

ACRP

AIRPORT
COOPERATIVE
RESEARCH
PROGRAM

STRATEGIC PLAN

A strategic framework for the development of a robust research program focused on airports



FY 2015-2020

<http://www.trb.org/ACRP/>

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TABLE OF CONTENTS

Foreword by Michael R. Salamone, CM	3
Mission, Vision, and Core Values	4
Strategic Planning Process	5
SWOT Analysis	6
Strategic Priorities	7
Priority 1: Ensure that Problem Statements Are of the Highest Quality and Greatest Relevance to the Airport Industry	8
Priority 2: Align Program Products with the Interests of Key Audiences	10
Priority 3: Expand and Diversify Product Dissemination	12
Priority 4: Implement Processes to Monitor Product Quality, Relevance, and Timeliness	14

FOREWORD

The Airport Cooperative Research Program has an outstanding reputation and is recognized as a credible industry research program, providing airport operating agencies research products on issues that are not being addressed by other research programs. Since its inception in 2006, the ACRP has received more than \$96 million and approved a total of 426 research projects, more than 300 of which were completed as of December 2014. The results of this research investment have benefited many airport practitioners. However, to secure its future in this rapidly changing industry, the ACRP requires a unified vision and a “roadmap” to guide the program’s priorities and activities.

To provide this guidance, the organization engaged in a strategic planning process of introspective analyses and consultation with ACRP Oversight Committee (AOC) Members and ex-officio representatives. As the ACRP seeks to continue providing solutions to practical problems faced by airport practitioners, the program needs to be ever more responsive to the changing needs of the industry.

Positioning the ACRP at the forefront of future airport trends is a critical step to continue meeting the research needs of airport practitioners. The organization’s Strategic Plan for years 2015 through 2020 describes how we see the program pushing boundaries and embracing opportunities, and focuses on four key strategic priorities:

- **Ensure that problem statements are of the highest quality and greatest relevance to the airport industry:** Problem statements must pose a significant, important question that can be investigated and that contributes to the airport knowledge base and repertoire of practices. Problem statements should be geared toward addressing the most critical tactical, operational, managerial, technical, and process issues faced by airport operating agencies and practitioners.
- **Align program products with the interests of key audiences:** To foster the research program benefits, ACRP products and services should be aligned with the needs and best interests of their users and beneficiaries and presented in ways to maximize learning and implementation.
- **Expand and diversify product dissemination:** An essential objective of the ACRP is to inform the airport industry and decision makers by disseminating high quality and timely research products that provide near-term practical solutions to issues faced by airport practitioners. To better meet and satisfy user demands and real market needs for applied research, the research findings and products need to be distributed and communicated effectively, including adaptation of the research results to the needs of different audiences using different communication channels.
- **Implement processes to monitor product quality, relevance, and timeliness:** To optimize the research value, continuous quality improvement and monitoring practices need to be integrated into the program to maximize the organization’s success in building relevance and quality into all of its products.

I thank the AOC Members, ex-officio representatives, past AOC Members, and ACRP staff for their participation and welcome their continuing input as the program strives to assist airport practitioners as they address current and emerging issues through research.



Michael R Salamone, CM
Senior Program Officer and Manager, ACRP

MISSION, VISION, AND CORE VALUES

The ACRP's Mission and Vision statements reflect the program's purpose and the ideal status that it aims to achieve in the future. As a research program, the ACRP aims to provide high-quality, relevant and innovative research products that will continue to meet the needs and best interests of the airport industry. Our Mission statement outlines the organization's fundamental purpose and role in bringing that Vision to life. Our Core Values guide our leadership team and influence their decisions.

Our Mission

The ACRP carries out applied research on problems shared by airport operating agencies that are not being adequately addressed by existing research programs. We accomplish our Mission by:

- Soliciting research ideas and proposals from the industry,
- Identifying the highest priority projects and necessary funding levels,
- Assigning industry topic-experts to panels for each ACRP research project to prepare project statements, select contractors, and provide technical guidance throughout the life of the project, and
- Producing quality reports and other innovative products from the research for use by airport operating agencies and associated consultant service providers and academic institutions.

