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Strategic Planning in the Airport Industry

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AIRPORT COOPERATIVE RESEARCH PROGRAM

Airports are vital national resources. They serve a key role in transportation of people and goods and in regional, national, and international commerce. They are where the nation’s aviation system connects with other modes of transportation and where federal responsibility for managing and regulating air traffic operations intersects with the role of state and local governments that own and operate most airports. Research is necessary to solve common operating problems, to adapt appropriate new technologies from other industries, and to introduce innovations into the airport industry. The Airport Cooperative Research Program (ACRP) serves as one of the principal 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.
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 the 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](http://www.TRB.org)

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A large number of individuals provided vital input to the Guidebook through their participation in focus groups and online surveys; these individuals are listed in Appendix B: Contributors to the Focus Groups and Online Survey.
ACRP Report 20: Strategic Planning in the Airport Industry provides practical guidance on the strategic planning process for airport board members, directors, department leaders, and other employees; aviation industry associations; a variety of airport stakeholders, consultants, and other airport planning professionals; and aviation regulatory agencies. A workbook of tools and sequential steps of the strategic planning process is provided with the report as CRP-CD-73.

Airports provide critical connections in the operation of the transportation system and have significant multiplier effects on national and regional economies. To meet their social, economic, operational, and environmental obligations in the face of changing conditions, airports often undergo dramatic transformations in business models, facilities, and social responsibilities. The airport industry, like other industries, is challenged when sudden or unexpected changes occur in the marketplace. Recent advances in long-term strategic planning have developed sustainable methods of managing change in the presence of uncertainty. Yet, the strategic planning process has not been widely embraced in the airport industry. Airport professionals and members of airport policy boards can use the strategic planning process to manage these transformations effectively and proactively.

Under ACRP Project 03-09, Ricondo & Associates was asked to provide a comprehensive, user-friendly management tool that could be used to design, implement, and understand the strategic planning process, leading to the development of an airport strategic plan. According to the results of the survey conducted as part of the research for this project, almost three-quarters of respondents viewed the development of a strategic plan as “a necessity” for their airport organization. ACRP Report 20 sets a common process and key considerations for applying strategic planning in an airport setting. The report integrates knowledge, expertise, opinions, and recommendations of airport executives and other airport industry professionals gained through focus group discussions, a survey, one-on-one interviews, and workshops. The report reflects an extensive outreach process undertaken to ensure that the contents reflects industry practices, views, opinions, and professional expertise from aviation professionals as they relate to airport strategic planning.

This report is also closely tied to airport performance measurement, which is now being addressed by ACRP Project 01-06. The results of both projects should be examined and utilized together.
PART 1 Introduction and Definition of Strategic Planning

Chapter 1 Introduction

1.1 Purpose of the Guidebook
1.2 The Guidebook Structure

Chapter 2 What Is Strategic Planning?

2.1 Definition
2.2 The Airport Strategic Planning Framework
2.3 The Key Benefits of Strategic Planning
2.4 The Airport Planning Processes

PART 2 The Strategic Planning Sequence

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90  7.1  Identifying Strategic Issues
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99  Chapter 8  Formulating Short-Term Objectives and Creating Action Plans

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Introduction and Definition of Strategic Planning
ACRP Report 20: Strategic Planning in the Airport Industry (hereafter referred to as the Guidebook) guides readers through a step-by-step process for developing a strategic approach to airport planning. The Guidebook provides information, tools, and techniques that can be used by airport professionals, airport policymakers, and related industry associations to develop or understand strategic plans that guide airport-related decisions and actions. The key content of the Guidebook is set forth in Exhibit 1-1.

This Guidebook is based on the knowledge, expertise, opinions, and recommendations of airport executives and other airport industry professionals gained through focus group discussions, an online survey, one-on-one interviews, and workshops. As with other subject areas, the body of knowledge regarding strategic planning rests with the practitioners who apply and advance it. The Guidebook includes proven traditional techniques and tools that have been effectively applied by some airport executives, as well as innovative practices that are emerging in the airport and other industries. For example, the Guidebook addresses the concepts of strategic agility and acuity, which define how an organization can remain strategically adaptable to an ever-changing environment and, to the extent possible, be proactive in identifying opportunities, unforeseen events, and changing conditions.

