Airport Insurance Coverage and Risk Management Practices

DETAILS

51 pages | | PAPERBACK
ISBN 978-0-309-14356-1 | DOI 10.17226/14611

AUTHORS

Ron Rakich; Catherine Wells; Danielle Wood; Transportation Research Board

ACRP
SYNTHESIS 30

AIRPORT COOPERATIVE RESEARCH PROGRAM

Airport Insurance Coverage and Risk Management Practices

Sponsored by the Federal Aviation Administration

A Synthesis of Airport Practice

TRANSPORTATION RESEARCH BOARD
OF THE NATIONAL ACADEMIES

ACRP OVERSIGHT COMMITTEE*

CHAIR

JAMES WILDING
Metropolitan Washington Airports Authority (retired)

VICE CHAIR

JEFF HAMIEL
Minneapolis–St. Paul Metropolitan Airports Commission

MEMBERS

JAMES CRITES
Dallas–Ft. Worth International Airport
RICHARD DE NEUFVILLE
Massachusetts Institute of Technology
KEVIN C. DOLLIOLE
Unison Consulting
JOHN K. DUVAL
Austin Commercial, LP
KITTY FREIDHEIM
Freidheim Consulting
STEVE GROSSMAN
Jacksonville Aviation Authority
TOM JENSEN
National Safe Skies Alliance
CATHERINE M. LANG
Federal Aviation Administration
GINA MARIE LINDSEY
Los Angeles World Airports
CAROLYN MOTZ
Hagerstown Regional Airport
RICHARD TUCKER
Huntsville International Airport

EX OFFICIO MEMBERS

PAULA P. HOCHSTETLER
Airport Consultants Council
SABRINA JOHNSON
U.S. Environmental Protection Agency
RICHARD MARCHI
Airports Council International—North America
LAURA McKEE
Air Transport Association of America
HENRY OGRODZINSKI
National Association of State Aviation Officials
MELISSA SABATINE
American Association of Airport Executives
ROBERT E. SKINNER, JR.
Transportation Research Board

SECRETARY

CHRISTOPHER W. JENKS
Transportation Research Board

*Membership as of October 2010.

TRANSPORTATION RESEARCH BOARD 2011 EXECUTIVE COMMITTEE*

OFFICERS

Chair: *Neil J. Pedersen, Administrator, Maryland State Highway Administration, Baltimore*
Vice Chair: *Sandra Rosenbloom, Professor of Planning, University of Arizona, Tucson*
Executive Director: *Robert E. Skinner, Jr., Transportation Research Board*

MEMBERS

J. BARRY BARKER, *Executive Director, Transit Authority of River City, Louisville, KY*
DEBORAH H. BUTLER, *Executive Vice President, Planning, and CIO, Norfolk Southern Corporation, Norfolk, VA*
WILLIAM A.V. CLARK, *Professor, Department of Geography, University of California, Los Angeles*
EUGENE A. CONTI, JR., *Secretary of Transportation, North Carolina DOT, Raleigh*
JAMES M. CRITES, *Executive Vice President of Operations, Dallas-Fort Worth International Airport, TX*
PAULA J. HAMMOND, *Secretary, Washington State DOT, Olympia*
MICHAEL W. HANCOCK, *Secretary, Kentucky Transportation Cabinet, Frankfort*
ADIB K. KANAFANI, *Cahill Professor of Civil Engineering, University of California, Berkeley*
MICHAEL P. LEWIS, *Director, Rhode Island DOT, Providence*
SUSAN MARTINOVICH, *Director, Nevada DOT, Carson City*
MICHAEL R. MORRIS, *Director of Transportation, North Central Texas Council of Governments, Arlington*
TRACY L. ROSSER, *Vice President, Regional General Manager, Wal-Mart Stores, Inc., Mandeville, LA*
STEVEN T. SCALZO, *Chief Operating Officer, Marine Resources Group, Seattle, WA*
HENRY G. (GERRY) SCHWARTZ, JR., *Chairman (retired), Jacobs/Sverdrup Civil, Inc., St. Louis, MO*
BEVERLY A. SCOTT, *General Manager and CEO, Metropolitan Atlanta Rapid Transit Authority, Atlanta, GA*
DAVID SELTZER, *Principal, Mercator Advisors LLC, Philadelphia, PA*
LAWRENCE A. SELZER, *President and CEO, The Conservation Fund, Arlington, VA*
KUMARES C. SINHA, *Olson Distinguished Professor of Civil Engineering, Purdue University, West Lafayette, IN*
THOMAS K. SOREL, *Commissioner, Minnesota DOT, St. Paul*
DANIEL SPERLING, *Professor of Civil Engineering and Environmental Science and Policy; Director, Institute of Transportation Studies; and Interim Director, Energy Efficiency Center, University of California, Davis*
KIRK T. STEUDLE, *Director, Michigan DOT, Lansing*
DOUGLAS W. STOTLAR, *President and CEO, Con-Way, Inc., Ann Arbor, MI*
C. MICHAEL WALTON, *Ernest H. Cockrell Centennial Chair in Engineering, University of Texas, Austin*

EX OFFICIO MEMBERS

PETER H. APPEL, *Administrator, Research and Innovative Technology Administration, U.S.DOT*
J. RANDOLPH BABBITT, *Administrator, Federal Aviation Administration, U.S.DOT*
REBECCA M. BREWSTER, *President and COO, American Transportation Research Institute, Smyrna, GA*
ANNE S. FERRO, *Administrator, Federal Motor Carrier Safety Administration, U.S.DOT*
LEROY GISHI, *Chief, Division of Transportation, Bureau of Indian Affairs, U.S.DOT*
JOHN T. GRAY, *Senior Vice President, Policy and Economics, Association of American Railroads, Washington, DC*
JOHN C. HORSLEY, *Executive Director, American Association of State Highway and Transportation Officials, Washington, DC*
DAVID T. MATSUDA, *Deputy Administrator, Maritime Administration, U.S.DOT*
VICTOR M. MENDEZ, *Administrator, Federal Highway Administration, U.S.DOT*
WILLIAM W. MILLAR, *President, American Public Transportation Association, Washington, DC*
TARA O'TOOLE, *Under Secretary for Science and Technology, U.S. Department of Homeland Security, Washington, DC*
ROBERT J. PAPP (Adm., U.S. Coast Guard), *Commandant, U.S. Coast Guard, U.S. Department of Homeland Security, Washington, DC*
CYNTHIA L. QUARTERMAN, *Administrator, Pipeline and Hazardous Materials Safety Administration, U.S.DOT*
PETER M. ROGOFF, *Administrator, Federal Transit Administration, U.S.DOT*
DAVID L. STRICKLAND, *Administrator, National Highway Traffic Safety Administration, U.S.DOT*
JOSEPH C. SZABO, *Administrator, Federal Railroad Administration, U.S.DOT*
POLLY TROTTENBERG, *Assistant Secretary for Transportation Policy, U.S.DOT*
ROBERT L. VAN ANTWERP (Lt. Gen., U.S. Army), *Chief of Engineers and Commanding General, U.S. Army Corps of Engineers, Washington, DC*
BARRY R. WALLERSTEIN, *Executive Officer, South Coast Air Quality Management District, Diamond Bar, CA*

*Membership as of June 2011.

AIRPORT COOPERATIVE RESEARCH PROGRAM

ACRP **SYNTHESIS 30**

Airport Insurance Coverage and Risk Management Practices

A Synthesis of Airport Practice

CONSULTANTS
RON RAKICH
CATHERINE WELLS
and
DANIELLE WOOD
Ron Rakich & Associates, Inc.
Dana Point, California

SUBSCRIBER CATEGORIES
Administration and Management • Aviation • Finance

Research Sponsored by the Federal Aviation Administration

TRANSPORTATION RESEARCH BOARD

WASHINGTON, D.C.
2011
www.TRB.org

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.

Once selected, each ACRP project is assigned to an expert panel, appointed by the TRB. Panels include experienced practitioners and research specialists; heavy emphasis is placed on including airport professionals, the intended users of the research products. The panels prepare project statements (requests for proposals), select contractors, and provide technical guidance and counsel throughout the life of the project. The process for developing research problem statements and selecting research agencies has been used by TRB in managing cooperative research programs since 1962. As in other TRB activities, ACRP project panels serve voluntarily without compensation.

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.

ACRP SYNTHESIS 30

Project 11-03, Topic S01-03
ISSN 1935-9187
ISBN 978-0-309-14356-1
Library of Congress Control Number 2011941914

COPYRIGHT INFORMATION

NOTICE

The project that is the subject of this report was a part of the Airport Cooperative Research Program conducted by the Transportation Research Board with the approval of the Governing Board of the National Research Council. Such approval reflects the Governing Board's judgment that the program concerned is of national importance and appropriate with respect to both the purposes and resources of the National Research Council.

The members of the technical committee selected to monitor this project and to review this report were chosen for recognized scholarly competence and with due consideration for the balance of disciplines appropriate to the project. The opinions and conclusions expressed or implied are those of the research agency that performed the research, and, while they have been accepted as appropriate by the technical committee, they are not necessarily those of the Transportation Research Board, the National Research Council, or the Federal Aviation Administration of the U.S. Department of Transportation.

Each report is reviewed and accepted for publication by the technical committee according to procedures established and monitored by the Transportation Research Board Executive Committee and the Governing Board of the National Research Council.

The Transportation Research Board of The National Academies, the National Research Council, and the Federal Aviation Administration (sponsor of the ACRP) do not endorse products or manufacturers. Trade or manufacturers' names appear herein solely because they are considered essential to the clarity and completeness of the project reporting.

Published reports of the

AIRPORT COOPERATIVE RESEARCH PROGRAM

are available from:

Transportation Research Board
Business Office
500 Fifth Street NW
Washington, DC 20001

and can be ordered through the Internet at:
http://www.national-academies.org/trb/bookstore

Printed in the United States of America

THE NATIONAL ACADEMIES

Advisers to the Nation on Science, Engineering, and Medicine

The **National Academy of Sciences** is a private, nonprofit, self-perpetuating society of distinguished scholars engaged in scientific and engineering research, dedicated to the furtherance of science and technology and to their use for the general welfare. On the authority of the charter granted to it by the Congress in 1863, the Academy has a mandate that requires it to advise the federal government on scientific and technical matters. Dr. Ralph J. Cicerone is president of the National Academy of Sciences.

The **National Academy of Engineering** was established in 1964, under the charter of the National Academy of Sciences, as a parallel organization of outstanding engineers. It is autonomous in its administration and in the selection of its members, sharing with the National Academy of Sciences the responsibility for advising the federal government. The National Academy of Engineering also sponsors engineering programs aimed at meeting national needs, encourages education and research, and recognizes the superior achievements of engineers. Dr. Charles M. Vest is president of the National Academy of Engineering.

The **Institute of Medicine** was established in 1970 by the National Academy of Sciences to secure the services of eminent members of appropriate professions in the examination of policy matters pertaining to the health of the public. The Institute acts under the responsibility given to the National Academy of Sciences by its congressional charter to be an adviser to the federal government and, on its own initiative, to identify issues of medical care, research, and education. Dr. Harvey V. Fineberg is president of the Institute of Medicine.

The **National Research Council** was organized by the National Academy of Sciences in 1916 to associate the broad community of science and technology with the Academy's purposes of furthering knowledge and advising the federal government. Functioning in accordance with general policies determined by the Academy, the Council has become the principal operating agency of both the National Academy of Sciences and the National Academy of Engineering in providing services to the government, the public, and the scientific and engineering communities. The Council is administered jointly by both Academies and the Institute of Medicine. Dr. Ralph J. Cicerone and Dr. Charles M. Vest are chair and vice chair, respectively, of the National Research Council.

The **Transportation Research Board** is one of six major divisions of the National Research Council. The mission of the Transportation Research Board is to provide leadership in transportation innovation and progress through research and information exchange, conducted within a setting that is objective, interdisciplinary, and multimodal. The Board's varied activities annually engage about 7,000 engineers, scientists, and other transportation researchers and practitioners from the public and private sectors and academia, all of whom contribute their expertise in the public interest. The program is supported by state transportation departments, federal agencies including the component administrations of the U.S. Department of Transportation, and other organizations and individuals interested in the development of transportation. **www.TRB.org**

www.national-academies.org

Cover figure: Louisville International Airport, Louisville, Kentucky.

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 synthesis study is intended to inform airport executives, risk managers, and other individuals involved in assessing necessary insurance coverage about variables that affect insurance purchasing for airport operators and the range of practices that exist among U. S. airports.

Information used in this study was acquired through a review of the literature, surveys, and interviews with airport operators about insurance purchasing practices.

Ron Rakich, Catherine Wells, and Danielle Wood, Ron Rakich and Associates, Inc., Dana Point, California, 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.

CONTENTS

AIRPORT INSURANCE COVERAGE AND RISK MANAGEMENT PRACTICES

SUMMARY

Insurance is one "risk-financing" technique. It remains one of the most important risk-financing techniques available to airport operators. For some airports, commercial property and casualty insurance coverage and the attendant services and advice that come with the insurance purchase are the primary means for financially managing the risk of loss within the organization. For other airports, insurance is more of a technique to supplement other risk management practices or a mechanism to help provide financial recovery from potentially catastrophic loss. Regardless of how they use the tool, most airport operators buy some form of property/casualty insurance.

This report presents the results of ACRP Project 11-03 S01-03 and is intended to identify the variables that affect insurance purchasing for airport operators and to identify the range of practices that exist among U.S. airports. Once identified, the practices can be synthesized into a set of basic principles to be considered and applied as appropriate by airport officials confronted with risk-financing and insurance-purchasing decisions.

A survey was developed to identify current insurance-buying practices and the characteristics of airports that use them. Twenty-one prequalified airport operator systems were selected to participate in the survey. Airports were prequalified by a preliminary survey of a larger population to determine those willing to participate. Nineteen prequalified airport operator systems, representing 42 airports, replied to the survey request. This was a 90% response rate.

In addition, eight airport operator systems participated in detailed interviews about their insurance-purchasing practices. These eight systems represented 20 airports.

Respondents to the survey were classified by revenue size for analysis purposes, rather than by passenger boardings or the FAA hub size definitions. Sizes used are small (less than $250 million), medium ($251 to $600 million), and large ($600 million and above). The reason for this classification system is that of the airport operator systems identified as willing to participate in the study, 16 of 19 systems fell into a single category, Category I under 14 Code of Federal Regulations (CFR) Part 139. The remainder fell into a secondary large category. None were in the smaller three FAA categories.

Therefore, identification of variables that could affect insurance-purchasing behavior required a different method of classification. Although a number of smaller airport operators are included in the study by virtue of being part of larger airport systems, the insurance-purchasing practices for such airport operators are determined by the parent organization, which falls into a larger category for purposes of analysis.

Another reason for use of revenue size rather than passenger boardings is that insurance-purchasing practices are more likely to be influenced by the size and sophistication of an organization than by the passenger-boarding variable. For example, an airport system with a large, sophisticated operation weighted heavily toward freight movement, rather than passenger boardings, would likely use insurance and other risk management tech-

niques more like a large passenger-oriented system than like a small airport with few boardings. Yet, a classification system based on boardings would put the large commercial freight airport operator and the small airport operator in the same category.

Topic areas covered in the survey and interviews included —

- General airport operator insurance-purchasing practices;
- The role of the risk manager with regard to insurance purchasing;
- Sources relied on for determining practices and procedures;
- Types of coverage, limits, and deductibles purchased; and
- The use of risk retention as a risk-financing tool.

All airport operators indicated that they rely on both internal staff and insurance brokers when making insurance-purchasing decisions, although large airport operators used brokers less intensively than their smaller counterparts. Small airport operators rely on their insurance broker to make recommendations on purchasing decisions, whereas large airport operators did not indicate this reliance. Smaller airport operators also indicated longer term relationships with their insurance brokers.

Large airport operators reported less concern with price as a purchasing determinant but were more concerned with loss exposure than small airport operators when buying coverage. Medium airport operators considered price, coverage, and exposure equally when making insurance-purchasing decisions.

