

The Airport Cooperative Research Program

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ACRP Ambassador

*Ambassadors are volunteers, not employees
of the National Academies or TRB.*

The National Academies of
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TRANSPORTATION RESEARCH BOARD

ACRP | AIRPORT
COOPERATIVE
RESEARCH
PROGRAM

What You Will Learn Today

- **What is the Airport Cooperative Research Program**
- **How Can It Help You**
- **How You Can Participate in ACRP**
- **Where to Find ACRP Publications**
- **Bonus: Learn New Acronyms**

ACRP – What's in it for You?

- **Save Time**
- **Save Money**
- **Enhance Quality**
- **Improve Customer Service**

Airports Are Complicated



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PROGRAM

Who Has...

- **Heard of ACRP?**
- **Used an ACRP Publication?**
- **Participated on a Panel?**
- **Served as a Consultant for ACRP Project?**



Organization

National Academies of Sciences,
Engineering and Medicine (NASEM)

Transportation Research Board (TRB)

Airport Cooperative Research
Program (ACRP)

What is ACRP?

- An **industry-driven**, applied research program that develops near-term, practical solutions to airport challenges
- **Sponsored by FAA**, managed by TRB
- \$15 million annual funding
- Research is conducted by contractors
- **Volunteer panels** develop scope, select contractors, oversee research, and review results
- The ACRP Oversight Committee reviews, selects, and funds projects