The Guidebook also draws on a number of articles, reports, research efforts, books, and studies that address strategic planning and/or airport planning.

1.1 Purpose of the Guidebook

The primary purpose of this Guidebook is to provide a comprehensive, user-friendly management tool that can be used by airport professionals, airport policymakers, and related industry associations to implement or understand the strategic planning process leading to the development of an airport strategic plan. Nearly three-quarters of respondents to the online survey conducted as part of the research for this Guidebook viewed the development of a strategic plan as “a necessity” for their airport organization. The Guidebook sets forth a common process and key considerations for applying strategic planning in an airport setting.

1.1.1 Historical Context for the Guidebook

The perspectives, priorities, and strategic planning techniques contained in the Guidebook are a reflection of the U.S. airport industry as it exists at the time of this research effort (2007 to 2009)—an environment in which airports are independent of national control and are typically owned and operated by local municipalities or regional/state authorities. However, other North
American airports with operational structures similar to those airports in the United States, such as Vancouver International Airport in Canada, are also represented in the Guidebook.

1.1.2 Intended Audience for the Guidebook

The Guidebook is intended to present the airport strategic planning process, related context, and facilitating tools and techniques to a variety of readers. In preparing the Guidebook, every effort was made to present the material in a simple and easy-to-follow style, while focusing on important and sometimes complex elements of the strategic planning process that are commonly overlooked in the day-to-day management of airports. The Guidebook provides a foundational reference for readers, who are expected to include, but not be limited to the following:

• Airport board members
• Airport directors
• Airport department leaders
• Airport employees
• Aviation industry associations
• Airport stakeholders
• Consultants and other specialists in strategic planning, airport planning, and related fields
• Educators in airport planning and related subjects
• Individuals facilitating strategic planning sessions

Exhibit 1-1. ACRP Report 20: Strategic Planning in the Airport Industry—key content.

American airports with operational structures similar to those airports in the United States, such as Vancouver International Airport in Canada, are also represented in the Guidebook.
• Researchers analyzing airport planning or strategic planning in the airport industry
• Regulatory agencies
• Other aviation professionals

1.2 The Guidebook Structure

The Guidebook is organized into two main parts: Part 1: Introduction and Definition of Strategic Planning (Chapters 1 and 2) and Part 2: The Strategic Planning Sequence (Chapters 3 through 10). The eight chapters in Part II (highlighted in Exhibit 1-2) are as follows:

- Chapter 3: Creating a Process Plan and Road Map
- Chapter 4: Evaluating and Understanding the Organization
- Chapter 5: Defining and Articulating the Organization’s Mission, Vision, and Values
- Chapter 6: Scanning the Environment and Predicting Developments
- Chapter 7: Identifying Strategic Issues, Strategies, and Long-Term Objectives
- Chapter 8: Formulating Short-Term Objectives and Creating Action Plans
- Chapter 9: Writing, Communicating, and Executing the Plan
- Chapter 10: Monitoring, Evaluating, and Modifying the Plan

These chapters cover steps that airport operators are recommended to follow when developing a strategic plan. The steps were designed based on a literature review, the research team’s experience in strategic planning, and feedback from airport executives. These steps are recommended, but do not represent the only approach to developing a strategic plan. Other sources for strategic planning may recommend slightly different steps or variations of these steps. The chapters were developed to enable airport operators and aviation industry professionals to tailor their approach to strategic planning according to their specific organizational needs.

Note that in Chapters 3 through 10 readers will encounter three icons: the worksheet icon, the question mark icon, and the exclamation point icon (icons are displayed in Exhibit 1-3). The worksheet icon refers readers to a numbered worksheet designed to assist them in the steps under discussion in each chapter. The worksheets are available on the CD-ROM that is bound into the Guidebook. Readers should insert this CD-ROM in their computer and click on the appropriate worksheet.