All airport operators purchase some level of coverage for general liability, property, and business interruption. Medium and large airport operators tend to purchase their own insurance for construction, as opposed to having construction contractors purchase the coverage, such as builders' risk or consolidated coverages as found in an owner-controlled insurance program. Larger airport operators are more likely to buy coverage for war and terrorism risks, whereas small airport operators do not purchase this coverage as often. Medium airport operators tend to self-insure for workers' compensation at a greater rate than airports in other size categories.

All airport operators indicated that they have not changed deductibles in the past 3 years, with many small airport operators responding that deductibles and limits have remained unchanged over many years. Large airport operators tend to evaluate deductibles and limits annually and will change when savings are indicated.

If an airport operator self-insures all or a portion of any line of insurance, it tends to be for workers' compensation. All airport operators indicated that they remain bare for cyber risks. Large airport operators tend to have a larger appetite to retain risks, whereas small airport operators tend to carry low deductibles—not a surprising finding.

Results of surveys and interviews conducted for this project indicated that the risk management function has become more important within airport organizations within the past 5 years. All respondents affirmed this finding, including those for whom risk management was not the only, or even necessarily the primary, job function.

How airports administer risk management is at least partly determined by the size and resources of the facility. As would be expected, larger airports are more independent, have greater resources, and use a greater variety of risk management techniques. They also approach their risk financing from a different perspective than their smaller counterparts. As one interviewee indicated, the larger airports tend to look at insurance as a "last resort." Smaller airports tend to view insurance as their primary risk-financing tool.

Medium and large airports frequently employ a full-time risk manager, who conducts risk assessments, usually supervises a modest sized staff, is considered a member of senior management, and reports having a considerable level of authority in making risk-financing decisions and ordering insurance coverage.

The risk management function at small airports tends to be part time and to rely on services, such as risk assessments, provided by a variety of resources within and outside the organization, including other employees and insurance brokers.

Medium and large airport operators tend to rely on risk analysis to validate insurance-buying decisions. Small airport operators are less likely to use risk analysis. When such analysis is conducted, the methods do not vary among the size classifications, aside from the concept that smaller airport operators may rely less on more sophisticated (and time-consuming) methods such as benchmarking and statistical analysis.

When it comes to self-administration of claims, medium airport operators are the most active and tend to evaluate the decision to self-administer more frequently than do large and small airport operators. Small airport operators do not self-administer claims and do not evaluate self-administration as an option. Large airport operators in this survey generally also forgo the self-administration of claims; however, they do tend to look at this option periodically.

Survey findings indicated that, regardless of revenue size, airport operators procure insurance coverage for property, general liability, and business interruption. Nevertheless, there are differences between the coverage-buying practices of the three size classifications. The survey indicated the following insurance-purchasing behaviors:

- Large airport operators may purchase contractors' pollution liability insurance for construction projects, but in general, large airport operator respondents are less likely to purchase pollution legal liability coverage than are small and medium airport operators.
- Medium airport operators do not purchase workers' compensation, employment liability, and auto liability as often as larger and smaller airport operators.
- Small airport operators do not buy construction insurance outside of the occasional purchase of builders' risk coverage. However, medium and large airport operators, often engaged in construction activity, are more likely to participate in consolidated insurance programs and tend to purchase builders' risk coverage more frequently.
- Nearly all large airport operators and about half of medium airport operators purchase insurance against acts of war and terrorism. These facilities tend to include this coverage principally in property coverage lines. Small airport operators, if they do purchase war and terrorism coverage, tend to purchase coverage for liability lines.

At small airports, deductibles and limits tend to remain unchanged for years at a time. In contrast, large airport operators tend to monitor the marketplace and modify both limits and deductibles where there is potential for additional savings.

Most airport operators indicated that deductibles have not changed within the past 3 years; however, when deductible amounts and liability limits are adjusted, large airport operators tend to do so because of perceived risk and affordability, whereas medium airport operators are generally motivated by affordability alone. In addition, as with coverage determination and risk assessment, when it comes to modification of deductible levels and liability limits, medium and small airport operators are more likely than large airport operators to rely on the recommendation of their brokers.

Overall, large airport operators tend to self-insure, whereas small airport operators do not. Where an airport operator does choose to retain risk, workers' compensation insur-

ance appears to be the most frequent choice. Medium and large airport operators tend to retain more workers' compensation risk compared with other lines of insurance.

Most airport operator respondents perform a cost–benefit analysis (evaluate the cost of various options compared with the expected benefits to be derived) to determine whether to retain risk. Respondents did not characterize the level of formality of this analysis. Frequency of analysis to validate this decision to self-insure depends in large part on the line of insurance; however, there are small and medium airport operators that choose not to conduct such analysis. Entire lines of coverage are also forgone by all airport size classifications in favor of risk retention, with coverage for cyber risk being chief among them.

The rule as illustrated by the survey appears to be, the larger the airport, the more risk that is retained. This is most evident in workers' compensation deductibles selected by large and medium airport operators, which in practice are the highest among the various lines of coverage. Smaller airport operators are more risk averse and usually carry deductibles no larger than $100,000.

A few principal conclusions are derived from the data and the interviews in this study.

1. The portion of the airport community characterized as either II (14 CFR Part 139) or Small Hub (49 United States Code 47102) classification standards is difficult to reach and underrepresented in this study. No participants came from either of these groups because none could be identified as willing to participate in prequalification surveys. Similarly, no private airports were represented. Further study may be appropriate to find out whether this part of the community needs the kind of assistance and information that is available to the types of airport operators that did participate.

2. A belief that smaller airport operators may not have the access to peer support or industry group resources is not supported by the information obtained in the interview portion of this study. Of the six "small" airport operator interview participants (less than $250 million operating budget), all respondents identified collaboration with peers and participation in industry or professional groups (Airports Council International–North America, Risk and Insurance Management Society, Public Risk Management Association) as their principal method for determining risk management best practices. However, this belief in lack of access for some may be accurate for classifications mentioned in the first conclusion above (i.e., Classification II or Small Hub). Because of the difficulty in identifying willing participants in these groups, the study revealed no conclusions about the groups' resources for peer consultation or benchmarking.

3. The smaller airport operators in this study showed more emphasis on price and less on coverage than did the larger airport operators. A follow-up study may be appropriate to find the reasons for this emphasis and to determine whether it is warranted or the result of misconception or lack of understanding of the risks.

4. Because price is the primary decision driver for smaller airport operators, a group purchasing or group self-insurance program may be appropriate to help provide adequate coverage at competitive pricing that could be obtained if economies of scale were available. Additional research is needed to determine whether this approach is viable.

5. The apparent tendency of smaller airport operators to forgo terrorism and pollution liability coverage merits further research to determine whether this decision is related to cost or whether there is a valid reason to assume limited exposure.

6. This study focused on insurance purchasing. Another important risk-financing technique is contractual risk transfer, in which another party agrees to pay for loss upon certain contingent events. For smaller airport operators especially, this technique may be valuable because it is very low cost and can be very effective if used properly. A research project to identify the need for training or dissemination of information in this area may benefit the smaller airport operators.

CHAPTER ONE

INTRODUCTION

BACKGROUND

Risk management is a broad, multidisciplinary field that involves elements of science, engineering, law, finance, insurance, and management. It has been referred to as the true "renaissance profession" (LeStrange 1993, p. 2) because of the multiple areas of knowledge and skill required.

Airport risk management is a subspecialty of the field of risk management. Airport risk management is further characterized by the nature of the aviation industry, which includes life safety considerations, catastrophic loss potential, and high visibility. Although there are some unique elements to airport risk management, the underlying principles and the inherent breadth of the risk management discipline apply to airport risk management as they do to risk management in other fields. With such a broad discipline in such a dynamic field, a synthesis of practice must focus on a manageable subtopic to attain any measure of coherence.

This introductory chapter describes the purpose of the report, presents the methodology used to develop the report, provides general background information, and outlines the organization of the report.

OBJECTIVES OF STUDY

This synthesis topic was scoped by a nine-member panel of industry experts whose discussions identified several issues in U.S. airport risk management:

1. A lack of consistency in insurance-purchasing practice,
2. A wide variation in technical knowledge among persons charged with buying insurance,
3. A lack of benchmarking information within the industry (for insurance purchasing),
4. Significant variation between airport operators in exposures to loss, and
5. A wide variation in coverage purchased.

The objective of this synthesis is to examine the current risk management practices and to identify variables, including exposures that affect insurance-purchasing decisions for airport operators. This synthesis identifies key factors for airport operators to consider when making decisions on their own insurance requirement needs and risk management practices.

SCOPE OF STUDY

The scope of this study, as determined by TRB staff and the topic panel, is limited to examining current airport risk management practice in insurance purchasing. The study includes commercial and general aviation airports.

Although airport risk management includes many other facets, such as loss control, alternative risk financing, risk analysis, coverage analysis, enterprise risk management, and more, this report does not address those subjects. Although this report includes some discussion of the risk manager's role in the insurance-procurement process, the report is not about developments in the risk management field.

The intent of this synthesis is not to identify potential weaknesses or provide recommendations to correct any perceived deficiencies.

STUDY METHODOLOGY

Several techniques were used to capture this information, including a literature search on current airport risk management practices, a survey of airport operator personnel responsible for risk management, and interviews with selected airport operator system risk managers. As requested by the study sponsors and the panel, both the survey questionnaire and the interview question list were kept as short as possible to encourage participation and to minimize disruption for the participants. Interviews were to be held to 20 minutes.

Literature Search

A literature search was conducted to document current practices in airport risk management and insurance purchasing. The search focused on (1) available documentation regarding

coverage purchased; (2) regulatory or statutory restrictions or requirements applicable to insurance purchasing at airports; and (3) current procurement practices used by airport operators, including use of insurance brokers. Because there is a dearth of published work specifically on airport insurance buying, the literature field was expanded to include more generic works addressing such topics as use of insurance brokers, coverage purchasing, and general insurance-related risk management practices.

Survey

A survey was developed to identify practices and correlate characteristics of airport operators that use them for the process of identifying and financing risks. The Internet-based survey was designed to be closed-ended. With very few exceptions, responders needed only to check a box on a form.

Various sources were invoked to obtain a population of U.S. airport operators, including trade associations, insurance sources, and the contacts of the panel and the principal investigator. This effort yielded a relatively small population given the more than 10,000 U.S. airports. A difficulty in surveying smaller airport operators without risk managers or key persons responsible for risk management is identifying to whom to send the survey. A second difficulty is finding persons with sufficient time or interest to participate. Airport operators were prequalified by a preliminary survey of a larger population to determine those willing to participate.

Twenty-one prequalified airport operator systems were selected to participate in the survey. A total of 19 airport operator systems (42 airports), a 90% response rate, replied to the survey request. Their geographic distributions are shown in Figure 1. In some cases, additional airport map pins may be hidden underneath another pin.

Owing to the limited survey respondent pool, the survey analysis was conducted on the basis of airport operating revenue size. This approach resulted in an equal number of respondents for each operating revenue size classification. Operating revenues ranged from $100 million to more than $600 million. A copy of the survey questionnaire can be found in Appendix A, and a list of respondent airport operator systems is included as Appendix B of this report.

For purposes of this synthesis,

Large airport operators are those reporting last-year operating revenue of more than $600 million;

Medium airport operators are those reporting operating revenue between $251 million and $600 million; and

Small airport operators are those reporting operating revenue less than $250 million.

The 19 survey respondents are almost equally divided among the three size classifications, with six survey respondents each for large and medium airports and seven for small airports. The survey generally relied on the respondents to report their revenue size and did not attempt to validate the responses through review of public records. Because most of the financial information available from the airport operators came from the 2009 fiscal year, the results may be somewhat skewed downward regarding size. The year 2009 was a poor one for most airport operators, with enplanements and revenues below normal owing to the state of the economy. The survey assumed that the airport operator representatives would be knowledgeable about their current operating revenues, especially with regard to recent changes resulting from economic conditions.

FIGURE 1 Geographic distribution of survey respondents.

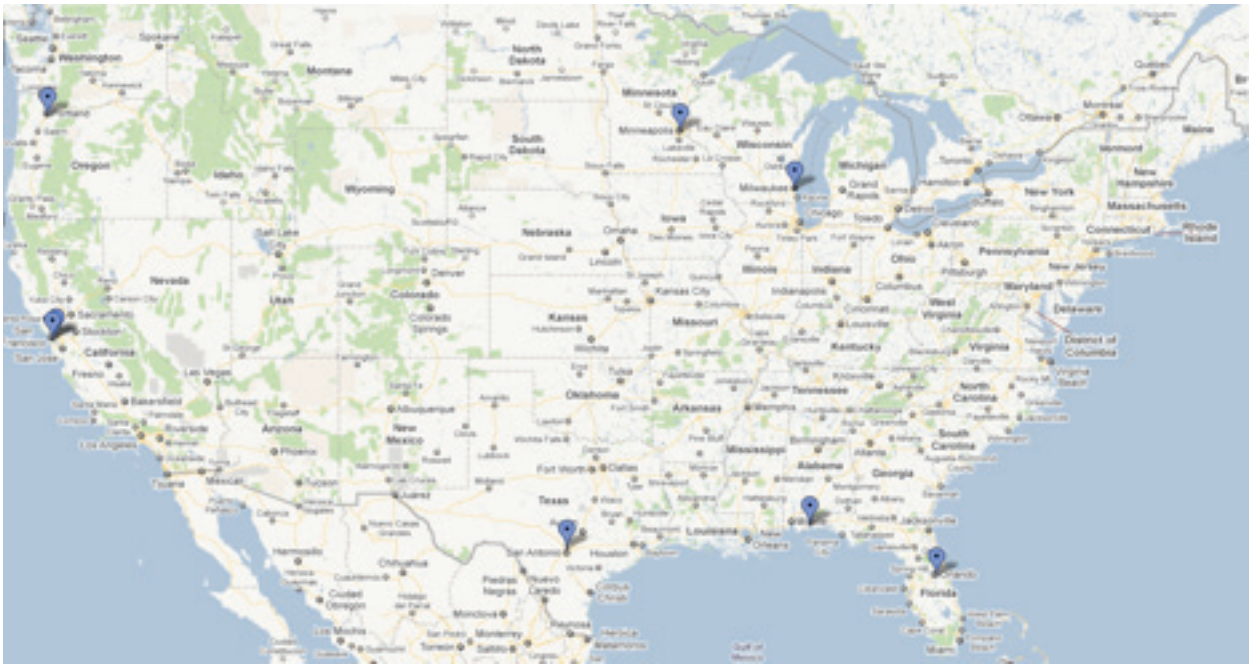

FIGURE 2 Geographic distribution of interview participants.

All respondents to the survey are public entities. Eleven are state or local entities, and the remaining eight are either commission or authority.

Eleven of the 19 of survey respondents employ a dedicated airport risk manager. For large and medium airport operators, this is the dominant practice. Five of the six respondents in each of these categories indicated employment of a dedicated risk manager.

Interviews

Risk managers from eight airport operator systems representing 20 individual airports agreed to participate in a brief interview to describe their practices for procuring insurance coverage and to reveal information about their role within their organizations. Interview questions were developed with the assistance and contributions of the expert panel. Interviews were to be limited to 20 minutes, although interviews were not halted at that point if the responder wanted to elaborate. Most were completed within 20 minutes. Figure 2 shows the geographic distribution of the interviewees.

ORGANIZATION OF THE REPORT

This report is organized along the lines of the survey categories, which were developed on the basis of the guidelines presented by the panel.

Chapter one presents background information on the study, the reasons for it, and how it was conducted. Chapter two discusses insurance-buying practices of airport operators. Chapter three presents information about the role of the risk manager in insurance buying. Chapter four identifies coverage purchasing by type and practices. Chapter five discusses deductible and limit selection. Chapter six presents information on risk retention practices. Chapter seven presents the study conclusions.

