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ACRP gathers data to ensure the program continues to provide value to the industry.

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These are the practitioners that use ACRP products; their demographics, program awareness, personal benefit gains.

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Airport practitioners share how they have benefited from ACRP.
What is ACRP?

Airports need unbiased and reliable research to solve common problems, learn about new technologies, and assess innovations in service and operations. In 2005, the Airport Cooperative Research Program (ACRP) was established by the Federal Aviation Administration (FAA) to meet this need.

Each year, ACRP receives funding from the FAA, ACRP’s program sponsor. With this budget, ACRP funds research projects and activities to help airports surmount real-world challenges and problems.

Every ACRP research project culminates in a research product, which may take one of the forms on the right. ACRP also produces guidelines, tools, databases, and models that are available for free to address the industry’s needs.

ACRP RESEARCH PRODUCTS

- Research Reports
- Synthesis Reports
- Legal Research Digests
- Research Results Digests
- Web-Only Documents
- WebResources
WHY ASSESS ACRP'S IMPACT?
Why assess ACRP's impact?

Why assess the program's impact on the industry? ACRP has been active for 16 years, and the purpose of impact assessment is to ensure the program is evolving with the needs of airport practitioners and remains relevant. The following questions were important when designing the impact measurement strategy.

**VALUE**
Does the program continue to provide value to the airport industry?

**ACCESSIBILITY**
Does the program provide information in the most digestible and useful manner?

**RELEVANCY**
Does the program provide research on topics that are relevant and current?
ACRP's strategy for measuring impact in 2021

ACRP continues to measure its impact on the airport industry to ensure its products are benefitting practitioners. Traditionally, ACRP has focused on the number of downloads or views a product receives as a key indicator of program effectiveness, similar to a for-profit company’s bottom line. Download numbers are important and prove that our products are consumed across the airport industry. In 2021, ACRP decided to enhance its understanding of how the program was benefiting end users by gathering information from different sources. The program began a new survey strategy, reaching out to airports themselves to see how they have benefitted from ACRP. Additionally, to collect information on implementation benefits, ACRP surveyed project participants and provided an opportunity on the website for individuals to share how they benefited from the program.

Overall, respondents found the program provides value by producing research that is useful and relevant, addressing challenges airports may not have the resources to solve on their own. ACRP will continue to measure impact regularly to maintain program relevance, remain connected with the airport community, and track industry trends.
WHAT DOES ACRP PRODUCE?
Research Reports, often written as guidebooks or manuals, are the main product of ACRP. They are often accompanied by tools, models, and databases.

- **Total Research Reports published to date:** 251
- **Average Number of Research Reports published annually:** 17
- **Research Reports published in 2021:** 11

**TOP TEN VIEWED REPORTS - ALL TIME**

<table>
<thead>
<tr>
<th>Research Report</th>
<th>Online Views</th>
</tr>
</thead>
<tbody>
<tr>
<td>Report 175: Improving Intelligibility of Airport Terminal Public Address Systems</td>
<td>30,503</td>
</tr>
<tr>
<td>Report 54: Resource Manual for Airport In-Terminal Concessions</td>
<td>22,941</td>
</tr>
<tr>
<td>Report 98: Understanding Airline and Passenger Choice in Multi-Airport Regions</td>
<td>21,548</td>
</tr>
<tr>
<td>Report 20: Strategic Planning in the Airport Industry</td>
<td>20,813</td>
</tr>
<tr>
<td>Report 143: Air Cargo Facility Planning and Development- Final Report</td>
<td>20,250</td>
</tr>
</tbody>
</table>
Report 25, a consistent favorite

Since publication, Report 25: Airport Passenger Terminal Planning and Design, Volume 1 has consistently been the most viewed ACRP Report. This graph shows the evolution of the top ten most viewed Reports*.

*Data from National Academies Press. Some reports do not show downloads from publication date as data is incomplete.
ACRP reports sorted by topic

The most common topic included in reports was "Terminals and Facilities."
SYNTHESES OF AIRPORT PRACTICE

Syntheses report on the state of the practice based on literature reviews and surveys of recent activities in critical areas. Syntheses also inform airport managers about innovations being used by others to solve problems.