The question mark indicates important questions that need to be asked and answered at particular points in the strategic planning process. The exclamation point icon indicates a tip about the information being given. Throughout the Guidebook, brief case studies provide real-world examples of how managers of airports of different sizes and characteristics are dealing with challenges presented by the strategic planning process.

Following Chapter 10 are Appendices A and B. Appendix A is a glossary of terms and concepts referenced in Parts 1 and 2 of the Guidebook. These definitions are only applicable to the terms and concepts as they are used in the Guidebook. These terms and concepts may have different meanings in other contexts. Appendix B lists contributors to the focus groups and online survey conducted as part of the research reported herein.

Exhibit 1-2. The strategic planning sequence as defined in Part 2.
2.1 Definition

In general terms, strategic planning is defined as the process undertaken by an organization to define its future and formulate a road map to guide the organization from its current state to its vision for the future. Strategic planning is based on the fundamental concept that aspects of an organization’s future can be influenced by actions taken in the present. Strategic planning requires a review of existing and potential challenges that an organization is, or may be, facing; development of a vision for how the organization will look in the future; and definition of the steps and actions that must be executed to achieve the organization’s vision. Exhibit 2-1 illustrates some key questions that need to be answered during the strategic planning process.

The strategic planning framework includes the following key elements:

- A mission statement that identifies the organization’s purpose and its core values (a separate values statement may also be created);
- A vision statement that portrays the organization’s future goal(s);
- Identification of the organization’s strengths, weaknesses, and opportunities, as well as threats that may affect the organization;
- Definition of strategic issues that must be addressed over the course of the strategic plan;
- A set of generic and grand strategies, long- and short-term objectives, and action plans that provide a road map for addressing the gaps between the organization’s current state and its vision; and
- Definition of key performance indicators (measures and targets) to evaluate the progress made toward achieving long- and short-term objectives.

2.2 The Airport Strategic Planning Framework

Over the years, corporations, nonprofit organizations, academic institutions, and governmental entities have tailored the strategic planning framework to fit their specific needs. While certain publications have addressed airport strategic planning at a conceptual level, no “how-to” guidebook has been developed specifically to assist airport operators with the strategic planning process. In light of this deficiency, the research team has reviewed the models developed by others and conducted focus groups and an online survey to gather input from airport executives and industry professionals. This information was used to develop a process that is specifically applicable to an airport setting.

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1 This preferred definition of strategic planning was corroborated by respondents to the online survey conducted as part of this research.
What Is Strategic Planning?

Strategic planning for airports consists of more than just ensuring the safety and security of the traveling public and achieving a strong financial performance. In the case of either a single airport or a multiple-airport system, strategic planning for airports projects a future vision for the airport organization, determines strategies and objectives for the growth or prosperity of the organization (including the type of products and services it should provide), and defines how the vision and objectives can be accomplished.

2.2.1 Elements That Influence the Process

The primary product offered by all airports is an infrastructure system and transportation hub that facilitates the safe and efficient movement of people and goods traveling from “Point A” to “Point B.” The product evolves over time, but its purpose essentially remains the same.

Similarly, airlines offer a comparable product (i.e., they transport passengers from their origin [Point A] to their destination [Point B]). But airlines such as Southwest Airlines and JetBlue Airways have proven that product differentiation is possible, even for companies that offer a comparable product. Southwest Airlines, which typically focuses on point-to-point service to midsize cities and secondary airports in larger metropolitan areas, offers limited amenities and few additional service fees and primarily serves price-sensitive travelers. JetBlue Airways has placed itself in a different strategic position by offering upscale amenities (including assigned seating, real-time television, and a choice of snacks) and a somewhat more hub-and-spoke-focused route network while also serving price-sensitive travelers.