Our Vision

The ACRP Vision is to be recognized as the focal point for the development of research products that address current and emerging issues in the airport industry. The organization provides an epicenter of industry knowledge and recommended practice for airport practitioners from varying disciplines and backgrounds to cooperatively address common problems. The ACRP is dedicated to providing the high-quality, research results necessary to inform and develop industry guidelines and improve operational and management processes that will benefit airport operators and their stakeholders.

Our Core Values

The ACRP holds the Core Values of quality and credibility as the basis for its activities. To sustain these Values ACRP commits to:

- Undertaking research and other technical activities in a variety of airport subject areas.
- Collaborating with airport professionals, consultants, academicians, state and local government officials, equipment and service suppliers, airlines, other airport users, and research organizations.
- Providing a forum where airport operators can cooperatively address common operational problems.
- Disseminating ACRP results to the intended end-users of the research: airport operating agencies, consultant service providers, and academic institutions.

STRATEGIC PLANNING PROCESS

The strategic planning process was initiated by the AOC in July 2014 to set the direction and priorities for the ACRP for the next 5 years. The strategic planning process was organized around two key questions: what has the organization achieved to date and what does it want to achieve in the future? The strategic planning process outlined in *ACRP Report 20: Strategic Planning in the Airport Industry* provides the foundation for the formation of the strategic planning framework presented in this document.

The goal of the strategic planning process was to engage in organized reflection on the past and future of the ACRP by:

- Identifying and recognizing the organization's strengths,
- Identifying weaknesses that could impede the ACRP's goals and hinder its continued success,
- Recognizing external opportunities and threats that may affect the future of the organization,
- Identifying strategic priorities for the program,
- Defining strategic direction and long-term goals that will set the stage for the ACRP's future activities, and
- Formulating a Strategic Plan for the organization that documents the results of the strategic planning process.

Key activities that were conducted as part of the strategic planning process include:

- Stakeholder survey: The survey, which consisted of four worksheets derived from *ACRP Report 20*, was distributed to current and past AOC Members, ex-officio representatives, and ACRP staff on September 29, 2014. The worksheets were designed to collect stakeholder perspectives and insights on the organization and its practices. This information was then used to moderate a first workshop with current and past AOC Members and ex-officio representatives.
- Workshop: On December 10, 2014, a workshop was conducted to gather additional input from stakeholders. As part of this workshop, the results of the survey were discussed and reviewed. The workshop led to identification of four key strategic priorities for the AOC to consider and ACRP to address over the next 5 years.
- AOC meeting: On January 23, 2015, the AOC will meet to review and discuss the draft Strategic Plan. Subsequent to this meeting, the draft document will be revised to incorporate comments and feedback from the meeting.

This Strategic Plan outlines the direction and priorities that the ACRP will pursue to realize its Vision of the future. Four strategic priorities have been identified to strengthen the ACRP's ability to accomplish its Mission and provide unique contributions to the airport industry through research. Each strategic priority is discussed in detail in a later section of this plan. These priorities and their supporting objectives will guide the ACRP's decision-making for the next 5 years.

SWOT ANALYSIS

One of the first initiatives in the strategic planning process consisted of identifying the program's internal strengths (S) and weaknesses (W), as well as the opportunities (O) and threats (T) presented by changes in the external environment and the organization's operating environment.

STRENGTHS

The program's strengths include a knowledgeable and reliable staff, a proven-successful process and organizational structure for project selection and management, an established network with other industry practitioners, a positive reputation within the industry, funding consistency, strong leadership brought by members of the AOC, and the positive value of the program for airports.

WEAKNESSES

Weaknesses identified are a lengthy procurement and production process; a lack of the use of innovative technology for product dissemination; insufficient quality-control techniques to ensure the consistent development of quality products; inadequate alignment between research products and the unique interests of certain targeted users; inability to adapt the research approach to quickly respond to emerging issues, and a lack of scheduled time for the AOC Members to meet discuss critical issues and focus on strategic directions.

