

INTRODUCTION TO ACRP

A HIGH-LEVEL OVERVIEW OF THE AIRPORT
COOPERATIVE RESEARCH PROGRAM

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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) has a comprehensive library of free resources 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.



Figure 1: San Jose International Airport

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). The FAA sponsors ACRP by providing funding and by fully participating in the ACRP process.

The AOC has representation from all sizes of airport owners as well as representatives from airport 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 the Airport Council International-North America (ACI-NA), American Association of Airport Executives (AAAE), National Association of State Aviation Officials (NASAO), Airport Consultants Council (ACC), Airlines for America (A4A), and the Environmental Protection Agency (EPA).



Figure 2: 2023 ACRP Ambassadors Orientation



ACRP SUBPROGRAMS AND PRODUCTS

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

Subprograms

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 Syntheses 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 syntheses of practice results in synthesis study publications.

Graduate Research Award Program: The purpose of the Graduate Research Award Program is to encourage applied research on airport and related aviation system issues and to foster the next generation of aviation community leaders. The focus of this research program is to help the public sector continue to improve the quality, reliability, safety, and security of the U.S. civil aviation system well into the foreseeable future. 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 publish that paper in the Transportation Research Record.

University Design Competition: 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 airport challenges.

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 areas for further research and a summary of proceedings and discussions published in the Transportation Insight series.



Figure 3: Sample Research Report



Publications

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

Synthesis Studies: The synthesis series reports on the state of 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 key findings, and 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 may be linked to other related project products, as well as to the relevant project write-ups.

Impacts on Practice (IOP): 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.



Figure 4: Sample Impacts on Practice

NAVIGATING THE ACRP WEBSITE

The [ACRP website](https://www.trb.org/ACRP) is a one-stop shop for reports, reference materials, and other resources that can help you with your day-to-day activities on the job.

To access ACRP reports, first select the "Publications" tab on the homepage. This will take you to a collection of ACRP resources including reports, Syntheses of Practice, and Legal Research Digests (LRD). From here, you can search by publication series, by subject, and by publication type. At the bottom of the page, search ACRP research by selecting ACRP Publications and using keywords to narrow your search even further.

Find ACRP Research

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Search: ☐ www.trb.org OR ☐ the TRID Database ☐ ACRP Publications

Figure 5: ACRP Publications Search Bar



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 6: 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 conduits of information between airports and ACRP, and strive to develop the next generation of airport leaders.

MyTRB

Create a MyTRB account to subscribe to the TRB Weekly newsletter and receive TRB news on new products, projects, and other relevant news. 'Friend' a committee to participate in committee meetings and other committee activities, and find information on the TRB Annual Meeting in Washington, D.C.

TRB Young Members Council - Aviation (YMC-A)

The Transportation Research Board (TRB) Aviation Group created the Young Members Council - Aviation (YMC-A) as a subcommittee to the group in 2012 as a means to more directly interact with the young membership within its nine committees. YMC-A is open to those in the aviation industry 35 years old 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. YMC-A hosts regular meetings that encourage the exchange of ideas and provide a platform to share individuals' career news or accomplishments in an open and supportive atmosphere.

Throughout the year, YMC-A facilitates multiple programs to encourage continuous participation of its members. Examples include the mentorship program, which matches members with industry veterans to learn about ranging topics of interest. The spotlight program highlights members' backgrounds, career journeys, industry outlooks, and personal anecdotes that better tell the stories of who are YMC-A members. For more information about the YMC-A's goals and activities, please visit [YMC-A website](#) or email ymcatrb@gmail.com



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 acrp@nas.edu.

APPENDIX A: ACRONYMS

A4A	Airlines for America
AAAE	American Association of Airport Executives
ACC	Airport Consultants Council
ACINA	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