Over the years, airport organizations have also sought product differentiation. Vancouver International Airport, for instance, has been reinvented from a regional airport serving the local community to a gateway airport connecting the Asia-Pacific Region, North America, Europe, and Latin America. This transformation occurred following the 1992 transfer of airport management and operational authority from the Canadian government (Transport Canada) to a not-for-profit corporation (Vancouver International Airport Authority). The airport’s simple strategic planning “formula” for product differentiation is: “Low Cost × High Service = Excellent Customer Value.”

Other airport operators differentiate their airports by focusing on unique products and services that competing airports do not provide. General aviation airports have offered services ranging from low-cost hangars to full-service fixed base operations. Diverse service offerings ranging from wine bars and day spas to flexible gate use policies have been developed at commercial service airports.

Thus, strategic planning in an airport setting is possible, but many factors, including product differentiation, influence the process. Some of these factors are similar to those that apply to corporations and nonprofit organizations, while others are specific to the airport industry.

When planning strategically, airport management solicits the opinions of a diverse group of stakeholders. Stakeholder roles in the process are generally diverse as well. Corporations and nonprofit organizations also involve a variety of stakeholders in executing their strategic plans, but the airport strategic planning process includes added representation from the local community, such as local government, business and community leaders, and local public interest organizations. This stakeholder diversity is highlighted in Exhibit 2-2.

Airports serve a broad and diverse group of customers that consists of two key categories: airport tenants (airlines, concessionaires, fixed base operators [FBOs], air cargo operators, and other airport business owners) and passengers (meeters/greeters and well-wishers, and other businesses or individuals that are users of, or dependent on, the airport). Governing entities must account for the needs and priorities of these customers when defining a vision for their airports.

In contrast to corporations, airports serve the community at large and generally are economic development engines for the communities they serve. Airport operators must be responsive to the needs of both their customers and communities. While the management team of a corporation or nonprofit organization can decide what type of customers it wants to serve, the same cannot typically be said for airports. Furthermore, local entities may be able to make operational and development decisions based on local needs and priorities that affect an airport’s future. In contrast, communities typically have less control over a corporation’s operations.

The competitive environment in which airports operate is not consistent. In some instances, competition comes from other airports located in close proximity or from an airport that offers better service or pricing options. In other instances, more applicable to connecting hub airports, an airline’s consolidation strategies may result in competition for new service opportunities among the airports in the airline’s hub network. In addition, other modes of transportation and economic factors, such as the cost of fuel, affect the competitive environment for airports.

Strategic planning in the airport industry is challenging because the aviation industry is continually changing. Engaging in structured and thoughtful speculation about what the future may hold is complex. Events such as airline bankruptcies and restructuring, economic slowdowns, the introduction of new regulatory requirements, the emergence of low-cost carriers, or the consolidation of airlines through mergers force airport governing entities to constantly rethink how they do business and how to maintain flexibility and adaptability. Almost two-thirds of the respondents to the online survey conducted in this research stated that they try to account for the myriad of events that may influence their organization’s future as part of the strategic planning process.

Strategic planning also requires consideration of the airport regulatory environment. While planning for the future, trying to match capacity with the demand for airline service, and meeting the needs of airport tenants and users and the public at large, airport operators must ensure that they satisfy the regulatory requirements imposed by federal, state, and local agencies. Agencies of particular relevance to the airport industry are the Federal Aviation Administration (FAA) and the Department of Homeland Security (DHS), including both the Transportation Security Administration (TSA) and U.S. Customs and Border Protection (CBP). In addition, airports are required
Note: Stakeholders that should actively participate in the strategic planning process should be differentiated from those that will be consulted as part of the process on a case-by-case basis.

Exhibit 2-2. Stakeholders in the strategic planning process.
Strategic Planning in the Airport Industry

To comply with various state and local regulations that protect airports and the surrounding communities from incompatible development, define airport design and construction standards, and provide environmental guidelines. Respondents to the online survey indicated that the reporting and regulatory environment of airports is what most differentiates formulating a strategic plan for an airport from formulating a strategic plan in other industries.