OPPORTUNITIES

The program's opportunities include the availability of innovative technologies and social media that could help facilitate the dissemination of findings, the ability to collaborate and learn from the Transportation Research Board (TRB) strategic planning process and activities, the potential and readiness of young people to be a driver of change as well as their propensity to embrace creative solutions, a strong interest for the program and a broad audience that includes students, staff at all levels in airport organizations including non-US airports, and an ever-increasing number of emerging issues faced by airports that require nimble research initiatives.

THREATS

Threats identified are future funding uncertainties; failure to show continuing value and relevance of research; the dynamic nature of the aviation industry which drives the need for nimble research initiatives; failure to recognize important audiences with different needs and interests, and competition from other research entities should the program fail to deliver quality and timely products that meet the needs and interests of airport users.

STRATEGIC PRIORITIES

ENSURE THAT PROBLEM STATEMENTS ARE OF THE HIGHEST QUALITY AND GREATEST RELEVANCE TO THE AIRPORT INDUSTRY

To ensure that ACRP projects contribute to the airport industry's knowledge base it is essential that problem statements are geared toward addressing the most critical tactical, operational, managerial, technical, and guidance issues faced by airport operators and other practitioners.

ALIGN PROGRAM PRODUCTS WITH THE INTERESTS OF KEY AUDIENCES

To align ACRP products and services with the needs and best interests of users to increase the research program benefits

EXPAND AND DIVERSIFY PRODUCT DISSEMINATION

To better inform the airport industry and decision makers through improved dissemination of research products

IMPLEMENT PROCESSES TO MONITOR PRODUCT QUALITY, RELEVANCE, AND TIMELINESS

To sustain relevance and quality consistently in ACRP products by implementing processes to monitor quality, relevance, and timeliness.

STRATEGIC PRIORITY 1

Ensure that Problem Statements Are of the Highest Quality and Greatest Relevance to the Airport Industry

DESCRIPTION

One of the main challenges the program faces is to ensure that problem statements are of the highest quality and greatest relevance to airport operators and consultant service providers. To maintain, and possibly increase, the research value, the organization must implement practices that will maximize the formulation of problem statements that are relevant to the airport industry. The formulation of relevant and high-quality problem statements should ultimately result in the development of research products that provide new insights, perspectives, or solutions that can be implemented by airport operating agencies.

OBJECTIVES

1. Develop New Initiatives for Generating Research Problem Statements Relevant to the Airport Industry

- a. **Expand Outreach to the Airport Community and the Aviation Industry:** ACRP managers will reach out to select airport operators through webinars or other means of communication to develop a deeper understanding of the problems they face and their perspectives on trends in the industry. Through discussions with airport practitioners, ACRP will strive to achieve an in-depth understanding of the current and emerging issues and their importance to the airport operating agencies.
- b. **Encourage Problem Statement Authors to Recruit Airports as Co-Signers to Each Problem Statement:** The role of the airport co-signers will be to refine the problem statement by discussing and stressing the relevance of the research needs, engaging with other airport operators that face the same problem, and facilitating collaboration with airport operating agencies to refine the problem statement. The co-signer program will provide a means to assess the relevance of the problem and the validity of the methods proposed to address the problem.
- c. **Recruit Topic Experts to Assist with Developing Problem Statements:** To ensure that the problem statements are well articulated and viable statement of research-worthy problems, topic experts will be recruited to develop the problem statements. The topic experts will bring an in-depth understanding of the body of knowledge related to the field of study and guarantee the quality and relevance of the problem statement. This approach will lead to the development of a research product that provides an original contribution to the relevant body of knowledge.

STRATEGIC PRIORITY 1

Ensure that Problem Statements Are of the Highest Quality and Greatest Relevance to the Airport Industry

2. Develop New Processes for Building Upon Previous Research Projects

- a. **Examine Previous Research Work:** The process for developing new problem statements will include an inventory and review of past research projects to avoid possible overlap in the research. Criteria for identifying redundant research ideas will be added to the problem statement development process.
- b. **Identify Gaps in Existing Research:** The purpose of the ACRP research is to add new knowledge and practice to the airport industry. To ensure future research relevance and utility, prior research contributions will be reviewed to identify gaps in existing knowledge and practice.