**Top 5 Viewed Syntheses - All Time**

<table>
<thead>
<tr>
<th>Synthesis Title</th>
<th>Online Views</th>
</tr>
</thead>
<tbody>
<tr>
<td>Synthesis 81: Food and Beverage and Retail Operators: The Costs of Doing Business at Airports</td>
<td>19,760</td>
</tr>
<tr>
<td>Synthesis 8: Common Use Facilities and Equipment at Airports</td>
<td>12,861</td>
</tr>
<tr>
<td>Synthesis 1: Innovative Finance and Alternative Sources of Revenue for Airports</td>
<td>8,294</td>
</tr>
<tr>
<td>Synthesis 2: Airport Aviation Activity Forecasting</td>
<td>6,506</td>
</tr>
</tbody>
</table>

**Yearly Output of Syntheses**

The Synthesis program was put on hold for much of 2021, but began again at the end of the year.

LEGAL RESEARCH DIGESTS

LRDs report on timely legal issues, compile case law, or recommend solutions to specific problems.

**TOTAL LRDS PUBLISHED TO DATE**

45

RESEARCH RESULTS DIGESTS

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.

**TOTAL RRDS PUBLISHED TO DATE**

30
WebResources are an online product line that include electronic resources, topical libraries, training videos, and alternative format research reports.

Pageview and User data collected from Google Analytics tracking the WebResources website. “Pageviews” are the total number of pages viewed. “Users” are visitors identified as new or returning.

TOTAL PAGEVIEWS IN 2021: 59,037

TOTAL USERS IN 2021: 20,628

USERS LOCATED IN 44 STATES IN 2021

TOP WEBRESOURCE PAGES BY PAGEVIEWS

<table>
<thead>
<tr>
<th>Page Title</th>
<th>Resource Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>“The Players in the Air Cargo Industry”: WR 1- Aligning Community Expectations with Airport Roles</td>
<td></td>
</tr>
<tr>
<td>“Types of Aircraft Utilized for Air Cargo”: WR 1- Aligning Community Expectations with Airport Roles</td>
<td></td>
</tr>
<tr>
<td>“Identifying Your Airport’s Strengths and Weaknesses”: WR 1- Aligning Community Expectations with Airport Roles</td>
<td></td>
</tr>
<tr>
<td>“Compilation of DOT and FAA Airport Legal Determinations and Opinion Letters”: LRD 21</td>
<td></td>
</tr>
<tr>
<td>“Develop Strategies for New Airport-Generated Revenue”: WR 1- Aligning Community Expectations with Airport Roles</td>
<td></td>
</tr>
</tbody>
</table>
WHO DOES ACRP IMPACT?
ACRP User Profiles

The typical users of ACRP products are 35 to 44 years old; male; work at an airport, a consultancy, or in academia; and are in executive management.

Data collected from ACRP website through Google Analytics, and ACRP survey results.

AGE
35-44 years old

GENDER
71% Male, 29% Female

INDUSTRY
Airport, Consultancy, Academia

POSITION
Executive Management
Most practitioners downloading ACRP products were airport practitioners, consultants, and academicians.

Data from a survey sent to all who downloaded an ACRP publication in 2018.

...and by organizational level

Those who worked in executive management and technical roles downloaded ACRP products most.

Data from a survey sent to all who downloaded an ACRP publication in 2018.
Which airports are familiar with ACRP?

ACRP went straight to the source and surveyed NPIAS (National Plan of Integrated Airport Systems) airports*, asking how they have been impacted by our program. The below map shows all airports that responded to the survey and whether they were aware of ACRP prior to receiving it. 55 percent of those that responded were not aware of the program, many of whom expressed interest in becoming engaged.

![Map showing awareness of ACRP among surveyed airports]

The map above represents airport managers that indicated awareness of ACRP. Blue marks signify airports that were already aware of ACRP, orange marks signify those that were not aware, and teal marks were airports that responded to the survey, but not to this question. The pie chart shows the percentage of airports that responded to the survey indicating they were aware, 45%, and unaware, 55%. *Not all NPIAS airports were surveyed due to lack of contact information.
Eight out of every ten NPIAS airports in the country are General Aviation airports. As shown below, the survey response rate was consistent with the NPIAS population among airport sizes and types.
How do practitioners find ACRP products?