ACRP Research Areas



Administration



Human Resources



Environment



Design



Policy and Planning



Construction



Safety



Maintenance



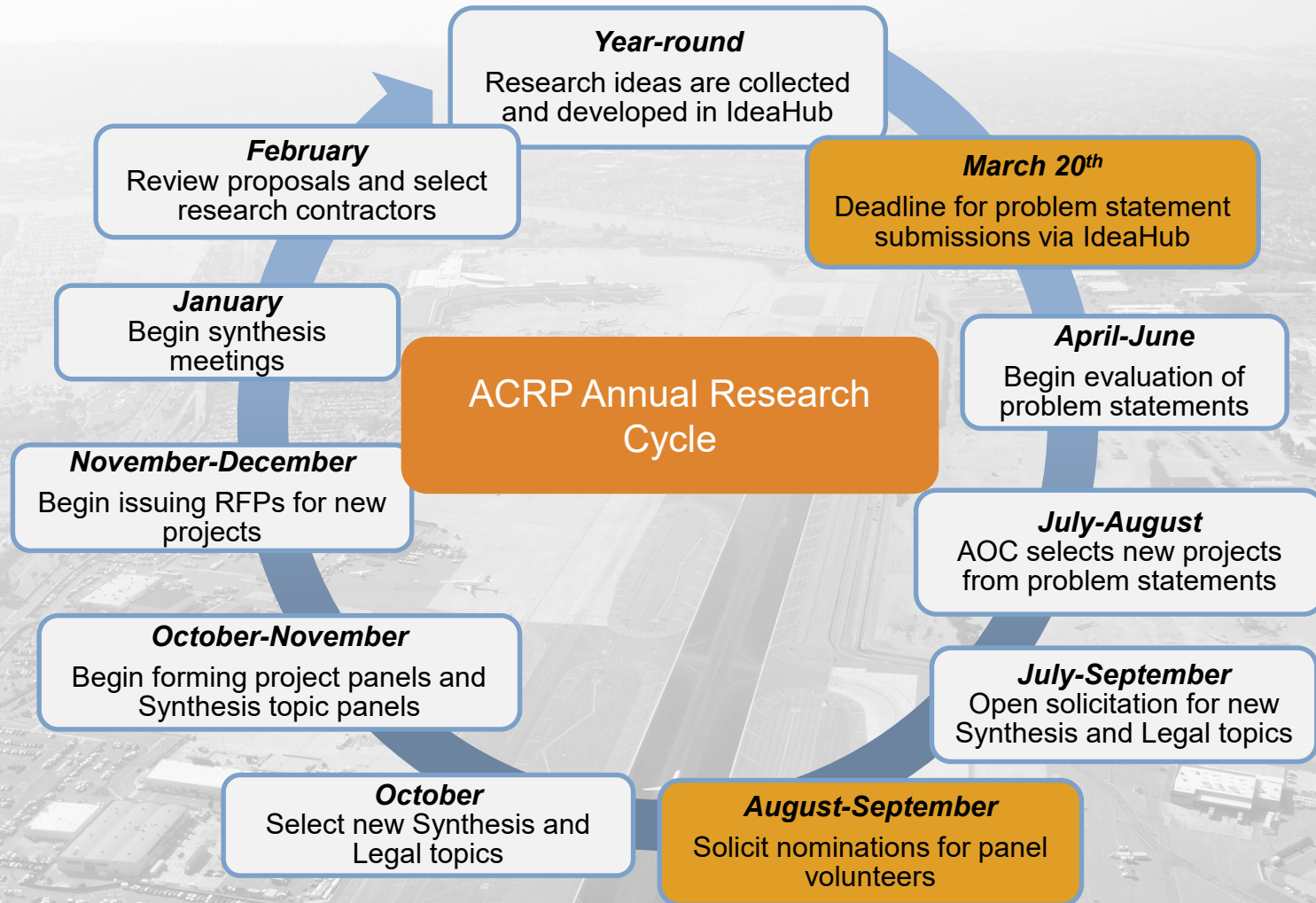
Security



Operations

Special Projects

ACRP Annual Research Cycle



ACRP Today

600+ research projects authorized since 2006

- More than 420 ACRP-produced resources are readily available to industry practitioners

700+ industry volunteers participating

- Participants come from airports, airlines, consulting firms, academia, state and federal government agencies, and industry associations

My ACRP Panels



How ACRP Can Help You

- **Research Report**
- **Synthesis Report**
- **Legal Research Digest**
- **Research Results Digest**
- **Impacts on Practice**
- **Workshops: On-Line and On-Location**

Research Topics

Your Key Problems at Your Airport?



Research Topic Examples

- # 159 – **Pavement Maintenance** for General Aviation Airport
- # 192 – **Aircraft Fueling** Management Guide
- # 195 – **Airport Obstruction** Management Guidebook
- # 206 – **Land Use** for General Aviation Airports
- # 213 – **Establishing Market Rent** at Small Airports

More Research Projects

77 – **Business Plan** Guidebook for General Aviation Airports

176 – **Generating Revenue** from Commercial Development On or Adjacent to Airports

173 – **PFAS** at Airports

188 – **Climate Risk** Management

TMR (Too Much Research)?

“I am always ready to learn, although I do not always like being taught.”

Winston Churchill



Impacts on Practice Examples

Integrating Airport **Research & Decision-making:**
A Case Study

ACRP and Higher Education: Building the
Next Generation Airport Professionals

Learning to Negotiate Airport / Airline
Agreements

Finding Solutions to **Information Technology**
Issues at Airports

Synthesis Examples

83 – Preparing Airports for **Communicable Diseases** on Arriving Flights

94 – **Attracting Investment** at General Aviation Airports Through Public-Private Partnerships

105 – **Airport Surface Weather Observation** options for General Aviation

Legal Research Digest Examples

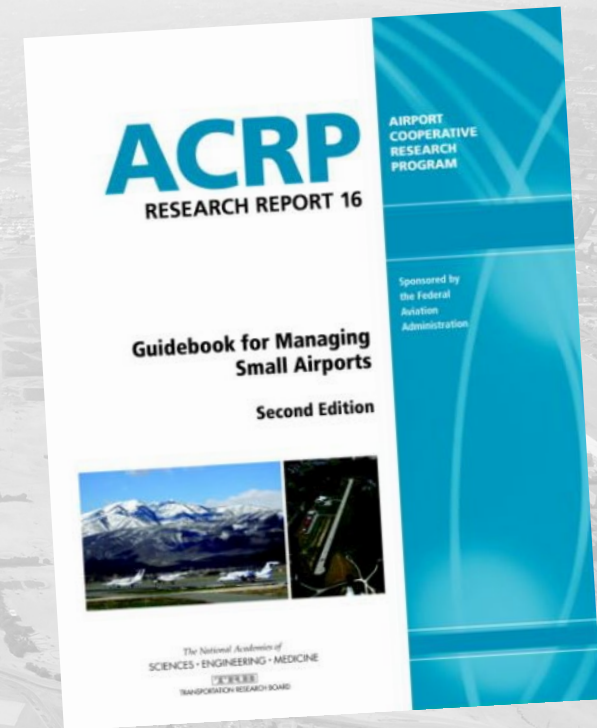
28 – Operational and Legal Issues with **Fuel Farms**