In addition, strategic planning in an airport setting is influenced by the “uniqueness” of airports, with the operation of each airport differing from that of any other. Airports vary in size, location, type of operations and passengers that they accommodate, and governing structure, among other factors. Each airport organization also has its own values and culture. Such uniqueness makes it difficult to benchmark airport organizations.\(^3\) Because of this uniqueness, the airport strategic planning process must be tailored to each airport to account for its individual characteristics.

### 2.2.2 The Airport Strategic Planning Process

The airport strategic planning process begins with preplanning activities. The strategic planning process then proceeds to assessment and development of (1) the organization’s historical context, mission, vision, and core values; (2) the internal and external environment in which the organization operates; (3) the organization’s strategic issues and strategies for creating competitive advantage; (4) specific long- and short-term objectives and action plans that must be implemented for the organization’s vision to be successfully achieved; and (5) an evaluation plan using key performance indicators and targets. The framework of the strategic planning process is highlighted in Exhibit 2-3.

The airport strategic planning process can also be segmented into four main phases: (1) preplanning, (2) analysis/evaluation, (3) implementation/execution, and (4) monitoring. Many of the steps within these phases are common to all airport strategic plans irrespective of airport size or the type of airport being considered. However, the amount of data to be collected, reviewed, and analyzed, as well as the outcomes of the process, will vary depending on the airport organization’s size and complexity, the amount of time and the level of effort invested in the strategic planning process, and the number of stakeholders involved in the process.

\(^3\) Despite the difficulty of benchmarking, 68 percent of respondents to the online survey stated that their organization was engaged in some form of benchmarking.
Similar to the strategic planning process for other types of organizations, the airport strategic planning process is dynamic and continuous. Airport strategic planning is a classic example of a “wicked problem,” or a “problem that has innumerable causes, morphs constantly and has no correct answer.” Wicked problems require (1) broader participation of parties affected either directly or indirectly by planned outcomes and (2) gathering a broad spectrum of data from a large and diverse range of sources. It should be noted that, in an airport setting, the strategic planning process typically incorporates elements of a “bottom-up” approach, in which stakeholder needs and wishes are considered and consensus among different interested groups is achieved to the extent possible.

A change in the environment in which an airport operates may necessitate a change in various elements of the strategic plan. The process is perpetual, and the organization’s strategic plan is frequently updated to align its key objectives, performance measures, and targets with the environment and uncertainties that arise.

A flow chart of the steps to be taken in each of the four main phases of the airport strategic planning process is presented in Exhibit 2-4. The first, or preplanning, phase establishes the purpose and method for undertaking the strategic planning process. This phase includes identification of the need and reasons for developing the strategic plan, an assessment of the organization’s readiness to participate in strategic planning activities, development of the scope and schedule for the planning process, identification of planning team members and the roles that other stakeholders should play in the process, and determination of whether there is a need to select an external facilitator.

The analysis/evaluation phase develops the airport organization’s mission, vision, and values statements. This phase also includes an evaluation of the historical context and culture of the organization and a scan of the environment in which the organization operates, including a review of the organization’s internal strengths and weaknesses and external threats and opportunities. The findings of these evaluations and reviews provide a means for the organization to assess and analyze critical gaps between current performance and established vision. The review of the critical gaps may also lead the organization to reassess its vision so that it is harmonized with the organization’s internal strengths and weaknesses and is adaptable to a range of future environments in which the organization may operate.

The implementation/execution phase provides the vital link between an organization’s mission and vision, resulting in the formulation and communication of strategies and objectives that must be implemented for the vision to become reality. In this phase, strategic issues are identified, generic and grand strategies are developed, and long- and short-term objectives are set, prioritized, assigned, and implemented throughout the entity’s organizational structure. The process for formulating objectives includes weighing resource requirements (e.g., capital and personnel) against the potential benefits that may result from achievement of the objective. Formulation of an action plan for each short-term objective guides the day-to-day activities of staff at the departmental level.