The method to locate ACRP products tended to vary among industries. Airports indicated finding products through ACRP’s website, while those from consultancies and universities used National Academies Press. All organization types cited that they ‘came across it doing online research’ as the second highest response.
ACRP practitioners found benefit in volunteering with the program.

ACRP offers many opportunities to engage with the program. About 80 to 90 percent of respondents said volunteering gave them a chance to give back to the industry, network with peers, be on the cutting edge of issues, and further their professional development.

<table>
<thead>
<tr>
<th></th>
<th>No Benefit</th>
<th>Some Benefit</th>
<th>Significant Benefit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chance to give back to industry</td>
<td>7.6%</td>
<td>48.1%</td>
<td>44.3%</td>
</tr>
<tr>
<td>Networking</td>
<td>17.7%</td>
<td>48.1%</td>
<td>34.2%</td>
</tr>
<tr>
<td>Opportunity to be on cutting edge of industry issues</td>
<td>13.9%</td>
<td>43.0%</td>
<td>43.0%</td>
</tr>
<tr>
<td>Professional development</td>
<td>8.9%</td>
<td>45.6%</td>
<td>45.6%</td>
</tr>
</tbody>
</table>

Percentages measured across rows equal to 100%. Totals may differ due to rounding. Data comes from the survey of those that downloaded ACRP products in a one year timespan.
HOW DOES ACRP IMPACT THE INDUSTRY?
How has ACRP benefited airports?

Airport practitioners indicated "improved planning and preparedness" as the greatest benefit gained from ACRP. These are the top ten responses given.
Survey respondents answered why they downloaded an ACRP product. "Getting ideas for new and effective practices used by other airports" was the highest response.
Airports share use cases of ACRP products.

Airport practitioners were asked to provide specific examples of ACRP products used and benefits they provide. Of those that responded to the survey, 23 percent took the time to include an extended response to this question, and many included praise for these products.

How do practitioners use ACRP products? We asked and they shared.

“When I was a new airport manager, ACRP Report 16 proved to be invaluable. I have used several other ACRP products to help me understand grant assurances, regulations, etc.” - Statesboro Bulloch County Airport, GA

“ACRP Report 32 is the bible for GA Airports wildlife mitigation efforts. Used by OXB Airport Management. Info also used by other non-airport municipal agencies. Practices in effect from publish date 2010 to today.” - Ocean City Municipal Airport, MD

“We have used several ACRP products over the years that I have managed this facility. When I was new to the job, I found them essential since there was no turn over from the previous manager and I was expected to pick up the necessary skills rather quickly. I routinely pass out copies of the one which describes the AIP process and regulatory issues for new members of my airport authority.” - Jackson County Airport, GA

“Upon entering into the Aviation industry as an Airport Manager I read several ACRP editions to self educate and learn about the industry.” - Curtis Field Airport, City of Brady, TX

“ACRP Report 58 is critical for educating new airport authority members.” - Coastal Carolina Regional Airport, NC

“...ACRP products are treated very much like any other source of information that we may find on the web, through conversations with airport colleagues, obtain at conferences, etc. It is difficult to quantify that XYZ Report is being used exclusively for XYZ practice. Rather it is a valuable tool that is part of a bigger pool of resources used by the Airport when making decisions on solutions to Airport related challenges.” - Lincoln Airport, NE

“I have used just about every ACRP report.” - Cherry Capital Airport, MI
What barriers exist to implementing ACRP research results?

Practitioners provided responses.

ACRP strives to produce research results that are easily implemented, and 25 percent of survey respondents said they experienced no barriers in doing so. Of those indicating a barrier, the most common was lack of funding (25 percent), followed by other varying issues. This information is important for ACRP as it continues to make products accessible to airports of all sizes and locations, and seeks to facilitate implementation.
Survey respondents were given an open ended question asking what key challenges airports face today. The most common response was lack of funding, often for expansion of GA airports, followed by hangar development, and compliance to regulations.
ACRP is valuable to the industry.

ACRP asked airport practitioners whether the program is easily accessible, relevant and timely with research results, and aiding in airport decision-making. The greatest number of responses agree that ACRP provides value to the industry on all measures.
INTERESTED IN ENGAGING WITH ACRP?

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skosling@nas.edu