THE AIRPORT
COOPERATIVE RESEARCH PROGRAM

JANUARY 2025

ACRP

AIRPORT
COOPERATIVE
RESEARCH
PROGRAM

Newark Liberty International Airport, photographed by Nicolas Jehly



INTRODUCTION TO ACRP

Welcome to the airport industry! As you get your bearings as a new practitioner, it may feel overwhelming to learn more about the industry, connect with others who are interested in the field, and collect and find the information you need to be successful in your position.

The Airport Cooperative Research Program (ACRP) is a comprehensive free resource that offers all these things and more to help you familiarize yourself with the airport industry.

This outline serves as a brief introduction to ACRP: who we are, what we offer, and how you can get involved in our community and initiatives.

Stay Connected with ACRP

Sign up to receive email notifications about ACRP announcements and new ACR publications at www.trb.org/ACRP/ACRPGetNotfied.aspx



WHAT IS ACRP?

Research is necessary to solve common operating problems, to adapt appropriate new technologies from other industries, and to introduce innovations into the airport industry. ACRP serves as one of the principal means by which the airport industry can develop innovative near-term solutions to meet demands and address current challenges.

ACRP carries out applied research on problems that are shared by airport operating agencies. ACRP undertakes research and other technical activities in various airport subject areas, including design, construction, legal, maintenance, operations, safety, policy, planning, human resources, and administration.

ACRP is approved by Congress, funded by the Federal Aviation Administration (FAA), and managed by the Transportation Research Board (TRB), which is a program unit within the National Academies of Sciences, Engineering, and Medicine (NASEM). ACRP relies on the participation of the FAA and the broader airport industry to ensure the work is useful to U.S airport practitioners.

ACRP's governing board, the ACRP Oversight Committee (AOC), has representation from all sizes of airport owners as well as representatives from airports users, private businesses involved in developing and operating airports, academia, and other relevant stakeholders. These voting members of the AOC

are appointed by the U.S. Secretary of Transportation to serve as ACRP's independent governing board. Additionally, relevant industry associations participate on the AOC including Airport Council International-North America (ACI-NA), the American Association of Airport Executives (AAAE), the National Association of State Aviation Officials (NASAO), the Airport Consultants Council (ACC), Airlines for America (A4A), and the Environmental Protection Agency (EPA).



Figure 1: 2023 ACRP Ambassadors Orientation



ACRP SUBPROGRAMS AND PRODUCTS

Below is a quick reference guide for ACRP subprograms and products. These subprograms and products are used to produce and disseminate ACRP research and speaks to the breadth and depth of work across the industry.

Subprograms

ACRP Academic Programs: ACRP manages two programs directed at higher-ed students; the [Graduate Research Award](#) and the [University Design Competition](#).

The [Graduate Research Award](#) program is focused on fostering the next generation of aviation community leaders, in part, by encouraging graduate students at a U.S. university to outline and execute applied research on airport and related aviation issues. Awardees receive a \$12,000 stipend, access to a panel of expert advisors in the chosen research area, an opportunity to present at the TRB Annual Meeting following completion of their paper, and the potential to submit the paper for publication in the *Transportation Research Record*.

The [University Design Competition](#) challenges individuals and teams of undergraduate and/or graduate students working with faculty advisors at U.S. colleges and universities to consider innovative approaches to challenges facing U.S. airports.

Insight Events: ACRP Insight Events convene airport industry leaders and subject matter experts from various fields to encourage discussion and promote broader, deeper insight on topics of significance to airport operators. These events are designed to foster a communal environment that includes dialogue across sectors, institutions, and industries. Particularly important and rapidly evolving topics are featured as the main focal point of these events. Insight Events results in a summary of proceeding and discussions published in the *Transportation Insights*.

Legal Aspects of Airport Programs: The Legal Aspects of Airport Programs initiative is focused on providing legal research on topics of interest to the airport legal community. The studies focus on legal and regulatory issues and challenges affecting the airport industry, and their findings are published in ACRP's Legal Research Digest (LRD) series.

Quick Response Projects: There are times when issues arise that require immediate attention and cannot wait for the typical ACRP research processes. The ACRP Oversight Committee has allocated a portion of research funds that can be used, as needed, for such "quick response" needs. These funds are spent on limited-scope research tasks that require a quick turnaround.

Syntheses of Practice: The Synthesis of Practice report on the state of the practice based on literature reviews, surveys, and interviews of airport activities in critical areas. Syntheses also inform airports about innovations being used by others to solve problems. The synthesis of practice results in synthesis study publications.



