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# Issues with Airport Organization and Reorganization

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AIRPORT COOPERATIVE RESEARCH PROGRAM

ACRP SYNTHESIS 40

# Issues with Airport Organization and Reorganization

## *A Synthesis of Airport Practice*

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**TRANSPORTATION RESEARCH BOARD**

WASHINGTON, D.C.
2013
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## AIRPORT COOPERATIVE RESEARCH PROGRAM

Airports are vital national resources. They serve a key role in transportation of people and goods and in regional, national, and international commerce. They are where the nation's aviation system connects with other modes of transportation and where federal responsibility for managing and regulating air traffic operations intersects with the role of state and local governments that own and operate most airports. Research is necessary to solve common operating problems, to adapt appropriate new technologies from other industries, and to introduce innovations into the airport industry. The Airport Cooperative Research Program (ACRP) serves as one of the principle means by which the airport industry can develop innovative near-term solutions to meet demands placed on it.

The need for ACRP was identified in *TRB Special Report 272: Airport Research Needs: Cooperative Solutions* in 2003, based on a study sponsored by the Federal Aviation Administration (FAA). The ACRP carries out applied research on problems that are shared by airport operating agencies and are not being adequately addressed by existing federal research programs. It is modeled after the successful National Cooperative Highway Research Program and Transit Cooperative Research Program. The ACRP undertakes research and other technical activities in a variety of airport subject areas, including design, construction, maintenance, operations, safety, security, policy, planning, human resources, and administration. The ACRP provides a forum where airport operators can cooperatively address common operational problems.

The ACRP was authorized in December 2003 as part of the Vision 100-Century of Aviation Reauthorization Act. The primary participants in the ACRP are (1) an independent governing board, the ACRP Oversight Committee (AOC), appointed by the Secretary of the U.S. Department of Transportation with representation from airport operating agencies, other stakeholders, and relevant industry organizations such as the Airports Council International–North America (ACI-NA), the American Association of Airport Executives (AAAE), the National Association of State Aviation Officials (NASAO), and the Air Transport Association (ATA) as vital links to the airport community; (2) the TRB as program manager and secretariat for the governing board; and (3) the FAA as program sponsor. In October 2005, the FAA executed a contract with the National Academies formally initiating the program.

The ACRP benefits from the cooperation and participation of airport professionals, air carriers, shippers, state and local government officials, equipment and service suppliers, other airport users, and research organizations. Each of these participants has different interests and responsibilities, and each is an integral part of this cooperative research effort.

Research problem statements for the ACRP are solicited periodically but may be submitted to the TRB by anyone at any time. It is the responsibility of the AOC to formulate the research program by identifying the highest priority projects and defining funding levels and expected products.

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Primary emphasis is placed on disseminating ACRP results to the intended end-users of the research: airport operating agencies, service providers, and suppliers. The ACRP produces a series of research reports for use by airport operators, local agencies, the FAA, and other interested parties, and industry associations may arrange for workshops, training aids, field visits, and other activities to ensure that results are implemented by airport-industry practitioners

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## FOREWORD

Airport administrators, engineers, and researchers often face problems for which information already exists, either in documented form or as undocumented experience and practice. This information may be fragmented, scattered, and unevaluated. As a consequence, full knowledge of what has been learned about a problem may not be brought to bear on its solution. Costly research findings may go unused, valuable experience may be overlooked, and due consideration may not be given to recommended practices for solving or alleviating the problem.

There is information on nearly every subject of concern to the airport industry. Much of it derives from research or from the work of practitioners faced with problems in their day-to-day work. To provide a systematic means for assembling and evaluating such useful information and to make it available to the entire airport community, the Airport Cooperative Research Program authorized the Transportation Research Board to undertake a continuing project. This project, ACRP Project 11-03, "Synthesis of Information Related to Airport Practices," searches out and synthesizes useful knowledge from all available sources and prepares concise, documented reports on specific topics. Reports from this endeavor constitute an ACRP report series, *Synthesis of Airport Practice*.

This synthesis series reports on current knowledge and practice, in a compact format, without the detailed directions usually found in handbooks or design manuals. Each report in the series provides a compendium of the best knowledge available on those measures found to be the most successful in resolving specific problems.

## PREFACE

*By Gail R. Staba*
*Senior Program Officer*
*Transportation*
*Research Board*

This report provides airport managers with effective practices airports use to help manage their organizations to best meet the changing needs of the aviation industry. It examines relevant organizational design in the academic literature, along with current trends and practices in airport management.

Twenty-two airport managers representing 36 airports answered an extensive questionnaire that elicited information about their unique experiences with organizational change, and five case studies were chosen for further exploration.

Kimberly A. Kenville, Ph.D., C.M., Kim Kenville Consulting, Grand Forks, North Dakota, and James F. Smith, Ph.D., P.E., Smith-Woolwine Associates, Floyd, Virginia, collected and synthesized the information and wrote the report. The members of the topic panel are acknowledged on the preceding page. This synthesis is an immediately useful document that records the practices that were acceptable within the limitations of the knowledge available at the time of its preparation. As progress in research and practice continues, new knowledge will be added to that now at hand.

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# CONTENTS



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# ISSUES WITH AIRPORT ORGANIZATION AND REORGANIZATION


## SUMMARY

Today's airport managers face unprecedented political, environmental, and economic pressures. In many cases, traditional organizational structures no longer address the complex nature of airport management. This lack of congruence between policy and practice is triggering widespread reevaluation of organizational planning. To develop an optimal structure, it is useful to examine past and current practices in operational design and explore sensible, effective approaches to organizational change.