CHAPTER TWO

AIRPORT OPERATOR INSURANCE-BUYING PRACTICES

USE OF BROKERS

Number of Brokers

Ten of 19 survey respondents indicated that they use one insurance broker when purchasing coverage for their airport. Seven of 19 employ two brokers, whereas two operators use more than three brokers when placing coverage for their airport.

Large airport operators tend to use a greater number of brokers, most (n = 4) using two or more. Medium airport operators generally use only one broker, although some did cite use of two or three-plus brokers. Small airport operators generally use only one insurance broker.

Broker Selection

Large airport operators exclusively use the open competitive bid process to select insurance brokers for their facilities. In contrast, small and medium airport operators practice a variety of other procurement methods in broker selection, such as a request for qualifications, request for proposals, or selection from prequalified pools.

Smaller airport operators tend to competitively procure broker services contracts less frequently than large or medium airport operators. A strong majority of large and medium airport operator respondents competitively procure broker services contracts every 3 to 5 years, whereas all small airport operator respondents competitively procure their broker services no more frequently than every 5 years.

Open competitive procurements are motivated by several factors (International Risk Management Institute 2010), among them airport procurement guidelines, service provided, broker performance, and contract expiration. Survey results illustrate that regardless of airport size, contract expiration and procurement guidelines are the common impetus for competitive procurement.

Airport Operator–Broker Agreements

Once the broker is chosen, written service agreements between the broker and the airport facility are the norm for all airport classifications and sizes; however, some small airport operators do choose to work with brokers under less formal arrangements.

All large and medium survey respondents reported the use of written broker service agreements between airport facility and broker. Only two small airport operator respondents, both reporting revenues of less than $100 million, stated that they have no formal written agreement with their insurance broker. All other respondents use a written agreement.

Airport Operator–Broker Relationship

The majority of airport operator respondents have long-term relationships with their current broker. Thirteen airport operator systems indicated that they have worked with their current broker for 5 years or more.

Survey results also demonstrate that the smaller the airport operator, the more likely the airport operator and its broker are to have forged a long-term relationship. Although a number of large and medium airport operators have worked with their current broker of record for approximately 3 years, all small airport operator survey respondents indicated that their current broker has served for anywhere from 5 to 10 or more years. This is consistent with the above-mentioned results showing that smaller airport operators competitively bid insurance brokerage contracts less frequently than their larger counterparts.

Smaller airport operators also show more reliance on the advice of their respective brokers. Overall, 12 of 19 airport operator respondents stated that they rely extensively on broker recommendations when making insurance-purchasing decisions. Of this group, half (n = 3) of all large airport operator respondents and six of seven small airport operator respondents reported extensive reliance on broker recommendations. Small airport operators indicated that they are unable to perform the kind of in-depth coverage analysis required and thus depend on their broker to provide these services.

INSURANCE-PURCHASING DECISIONS

Who Decides?

Insurance-purchasing decisions often follow a multilayered approach. Respondents universally indicated that internal airport operator staff and brokers assist in the purchasing process. Some airport operators employ dedicated commit-

tees and/or outside risk management consultants, whereas others follow the advice of airport commissions, boards, or a director of risk management in choosing and procuring coverage best suited to their facilities.

Large airport operator survey respondents indicated reliance primarily on internal staff resources, with help from the broker and outside consultants. Many of these larger airport operators also make purchasing decisions under the direction of a board of commissioners and the airport's risk manager. Medium airport operators rely less on a commission or board, but similarly use internal staff resources as well as those of their insurance broker in making all coverage determinations.

It can be noted, however, that large airport operators do tend to rely less on the advice of their brokers in making insurance-purchasing decisions, most likely because of greater resources available to larger facilities with more numerous staff and expanded operating budgets as compared with their smaller counterparts.

In each of the three airport size classifications, there is a designated hierarchy of individuals who interact to shape the coverage that will insure the airport, its operations, facilities, employees, and visitors. In general, large airport operators appear to delegate this decision-making process to airport officials and internal staff; medium and small airport operators tend to entrust coverage decisions to insurance brokers to supplement their more limited internal resources.

What Factors Influence Purchasing Decisions?

Overall, the most important factor in insurance-purchasing decisions is coverage (protection). Price ranks second in importance among survey respondents and exposure ranks third. However, although coverage is the priority among all survey respondents, medium and small respondents rank price as equally influential or in some cases even more influential (as compared with coverage) in purchasing decisions.

Figure 3 illustrates the importance of factors such as price, coverage, and exposure in making insurance-purchasing decisions as weighed by survey respondents from all airport size classifications. The questionnaire also included a category of broker recommendation and a category for other factors. Neither category had any responses.

Smaller airport operators are the most cost sensitive when procuring coverage for their facility. Although medium airport operators also express concern as to the price of insurance, large airport operators do not recognize price as a factor in their coverage decisions.

All airport operators reported that coverage is an important criterion. Larger and medium airport operators are concerned with the various exposures faced by their airports,

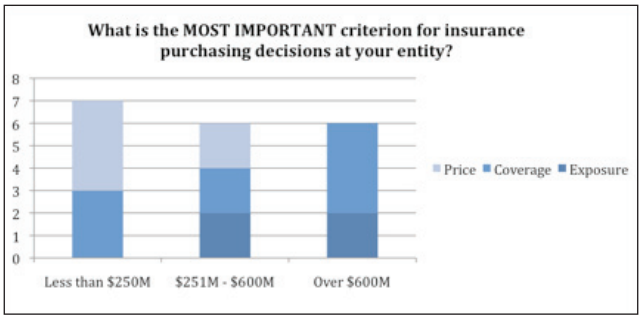

FIGURE 3 Factors influencing insurance buying practice at all airport size classifications by priority. Numerical axis shows number of airport operators responding.

whereas small facilities do not identify exposures as an influential factor in their coverage decisions. Oddly, although a strong majority of airport operators admit at least some reliance on the advice of their broker in making purchasing decisions, none of the respondents regardless of class size list broker recommendation as the most important criterion for their insurance-purchasing decisions.

How Often Do Airport Operators Shop Coverage?

A variety of factors determine how often an airport operator obtains competitive insurance quotations or "shops" the various lines of coverage. Overall, 13 of 19 survey respondents shop property and casualty lines every year, with four of 19 respondents indicating that they shop coverage every 3 years. One airport operator respondent indicated that they do not "shop" for coverage at all. Another indicated that coverage selection or shopping is dependent on preliminary renewal pricing and coverage terms.

Although three of the six large airport operators shop every 3 years, medium and small airport operators tend to shop annually. Larger airport operators shop less frequently because they negotiate longer program terms, lock in rates over multiple years, and tend to develop long-term relationships with insurance carriers.

What Prompts the Purchase of New Insurance Products?

When it comes to buying new insurance products, 14 of 19 respondents cited the use of cost–benefit analysis as the most important factor in coverage selection. Remaining respondents cited newly identified exposures as the motivating factor behind the purchase of new lines of coverage.

In this instance, there are no significant differences between the size classifications. All identified cost–benefit analysis as the determinant factor in purchasing a new insurance product.

According to the survey instrument, small airport operators are price sensitive when making insurance-purchasing

decisions and are less concerned about the exposures attendant to airport operator functions. Although medium airport operators take price into consideration, they are equally concerned with exposure and coverage. Large airport operators, on the other hand, do not consider price a determining factor in purchasing decisions. Large airport operators give factors such as coverage and exposure far more weight in the deliberations process.

A point of commonality among the three size classifications is that all airport classifications use internal staff in addition to the expertise of their insurance brokers to make purchasing decisions. However, medium and small facilities rely more on brokers than do large facilities.

Small and medium airport operators also find common ground in their tendency to shop coverage more frequently than large airport operators. Although the small and medium facilities indicate program shopping once per year, larger facilities are in the practice of locking in rates for long-term programs with their chosen insurance carriers. All three classifications, however, prefer to conduct a cost–benefit analysis in contemplation of the purchase of a new insurance product.

INTERVIEW RESULTS—INSURANCE-PURCHASING DECISIONS

One of the most interesting findings of the follow-up interviews with airport officials was the relatively high level of authority granted to airport risk managers regarding insurance-purchasing decisions (see Appendix E). Most risk managers have limited or full buying authority subject to ratification by a governing body or top-level executive. In the public sector, purchasing authority is often highly limited, especially for service purchases. Although ratification is required in all interviewed airport operator entities and dollar amounts are restricted for some airports, the level of authority for insurance buying is quite high and, in some cases, without specific limits.

The interviews also explored the effect of tort liability caps on insurance-buying decisions. Five of eight interviewees reside in states with governmental tort liability caps on claims. The caps range from $50,000 to $1,500,000 per occurrence. Two states have no caps (two operators are located in the same state). Four of the interviewees stated that tort liability caps influence their insurance-buying decision. One interviewee stated that purchase of insurance above the tort caps waives the entities' immunities. In that instance, the airport operator buys insurance only to tort limits for nonaviation exposures. Some of the operators indicated that despite immunities or tort caps, the airport purchases coverage out of caution.

CHAPTER THREE

AIRPORT RISK MANAGER'S ROLE

The risk management profession grew out of an insurance-buying role. Its principal professional organization, the Risk and Insurance Management Society (RIMS), evolved from an earlier organization known as the American Society of Insurance Management "acknowledging the shift toward risk management" and away from just buying insurance and managing the accompanying services (Arnold 2002).

Nevertheless, insurance purchasing remains an important function of the present-day risk manager. Not all organizations have risk managers, however, although someone is always responsible for the functions that a risk manger performs. The survey included questions about employment of risk managers by airport operators; their insurance-purchasing responsibility and authority; their systems, methods, and procedures for insurance purchasing; and how this function relates to their overall role within the organization.

AIRPORT RISK MANAGERS

Eleven of 19 airport operator respondents employ a designated airport risk manager charged with the authority to make final insurance-purchasing decisions. Airport operators without risk managers tend to rely on positions such as a deputy director, a municipal risk manager (for operators that are part of a municipal agency), or legal or finance personnel to make the final insurance-purchasing decision.

All but one large airport operator respondent stated that the airport risk manager is ultimately responsible for the risk management role in their facility, including insurance-purchasing decisions. The remaining airport operator indicated that the Treasury/Risk Financing Department is charged with these tasks.

Medium airport operators fall in line with their larger counterparts. All but one medium airport operator respondent has a designated airport risk manager. The remaining medium airport operator uses the services of a municipal risk manager.

Small airport operators tend to use a variety of resources to manage risk. Like the larger airport operators, some indicate use of a designated risk manager. Unlike the consolidated, single risk manager approach employed by large airport operators, persons charged with the risk management role in small airports include deputy directors, finance managers, property managers, legal personnel, and various committees within the airport operator organization.

Fifteen of 19 airport operators confirmed that risk management is a full-time position at their facility. Of the remaining airport operators with part-time risk managers, the primary responsibility of these risk managers entails finance, legal matters, and property management.

RISK ANALYSIS

After computer problems crippled the new $20 billion Chek Lap Kok (Hong Kong) airport in July 1998, economic losses related to cargo delays amounted to more than $1 billion. The staggering losses led to an inquiry by an independent commission to determine responsibility for these losses and to ensure that the same mistakes would not be made again (Macdermott 1999).

The commission's report focused on the critical nature of comprehensive risk assessment and contingency planning to ensure the success of large-scale infrastructure projects such as Chek Lap Kok. The report cited a multitude of operation problems, from slippery floors, insufficient air conditioning, and escalator stoppages to more complex problems such as malfunctioning of both the flight information display system and cargo-handling system.

Here, the lack of overall risk assessment resulted in a near irreparable breakdown in procedure, $1 billion in losses, embarrassment for the government-run airport, and 6 weeks of remediation before the facility could begin operations at the intended capacity.

Airport operators responding to this synthesis survey instrument are aware of the need for risk assessment. Airport operators, especially large and medium facilities, employ risk assessment techniques such as cost–benefit analysis, evaluation of loss histories, benchmarking, and statistical analysis to make the decisions that keep day-to-day operations afloat and, for effective risk managers, successful.

How Frequently Do Airport Operators Perform Risk Analysis?

The majority of airport operator respondents indicated that they "usually" or "always" conduct specific risk analysis to validate insurance-purchasing decisions. Some responded that whether or not an analysis is performed depends on the type of coverage; one respondent stated that his or her facility never performs risk assessments.

Large airport operators reported that they "always" perform risk assessments. For medium airport operators, risk analysis is less certain. Two of six medium airport operator respondents indicated that their facility "always" performs risk analysis to validate purchasing decisions. Another two operators indicated that their facilities "usually" perform risk analysis to validate these decisions, and the remaining two respondents stated that the performance of risk analysis depends on the line of coverage purchased.

Small airport operators responded with a variety of answers when questioned about the frequency of risk assessment at their airports. Four of seven small operators claimed that they "always" conduct risk analysis. The remaining airport operators were split. One indicated periodic performance of risk analysis. One operator stated that the analysis is dependent on the line of coverage. One small facility admitted that it does not perform risk assessments at all.

In summation, the survey instrument reveals that medium and large airport operators tend to rely on risk analysis to validate insurance-purchasing decisions. In contrast, small airport operators rely less on this approach, likely because on the whole they are without the dedicated personnel, monetary resources, and the knowledge base necessary to conduct these tasks.

What Methods of Risk Analysis Are Used?

Of the airport operators that conduct risk analyses, most use not one but a variety of methods, including the evaluation of contracts, records, and documents; benchmarking; and statistical analysis. All airport operators conducting risk analysis evaluate loss histories in performance of this task.

Large facility respondents use personal inspections of their facilities and analyze loss histories using benchmarking; statistical analysis; and review of contracts, documents, and records. Half of these large airport operators use risk assessment questionnaires, and one uses personal interviews and staff discussions to evaluate purchasing decisions.

As a group, medium airport operators evaluate contracts, records, and documents; use benchmarking; and evaluate loss histories. Some conduct personal inspections and risk assessment questionnaires.

Of the small airport operators that do conduct risk assessments, all evaluate contracts, records, documents, and loss histories. Most conduct personal inspections. Some also use benchmarking and statistical analysis to assess the performance of risk management strategies and their overall insurance program.

Based on survey responses, there appears to be no marked difference in the methods used by the three airport size classifications to perform risk analysis; however, small airport operators responded that they rely less on methods such as benchmarking and statistical analysis than do the larger facilities.

Who Performs Risk Analysis?

Risk managers, risk analysts, safety officers, and insurance brokers are the person(s) responsible for risk analysis. Some airport operators also named independent risk consultants and/or other internal personnel as responsible for this function.

All large airport operator respondents stated that risk managers or risk analysts within their organization perform risk assessments. Three of six of these respondents also use insurance brokers and safety officers within the organization to aid in assessments.

Again, all medium airport operator respondents stated that the risk manager within the organization runs the analysis. Some solicit assistance from safety and insurance broker personnel.

Of the small airport operators that conduct risk assessments, a majority of small respondents rely on safety officers; half use risk managers, broker personnel, and independent risk consultants to perform analysis for their facility.

Smaller airport operators tend to rely on safety officers to conduct risk assessments, as they do not employ dedicated airport risk managers and the risk management function tends to be part time. In contrast, medium and large airport operators use dedicated risk managers and/or staff and rely less on safety officers and insurance brokers to conduct the analysis to evaluate insurance-purchasing decisions and determine the quality of the coverage purchased and its attendant services.

PRIORITY OF EXPOSURES

In order of importance, areas of exposure concerning the survey respondents include general liability, construction, and business interruption. Although these three areas are the top concerns among airport operators, other loss exposures, namely automobile liability, environmental concerns, war

and terrorism, professional liability, and cyber risks, worry the respondent airport operators as well.

Large airport operators prioritize general liability and war and terrorism as the two loss exposures causing them the most concern and requiring the greatest amount of attention today. Business interruption and construction tie for third among large airport operator exposure concerns.

Medium airport operators are most concerned with general liability and construction liability exposures. No medium airport operator respondents cited war and terrorism as a priority concern. One medium airport operator included automobile liability exposures as one of their top three exposure concerns.