The implementation/execution phase also includes determining how to best communicate the content of the strategic plan to stakeholders and developing key performance measures and targets for each of the objectives set in the strategic planning process. Key performance indicators are used to measure and evaluate incremental performance improvement and the achievement of objectives established through the strategic planning process. This phase also includes implementation of an incentives/rewards program to ensure that individual performance is linked to

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5 Harry T. Dimitriou and Robin Thompson, Strategic Planning for Regional Development in the UK (Abingdon, UK: Routledge/Taylor & Francis Group, 2007).
organizational performance and creation of training and development programs to ensure proper implementation of the plan.

Monitoring, although listed as the final phase in the planning process, needs to occur throughout the process. In this phase, the key performance indicators defined during the implementation/execution phase are monitored to assess the effectiveness of the strategic plan and the need for any adjustments.

The steps and considerations required to complete these four phases are the subject of this Guidebook and are discussed in detail in the remaining chapters. The definition and development
of these steps is based on a review of relevant literature, research conducted for this project, published practical guidance, and previously implemented techniques.

The strategic planning process generally results in the development of one key document, the strategic plan, which can be accompanied by a communications plan and a monitoring plan. Key inputs to the process include internal and external stakeholder views, information relative to the organization’s competition and internal strengths and weaknesses, key industry trends, and existing constraints that are likely to impact the organization’s future. Exhibit 2-5 graphically depicts the inputs and outputs of the strategic planning process. The strategic plan, the communications plan, and the monitoring plan constitute the main outputs of the process. A comparison of the contents included in the interrelated plans is provided below:

- A strategic plan provides a high-level statement of strategic directions and priorities. The strategic plan generally includes generic and grand strategies, long- and short-term objectives, an action plan that defines what needs to be accomplished and who is responsible for each action, and corresponding expected results or performance targets. The strategic plan serves as the basis of comparison for the monitoring plan.
- A communications plan establishes the processes for (1) gathering feedback/input from stakeholders and informing all stakeholders of the progress of the strategic planning process and (2) distributing the strategic plan to stakeholders. The first part of the communications plan is developed during the preplanning (first) phase of the strategic planning process and the second part is developed during the implementation/execution (third) phase. A communications plan sets the rules to ensure that communication is maintained among the various individuals or entities involved in the planning process and maximizes opportunities to engage all stakeholders. Development of a communications plan as part of the strategic planning process is particularly relevant for organizations that interact and collaborate with many stakeholders.
- A monitoring plan details how to evaluate implementation of the strategic plan and helps ensure that the organization is following the action plan established during the strategic planning process. Management generally benefits from the monitoring process by learning how its organization reacts to specific events. The process helps “trigger” needed adjustments to the strategic plan to effectively respond to unanticipated events or business opportunities. Monitoring of strategic plan implementation also allows management to document the evolution of the orga-

<table>
<thead>
<tr>
<th>INPUTS</th>
<th>OUTPUTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Internal and External Stakeholder Views</td>
<td>- - - → Strategic Plan</td>
</tr>
<tr>
<td>Competition Information</td>
<td>- - - → Mission and Vision Statements</td>
</tr>
<tr>
<td>Internal Performance</td>
<td>- - - → Strategic and Objectives</td>
</tr>
<tr>
<td>Industry Trends</td>
<td>- - - → Action Plans and Responsibility Assignments</td>
</tr>
<tr>
<td>Existing Constraints (environmental, operational, financial)</td>
<td>- - - → Key Performance Indicators and Targets</td>
</tr>
</tbody>
</table>

**Exhibit 2-5.** Inputs and outputs of the strategic planning process.
Strategic Planning in the Airport Industry

...organization’s historical performance, which can generally be used to predict how future risks and uncertainties could affect the organization’s future performance.

2.3 The Key Benefits of Strategic Planning

The feedback received by the research team from airport executives and aviation industry professionals through three focus group sessions indicates that a variety of benefits are achieved from engaging in the strategic planning process. These benefits range from increased efficiency resulting from the establishment of airport performance metrics to gaining stakeholder buy-in for the management team or board of directors’ vision for the airport.