32 – Evolving Law on Airport Implications by **Unmanned Aerial Systems**

34 – Airport **Public Health Preparedness** and Response: Legal Rights, Powers, and Duties

Report 16: Managing Small Airports

1. Introduction
2. Airport Roles, Classifications & Regulations
3. Business Financial & Administrative
4. Operations
5. Asset Management & Planning for Development
6. Communication & Promoting the Airport
7. Commercial Service



Report 16: Managing Small Airports

1	Chapter 1	Introduction
2	1.1	Approach to Project
5	1.2	Intended Audience
6	1.3	Industry Survey
7	1.4	Common Resources
12	Chapter 2	Airport Roles—Key Classifications and Regulations in the Airport System
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21	2.2	Key Types of Regulations for Airport Management
23	Chapter 3	Business—Financial and Administrative Management
23	3.1	Revenue Generation and Use
28	3.2	Budgets
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89	Chapter 4	Operations—Running a Safe, Secure and Efficient Airport
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95	4.2	NOTAM Management

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3.6 Leases

Key Insights

Leases typically comprise a complex mixture of factors that represent a cost basis at a certain point in time.

While each lease consists of the same or similar core elements, each particular lease arrangement must be carefully tailored to the specific circumstances and characteristics of a landlord–tenant relationship.

It can be difficult to ensure the proper blend of lease term, rate of return or market rate, rate adjustment and reversionary requirements.

Because leases are effectively long-term partnerships, they also need to ensure effective routine maintenance, the service levels expected, the capital investment required and the ability of the airport to inspect and take corrective action, if necessary.

Key Definitions

Base rent: A set amount, used as a minimum rent in a lease, with provisions for increasing the rent over the term of the lease.

Effective rent: The actual rental rate to be achieved by the landlord after deducting the value of concessions from the base rental rate paid by a tenant, usually expressed as an average rate over the term of the lease.

Fair market value (FMV): An estimate of the market value of a property, based on what a knowledgeable, willing and unpressured buyer would probably pay to a knowledgeable, willing



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Guidebook for Managing Small Airports - Second Edition

Business—Financial and Administrative Management 47

the needs of the community. For nonaeronautical use on airport property, charging fair market value is the standard. The assurance for hangar construction enables the airport sponsor to enter a long-term lease for hangar construction and impose appropriate terms and conditions. *ACRP Legal Research Digest 23: A Guide for Compliance with Grant Agreement Obligations to Provide Reasonable Access to an AIP-Funded Public Use General Aviation Airport* provides additional information about the grant assurances that limit the sponsor from unreasonably restricting access for aeronautical activity at GA airports.

Keeping these grant assurances in mind when seeking to establish new airport property leases, the airport sponsor must begin the process with a strategic overview of the existing leases (if any), as well as the strategic goals and leasing policy of the organization. A best practice, especially at small airports with multiple leases, is to develop a leasing policy as described in Section 6.2.1 of *ACRP Report 47: Guidebook for Developing and Leasing Airport Property*, which is approved by the airport's policymaking board. The leasing policy establishes standard terms and requirements to serve as a leasing and airport development guide and provides a fallback position to aid in lease negotiation. It should also correlate with the airport's *minimum standards*. While strategically targeted industries can always be incentivized through beneficial lease terms, the airport must seek to promote a balance between economic development and the business needs of tenants.

Common Types of Airport Leases

As described in *ACRP Report 47*, there are many common types of airport lease agreements:

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[by Subject](#)

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Guidebook for Developing and Leasing Airport Property

TRB's Airport Cooperative Research Program (ACRP) Report 47: Guidebook for Developing and Leasing Airport Property explores issues associated with developing and leasing available airport land and summarizes best practices from the perspective of the airport sponsor.

The guidebook includes a diverse set of case studies that show several approaches airports have taken to develop and lease property for both aeronautical uses and non-aeronautical uses.