Small airport operator exposure concerns primarily include general liability and automobile liability. Fewer than half of small airport operator respondents reported business interruption, environmental considerations, or cyber risk within their top-three exposure concerns. No small airport operators mentioned professional liability or war and terrorism exposures as priorities within their organization.

Overall, general liability exposures take priority with airport operators in all size classes. Small and medium airport operators did not express concern regarding war and terrorism; however, war and terrorism is of great concern for larger respondent airport operators. Both large and medium airport operators expressed some concern for construction liability exposures, whereas small airport operators are more concerned with automobile liability exposures.

CLAIMS ADMINISTRATION

Most airport operators do not self-administer claims. Of airport operator survey respondents that do, two stated that their facility self-administers general liability claims, and another self-administers workers' compensation claims, automobile liability claims, and all other coverage lines up to program retention levels.

Only one large airport operator respondent self-administers claims for general liability. Medium airport operators were split on claims administration, with half indicating that they self-administer and half outsourcing claims. No small airport operators reported self-administration of claims. Thus, the survey instrument illustrates that medium airport operators are most likely to engage in claims administration, whereas small airport operators do not self-administer claims at all.

Results also show that just 10 of 19 respondents do not conduct a cost–benefit analysis relating to the self-administration of claims. Of those 10 that conduct such analysis, three perform this evaluation every year, three evaluate every 3 or more years, and three evaluate claims administration practices when they rebid the airport's insurance package.

Large airport operator respondents tend to evaluate claims administration either every 3 years, when they rebid insurance, or not at all. Medium facilities are split, with three indicating that they perform cost–benefit analysis of claims administration every year, and three providing varying responses ranging from evaluation upon rebid of insurance to never. All small airport operator respondents answered that they do not perform cost–benefit analysis regarding self-administration of claims, which is not unexpected given that none of the small airport operator respondents currently engage in self-administration of claims.

In summation, the survey results indicate that medium airport operators tend to evaluate self-administration of claims more frequently than both large and small airport operators. Although large airport operators do perform this analysis, they use this risk management tool less frequently, generally when they rebid the facility's insurance package about every 3 years. Small airport operators do not conduct this type of cost–benefit analysis.

These results are in line with earlier survey findings that small airport operators rely less on risk analysis, most likely because they are without the greater resources of their medium and large airport operator counterparts.

INCREASING IMPORTANCE OF RISK MANAGEMENT AT AIRPORTS

Fifteen of 19 respondents indicated that the risk management function has become increasingly important to their airport in recent years, and not one respondent stated that the risk management function had declined in importance over recent years. From the survey responses, it appears that regardless of revenue size, risk management is becoming more of a priority for airports across the country.

The increasing weight of the airport risk management function may be directly attributed to the ever-expanding nature of the aviation industry. In addition to air transportation and preflight dining, airport operators are transitioning into full-service operations in the business of providing hotel accommodations, gym facilities, museum and exhibition space, shopping, and connections to various methods of ground transportation. The transition equates to new and previously unexplored exposures and the need to effectively oversee those exposures.

INTERVIEW RESULTS—RISK MANAGER'S ROLE

Participants in the interviews were asked, "How has the evolving role of risk management affected insurance purchasing in your organization?" Responses varied, as shown in Appendix E, but there were several common threads:

1. Risk mitigation has become more important than insurance.

2. Insurance has become a "last resort" after exploring other avenues for financing risk. Several interviewees commented that their organizations retain or "self-insure" large loss exposures.

3. "Enterprise risk management" has become important within some organizations, and one indicated that this perspective was the basis for insurance-purchasing decisions. None of the interviewees defined "enterprise risk management." One interviewee said, "I have yet to meet anyone who actually practices enterprise risk management," and that it was not easy to do so because uninsurable risks were often addressed by line managers, not by the risk manager.

Another question asked whether the risk manager was considered a member of senior staff within the organization. Six of the eight interviewees answered yes.

Five of the interviewees report to a chief finance officer or director of finance. Two report to a chief administrative officer or director of administration. One reports to the human resources director. This finding reflects industry observations that risk management is viewed increasingly as a financial function (International Risk Management Institute 2010).

CHAPTER FOUR

COVERAGE SELECTION

PROPERTY AND LIABILITY INSURANCE

All airport operator respondents purchase property and general liability insurance, and all but one of 19 purchase coverage for business interruption. Fourteen of 19 respondents purchase both crime and employment practices liability, and well over half of respondent airport operators purchase builders' risk, workers' compensation, commercial auto coverage, and coverage for public officials' errors and omissions.

The breakdown of buying practices looks much the same for large airport operators. All stated that they purchase property, business interruption, general liability, and crime policies. All but one large airport operator confirmed the purchase of builders' risk insurance, and four of six also buy workers' compensation, auto liability, public officials' errors and omissions, and employment practices liability.

The survey did not specifically inquire about purchase of certain types of catastrophic loss coverages such as earthquake and coastal windstorm. Because relatively few of the airport operators surveyed are in locations where such coverage is a concern, it would be difficult to obtain meaningful data concerning such coverage in this survey.

All medium airport operator respondents indicated that they purchase property insurance. Three of six medium respondents buy coverage for builders' risk, crime, employment liability, and pollution. One medium airport operator reported the purchase of workers' compensation insurance, and one reported the purchase of excess workers' compensation coverage.

Purchasing habits of smaller airport operators show that these facilities are coverage-heavy and that small airport operators tend to purchase a wide variety of coverage types. Again, all small airport operators surveyed carry property insurance. All small airport operator respondents also indicated the purchase of business interruption, general liability, workers' compensation, and employment practices liability. All but one carry coverage for auto liability. Five of seven small airport operator respondents purchase crime, fiduciary liability, public officials' errors and omission, and directors' and officers' liability coverage. Three of seven small operator respondents also buy builders' risk, professional liability, and pollution coverage.

Several differences emerged in the types of coverage selected by each size classification. First, medium airport operators do not purchase workers' compensation or employment liability coverage, as do their large and small airport operator counterparts. Also of note is that small airport operators do not report the purchase of insurance for construction outside of the few respondents who purchase builders' risk policies. Other disparities among respondents include that large airport operators do not report the purchase of pollution liability at the same rate as smaller airport operators, and medium airport operators do not report the purchase of auto liability coverage as frequently as their large and small counterparts.

Despite these differences, a majority of airport operators regardless of size did confirm the purchase of property, general liability, and business interruption coverage.

INSURANCE FOR CONSTRUCTION

Thirteen of 17 respondents purchase coverage for construction activities on their airport. Of those, seven procure builders' risk coverage, and four participate in an owner-controlled insurance program (OCIP).

All but one of the large airport operator respondents confirmed the purchase of builders' risk coverage. Three large airport operators buy contractors' pollution liability. Another three have an OCIP.

Three of six medium airport operator respondents are undergoing construction. Of these, two participate in an OCIP that includes coverage for builders' risk. One additional medium airport operator reported that implementation of an OCIP is under consideration at this time.

Three of seven small airport operators indicated the purchase of insurance for construction. Of those that do, some buy builders' risk insurance, whereas others indicated that insurance is purchased through project contractors.

Survey instrument results illustrate that both large and medium airport classifications are actively involved in construction programs; therefore, a large percentage purchase construction coverage to provide for any potential pro-

gram losses. Both medium and large airport operators also reported experience with OCIPs; however, only large airport operators reported the purchase of contractors' pollution liability insurance.

WAR RISK AND TERRORISM INSURANCE

Terrorism insurance in the United States is provided through two principal mechanisms. One is government-sponsored under the Terrorism Risk and Insurance Act (TRIA) and its successors and provides a limited pool of coverage ($100 billion) and requires certain conditions such as a declaration of an act of terrorism, losses of more than $100 million total from the terrorist act, and other requirements. Under TRIA, insurers are "reinsured" by the federal government.

"War risk" is excluded under most commercial policies since the terrorist acts of 2001. However, in recent years, it has been possible in the aviation industry to "buy back" the coverage. Doing so provides a less restrictive form of coverage without the conditions required by TRIA.

At the 2009 Airports Council International (ACI) Risk Management Conference, presenter Clayton Hill, Area Vice President for Broker Arthur J. Gallagher, made an effective case for the purchase of war and terrorism coverage, pointing out, "Serious consideration should be given to obtaining War and Related Perils coverage. This is often under sold and misunderstood as only coverage for acts of war and terrorism" (ACI-NA Insurance and Risk Management Conference 2009).

However, a liability policy as issued without the war risk endorsement excludes coverage for strikes, riots, civil commotions or labor disputes, and/or any malicious act of sabotage. Labor disturbances do not apply only to airport employees and may extend to assaults by an individual or a group in connection with any of the above acts. Without war and terrorism coverage, these acts may go uncovered. Furthermore, without the war risk endorsement, physical injuries to others resulting from one person's malicious act may also remain uncovered (ACI-NA Insurance and Risk Management Conference 2009).

War risk and terrorism concerns correlate closely to airport size, although only four of 19 airport operators (all large airport systems) identified the exposure as among their three greatest loss exposure concerns. The larger the airport, the stronger the concern that the facility and its passengers may be targeted. A majority of large airport operator respondents and half of medium respondents do purchase war and terrorism coverage in some form, whereas a lesser percentage of small airport operators elect this coverage. Of airport operators that do elect coverage, the tendency is toward inclusion in property and liability lines of coverage. Medium and large airport operators tend to purchase war and terrorism coverage for property. Small airport operators tend to buy war and terrorism coverage for liability lines.

Of the 19 total airport operator respondents, 14 indicated purchase of some form of war and terrorism coverage. Ten of 19 purchase the coverage for general liability and 11 of 19 for property. Five of 19 respondents do not purchase any form of terrorism coverage (see Figure 4). A 2009 survey conducted by Airports Council International–North America found that 10 of 35 respondents had no form of terrorism liability coverage and 13 of 35 did not purchase the coverage for property insurance.

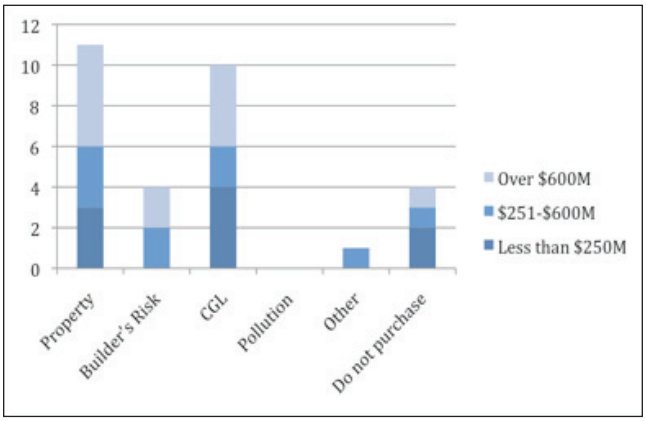

FIGURE 4 Lines of coverage for which airport operators purchase war and terrorism insurance. Numerical axis shows number of airport operators responding.

Five of six large airport operator respondents purchase war and terrorism coverage for airport property. Four of the six large operators purchase war and terrorism coverage for general liability lines, and two purchase war and terrorism coverage on builders' risk policies. Only one large airport operator respondent did not purchase any type of war and terrorism insurance.

Three of six medium airport operator respondents purchase war and terrorism coverage for property. Only two of the six medium airport operators procure war and terrorism coverage for general liability and builders' risk policies. One medium airport operator respondent also did not purchase any type of war and terrorism coverage.

Two of the seven small airport operators reported that they do not purchase insurance for acts of war and terrorism. Of those that do, three of five operators purchase war and terrorism coverage for liability, and two operators obtain war and terrorism coverage for property. Although the survey did not explore why a smaller operator would decline to purchase this coverage, one assumption is that smaller airport operators do not perceive the risk of an event being as likely as do the larger airport operators. Acts of terrorism can be launched from any airport, however.

INTERVIEW RESULTS—COVERAGE SELECTION

The eight airport operators interviewed were not asked to identify the lines of coverage purchased but to indicate whether any coverage had been added or dropped recently. None had added or dropped any coverage lines. Interviewees were asked specifically about two types of insurance: terrorism and construction.

Terrorism and War Risk

Five of eight operators buy some form of terrorism or war risk insurance for liability and seven purchase coverage for property. Responses as to why the individual operator purchases the coverage showed no clear pattern. One operator said the purchase was the result of contractual requirements in leases. Another was concerned about coverage for defense. A third indicated that price was a motivator as the coverage is currently inexpensive. This same operator indicated that the entity would not buy the coverage at 2002 prices.

Insurance for Construction

Interviewees were asked only about the type of risk financing used for construction activities, not about the actual coverages purchased. Four of the operators had OCIPs. One had participated in a contractor-controlled insurance program (CCIP), and the remaining three used the "traditional" approach, allocating the risk to the contractor or construction manager and relying on indemnity and additional insured status under the contractor's relevant liability policies.

Three of the airport operators that had used OCIP indicated they would use the technique again. A fourth did not answer this question. One "traditional" risk-financing operator said it would use the same technique again, and another that had used the "traditional" method indicated an interest in OCIP. The remaining interviewees did not answer the question.

CHAPTER FIVE

PRACTICES FOR CHOOSING DEDUCTIBLES AND LIMITS

DEDUCTIBLES

Seven of 19 survey respondents stated that they review deductibles annually. Seven respondents indicated that they tend to change their deductibles when market conditions yield premium savings. A smaller group of total participants, five of 19, indicated that deductibles at their facility have remained the same for many years.

Four of six large airport operator respondents adjust deductibles as market conditions yield premium savings. Two large airport operators stated that they review and assess deductibles annually on policy renewal.

As for medium airport operators, two of the six review and assess deductibles annually on policy renewal. Two operators adjust deductibles according to conditions within the market, and two reported no change in deductibles for many years.

Likewise, three of seven small airport operators have not changed the amount of their deductibles in years. Two of the small airport operator respondents review and assess deductibles annually. A lesser percentage of small respondents indicated that adjustments to deductibles are dependent on market conditions or that they do not adjust deductibles at all.

Results of the survey instrument show that large airport operators review deductible levels more frequently than small and medium airport operators and tend to be more sensitive to market conditions when assessing deductibles. On the other hand, small and medium airport operators tend to leave deductible levels unchanged or assess deductibles annually on renewal.

The survey also inquired whether respondents have increased deductibles within the past 3 years, and if so, the reasons for this increase. Of the airport operators who acknowledged having increased deductibles in the past, five of 10 have not made any changes in the past 3 years. Three of the 10 respondents to this question reported that the cost of insurance has been a factor that has caused their airport to obtain higher deductibles, and two respondents indicated that the loss exposure supports a higher retention.

None of the large or medium airport operator respondents reported an increase in deductibles within the past 3 years. Reasons compelling an increase in smaller airport operator deductibles include the cost of insurance, the condition of the insurance market, and support for a higher rate of retention.

LIMITS

Modification of Liability Limits

Seven of the 19 survey respondents adjust liability limits according to market conditions. Six operators replied that liability limits have not changed for many years; none of these were in the largest category. Two of the 19 participants stated that they evaluate their limits annually, whereas two respondents indicated that they do not adjust liability limits at all.

Large airport operator respondents change liability limits depending on market conditions. Other large airport operators indicated that they evaluate limits annually on policy renewal.

Three of the six medium airport operator respondents change limits according to changes in market conditions. Two of the medium airport operator respondents stated that limits have remained the same for years, and one medium airport operator evaluates limits annually at renewal.

Of the responding small airport operators, all but one indicated that liability limits have not changed in years or do not change at all. Only one indicated that liability limits change according to conditions in the insurance market. Figure 5 shows the distribution of responses by airport operator size.

The survey instrument revealed that as airport size increases, so does the likelihood of that airport operator to evaluate and adjust liability limits. Large airport operators are more sensitive to market conditions and look for cues in the marketplace to signal a change in their insurance strategies, whereas medium and small airport operators tend to keep the same limits of insurance each year.