Corporate strategic planning activities tend to be more quantitatively focused and are directed toward modification of the organization’s internal and external environment through asset acquisition and disposal, market share, and growth. Public sector (e.g., airports) strategic planning activities tend to be more qualitatively focused and are directed toward improving internal operating efficiency, setting and achieving objectives, and financial performance.

Several strategic planning benefits were specifically mentioned by participants in each of the three focus groups: the Large Hub/Gateway International Airports Focus Group; the Medium Hub, Small Hub, and Non-Hub Airports Focus Group; and the Corporate/General Aviation Airports Focus Group. Exhibit 2-6 shows these benefits and groups them into four categories: organizational benefits, operational/managerial benefits, community/stakeholder benefits, and economic benefits.

Organizational benefits of strategic planning mentioned by the focus groups were the following:

- Codifying a set of minimum standards or guiding policies that will be supported by the governing body of the airport
- Bringing order and a long-term focus to a chaotic business
- Allowing management to tie performance evaluations at all organizational levels to a common set of strategic objectives
- Providing an important motivational tool to enable employees at all organizational levels and in all departments to understand the mission and vision of the organization

Operational/managerial benefits of strategic planning mentioned by the focus groups were the following:

- Facilitating the development of metrics to help measure airport performance, leading to increased efficiency
- Creating a blueprint for prioritizing the projects that should move forward
- Enabling airport management to examine, in a more comprehensive manner, bold initiatives, strategies, and alternatives more easily than during the master planning process

Community/stakeholder benefits of strategic planning mentioned by the focus groups were the following:

- Helping to diffuse tensions between an airport’s public policy priorities and tenants’ economic development priorities (e.g., an increase in rates and charges to offset the costs associated with construction of a new passenger terminal or automobile parking garage)
- Helping to build community support and explain to elected officials how the airport contributes to the community’s economic development
- Being a tool for soliciting input and buy-in from stakeholders on a particular course of development
- Preventing future conflicts by building consensus for a future action that needs to be initiated at the present time (e.g., the acquisition of land parcels that will allow for the long-term development of airport facilities)
BENEFITS OF STRATEGIC PLANNING IN THE AIRPORT INDUSTRY

- Facilitates Decision Making
- Provides Airport Blueprint and Guiding Policies
- Brings Order to the Organization and a Long-term Focus
- Assists in the Creation of Performance Metrics
- Integrates Performance Evaluations with a Common Set of Objectives
- Leads to Efficiency
- Enables Airport Management to Examine Bold Initiatives, Strategies, and Alternatives
- Creates a Blueprint for Prioritizing Projects
- Helps Communicate Mission and Goals
- Helps Obtain Stakeholder Buy-In on Specific Development and Other Airport Improvement Initiatives
- Helps Nurture Community Support
- Builds Consensus
- Helps Maintain Financial Stability
- Helps Diffuse Tensions Between Entities with Different Set of Priorities

Exhibit 2-6. Key benefits of strategic planning in the airport industry.
Helping to build consensus on core business issues before proceeding with the master planning process

The main economic benefit of strategic planning cited by the focus groups was that it allows airport management to shape its strategic response to structural changes in the business environment (e.g., change in traffic mix from general aviation to corporate) to maintain financial stability.

A common benefit of the strategic planning process in both airport and corporate settings is that the process is useful for establishing metrics to measure performance. Another common benefit is the usefulness of the process for communicating the mission and vision of the organization to employees.

Participants in the three airport focus groups formed by the research team consistently mentioned the benefits of using the strategic planning process as a tool for reconciling the competing demands of policymakers, the community, and airport tenants and users. The usefulness of the strategic planning process for building community support and explaining to elected officials how the airport contributes to the community’s economic development, for instance, was mentioned by participants in more than one focus group.

During the focus group discussions, airport executives also stressed the importance of strategic planning as a motivational tool to help employees at all operating levels and in all departments to understand the vision for the organization. They also indicated that the airport strategic planning process is oriented toward empowering stakeholders and addressing their needs.