The project that developed the guidebook also produced two presentation templates designed to help airports in effective stakeholder communication regarding developing and leasing airport property. The templates, designed for a non-technical audience, provide content, examples, and definitions for a presentation to community stakeholders. The templates, one for [aeronautical use development presentations](#), and the second for [non-aeronautical use development presentations](#) are available only online.

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the property. Sublease agreements must also conform to the airport's minimum standards.

ACRP Legal Research Digest 30: Contract Risk Management for Airport Agreements also provides a general overview of the types of agreements, including leases as well as other airport agreements and the risks associated with each type of agreement. The FAA does not allow lease terms longer than 50 years and encourages shorter terms.

Common Lease Elements



An airport land or building lease agreement template, a hangar lease agreement template and a farmland lease agreement template are included in *ACRP WebResource 6* (crp.trb.org/acrp0132). The farmland lease agreement template has sample conditions specific to agricultural operations. While FBO and SASO leases are more specific to the operation at each airport, they are typically built upon a land or building lease with additional operating requirements. The templates in *ACRP WebResource 6* are intended as a starting point and **must be customized through a local legal review** to ensure that all applicable local, state and federal requirements are incorporated.

The primary difference between a land or building lease and a rental agreement is that, for the land or building lease, the lessee has the responsibility for and control over the operation of the building. In a rental agreement, the lessee is obtaining the right to occupy the space, but the responsibility for and control of the building typically remain with the lessor.

A rental agreement includes many of the same elements as a land lease, except for the elements associated with the operations and maintenance of the facility, because that responsibility would typically rest with the lessor.

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This is a sample hangar lease agreement template that must be customized through a local legal review. Bold and highlighted text needs to be completed to align with local requirements. Highlighted text in italics provides explanation such as optional sections. See [Airport Cooperative Research Program \(ACRP\) Report 16, Guidebook for Managing Small Airports 2nd Edition Section 3.6](#) for additional airport lease information.

Airport Hangar Rental Agreement

THIS AGREEMENT is made between the **OWNER NAME**, hereafter **Lessor**, and the undersigned **LESSEE NAME**, hereafter **Lessee**. The **Lessor**, in consideration of the conditions set forth, leases to **Lessee** that portion of the **AIRPORT NAME** situated in the County of **COUNTY**, State of **STATE**, known and described as "**T**" Hangar/Tie-Down Number **HANGAR NUMBER** (the "Premises") commencing on **DATE** (Commencement Date).

Lessor and **Lessee**, in consideration of the conditions set forth, agree as follows:

1. **TERM**: Except as otherwise provided herein, the Premises are leased for **ONE YEAR**, starting the commencement date. Provided the Lessee is not in default under the Lease, the Lease will automatically be extended for **one year** unless either party gives the other **sixty (60)** days written notice to terminate. Either party may terminate the lease with **sixty (60)** days written notice, provided Lessee is not in default. **Lessee** will be liable for rental charges until possession is delivered to **Lessor** or for **sixty (60)** days after written notice of election to terminate whichever is longer.
2. **RENTAL FEE**: The rent of **\$RENT** per month shall be paid in advance on or before **the first day of each calendar month** beginning **START DATE**, and shall continue to be paid as long as this Agreement remains in full force and effect. The rent amount per month includes **DEFINE INCLUDED UTILITIES**. The rent will be adjusted annually in the sole discretion of the Lessor.

INSERT ANY OTHER FEES ASSOCIATED WITH THE AGREEMENT HERE

Lessee agrees to pay a late fee of **\$ per day for each day** the rent amount is due and remains unpaid.

All rent payments, security deposit, and late fees shall be made by certified check, personal check or money order payable to the "**PAYEE NAME**" and delivered to one of the following addresses on or before the due date and without demand:

LESSOR'S NAME AND ADDRESS

Report 16: Managing Small Airports

240	Chapter 6	Communication—Promoting the Airport and Connecting with the Community
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244	6.2	Branding
245	6.3	Marketing Plans
248	6.4	Communication Tools
251	6.5	Economic Impact
254	6.6	Emergency Communication
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286		Aviation-Related Abbreviations
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Note: Photographs, figures, and tables in this report may have been converted from color to grayscale for printing. The electronic version of the report (posted on the web at www.trb.org) retains the color versions.