STRATEGIC PRIORITY 2

Align Program Products with the Interests of Key Audiences

DESCRIPTION

The overall value of any research product is a function of how effectively it is being used by industry practitioners. To contribute to the overall value of the research to practice, research products must be aligned with the needs and best interests of ACRP product and service users and beneficiaries.

OBJECTIVES

1. Evaluate and Expand Product Portfolio

- a. **Evaluate Existing Products:** The existing research product mix will be evaluated to assess the benefits of supplementing the established product line with new products. The results of completed projects may benefit a broader audience if new products or product derivatives are added to the existing product line.
- b. **Measure Market Penetration of Existing Research Products:** To better understand the impact of research products and the significance of the research, the experiences existing end-users have had putting the research into practice will be assessed.
- c. **Identify Particular Audience Segments that Are Likely to Benefit from the Research Product:** The ACRP will identify those segments within the aviation industry that are most likely to use the research products so that the research program can be promoted directly to them. The goal is to find the audience and practitioner dimensions within the airport operating agencies, consultant service providers, and academicians that are most likely to use the products the ACRP has to offer. This approach will provide an opportunity to better define research products to fit the needs and interests of the specific audience most likely to benefit from the research. This approach will also help build a strong and satisfied audience that values ACRP products and is likely to ask for more. As part of this effort, linkages between national and international interests will also need to be evaluated.
- d. **Tailor Program Products to Key Audience Segments:** The program could improve its ability to attract additional end users by tailoring the research products to different target audiences (airport management, industry decision makers, the public, etc.). The ACRP will periodically determine the learning-style preferences of key audience segments to understand how they use or intend to use ACRP products. The ACRP will then ensure that its products address those preferences. This approach will require reaching out to the industry (by attending conferences and/or soliciting individual feedback) to expand the dialogue with end users of the research product.

STRATEGIC PRIORITY 2

Align Program Products with the Interests of Key Audiences

- e. **Expand the ACRP's Impacts on Practice Series:** The ACRP's Impacts on Practice series will be expanded to increase practitioner engagement and provide additional examples of how airport industry practitioners are using ACRP research results to assist them in their work.
- f. **Engage and Connect with Young Audiences:** The ACRP will develop research products that are geared toward younger audiences. ACRP products and media should be tailored to the interests of the new generation of airport industry practitioners who are accustomed to a media-saturated world, where information is ubiquitous and interactive.

2. Align Research Needs and Means

- a. **Align the Research Budget to the Problem Statement:** The ACRP will refine methods to determine the optimum budget assigned to a research project, which should be consistent with the complexity of the research idea and the effort required producing a high-quality product. The project budget should provide for the development of a research product that meet the needs and interests of the targeted audience(s).
- b. **Clarify Timelines for Deliverables to Provide Just-in-Time Benefits:** The industry end users will benefit if the research results are disseminated quickly and coordinated with the needs of key audiences. The ACRP will refine processes to minimize timetables from inception to final deliverables and consider producing useful quality interim products in accordance with audience needs.

STRATEGIC PRIORITY 3

Expand and Diversify Product Dissemination

DESCRIPTION

ACRP research products should be easily available to those who would best use them, at the time they need them, in a format they can use, and with findings that are comprehensible and adaptable to their needs. The ACRP will explore innovative dissemination techniques to provide added value to the research projects and maximize the effects of the research results.