Figure 2: Sample Research Report



Products

Research Reports: Reports are the main product of a research project and are sometimes written as guidebooks or manuals. Reports also have supplemental project material - such as appendices, which describe technical details, information gathering activities, or survey instruments; glossaries; and bibliographies.

Synthesis: The synthesis series report on the state of the practice based on literature reviews, surveys, and interviews of airport activities in critical areas.

Research Results Digests (RRDs): RRDs are used to promote early awareness of project results in order to encourage implementation. RRDs also summarize specific findings that emphasize how the research may be used. The contents are organized in terms of the problem and the solution to it, the findings, and the applications.

Legal Research Digests (LRD): The LRD series provides airport attorneys with a single repository of authoritative and well-researched papers on the issues affecting them and their clients.

Web-Only Documents: Web-only documents are fully searchable PDFs of contractor-prepared reports or supporting appendix materials. Web-only documents are linked to other related project products, as well as to the relevant project write-ups.

Impacts on Practice: The IOP series is designed to provide examples of how airport industry practitioners are using ACRP research results to assist them in their work. These shorter case studies summarize how real-world practitioners have used ACRP research at their facilities.

WebResources: ACRP's WebResources is an online product series that includes electronic resources, created in lieu of traditional ACRP Research Reports.

NAVIGATING THE ACRP WEBSITE

The [ACRP website](https://nap.nationalacademies.org/author/ACRP) includes a one-stop shop for reports, reference materials, and other resources that can help you with your day-to-day activities on the job. You can also submit problem statements for research topics and sign up to receive emails with ACRP announcements and publication notices. To access ACRP reports on the National Academies Press, please click the following link: <https://nap.nationalacademies.org/author/ACRP>. This will take you to a list of all ACRP's published products including reports, Syntheses of Practice, and Legal Research Digests (LRD). From here, you can search by publication series, by subject, and by publication type.



Figure 3: Sample Impacts on Practice



Figure 4: ACRP Page on the National Academies Press



GET INVOLVED

Submit a Problem Statement

Research problem statements for ACRP may be submitted by anyone at any time. The AOC reviews and selects problem statements that best serve the airport industry's needs. Submit a problem statement at <https://trb.org/ACRP/problemstatements.aspx>

Become a Panel Member

ACRP uses project panels to provide guidance on technical aspects of research projects selected to address the airport industry's needs. Each yearly research cycle includes a new cohort of aviation practitioners and other professionals that have expertise that is directly relevant to the selected research projects. ACRP projects are selected in July, and panel nominees are solicited in early August. In order to nominate yourself or a colleague, you will need to create a MyTRB account (see below).



Figure 5: 2023 Ambassador Class

Serve as an Ambassador

The ACRP Ambassador program is a premier practitioner engagement initiative within ACRP. Ambassadors tell the ACRP story, help practitioners access and apply research to solve airport problems, serve as conduit of information between airports and ACRP, and strive to develop the next generation of airport leaders.

TRANSPORTATION RESEARCH BOARD

The TRB's mission is to promote innovation and progress in transportation through research. They do this through three activities: (1) Research (the Cooperative Research Programs), (2) Advise (Consensus Studies), and (3) Convening (TRB Standing Committees).

TRB Aviation Standing Committees

TRB helps to fulfill its mission through the work of standing committees, which are networks of professional individuals who share an interest in a particular transportation topic. With over 170 committees, most every transportation topic is represented in the standing committee structure. Each committee holds regular meetings, disseminates research findings, and most importantly provides a forum for industry practitioners to discuss the issues facing the transportation industry today.

There are nine aviation-specific committees with additional subcommittees and councils, including one specifically for young professionals, that explore a wide range of issues affecting airports, such as how to optimize airport infrastructure and integrating new technologies into the existing aviation system.

Serving on a TRB committee provides an opportunity to contribute to the advancement of the state of the art and the state of the practice in transportation research and policy. Participants have included individuals from throughout the world with varied backgrounds, including industry, academia, consulting, and public office. This broad representation gives transportation professionals a chance to contribute, to learn, to debate and to share in their passion for transportation.



Most importantly, there are no costs or fees associated with participation—only the time you voluntarily contribute to the committee activities. Additionally, you don't need to be an official member of the committee to participate, you can become a friend of the committee just by creating an account at MyTRB, finding the committee(s) that interest you, and click the Become a Friend of this Committee button. More information about their activities, including their Annual Meeting can be found on the TRB homepage at www.TRB.org.