Selection of Liability Limits

Cost, exposure, and broker or consultant recommendation are three factors respondents cited as influential in establishing liability limits for their airport facility.

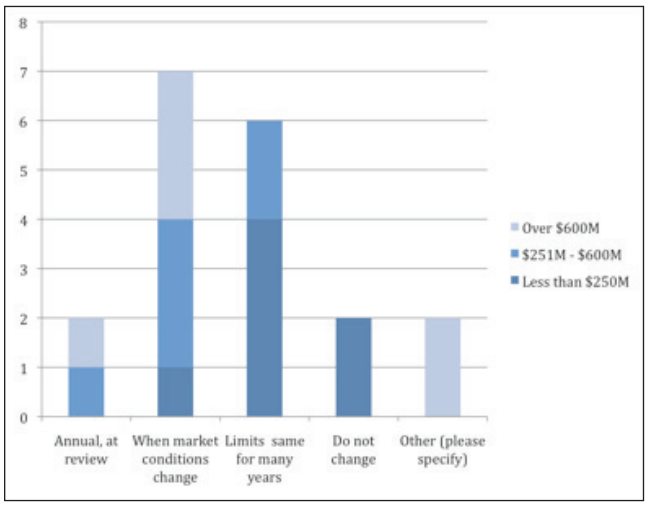

FIGURE 5 Reasons for changing or reviewing liability limits by airport operator size.

Cost and exposure drive large airport operator respondents to make changes in liability limits. Some also indicated that the recommendation of their broker may prompt a change in limits. Medium airport operators indicated cost, broker recommendation, and exposure (in that order) as forces motivating a change in insurance limits.

Small airport operator respondents identified exposure and cost as factors that might prompt a change in limits; however, two of the seven small airport operator respondents revealed that their facility purchases the same liability limits every year (no change).

Furthermore, medium and small airport operator respondents also reported relying on broker recommendations when selecting insurance limits, whereas large airport operators rely less on such recommendations.

Increasing Liability Limits

Approximately 47% of all survey respondents indicated that they have not increased liability limits within the past 3 years. For those airport operators that have, most indicated that increased liability limits were affordable, and this factor prompted a change in the airport operator's buying practice. Others increase liability limits because of a greater loss exposure or owing to a recommendation from the airport operator's broker.

The survey instrument illustrates that small airport operators do not change liability limits from year to year, as large and medium airport operators are prone to do. Specifically, large airport operator respondents adjust limits upward owing to exposures, affordability, and broker recommendation. Medium airport operators increase limits because of affordability, but do not cite exposures or broker recommendation as influences in this decision.

Property Limits

The survey did not inquire about property limits purchased. The issue of limits is much more complex for property insurance than for liability insurance and comparisons are difficult. Because the exposure is determined by the value of the property at risk, individual circumstances at each airport facility vary greatly. Not all property needs to be insured. Large property holdings invite the use of "loss limits" rather than insuring to the value of the entire property; the larger the holdings get, the less likely a total loss or loss to a high percentage of the holdings.

Although the study could have surveyed the processes by which airport operators make decisions about property insurance, the detail required for any meaningful analysis put the issue beyond the scope of a general inquiry about insurance-purchasing practices and would have required many more survey questions that would have made this survey unwieldy.

It is important to note the variety of types of coverage bought by different airport operators and that drawing any conclusions about the bases for insurance-buying decisions is subject to many variables. For example, the purchase of low-deductible coverage for workers' compensation could be the result of the requirement for a particular airport operator to participate in a state fund. As noted in one of the responses to our interviews, one jurisdiction provided that when a public entity buys insurance coverage in excess of the statutory tort limits, it waives those limitations. This results in a decision on limit selection that comes more from a legal perspective than from a risk management perspective.

INTERVIEW RESULTS—DEDUCTIBLES AND LIMITS

The interview questions did not ask specifically about deductibles and limits.

CHAPTER SIX

RISK RETENTION

SELF-INSURANCE

The survey asked respondents to state whether any portion of their insurance portfolio was self-insured. The survey did not specifically define self-insurance, but the question was phrased to specify the use of a large self-insured retention at the primary insurance level with excess insurance above the retained amount. Self-insurance involves a formal decision to retain risk rather than insure it and is distinguished from noninsurance or retention of risks through deductibles by a formalized plan or system to pay losses as they occur (International Risk Management Institute 2010).

Nine of the 19 survey respondents indicated that their facility is self-insured for primary lines of insurance. All large airport operator respondents confirmed that some primary lines are self-insured. Medium airport operator respondents are split: three self-insured and three insured by traditional coverage. Conversely, no small airport operators reported being self-insured for primary lines of coverage.

The size of the airport is directly correlated to whether the facility tends to be self-insured for any lines of insurance. Larger airport operators are self-insured for one or more lines of insurance, whereas small airport operators do not retain risk.

Eight of 19 airport operators indicated they are self-insured for workers' compensation, and six of 19 self-insure for property and six for general liability lines (see Figure 6).

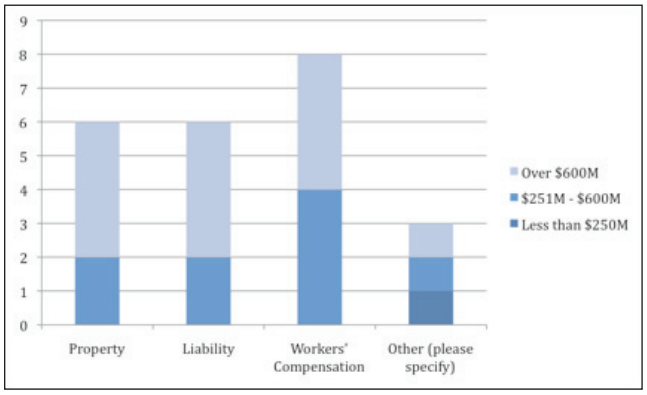

FIGURE 6 Number of airport operators reporting self-insurance by line.

Large airport operator respondents indicated that they are self-insured for property, liability, and workers' compensation coverage lines. Four medium airport operator respondents are self-insured for workers' compensation, two reported self-insuring property, and two self-insure general liability coverage lines. Although no small airport operator respondents reported retaining risks on primary coverage lines, one small airport operator indicated that its facility is self-insured for auto collision.

In general, small airport operators do not self-insure risks and medium airport operators tend to retain workers' compensation risks. Large airport operators self-insure more lines of coverage including property, liability, and workers' compensation. Most likely, this is the result of greater revenues, larger operating budgets, and the existence of personnel well versed in risk management methodology and capable of assessment and implementation of more complex risk-financing strategies at their respective large airport facilities.

WHAT COMPELS AN AIRPORT OPERATOR TO SELF-INSURE?

Of the 11 airport operators that self-insure at least one line of coverage, eight indicated that a cost–benefit analysis prompted the decision to retain risks. Four respondents indicated a strong appetite to retain risk within their facility. Other explanations for the decision to self-insure include the ability to control claims and manage claims costs, as well as affordability of self-insurance as compared with costs of traditional coverage.

Among large airport facilities, cost–benefit analysis is the primary factor in the decision to self-insure. Affordability and the desire to retain risk also rank on large airport operators' lists of reasons to self-insure.

Motivation for medium airport operator self-insurance varies. Medium airport operator respondents cited factors such as cost–benefit analysis, appetite for risk, cost management, better claims administration, and decision of the facility's risk manager as prompting the decision to self-insure.

Overall, a cost–benefit analysis is generally conducted before the decision to retain risks. Large and medium airport operators also evaluate the affordability of such techniques and tend to have a stronger appetite for risk retention than do smaller facilities.

ASSESSING THE VIABILITY OF SELF-INSURANCE

The majority of airport operators use cost–benefit analysis to determine the appropriateness of risk retention. Survey results indicated that, once an airport facility has chosen to self-insure, the frequency of analysis of the viability of self-insurance depends on the type of coverage or particular line of insurance. Some survey participants indicated that they do not probe the viability of their risk retention programs. In stark contrast, other airport operators assess the viability of self-insurance every year.

Four of the six large airport operator respondents indicated that the frequency of a cost–benefit analysis depends on the line of insurance. The remaining large, self-insuring airport operators perform analysis to validate risk retention every year.

As with most of their larger counterparts, half of medium airport operators stated that frequency of cost–benefit analysis depends on the line of coverage. The other half indicated that they do not conduct such analysis.

Although no small airport operators reported self-insurance for primary lines of coverage, five of seven small airport operator respondents indicated that self-insurance is evaluated based on the line of coverage. The remaining airport operators do not conduct such assessments.

Overall, the frequency of risk assessments to determine the viability of risk retention programs is dependent on the line of insurance; however, it is clear from survey responses that some medium and small airport operators do not conduct analysis into self-insurance at all.

FORGONE COVERAGE TYPES

When asked to point out any gaps in their facility's coverage, most respondents indicated that their airport does not insure cyber-related risks, and six of 12 respondents indicated that their airport does not carry coverage for professional liability; six had no pollution liability coverage. Another type of frequently forgone coverage includes law enforcement errors and omissions.

Overall, large airport operators are not covered for pollution risks. Both medium and large airport operator respondents indicated a lack of coverage for professional liability, and all categories are unlikely to cover cyber risks.

SELECTION OF DEDUCTIBLES

Current airport operator deductibles fall in line with each airport classification's appetite for risk as evidenced in the prior section. Fourteen of 19 airport operators indicated property deductibles ranging from zero to $100,000. Figure 7 shows property insurance deductibles for all size airports. The number of respondents indicating a deductible range, for each size range, is shown in the chart.

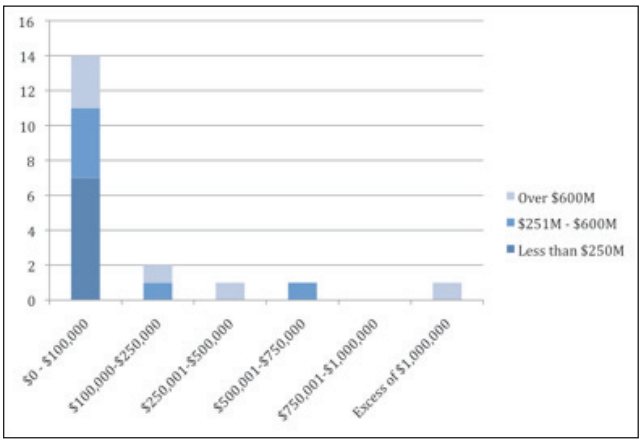

FIGURE 7 Property insurance deductible levels, all airports.

Liability deductibles follow a similar pattern to the property insurance deductibles—clustered at the lower end of the spectrum, even for the larger airport operators. Figure 8 shows deductible-level choices for liability insurance.

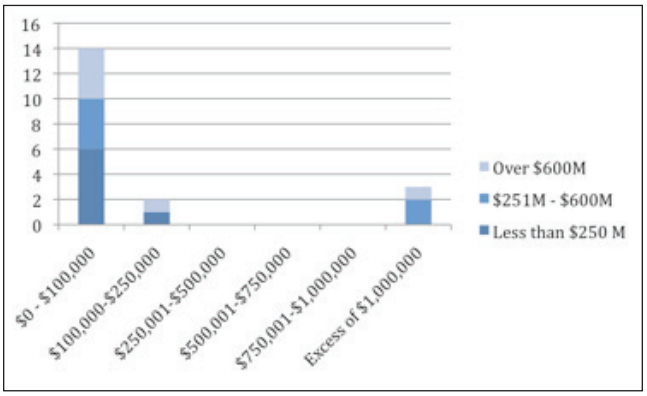

FIGURE 8 Liability insurance deductible levels, all airports.

Workers' compensation deductibles tend to run slightly higher. Eight of 15 airport operators answering this part of the question reported workers' compensation deductibles ranging from zero to $100,000. Figure 9 shows deductible level choices for workers' compensation insurance.

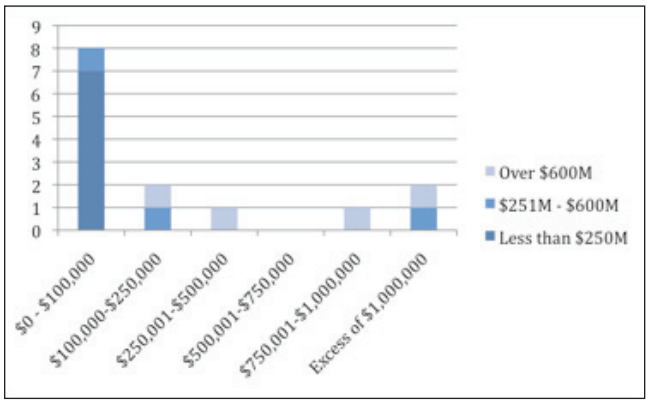

FIGURE 9 Workers' compensation insurance deductible levels, all airports.

The survey instrument shows that large airport operators tend to carry higher workers' compensation deductibles in comparison with deductibles for property and liability lines of insurance. Some medium airport operators also carry high workers' compensation deductibles; however, medium airport operator deductibles for property and liability hover in the zero to $100,000 range. Small airport operators are more risk averse, with most holding deductibles no higher than $100,000 for any lines.

This survey was conducted in the midst of a "soft" insurance market wherein insurers are pricing coverage low and probably not offering substantial premium reductions for higher deductibles. As a result, this survey may understate the "appetite for risk" of the airport operators over the long term.

CHAPTER SEVEN

CONCLUSIONS

Based on a survey of 19 prequalified airport operators, the type of airport organizational structure (e.g., municipal, commission, authority) is less important than size as measured in operating revenue in determining characteristics of risk management within the entity. All of the participating operators are public agencies of some sort.

As would be expected, larger airport operators handle more of the risk management responsibilities in house and are less dependent on their outside services providers, including insurance brokers, for determining how to finance and manage risks. They are also more mutable in their relationships with such providers.

Larger airport operators retain more risk and are more capable of approaching risk management the traditional way: identify, then measure, then treat, then monitor the risk. Smaller airport operators are more likely to be advised and guided by the parties that are also providing a service related to the advice. Thus, the smaller airport operator approach also appears to be more product-oriented than exposure-oriented.

These conclusions imply that additional research or efforts on the part of the airport risk management community may be designed to best benefit medium to small airport operators.

Another finding leading to this conclusion is that some smaller airport operators appear to not address some of the more significant risks, such as pollution and war and terrorism. Less than half purchase pollution liability coverage. Although this may appear to have some validity as the smaller airport operators are seen as less significant terrorism targets or have fewer direct exposures to pollution loss because of their smaller scale, it is a risk management truism that the size of the exposure does not necessarily correlate with the size of the operation. For example, terrorists seek targets of opportunity, not always the largest targets. Furthermore, larger airport operators are likely to have more robust loss-prevention mechanisms in place for exposures such as pollution and terrorism. Smaller airport operators may not have the resources for extensive prevention activity. Further research into the risks for smaller airport operators from these exposures may be warranted.

The survey responses from the smaller airport operators indicate a higher emphasis on price than coverage in insurance purchasing, the inverse of what the survey found with larger airport operators. Smaller airport operators also tend to have more "generic" insurance programs in place and do not have the competitive advantage of larger airport operators in the insurance marketplace. Conversely, small airport operators are more dependent on the coverage they do buy and are less able than the larger airport operators to use alternative risk financing, including risk retention.

Research into the possibility of a risk pool or joint insurance purchasing pool may be beneficial for improving both the coverage and cost of insurance for the medium to smaller airport operators. The survey finding that larger airport operators, even though they have more internal risk management resources, are more likely to have long-term relationships with insurers implies that a stable group program may have benefits for smaller airport operators that they are currently unable to enjoy because of the priority of price in their insurance-purchasing decisions.

Because of the survey data showing that smaller airport operators are more dependent on insurance and the implication that pricing may be a problem (because of the emphasis on price as the most important decision factor), research into noninsurance risk transfer practices (contractual risk transfer) among smaller airport operators may be warranted.