This project provides airport managers with improved tools to help manage their organizations to best meet the changing needs of the aviation industry. It examines relevant organizational design in the academic literature, along with current trends and practices in airport management. Twenty-two airport managers representing 36 airports answered an extensive questionnaire that elicited information about their unique experiences with organizational change, and five case examples were chosen for further exploration. A discussion and synthesis of the literature with real-world experience, along with a "flight plan" detailing successful strategies, aims to support airport leaders as they strive to best align personnel and thrive in today's rapidly changing environment.

Organizations can determine the best fit by considering the key elements of work specialization, departmentalization, chains of command, span of control, centralization, and formalization in tandem with observations and assessments of current practice. Examining the nature of the industry (e.g., formal, mechanistic, regulated), the type of employees (e.g., management, workers), along with mission and vision, can help airports find their most advantageous structure.

Organizational structures range from functional, centralized, and hierarchical to more free-flowing, decentralized, and collaborative: boxes and straight lines yield to circles and arrows. Over the past two decades, new approaches have been gaining support, such as team-based, modular, organizational network analysis, and boundaryless organizational design.

This report provides airport operators with a synthesis of methodologies, processes, and factors to develop, implement, and evaluate organizational structures; a discussion of the advantages, disadvantages, constraints, risks, and opportunities of traditional and alternative organizational concepts and frameworks; and selected examples and lessons learned from five airports that recently implemented substantial changes in their organizational structure.

Several issues were evident throughout the research: a clear vision and strategic plan was critical in driving any organizational change. Endorsement from the governing entity was essential; the primary role of the leadership was to involve key employees in determining the type of organizational structure that would best serve the new strategic business objectives. An overarching theme in each case example interview was that it takes time to initiate and implement organizational change, so patience needs to prevail, and the small successes should be celebrated along the way.


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Although the airport managers' experience and insights often matched best practices in the literature, there is no "one size fits all" approach. Each approach has advantages and disadvantages, and each airport faces unique local, state, and federal obligations and pressures. Strong, informed leadership and vision, coupled with a patient and informed approach, can drive positive, effective change.

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CHAPTER ONE

# INTRODUCTION

## BACKGROUND

> Organizational design is a complex and difficult task, yet it is one of the most important tasks untaken by CEOs and their senior management teams. Successful design of an organization requires deeply understanding the context for which the organization is being designed—the environment in which the firm competes, and the business strategies and models it will use to compete, and the capabilities it needs to compete (Beckman 2009).

Over the past decade, most airports have faced many new challenges, such as irregular operations, increased competition, changing regulatory issues, and increasing economic pressures. These challenges have provided opportunities for management to review current business strategies and adjust organizational structures to best meet their core business strategies.

External pressures have triggered changes in operations; in some cases, changes in business models and strategies have led airports to remain self-sustaining organizations that are flexible during times of change. In other cases, however, airports are struggling to meet the challenges of this era of rapid change. To make the best decisions before embarking on restructuring an airport, it is useful to examine past and current practices in operational design and observe real-world approaches to organizational change. Airports may find that they need to update their organizational structure as a result of political, environmental, or economic triggers. Articulating business goals and developing an effective strategic plan can lead airport operators to examine and modify their organizational structure. A well-understood and effective organizational structure can provide much-needed support for airports seeking to meet strategic, operational, and business goals while facilitating successful delivery of core services.

According to Droege (n.d.), "changing an organization's structure is a daunting managerial task, and the immensity of such a project is at least partly why organizational structures change infrequently" (para. 4). It is a daunting but necessary task that requires sound leadership and high-level collaboration. Many airports are examining their internal organizational structure to rebalance workloads and identify possible outsourcing opportunities to attain greater efficiencies. Some are finding that their original organizational chart needs to be completely overhauled.

This project aims to facilitate and support the change process by providing airport managers with specific, effective organizational practices to meet their strategic, operational, and business goals and delivery of core services in a time of changing needs within the aviation industry. Key points from current academic literature regarding organizational structures and design features are explained, and a discussion of a survey completed by 22 airport operators representing 36 airports follows. Five in-depth case examples further illustrate specific triggers, processes, and challenges learned during the change process. Finally, a practical flight plan of critical considerations synthesizes the current literature, survey data, and case example information as it affects real-world practice, providing busy airport leaders with a helpful guide to follow as they navigate organizational change.

## STUDY METHODOLOGY

A questionnaire (see Appendix A) was designed to elicit information from airport operators. Airport executives were asked to identify their type of governance structure, their current type of organizational structure, the number of employees in their workforce, which employees or job functions were outsourced, and how they defined and determined organizational effectiveness and efficiency.

Twenty-two executives representing 36 airports completed surveys (Appendix B); all surveys were completed, yielding a 100% response rate. The airports ranged in size from 7 to 1,850 employees and represented each type of governance structure in each category of the National Plan of Integrated Airport Systems (NPIAS).

After the survey data were analyzed, five airports were selected for more detailed examination. All five airports had experienced a recent significant change in organizational structure and were willing to share lessons learned, along with advice to those initiating change in organizational structure and design. The five case example airports or airport systems are as follows:

1. Metropolitan Nashville Airport Authority — medium hub

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2. Louisville Regional Airport Authority — small hub/significant cargo
3. Salt Lake City International Airport (city) — large hub
4. Rapid City Regional Airport (city) — non hub
5. Colorado Springs Airport (city) — small hub

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