OBJECTIVES

1. Explore Opportunities to Develop New Dissemination Strategies

- a. **Provide Necessary Resources (Internal or External):** The main constraints to expanding product dissemination were identified as lack of time and resources and institutional encumbrances which acted on the type of research outputs produced. Opportunities will be explored to add staff or hire contractors to plan and integrate an expanded dissemination strategy into the life cycle of research projects.
- b. **Diversify Dissemination Techniques:** The ACRP will explore the use of a variety of innovative dissemination techniques, including webinars, training curricula, (TED-style) 15-minute online presentations, and mobile applications, for communicating the research results. The organization will identify activities for the dissemination of research outputs and refine ACRP's dissemination plan. This approach will include consideration for a multichannel approach to dissemination, as well as dissemination opportunities during the life of the project, rather than only at the end.
- c. **Tailor Product Dissemination to Key Audience Segments:** The ACRP will identify the intended audiences for the research, assess their information needs and learning style, and develop product dissemination techniques for the primary target audiences (airport employees/staff, consultants and private entities that provide essential planning, development, management, maintenance, and operational services to airports, and academicians that educate and train current and future airport-practitioners on subjects that are addressed by ACRP research.).
- d. **Investigate Development of a Dedicated ACRP Search Engine:** Research outputs need to be easily accessible from the web and do not need to include all of the information that was discovered during the research process. A dedicated ACRP search engine would enable end-users to quickly and efficiently find the information they are seeking, providing added benefits to airport practitioners. In turn, such a search engine would provide added value to the research program.

STRATEGIC PRIORITY 3

Expand and Diversify Product Dissemination

2. Expand Outreach Program to Increase Product Dissemination

- a. **Explore Opportunities to Increase ACRP Participation in and Reach to Industry Conferences and Committees:** The dissemination of research products will be expanded through expanded participation in conferences and committees. The ACRP will explore opportunities to participate in and provide funding to attend additional conferences and committees through its connections with other industry programs.
- b. **Expand ACRP Relationships with Industry Associations:** The ACRP will nominate personnel with other industry organization committees to coordinate activities and increase awareness of ACRP research products.

STRATEGIC PRIORITY 4

Implement Processes to Monitor Product Quality, Relevance, and Timeliness

DESCRIPTION

The ACRP will implement proactive and systematic processes to monitor the quality, relevance, and timeliness of the research projects and their products. Effective monitoring and evaluation will provide a means to determine if the research results are being used by practitioners, identify practitioner perceptions, examine statistical outliers and their attributes of quality, determine corrective action(s) that may be needed to improve future research results, and quantify which products are making positive contributions to the industry.

OBJECTIVES

1. **Monitor and Evaluate the Success of Products and Their Contribution to the Industry**
 - a. **Create and Distribute Product Evaluations:** An evaluation instrument will be created and distributed to assess the relevance and quality of the research product. End-users will be asked to complete the evaluation form within an allotted time period and return it to the ACRP.
 - b. **Engage with Practitioners to Assess Product Quality and Relevance:** The organization will establish processes and procedures to address quality through practitioners who would provide feedback on the quality, relevance, and timeliness of ACRP products.
2. **Review Product Quality and the Development Process**
 - a. **Establish Product Quality Goals at the Start of the Project:** A template for a product quality monitoring and evaluation framework will be developed and recommended to the project panel and proposers at the initiation of the project. Added to the request for proposals this framework, will be addressed in each proposal and will set forth what is to be monitored and evaluated, who is responsible for monitoring and evaluation activities, when monitoring and evaluation activities are planned, and how monitoring and evaluation are to be implemented.
 - b. **Refine Internal Research Product Review Prior to Publication:** A process will be conducted to ensure that each research product is reviewed internally prior to publication. This process will include a mechanism to inform the AOC as to whether or not the research goals were met.

STRATEGIC PRIORITY 4

Implement Processes to Monitor Product Quality, Relevance, and Timeliness

- c. **Evaluation of Research Product:** The ACRP will explore ideas and opportunities to improve established product evaluation methods to determine the relevance and fulfillment of objectives and research contributions. The research product evaluation will provide a process through which the worth or significance of a research product can be determined. It will also provide for incorporation of lessons learned.
- d. **Provide Policies and Tools for Research Oversight:** The ACRP will look for opportunities to establish procedures and develop tools that can be used by ACRP staff to monitor and evaluate research processes and products. The development of a process through which ACRP staff can periodically report to the AOC with regard to the quality of the research and the research product will be included in this effort.

3. Evaluate Contractors

- a. **Establish a Contractor Review Process:** The ACRP will establish a process to review contractor performance.
- b. **Contractor Prequalification:** The ACRP will explore whether not prequalifying contractors, even if only for limited or specific task-assignments, could help improve research product quality and timeliness.

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