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Crisis Communication Plan

A crisis communication plan helps determine how an airport will communicate to news media, passengers, families, airport personnel and stakeholders to mitigate potential reputational damage. A communication plan should include on-airport groups (e.g., tenants, passengers, employees, vendors), off-airport groups (e.g., federal and state government authorities), emergency services (e.g., police, fire, ambulance) and geographic neighbors (e.g., industrial facilities, hotels, rental car companies, air freight facilities, hospitals, schools). The sidebar lists the elements of a crisis communications plan.

A crisis communication plan can be part of an airport emergency plan (AEP). The FAA offers guidance for developing an AEP in [FAA Advisory Circular 150/5200-31: Airport Emergency Plan](#). While an AEP is required for Part 139 airports, all GA airports can benefit from adopting and implementing certain parts of such a plan. The University of Minnesota's Airport Technical Assistance Program developed [Emergency Guidebook for General Aviation Airports: A Guidebook for Municipal Airport Managers](#) as well as a [General Aviation Airport Emergency Plan Template](#) for use in emergency planning and communication planning.

Key resources for airports to use when developing a crisis communication plan include the following:

- [ACRP Synthesis 73: Emergency Communications Planning for Airports](#)
- [ACRP Report 12: An Airport Guide for Regional Emergency Planning for CBRNE Events](#)
- [The International Air Transport Association \(IATA\)'s Crisis Communications and Social Media: A Best Practice Guide to Communicating in an Emergency](#)

The IATA document and *ACRP Synthesis 73* include sample crisis statements, forms and case studies for use when developing your plan.



ELEMENTS OF A CRISIS COMMUNICATION PLAN

- Statement of company communication policy, including authorized spokespersons
- Outline of the communication organization and its interface with the corporate crisis management team
- Description of functional roles and responsibilities

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Basic Plan

Purpose

The purpose of this plan is to ensure the safe and efficient handling of any emergency situation that may arise at _____ Airport. It is intended to assist the Airport Manager, airport staff, and emergency organizations with carrying out their responsibilities efficiently in case of an airport emergency.

Note that, in addition to this document, a brief reference guide titled *Airport Emergency Procedures* is included in the emergency kit located at the airport, which provides additional guidance to specific emergency situations.

Introduction

We recognize that all emergency situations cannot be anticipated. If an emergency situation arises that is not covered in this plan, the Airport Manager has the authority to direct such actions as he or she may deem necessary.

This plan was approved and adopted on _____.