TRB Young Professionals Committee

The TRB Young Members Council - Aviation (YMC-A) was created in 2012 to directly interact with the young membership within its nine committees. YMC-A is open to those in the aviation industry 35 years and younger and is composed of over 100 members who are full-time associates of academia, airports, consultancies, government, and more. YMC-A's mission is to encourage and support the involvement, education, and growth of students and professionals within TRB and the aviation industry. For more information about the YMC-A's goals and activities, visit [YMC-A website](#) or email ymcatrb@gmail.com

MyTRB

Create a MyTRB account and request to become a 'Friend' of a committee to learn more about their specific activities and how to get involved. You may also subscribe to the TRB Weekly newsletter to receive TRB news on new products, projects, and other relevant news. For more information go to www.MyTRB.org.

WANT TO LEARN MORE?

For more information about ACRP and how to get involved, you can visit the [ACRP website](#) and create a free MyTRB account. To request additional information, please contact ACRP at acrps@nas.edu.

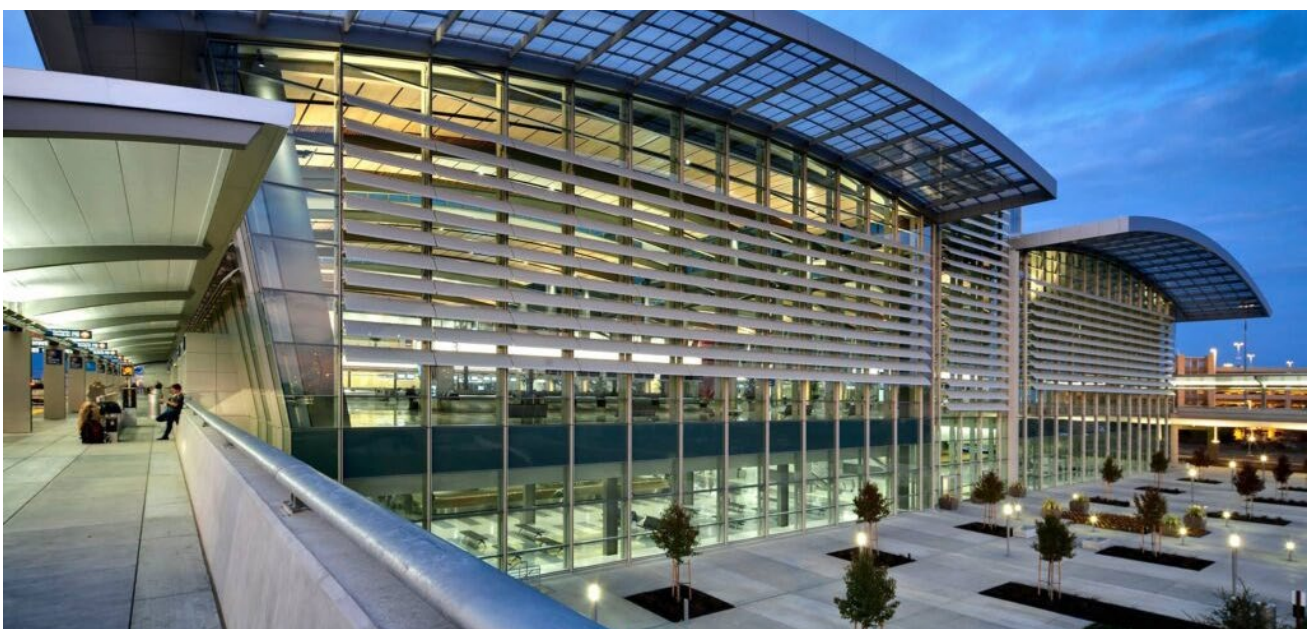


Figure 6: San Jose International Airport



APPENDIX A: ACRONYMS

A4A	Airlines for America
AAAE	American Association of Airport Executives
ACC	Airport Consultants Council
ACI-NA	Airport Council International-North America
ACRP	Airport Cooperative Research Program
AOC	ACRP Oversight Committee
FAA	Federal Aviation Administration
NASAO	National Association of State Aviation Officials
NASEM	National Academies of Sciences, Engineering, and Medicine
NCHRP	National Cooperative Highway Research Program
TCRP	Transit Cooperative Research Program
TRB	Transportation Research Board