Smaller airport operators are likely to benefit from contractual risk transfer even more than large airport operators as the smaller airport operators have fewer insurance resources. More than larger airport operators, smaller airport operators also are likely to deal with other parties, such as tenants, that have considerably more risk management resources than the airport operator and are therefore more capable of assuming risk than the airport operator. On the other hand, smaller airport operators are less likely to have the technical and legal resources readily available to construct and maintain an effective contractual risk transfer program.

The study points to certain key factors for airport operators to consider when making decisions on their own insurance needs, some of which can be addressed by answering the following questions:

1. Have we identified and measured all of the risks that need to be covered?

2. Have we considered alternatives to insurance for financing the risk of loss for each?

3. Does the insurance coverage we have arranged, or are considering, adequately address those risks?

4. What is the industry norm or benchmark for each of the processes involved with the treatment of each risk (e.g., risk analysis methods, selection of deductibles and limits, alternative risk-financing methods)?

5. Have we used all of the available sources of information within the industry, such as trade associations, professional organizations, and peer consulting, for guidance on use of insurance for risk treatment?

6. Do we have sufficient information about the insurance market and its trends to make an informed decision about obtaining the best results for our premium dollars?

7. Have we considered our strategy with regards to use of deductibles, self-insured retentions, limits, and coverage enhancements or trade-offs in response to changing market conditions?

8. Do we spend enough time keeping up with industry issues through conferences, research, participation in professional organizations, and peer consultation to support our business decisions about insurance purchasing?

9. Do we have the information and expertise to make value comparisons between quotes rather than just relying on price as the final determinant?

Specific issues that arose from information obtained from this report and that are areas for further investigation or study include the following:

- Study the practical possibilities of providing a risk-sharing facility, possibly combined with joint purchase of excess insurance, to afford smaller airport operators better access to technical risk management expertise and to overcome the emphasis on price over coverage and risk in their insurance-purchasing decisions.
- Determine whether many smaller airports do not purchase war risk and terrorism coverage and determine why and whether their practices point to potential problems.
- Study airport operators' exposures to and sources of protection from catastrophic losses, such as earthquake, windstorm, and other natural disasters.

REFERENCES

Airports Council International–North American, "2009 ACI-NA Insurance and Risk Management Conference," ACI E-Library, 2009 [Online]. Available: http://www.aci-na.org/static/entransit/General%20Session%201%20-%20Clay%20Hill.pdf.

Arnold, P., "A Short History of Risk Management: 1900 to 2002," McCombs School of Business, University of Texas at Austin, 2002 [Online]. Available: http://www.mccombs.utexas.edu/dept/irom/bba/risk/rmi/arnold/downloads/hist_of_rm_2002.pdf.

International Risk Management Institute, "Glossary of Insurance & Risk Management Terms," IRMI Online, 2010 [Online]. Available: http://www.irmi.com/online/default.aspx.

LeStrange, K.J., "Captives, Reinsurance, and the Renaissance Risk Manager," *Risk Management*, 1993 [Online]. Available: http://findarticles.com/p/articles/mi_qa5332/is_n8_v40/ai_n28627670/?tag=content;col1.

Macdermott, M., "Learn from Airport Mistakes: Report," *Business Insurance*, 1999 [Online]. Available: http://www.businessinsurance.com/article/19990314/ISSUE0101/1000976

BIBLIOGRAPHY

"The Airport Insurance Market (Part 3)," ACI E-Library, 2010 [Online]. Available: http://www.aci-na.org/static/entransit/Session%201%20-%20Moore.pdf.

Broker Selection, Topic A-7, Practical Risk Management, International Risk Management Institute, Dallas, Tex., 2011.

Carter, R.L., G.N. Crockford, and N.A. Doherty, *Handbook of Risk Management*, Kluwer-Harrap Handbooks, London, U.K., 1974.

Chevrette, M.E., "Details: Niche Market: Non-Owned Aviation," *Risk Management Magazine*, Vol. 50, July 2003.

"Creating Value with Risk Management (Part 2)," ACI E-Library, 2010 [Online]. Available: http://www.aci-na.org/static/entransit/Session%204%20-%20Fitzpatrick.pdf.

Denenberg, H.S., R.D. Eilers, G.W. Hoffman, C.A. Kline, J.J. Melone, and H.W. Snider, *Risk and Insurance*, Prentice–Hall, Inc., Englewood Cliffs, N.J., 1964.

Fant, B.J., "War Risks, Hijacking and Other Related Perils vs. TRIA Coverage: What Is the Story?" Wells Fargo Insurance Services White Paper, 2009 [Online]. Available: https://wfis.wellsfargo.com/NewsIndustryInfo/Industry%20Information/Documents/ce6cbdfc10ef4cd68519569111c5d-85dAM0809WarRiskswhitepaperl.pdf.

Greene, M.R. and O. N. Serbein, *Risk Management*: *Text and Cases*, Reston Publishing, Reston, Va., 1978.

Greene, M.R. and J.S. Trieschmann, *Risk & Insurance*, 6th ed., South-Western Publishing, Cincinnati, Ohio, 1984.

Grose, V.L., *Managing Risk: Systematic Loss Prevention for Executives*, Omega Systems Group, Arlington, Va., 1987.

Hedges, B.A. and R.I. Mehr, *Risk Management Concepts and Applications*, Richard D. Irwin, Inc., Homewood, Ill., 1974.

Heins, R.M. and C.A. Williams, Jr., *Risk Management & Insurance*, 5th ed., McGraw–Hill, New York, N.Y., 1985.

Hering, P., "Picking Your Risk Partner," *Risk Management Magazine*, Vol. 54, Apr. 2007.

Holbrook, E., "Airport Security: Privacy vs. Safety," *Risk Management Magazine*, Vol. 57, Mar. 2010.

Kirkland, I.D.L., R.E. Caves, I.M. Humphreys, and D.E. Pitfield, "An Improved Methodology for Assessing Risk in Aircraft Operations at Airports, Applied to Runway Overruns," *Safety Science*, Vol. 42, No. 10, 2004, pp. 891–905.

Malecki, D.S., R.C. Horn, E.A. Weining, and A.L. Flitner, *Commercial Liability Insurance and Risk Management*, American Institute for CPCU, Malvern, Pa., 1995.

Managing Public Agency Risks, Creative Approaches Volume II, Public Risk Management Association, Arlington, Va., 1989.

McDonald, C., "New Risks Take Off, PRIMA Winner Says," *National Underwriter Property & Casualty-Risk & Benefits Management*, Vol. 105, No. 25, 2001, p. 3.

Phelus, D.G. and N. Wasserman, *Risk Management Today: A How-to Guide for Local Government*, International City Management, Washington, D.C., 1985.

Phillips, Z., "Travelers Changes Course, Exits U.S. General Aviation," *Business Insurance*, Oct. 2009.

Pouzar, E., "Airport RMs Facing Tough Challenges," *National Underwriter Property & Casualty-Risk & Benefits Management*, Vol. 100, No. 16, 1996, pp. 7–8.

Readings in Risk Management, 1st ed., Insurance Institute of America, Malvern, Pa., 1980.

"Risk Management at the Washington Metropolitan Airports Authority," ACI E-Library, 2010 [Online]. Available: http://www.aci-na.org/static/entransit/Session%204%20-%20Natale.pdf.

Risk Retention: Alternate Funding Methods, The Society of Chartered Property & Casualty Underwriters, Malvern, Pa., Winter 1983.

"The Role of Today's Airport Operator," ACI E-Library, 2010 [Online]. Available: http://www.aci-na.org/static/entransit/IssuesOwnershipTodays%20Operator%20final.pdf.

Sheehan, T.F., *The Liabilities of Directors and Officers: With Practical Solutions for Their Discharge*, 3rd ed., Directors' Press, Bartlett, Ill., 1979.

"2005–2006 Insurance Coverage Benchmarking Survey Summary," ACI-NA Insurance and Risk Management Subcommittee, ACI-NA Economic Affairs Department, Washington, D.C.

"2008 Terrorism Immunity Survey Summary," ACI-NA Insurance and Risk Management Committee, ACI-NA Economic Affairs Department, Washington, D.C.

Webster, A., "Pushing Your Aviation Risk Management Comfort Zone," IRMI Online, Oct. 2007.

Wells, A.T., "Airport Liability Insurance," *The Risk Report*, Vol. 24, No. 12, Aug. 1992.

Wells, A.T. and B.D. Chadbourne, "Introduction to Aviation Insurance and Risk Management," In *Airport Planning and Management*, 3rd ed., Krieger Publishing Company, Malabar, Fla., 2007.

Wells, A.T. and S.B. Young, "Airport Financial Management," In *Airport Planning and Management*, 5th ed., McGraw–Hill, New York, N.Y., 2004.

GLOSSARY

Airport Operator: An airport operator is an organization responsible for the direction and management of one or more airports.

Benchmarking: The act of comparing a measurement with a standard. It shows you where you are and helps you decide where you want to go.

Builders' Risk: A property insurance policy that is designed to cover property in the course of construction. There is no single standard builders' risk form; most builders' risk policies are written on inland marine (rather than commercial property) forms. Coverage is usually written on an all-risk basis, and typically applies not only to property at the construction site, but also to property at off-site storage locations and in transit. Builders' risk insurance can be written on either a completed value or a reporting form basis; in either case, the estimated completed value of the project is used as the limit of insurance.

Business Interruption: Insurance covering loss of income suffered by a business when damage to its premises by a covered cause of loss causes a slowdown or suspension of its operations during the time required to repair or replace the damaged property. There are two Insurance Services Office, Inc., business income coverage forms: the business income and extra expense coverage form (CP 00 30) or the business income coverage form without extra expense (CP 00 32). Previously referred to as "business interruption coverage."

Carrier: An insurance or reinsurance company that insures or "carries" the insurance or reinsurance.

Claim: Used in reference to insurance, a claim may be a demand by an individual or corporation to recover, under a policy of insurance, for loss that may come within that policy.

Consolidated Insurance Program: See Controlled Insurance Program.

Controlled Insurance Program (CIP): A centralized insurance program under which one party procures insurance on behalf of all (or most) parties performing work on a project or a site. Typically, the coverages provided under a CIP include builders' risk, commercial general liability, workers' compensation, and umbrella liability. CIPs are most commonly used on single construction projects, but other uses include contract maintenance on a large plant or facility (maintenance wrap-up) or on an ongoing basis for multiple construction projects (rolling wrap-up). CIPs offer a number of benefits, including greater control of the coverage, potentially lower costs, and reduced litigation. Can be owner controlled (OCIP) or contractor controlled (CCIP). See also Partner controlled insurance program at http://www.irmi.com/online/insurance-glossary/terms/p/partner-controlled-insurance-program-pcip.aspx.

Crime Coverage: A crime insurance policy that is designed to meet the needs of organizations other than financial institutions (such as banks). A commercial crime policy typically provides several different types of crime coverage, such as employee dishonesty coverage; forgery or alteration coverage; computer fraud coverage; funds transfer fraud coverage; kidnap, ransom, or extortion coverage; money and securities coverage; and money orders and counterfeit money coverage.

Cyber (Cyberspace Liability) Coverage: A term used to describe the liability exposures encountered when communicating or conducting business online. Potential liabilities include the Internet and e-mail. Online communication tools could result in claims alleging breaches of privacy rights, infringement, or misappropriation of intellectual property; employment discrimination; violations of obscenity laws; the spreading of computer viruses; and defamation. Media liability policies are available to cover these exposures.

Deductible: A portion of covered loss that is not paid by the insurer.

Employment Liability: A form of liability insurance covering wrongful acts arising from the employment process. The most frequent types of claims alleged under such policies include wrongful termination, discrimination, and sexual harassment. The forms are written on a claims-made basis and generally exclude coverage for large-scale, companywide layoffs. In addition to being written as a stand-alone coverage, employment liability insurance is frequently available as an endorsement to directors' and officers' liability policies.

Errors and Omissions: An insurance form that protects the insured against liability for committing an error or omission in performance of professional duties. Generally, such policies are designed to cover financial losses rather than liability for bodily injury and property damage.

Exposure: The state of being subject to loss because of some hazard or contingency.

Fiduciary Liability: The responsibility on trustees, employers, fiduciaries, professional administrators, and the plan itself with respect to errors and omissions in the administration of employee benefit programs as imposed by the Employee Retirement Income Security Act.

General Liability Insurance: A standard insurance policy issued to business organizations to protect them against liability claims for bodily injury and property damage arising out of premises, operations, products, and completed operations; and advertising and personal injury liability. The policy was introduced in 1986 and replaced the "comprehensive" general liability policy.

Insurance Broker: An insurance intermediary who/that represents the insured rather than the insurer. Because they are not the legal representatives of insurers, brokers, unlike independent agents, often do not have the right to act on behalf of insurers, such as to bind coverage. Although some brokers do have agency contracts with some insurers, they usually remain obligated to represent the interests of insureds rather than insurers. For example, some state insurance codes impose a fiduciary responsibility to act on behalf of their customers or provide full disclosure of all their compensation from all sources. See also Agent at http://www.irmi.com/online/insurance-glossary/terms/a/agent.aspx.

Large Airport: Airports reporting operating revenue in the last fiscal year of more than $600 million.

Law Enforcement Errors and Omissions: Provides errors and omissions coverage for police departments. Unlike most professional liability coverage, such policies are often written on an occurrence (rather than on a claims-made) basis. Some of the more important covered acts include false arrest, excessive force, and invasion of privacy. This coverage can sometimes be provided on a limited basis in the general liability policy but must usually be purchased separately. Common exclusions are criminal/intentional acts, claims for injunctive relief, and motor vehicle operations.

Liability Limits: The stipulated sum or sums beyond which an insurance company is not liable for payments due to a third party. The insured remains legally liable above the limits.

Loss: The basis of a claim for damages under the terms of a policy.

Medium Airport: An airport reporting operating revenue between $251 million and $600 million.

Owner-Controlled Insurance Program (OCIP): See Controlled Insurance Program.

Pollution: The contamination of an environment by substances regarded as pollutants. Liability from pollution is normally excluded to some degree by the general, auto, and umbrella liability policies. In recent years, insurers have attempted to introduce strict exclusionary language into these policies, making it necessary for insureds to seek coverage under separate "environmental impairment liability" policies.

Primary Coverage: The policy that responds first to an insured loss, either on a first-dollar basis or after allowing for a deductible. When the primary coverage limits are paid, any remaining loss is covered by whatever excess layer of insurance may be in place.

Professional Liability: Coverage designed to protect traditional professionals (e.g., physicians) and quasi-professionals (e.g., real estate brokers) against liability incurred as a result of errors and omissions in performing professional services. Although there are a few exceptions, most professional liability policies cover economic losses suffered by third parties, as opposed to bodily injury and property damage (which is typically covered under commercial general liability policies). The vast majority of professional liability policies are written with claims-made coverage triggers.

Property Insurance: First-party insurance that indemnifies the owner or user of property for its loss, or the loss of its income-producing ability, when the loss or damage is caused by a covered peril, such as fire or explosion. In this sense, property insurance encompasses inland marine, boiler and machinery, and crime insurance, as well as what was once known as fire insurance, now simply called property insurance: insurance on buildings and their contents.

Public Officials' Errors and Omission: Provides liability coverage for the errors and omissions of public officials. In effect, such policies serve the same function for elected/appointed officials of state and local government as directors' and officers' (D&O) insurance serves for the directors and officers of corporations. However, one major difference is that under public officials' liability forms, employees and the public entity itself are insureds, whereas this is not the case with D&O policies. Exclusions under this policy include losses owing to fraud or dishonesty, bodily injury or property damage, false arrest, assault and battery, defamation, and fiduciary liability.

Renewal Policy: An insurance policy issued to replace an expiring policy.

Request for Proposals: A document used to secure proposals for insurance or risk management services.

Retention: Assumption of risk of loss by means of noninsurance, self-insurance, or deductibles. Retention can be intentional or, when exposures are not identified, unintentional.

Risk Identification: The qualitative determination of risks that are material, i.e., that potentially can impact the organization's achievement of its financial and/or strategic objectives. This is often done through structured interviews of key personnel by internal (e.g., internal audit) or external experts. In some cases, the organization's business process maps are used to guide the risk assessment.