Airport Emergency Plan Coordinator

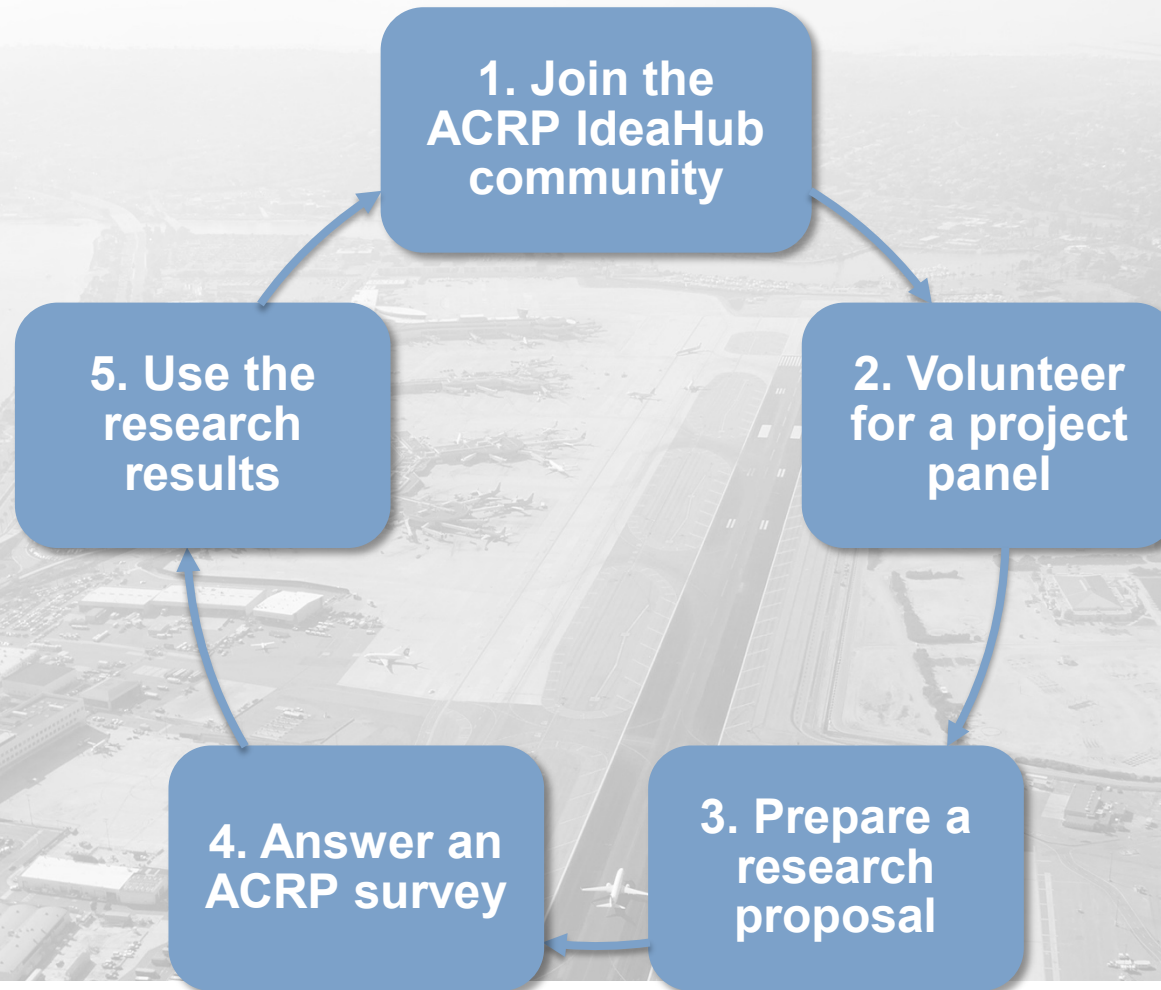
The coordinator of this plan will be the Airport Manager or his or her designated representative, who will be responsible for the administration and review processes of this plan and who will ensure full implementation of these procedures during any emergency or disaster condition. Emergency response will vary depending on hazard-specific conditions as contained herein, and Incident Command will be established consistent with _____ County emergency response procedures and National Incident Management System (NIMS) guidelines.

Basic Assumptions

In developing this plan, we considered the following:

- How best to work together as a team and use the resources of the city, county, and airport.
- How to manage communications at the airport during an emergency.
- How to hand off control as the availability of staff and the nature of the emergency changes.
- How to coordinate radio frequencies so that all emergency responders can communicate effectively with each other.

Five Ways to Get Involved



Volunteer Panel – How & Why

- **How:**
 - **Select from Proposed Project List each August**
 - **Self-Nominate (don't be shy)**
- **Why: Benefits of Serving on a Panel**
 - **Learn More about an Area of Interest**
 - **Meet New People / Expand Your Network**
 - **Free Trip to Washington DC**

Are You Using ACRP Research at Your Airport?

Did you use Report 146 to develop a new transportation plan?



Or maybe you used Synthesis 57 to plan for an unusual influx of air traffic for the Super Bowl?



**ACRP WANTS TO HEAR
HOW YOU USE THE
RESEARCH!**

Other Ways to Participate



The screenshot shows the top of the ACRP website. The header includes the National Academies of Sciences, Engineering, and Medicine logo on the left and the TRB Transportation Research Board logo on the right. A navigation menu lists: About TRB, Annual Meeting, Calendar, Committees & Panels, Programs, Projects, Publications, Resources & Databases, and Provide Feedback. Social media icons for Facebook, LinkedIn, Twitter, YouTube, and Instagram are also present.

AIRPORT COOPERATIVE RESEARCH PROGRAM

Problem Statements – Now that's a great idea! Learn what makes a great problem statement.

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ACRP publications contain the findings of individual research projects managed by...
- Projects**
View all active and completed projects of the ACRP. All ACRP research ideas are...
- Subprograms**
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- Getting Involved**
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