Self-Insurance: A system whereby a firm sets aside an amount of its monies to provide for any losses that occur—losses that could ordinarily be covered under an insurance program. The monies that would normally be used for premium payments are added to this special fund for payment of losses incurred. Self-insurance is a means of capturing the cash flow benefits of unpaid loss reserves and also offers the possibility of reducing expenses typically incorporated within a traditional insurance program. It involves a formal decision to retain risk rather than insure it and is distinguished from noninsurance or retention of risks through deductibles, by a formalized plan or system to pay losses as they occur.

Small Airport: An airport reporting operating revenue between zero and $250 million.

Terrorism: The use of violence to produce terror for political or ideological purposes. Terrorism is distinct from war in that it need not be the act of a military force or be directed by a sovereign power. Foreign acts of terrorism may be certified as an insurable loss exposure under the Terrorism Risk Insurance Act (TRIA). See also Terrorism Risk Insurance Act (TRIA) at http://www.irmi.com/online/insurance-glossary/terms/t/terrorism-risk-insurance-act-tria.aspx/

War Exclusion: A provision found in nearly all insurance policies that excludes loss arising out of war or warlike actions. The loss can result from either declared or undeclared war, but must be related to actions of a military force directed by a sovereign power. Before the September 11, 2001, terrorist attacks, the war exclusions in most liability insurance policies applied only with respect to contractually assumed liability, on the theory that private persons and organizations could not otherwise incur liability in connection with war. Following the September 11, 2001, terrorist attacks, "war and terrorism" exclusions that broadened the war portion of the exclusion beyond contractually assumed liability were quickly added to liability policies. That broadened war exclusion is now standard, regardless of whether terrorism is insured or excluded in the policy.

War Risk Insurance: Insurance against loss or damage to property resulting from the acts of war. It is freely written on marine exposures but is virtually unobtainable on property exposures.

Workers' Compensation: The system by which no-fault statutory benefits prescribed in state law are provided by an employer to an employee (or the employee's family) owing to a job-related injury (including death) resulting from an accident or occupational disease.

APPENDIX A

Survey Questionnaire

SURVEY OF AIRPORT INSURANCE BUYING PRACTICES

I. INTRODUCTION

The Transportation Research Board (TRB) Airport Cooperative Research Program (ACRP) has commissioned a study of airport practices regarding the arrangement of insurance coverage for airport operations.

Ron Rakich & Associates, Inc., a risk management consulting firm, has been selected by the TRB as part of its ACRP, to perform research into airport risk management practices. The objective of this particular synthesis is to obtain information from airport decision makers regarding current industry practices and the myriad factors that influence insurance purchasing decisions at airports within each of the FAA's size classifications. More specifically, this synthesis seeks to identify, analyze, and compile these influential factors and, upon completion, aims to serve as a key resource assisting airport executives, risk managers, and other professionals tasked with the responsibility of purchasing coverage for their respective facility.

The synthesis will achieve this goal by asking airport decision makers a series of questions in survey format to determine how each entity arrives at coverage decisions. This survey, which consists of 40 total questions, is broken into 8 categories:

I. INTRODUCTION

II. GENERAL INFORMATION ABOUT YOUR AIRPORT

III. YOUR AIRPORT'S INSURANCE PROCUREMENT PRACTICES

IV. THE RISK MANAGEMENT FUNCTION AT YOUR FACILITY

V. CURRENT INSURANCE COVERAGE

VI. YOUR LIMITS AND DEDUCTIBLES

VII. YOUR FACILITY'S APPETITE FOR RISK RETENTION

VIII. THANK YOU

When completing this survey, please answer all questions in terms of current practice at your airport facility. Please note that many of the following survey questions may have more than one appropriate response, while others call for one singular answer. Specifications are listed in the body of each question.

Although all responses to this survey will be collected, analyzed, and published, individual responses will be kept strictly confidential to preserve the anonymity of respondents. All survey respondents will be given a link to the overall survey results after it is published.

Thank you in advance for taking the time to provide us with your candid responses. The synthesis will provide invaluable insight into the exposures faced by other airports and how these exposures shape the coverage needs and coverage selections of similarly classified commercial aviation facilities.

PLEASE NOTE, at this time ACRP is preparing a similar but separate study focusing on Enterprise Risk Management (ERM). The ERM survey is expected to be distributed to industry contacts within the coming weeks. As an airport risk manager, your feedback may be sought for this subsequent survey. Although some of the questions may appear to be duplicative in subject matter, each survey stands alone.

II. GENERAL INFORMATION ABOUT YOUR AIRPORT

SURVEY OF AIRPORT INSURANCE BUYING PRACTICES

1. Type of entity:

State or local government

Federal

Commission/authority

Private

Other (please specify):

2. Please identify your airport's classification under 14 CFR Part 139.

I (scheduled and unscheduled large carrier aircraft, scheduled small carrier aircraft)

II (unscheduled large carrier aircraft, scheduled small carrier aircraft)

III (scheduled small carrier aircraft)

IV (unscheduled large carrier aircraft)

3. Please identify your airport's classification according to 49 USC 47102 classification standards.

Large Hub

Medium Hub

Small Hub

Non Hub

4. Please indicate your airport's annual operating revenues for the most recent fiscal year. Include tenant, landing fees, parking, etc.

Less than $100M

$100M–$250M

$251M–$400M

$401M–$600M

Over $600M

III. YOUR AIRPORT'S INSURANCE PROCUREMENT PRACTICES

5. How many property/casualty insurance brokers does your entity use?

0

1

2

3 or more

6. Do you have a written broker services agreement with your property/casualty insurance broker(s)?

Yes

No

Uncertain

7. How long has your primary insurance broker worked with your entity?

0–3 Years

3–5 Years

5–10 Years

10 Years or more

N/A—Our facility does not use a broker

8. How often do you competitively procure your insurance broker services contract?

Every year

Every 2 years

Every 3 years

Every 4 years

Every 5 years

More than every 5 years

9. Why do you competitively procure your broker services contract? (Please check ALL that apply.)

Contract expiration

I continually assess service provided vs. price paid

Required under our procurement guidelines

Broker performance issues

We do not competitively procure our broker services contract

Other (please specify):

10. Which describes the method most often used by your airport in selecting an insurance broker?

Open competitive RFP

Pre-qualified pool through RFQ process, then distribute RFP

Pre-qualified pool through RFQ process, then make selection

Personal relationship

Other (please specify):

11. To what extent does your entity rely on your insurance broker's recommendations regarding insurance purchases?

Extensively

Somewhat

Limited

We perform an independent analysis

12. What is the MOST IMPORTANT criterion for insurance purchasing decisions at your entity?

Price

Coverage

Exposure

Recommendation of insurance advisor

Other (please specify):

13. Who assists with the insurance purchasing decision? (Please check ALL that apply.)

Internal staff

Outside risk management consultant

Insurance broker

Committee

None of the above

Other (please specify):

14. How often do you "shop" your property/casualty lines of insurance?

Every year

Every 2 years

Every 3 years

Every 4 years

More than every 5 years

Do not shop the insurance

Depends upon the preliminary renewal pricing and terms

15. What is the MOST IMPORTANT factor that goes into your decision to purchase a NEW insurance product?

Exposure increase

Cost/benefit

Newly identified exposure

Emerging trends

Statutory/legal/regulatory requirement(s)

Do not buy new insurance products

Other (please specify):

IV. THE RISK MANAGEMENT FUNCTION AT YOUR FACILITY

16. Who in your organization is ULTIMATELY RESPONSIBLE for the risk management role including the insurance purchasing decision?

Dedicated airport risk manager

Municipal risk manager

Legal

Purchasing/procurement

Human resources

Committee

Other (please specify):

17. Is the risk management function in your organization Full Time OR Part Time?

Full time (Skip to Question #19)

Part time

18. If part time, what is the primary responsibility of the person responsible for risk management?

Finance

Purchasing

Legal

Human resources

Administration

Other (please specify):

19. Does your airport perform specific risk analysis (identification of exposures that may need insurance coverage) to validate an insurance purchasing decision?

Always

Usually

Sometimes

Depends upon the line of insurance

No, we do not perform risk assessments (Skip to Question#22)

20. Which of the following methods does your facility use to conduct this risk analysis? (Please check ALL that apply.)

Risk Assessment Questionnaires

Evaluating Contracts, Records, and Documents

Personal Inspections

Benchmarking and Statistical Analysis

Evaluating and Analyzing Loss Histories

Other (please specify):

21. Who performs risk analysis for your airport facility? (Please check ALL that apply.)

Risk manager within your organization

Safety officer(s) within your organization

Independent risk consultant

Insurance broker(s)

Departmental personnel

Other (please specify):

22. Does your organization self-administer claims?

Yes (Please indicate which type below)

No

Type (Worker's Compensation, General Liability, etc.):

23. How often do you perform a cost/benefit analysis relating to self-administration of claims?

Every year

Every 2 years

Every 3 years

More than every 3 years

When we re-bid the insurance package

Never

24. To what extent has the risk management function become important to your airport in the last 5 years?

More important

Same

Less important

25. Which THREE loss exposures are you MOST concerned about today?

General Liability

Auto Liability

Business Interruption

Construction

Environmental

Professional Liability

War/Terrorism

Cyber Risk

Brand Identity

Intellectual Property

V. YOUR CURRENT COVERAGE

26. Please indicate the lines of coverage your entity purchases. (Please check ALL that apply.)

General Property

Crime

Law Enforcement E & O

Builder's Risk

Fiduciary Liability

Pollution

Business Interruption

Professional Liability

Cyber

Commercial General Liability

Public Officials Errors & Omissions

Other (Please specify below):

Workers' Compensation

Director & Officers Liability

Commercial Auto Liability

Employment Practices Liability

Other (please specify):

27. Does your entity purchase war and terrorism coverage for any of the following lines of insurance? If so, check ALL that apply.

General Property

Pollution

Builder's Risk

Other (Please specify below):

Commercial General Liability

Other (please specify):

Do not purchase war and terrorism coverage

28. Does your entity purchase construction insurance coverage? If so, check ALL that apply.

Owner controlled insurance (OCIP)

Builder's Risk

Project Errors &Omissions

OPPI

Other (please specify):

Contractor's Pollution Liability

Other (Please specify below):

Do not purchase construction coverage

VI. CURRENT LIMITS AND DEDUCTIBLES

29. How often do you change the deductibles on your insurance program?

Annual, at review

When market conditions yield premium savings

Deductibles have remained the same for many years (Skip to Question #31)

Do not change (Skip to Question #31)

Other (please specify):

30. If you have INCREASED your deductibles within the past 1–3 years, what are the reasons for that change? (Please check ALL that apply.)

Loss exposure supports a higher retention

Cost of insurance requires us to retain higher deductibles

Market forces-no other options

We HAVE increased deductibles, but NOT within the past 1 - 3 years.

Other (please specify):

31. How often do you change the liability limits on your insurance program?

Annual, at review

When market conditions change

Liability limits have remained the same for many years (Skip to Question #33)

Do not change (Skip to Question #33)

Other (please specify):

32. If you have INCREASED your liability limits within the past 1-3 years, what are the reasons for that change? (Please check ALL that apply.)

Greater loss exposure

Broker recommendation

Increased liability limits were affordable

We HAVE increased our liability limits, but NOT within the past 1–3 years

Other (please specify):

33. What factors go into your decision to select the liability limits in your insurance program? (Please check ALL that apply.)

Cost

Exposure

Broker recommendation

Consultant recommendation

We purchase the same liability limits each year

Other (please specify):

VII. YOUR FACILITY'S APPETITE FOR RISK RETENTION

34. Is your facility self-insured for any primary levels of insurance, i.e., with a large self- insured retention for excess or catastrophe lines of insurance?

Yes

No (Skip to Question #37)

35. Which lines are self-insured? (Please check ALL that apply.)

Property

Liability

Workers' Compensation

Other (please specify):

36. What factors went into your decision to self-insure? (Please check ALL that apply.)

Affordability of the insurance product

Availability of the insurance product

Cost/benefit analysis

Strong appetite to retain risk

Other (please specify):

37. How often do you perform a cost/benefit analysis to assess the viability of self- insurance?

Every year

Depends upon the line of insurance

When the market hardens for specific lines of insurance

Never

38. Is your entity "bare" (without any insurance or self-insurance program) for any lines of coverage? If so, please check ALL lines neither INSURED nor SELF-INSURED by your facility from the list below.

General Property

Crime

Law Enforcement E & O

Builder's Risk

Fiduciary Liability

Pollution

Business Interruption

Professional Liability

Cyber

Commercial General Liability

Public Officials Errors & Omissions

Workers' Compensation

Directors and Officers

Errors & Omissions

Commercial Auto Liability

Employment Practices Liability

Other (Please specify below):

39. What is the deductible for each line of insurance?

Property

Liability

Workers' Compensation

$0–$100,000

$100,000–$250,001

$250,000–$500,000

$500,001–$750,001

$750,000–$1,000,000

Excess of $1,000,000

VIII. THANK YOU!

40. Your participation in this survey is greatly appreciated and will aid in the development of a significant resource for professionals in the airport and risk management industries. Please recall that you may receive a separate but similar survey in the coming weeks. As a risk management professional with unique perspective on the industry and its practices, ACRP welcomes and encourages your response to each.

Thank you for providing us with your comments or sharing additional information about your insurance purchasing and risk management practices in the comment section below.

APPENDIX B

List of Survey Respondents

TABLE 1
SUMMARY OF STATES AND PROVINCES SURVEY

AIRPORT SURVEY RESPONDENTS	COM	GA	HUB CLASSIFICATION	SURVEY SIZE CLASSIFICATION
Metro (Minneapolis) Airports Commission				Large
MSP Minneapolis/St. Paul Intl.	X		L	
Y12 Airlake Airport		X		
ANE Anoka Airport		X		
MIC Crystal Airport		X		
FCM Flying Cloud Airport		X		
STP Saint Paul Downtown Airport		X		
McCarran Intl Airport (Clark County)				Medium
LAS McCarran Intl. Airport	X		L	
HSH Henderson Executive Airport		X		
VGT North Las Vegas Airport		X	N	
Williams Gateway Airport Authority				Small
IWA Williams Gateway Airport	X		N	
City of Phoenix				Medium
PHX Sky Harbor International	X		L	
DVT Deer Valley Airport		X		
GYR Good Year Airport		X		
Broward County Aviation Department				Medium
FLL Ft. Lauderdale Hollywood Intl.	X		L	
HWO North Perry Airport		X		
San Diego County Regional Airport				Large
SAN San Diego International	X		L	
Port of Seattle				Medium
SEA Seattle Tacoma International	X		L	
Port Authority of NY and NJ				Large
JFK John F Kennedy Intl.	X		L	
LGA LaGuardia Airport	X		L	
EWR Newark Liberty Intl.	X		L	
SWF Stewart International	X		N	
TEB Teterboro Airport		X		
Raleigh-Durham Airport Authority				Small
RDU Raleigh–Durham International	X		M	
Tucson Airport Authority				Small
TUS Tucson International	X		M	
RYN Ryan Airfield		X		
Wayne County Airport Authority				Large
DTW Detroit Metro Wayne County	X		L	
YIP Willow Run Airport		X		

Table 1 continued on p.43

Table 1 continued from p.42

AIRPORT SURVEY RESPONDENTS	COM	GA	HUB CLASSIFICATION	SURVEY SIZE CLASSIFICATION
Pease Development Authority				Small
PSM Pease Intl. Tradeport	X			
DAW Skyhaven Airport		X		
Metro Washington Airports Authority				Large
DCA Ronald Reagan National Airport	X		L	
IAD Washington Dulles International	X		L	
San Francisco Airport Commission				Large
SFO San Francisco International	X		L	
John Wayne Airport				Medium
SNA John Wayne Airport	X		M	
Dallas/Fort Worth International				Medium
DFW Dallas–Ft. Worth International	X		L	
Jacksonville Aviation Authority				Small
JAX Jacksonville International	X		M	
VQQ Cecil Airport		X		
CRG Craig Airport		X		
23J Herlong Airport		X		
Lee County Port Authority				Small
RSW Southwest Florida International	X		M	
FMY Page Field Airport		X		
Fort Wayne-Allen County Airport Authority				Small
FWA Fort Wayne International	X		N	
SMD Smith Field Airport		X		

COM = Commercial aviation; GA = General aviation.

APPENDIX C

Interview Questions

1. **Please provide the following:**

   a. Size of RM staff

   b. Reporting level (to whom)

   c. Is Risk Manager a member of senior staff?

   d. Your airport operating revenue size

2. **How do you determine risk management best practices? Do you seek the advice of your industry peers? If so, how often and for which functions or activities do you seek peer advice? Do you contact peers from private business and non-airport public entities, or do you solely use airport risk management peers?**

3. **Has the recent soft market prompted any of the following purchasing activities within your facility?**

   a. Keeping premiums flat but increasing limits

   b. Keeping limits/deductibles flat, and taking advantage of price reductions

   c. Keeping premiums and limits flat, but adding coverage enhancements

   d. Adding new lines of insurance coverage that were not previously purchased

   e. Adding war/risk coverage and/or TRIA coverage for airport general liability coverage

4. **Is your entity protected by TORT limits? If so, what is the amount of the cap and does this influence your buying decision?**

5. **In your organization who ultimately determines (a) type of coverage purchased and (b) cost of coverage purchased? As the Risk Manager, do you possess the ultimate authority to bind the coverage and/or forgo certain coverage, or are you required to obtain final sign off/concurrence from another (board, commission, or other airport, city, or county personnel, for example)?**

6. **Have you recently dropped or added any insurance coverage/product due to either availability or affordability issues? If so, which lines were dropped and why?**

7. **On the subject of "risk assessment" within your organization, please describe your process and how it leads to purchasing decisions at your organization. How often do you conduct such risk assessments? Please advise the format/template used, if any.**

8. **For war and terrorism risks, do you purchase coverage for liability lines? For property lines? If so, what drives that purchasing decision and the limits purchased? If you do not purchase war/terrorism insurance, describe how you intend to fund property and/or general liability losses as a result of an act of war or terrorism?**

9. **Aside from the purchase of insurance or deliberate risk retention, what other risk mitigation techniques do you use for those risks that you:**

   a. Choose not to insure,

   b. For which coverage is not an option at all, or

   c. For where coverage is available but you have chosen not to purchase insurance?

10. **How has the evolving role of risk management affected the insurance purchasing decision within your organization?**

    a. For example, is the task of insurance purchasing to mitigate insurable risks kept separate from the mitigation of other entity risks; or

b. Is the use and purchase of insurance as a risk management tool performed in conjunction with other risk management activities including those done outside of the Risk Management Department (such as enterprise risk management, internal audit, management of employee benefits, security, and emergency planning)?

c. What factors (both internal and external) contribute to the insurance purchasing decision within your organization?

11. If your facility is or has been involved in any single construction project in excess of $25M within the past 5 years or an aggregation of projects totaling at least $100 Million within the past 5 years:

a. How has your organization chosen to finance this risk?

b. Have you used OCIP, CCIP, or traditional contractor insurance (contractors provide insurance and indemnify)?

c. Why has your organization chosen any particular method of risk financing?

d. If you have used an OCIP or CCIP as a risk financing technique, given the same project(s) would you use it again as opposed to traditional methods?

APPENDIX D

List of Interviewees

TELEPHONE INTERVIEW AIRPORTS	COM	GA	HUB CLASSIFICATION
Port of Portland			
PDX Portland International	X		M
TTD Troutdale		X	
HIO Hillsboro		X	
Kenton County Airport Board			
CVG Greater Cincinnati International	X		L
City and County of Denver Dept. of Aviation			
DIA Denver International	X		L
City of San Antonio Aviation Department			
SAT San Antonio International	X		M
SSF Stinson Airport			
City of Pensacola			
PNS Pensacola Gulf Coast Regional	X		S
Port of Oakland			
OAK Metropolitan Oakland International	X		L
Greater Orlando Aviation Authority			
MCO Orlando International	X		L
ORL Orlando Executive			
Milwaukee County			
MKE General Mitchell International	X		M
MWC Timmerman Airport		X	
San Francisco Airport Commission			
SFO San Francisco International	X		L
Metro (Minneapolis) Airports Commission			
MSP Minneapolis/St. Paul International	X		L
Y12 Airlake Airport		X	
ANE Anoka Airport		X	
MIC Crystal Airport		X	
FCM Flying Cloud Airport		X	
STP Saint Paul Downtown Airport		X	

COM = Commercial aviation; GA = General aviation.

APPENDIX E
Interview Responses

	The Risk Management Position within Each Organization Small Airport Interviewees						Medium Airport Interviewee	Large Airport Interviewee
	1	2	3	4	5	6	7	8
Size of Risk Management Staff	15	3 f/t 2 p/t	2 risk analysts. 2 claims 4 safety	2	Varies	5	5	4 f/t 2 brokers
Staff Reports To	HR Director	Chief Admin. Officer.	CFO	Director of Finance.	CFO	Director of Admin.	CFO	CFO
Member of Senior Staff?	No	Yes	Yes	Yes	No	Yes	Yes	Yes
Insurance Purchasing Authority	RM authority to $50K. Over $50K needs board approval.	CFO can approve to $40K. Over 40K need board approval.	Board grants purchasing authority to Managing Director, who grants to RM. Purchasing plans reviewed annually by board.	RM sets terms for coverage w/in budget. Finance approves expenditures. Board approves purchases above spending limits and new coverage.	RM prepares paperwork and works with brokers. Decisions by board.	RM responsible for RFP, selection, and recommendation to Board for ratification.	RM handles all purchases/ decisions. Decisions reviewed by board.	RM handles all purchases/ decisions. Concurrence of CFO or higher if warranted.
How has evolving role of risk mgmt affected insurance purchasing in your organization?	Purchasing decisions are made same way each year. RM evaluates exposure, probability of occurrence, and price. Price is not a factor if probability of exposure is high.	Risk mitigation more important than insurance. No pressure to buy insurance. Decision makers prefer risk retention to risk transfer. Buy stop-loss insurance for cat losses.	Purchase based on ERM. Work with HR to mesh safety and wellness issues. Internal audits to advise on risk and insurance. Process becoming more transparent.	Consumer- driven. Use and purchase of insurance performed in conjunction w/ other RM activities, including those performed outside the RM Dept.	Other managers handle uninsurable risks; reach out to each Dept.	Mitigating risk most important. Insurance is financial mechanism to do so. All programs have very large SIR.	Prefer to avoid insurance. Attempt to design self-funded programs. Buy stop loss for cat losses. Evaluate cost of transfer vs. cost to retain in making ultimate decision.	Entity uses ERM. Commercial insurance evaluated to transfer risk. Policy expiration dates uniform so that RM can focus on insurance purchasing once yearly.

Table continued on the next page

	Factors Influencing the Risk Management Function Small Airport Interviewees						Medium Airport Interviewee	Large Airport Interviewee
	1	2	3	4	5	6	7	8
Has the recent soft market prompted any purchasing activities within your organization?	Flat premiums. No increased limits. Asked broker to review policy at last renewal. Coverage enhancement including 3-year rate lock. Shopping PLL. Focus on negotiating enhanced terms on existing policies.	Doubled limits. Reduce premium. Increased sub-limits. Keep deductible according to 10 years of claims history. Have not added lines since 2001.	Obtained higher limits. Price reductions in some lines. Keep premiums/limits flat, enhance coverage. Purchased TRIA in 1st round of price reductions.	Keep limits/ deductibles flat and take advantage of price reductions. Keep premiums/ limits flat, enhance coverage.	Focus on more savings. Reduced deductibles at no extra charge. Added TRIA.	Keep limits flat and take advantage of price reductions. Premiums reduced. Added TRIA.	Keep limits/ deductibles flat. Take advantage of price reductions.	Working w/ FEMA to assess exposures. Manage war and terrorism in-house. Focus on controlling costs. Hold low retentions due to risk appetite.
Is your entity protected by TORT limits?	Yes	No	Yes (Port)	Yes	Yes	Yes	Yes	No
Amount of Applicable TORT Cap (if any)?	$250K per claim $500K per occurrence	N/A	$100K per occurrence $500,600 per event	$200K /$300K	N/A	$50K for non-vehicular accidents $250K for vehicular accidents	$500K per person $1.5M per occurrence	N/A
Do TORT limits or lack thereof influence buying decision?	Yes	Government immunity in place, which does affect purchasing decisions.		Yes	Yes, consider not buying insurance. Deny all claims.	Uncertain	Yes	N/A

	Addition or Deletion of Coverage or Product Lines Small Airport Interviewees						Medium Airport Interviewee	Large Airport Interviewee
	1	2	3	4	5	6	7	8
Has your airport recently dropped or added coverage/product because of availability or affordability?	No	No	No	No	No	No	Enhanced coverage.	No drop in coverage, but changed carriers.
If dropped/ added, which lines and why?	N/A	N/A	N/A	N/A	Considered not buying insurance and relying on FEMA.	N/A	Consolidated crime coverage.	Carrier change on public official's liability.
War and Terrorism								
Is war and terrorism coverage purchased for liability lines?	Yes, limited coverage under airport liability policy.	Yes	Yes	War yes, TRIA no.	TRIA yes	No	Not currently, but considering.	No
Is war and terrorism purchased for property lines?	Yes, provided under city's property policy that covers the airport.	Yes	Yes	War yes, TRIA no.	TRIA yes	Terrorism is included w/ government property fund.	Yes, PEPP pool.	No
What drives war and terrorism purchasing decisions?		Contractual requirements in leases.	Concern about defense. Other options.		Cost: currently inexpensive to buy TRIA. Would not buy at 2002 prices.		TORT caps. Alternatives.	
How does your organization plan to fund war and terrorism losses if not by insurance?		N/A	Dip into reserves or public funding.		FEMA		Relied on TORT caps in the past. FAA has war risk program.	

Table continued on the next page

	Practice of Risk Management in Your Airport Organization Small Airport Interviewees						Medium Airport Interviewee	Large Airport Interviewee
	1	2	3	4	5	6	7	8
How do you determine risk management best practices?	Consult with brokers, TPA, and industry colleagues in RIMS and PRIMA.	Benchmarking w/ ACI group. Involvement in PRIMA. Collaboration with airport mgmt peers and broker.	RIMS PRIMA Publications and network. Contacts outside industry. Involvement w/ governance boards and mutual insurers. Experts, brokers, carriers.	RIMS PRIMA Other airport RMs. Insurer for loss control.	ACI Peers Safety and security peers. Broker for data. CAPA	RIMS PRIMA ACI	Benchmarking w/ ACI. Comparison w/ other airports and government entities. Less reliance on broker.	Internal audit. Seek advice from city and county. Use strict ERM policy. Contact other airports for help w/ special risks.
Risk Assessment								
Describe risk assessment within your organization?	Process for safety and risk team. Review claims trends. Work with carrier.	Surveys including financial, facility, and airfield, consultant, and professional liability. Incident reports. Contract review.	RM collaborates w/ team to assess risk on new ventures. Review business lines activity at renewal.	Individual depts. RM is in-house consultants on risk transfer. Consumer-driven. Each dept. has safety function and consultants.	Investigate losses. Review contracts. Participate in conversations with underwriters and others on risks.	Informal process. Ground floor evaluations on bigger projects/ decisions. Ongoing review. Contract review.	All contracts go through RM. Periodic inspections by staff and by carrier. Loss analysis. Cost assessment approach. Benchmarking.	Conduct quantitative and qualitative assessments w/ owners. Document personnel's understanding of risk. Monitor progress.
How often does your organization assess risk?	Daily	Quarterly	When taking on new ventures. At renewal.			Address routine operating risks at renewal.	Frequent	Frequent
Does your organization use a template for assessment?	No	Incident reports.	RM has policy review checklist.			No		

	Mitigation of Risk Small Airport Interviewees						Medium Airport Interviewee	Large Airport Interviewee
	1	2	3	4	5	6	7	8
Risk mitigation techniques used by your organization	Evaluate airport risks and safety protocol. Dedicated safety professionals employed. Checklists. Safety committee.	Work with internal audit department. Monitor exposures to determine whether to purchase insurance.	Keep general reserves. Train other departments on contractual risk transfer. Loss control.	Do not insure. SIR for catastrophe (all lines).	Would like to develop disaster fund. Require tenants to purchase coverage.	Self-insured for WC. WC also self-administered. No Excess. Loss control. Claims control.	Conduct thorough analysis. Rely on risk transfer and contract language. Rely on state and federal immunities. Use non-insurance products such as restricted claims fund.	Choose not to insure or retain the risk. Evaluate exposures for possible coverage. Negotiate new insurance limits for parties contracting w/ airport.
Risk Financing Methods								
Risk financing method chosen for recent large construction projects	CCIP	Traditional	OCIP	Traditional approach w/ CM at Risk.	OCIP	Standard BR and contract Indemnity.	Traditional program with strict indemnity language, high limits, high safety standards, and OCIP.	OCIP
Reason why this financing method was chosen	Evaluated as feasibility. Cost/benefit analysis performed.	Low payroll associated with project not sufficient to produce savings.	Quality of safety where there is public exposure. Maintain owner's perspective. Save money.	Comfort Familiarity	Savings. Ability to extend and restructure. Claim control. Loss simplification. Admin.		Traditional chosen because of time and staffing constraints.	Attractive program. Solid safety mgmt. Better price, coverage, and safety.
Would your organization use this risk financing technique again?		Yes	Yes		Yes	Interested in OCIP.		Yes

Abbreviations used without definition in TRB Publications:

AAAE	American Association of Airport Executives
AASHO	American Association of State Highway Officials
AASHTO	American Association of State Highway and Transportation Officials
ACI–NA	Airports Council International–North America
ACRP	Airport Cooperative Research Program
ADA	Americans with Disabilities Act
APTA	American Public Transportation Association
ASCE	American Society of Civil Engineers
ASME	American Society of Mechanical Engineers
ASTM	American Society for Testing and Materials
ATA	Air Transport Association
ATA	American Trucking Associations
CTAA	Community Transportation Association of America
CTBSSP	Commercial Truck and Bus Safety Synthesis Program
DHS	Department of Homeland Security
DOE	Department of Energy
EPA	Environmental Protection Agency
FAA	Federal Aviation Administration
FHWA	Federal Highway Administration
FMCSA	Federal Motor Carrier Safety Administration
FRA	Federal Railroad Administration
FTA	Federal Transit Administration
IEEE	Institute of Electrical and Electronics Engineers
ISTEA	Intermodal Surface Transportation Efficiency Act of 1991
ITE	Institute of Transportation Engineers
NASA	National Aeronautics and Space Administration
NASAO	National Association of State Aviation Officials
NCFRP	National Cooperative Freight Research Program
NCHRP	National Cooperative Highway Research Program
NHTSA	National Highway Traffic Safety Administration
NTSB	National Transportation Safety Board
SAE	Society of Automotive Engineers
SAFETY-LU	Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (2005)
TCRP	Transit Cooperative Research Program
TEA-21	Transportation Equity Act for the 21st Century (1998)
TRB	Transportation Research Board
TSA	Transportation Security Administration
U.S.DOT	United States Department of Transportation

TRANSPORTATION RESEARCH BOARD
500 Fifth Street, N.W.
Washington, D.C. 20001

ADDRESS SERVICE REQUESTED

THE NATIONAL ACADEMIES™
Advisers to the Nation on Science, Engineering, and Medicine

The nation turns to the National Academies—National Academy of Sciences, National Academy of Engineering, Institute of Medicine, and National Research Council—for independent, objective advice on issues that affect people's lives worldwide.
www.national-academies.org

ISBN: 978-0-309-14356-1