The academic literature on corporate strategic planning highlights the usefulness of the strategic planning process in enabling corporations to develop strategies for building a competitive advantage that leads to sustained growth in profits. The public utility nature of airports makes airport management less likely to focus on the economic benefits of the strategic planning process. Airport management has limited control over its customer base, and the emphasis for airport organizations is on financial stability (i.e., revenues offsetting costs and a lower rate structure), not profitability.

2.4 The Airport Planning Processes

The differences and similarities between airport strategic planning and other forms of airport planning are discussed in this section. An overview of the correlations between these airport planning processes and how their combination provides an essential, if not required, tool for airport management and planning is also provided.

As illustrated in Exhibit 2-7, the airport strategic plan should guide all other airport planning analyses (input from the focus group participants also supported this view). The airport strategic plan sets forth the foundation for planning initiatives and defines the road map that the organization should follow to achieve its vision. All other planning analyses should be aligned with and support the strategic plan.

Strategic planning differs from long-term planning. In long-term planning, it is generally assumed that the environment in which the organization operates will remain unchanged over time or that trends and patterns from the past will continue in the future. Goals and objectives defined as part of the long-term planning process are based on an extrapolation of current business trends. Strategic planning, on the other hand, enables an organization to react to a dynamic [6These benefits were echoed by respondents to the online survey.]
and continually changing environment. Strategic planning is about proactively thinking about and mapping the future and developing a creative plan that will enable the organization to reach its objectives in a non-static environment. A review of the external environment to determine whether emerging issues may pose threats or opportunities to the organization is a key component of strategic planning.

Often, many other airport planning analyses are developed prior to development of a strategic plan and provide critical inputs to the airport strategic planning process. However, once an airport strategic plan is developed, these planning analyses must be adjusted to align with the strategic plan objectives.

The airport business plan and strategic plan are closely related and may even be prepared simultaneously. An airport strategic plan sets the direction for the airport in the medium- to long-term future, defines generic and grand strategies and long- and short-term objectives, and defines the specific steps necessary for implementing those strategies and objectives. The business plan identifies the short- to medium-term steps that must be implemented to move the organization toward realizing its vision. The business plan should be the department-level action plan that guides the day-to-day implementation of the strategic plan’s specific objectives (i.e., the action plan section of the strategic plan should be consistent with, and integrated into, the department-level business plan). Results of the online survey indicated that there may be a lack of clarity about the relationship between an airport’s business and strategic plans. Results of the online survey indicated that
there may be a lack of clarity about the relationship between an airport’s business and strategic plans, as 44 percent of respondents to the online survey stated that they consider their business and strategic plans to be the same.

Airport marketing plans should also reflect the goals set during the strategic planning process. For example, if the goal of the strategic plan for a non-hub airport is to attract a total of 500,000 passengers by 2012, the marketing plan should detail the air service development strategies that will lead to accomplishment of that goal.

The master planning process typically defines the airport facilities needed and when they will be needed. Master planning is primarily focused on facilities, while strategic planning has a much broader scope. The master plan relies on the strategic planning process for definition of the airport’s vision, its customer base (e.g., business aircraft operators vs. general aviation pilots flying for leisure), and services to be provided (e.g., general aviation vs. cargo). On the basis of that information, the master planning process leads to review and evaluation of several development alternatives. These alternatives are then ranked and a preferred development alternative is identified. The master plan provides a means to ensure that the facilities required to meet the vision for the airport are identified and that space is reserved for the siting of those facilities, if needed. Over three-quarters of respondents to the online survey indicated that their master plan is linked to their strategic plan.

The long-term strategies contained in an airport’s strategic plan are also reinforced and promoted in more detailed land use or environmental plans. For example, the most recent strategic plan for Bradley International Airport states that “[t]he Board has identified ‘being an excellent neighbor to the Airport’s surrounding communities through consistent communication and responsiveness’ as a primary supporting element to the Airport’s mission.” In support of this objective, airport management will “[i]nclude, inform and request feedback from surrounding communities regarding future development activities on and off the Airport.” Additionally, airport management will “[a]cquire state-of-the-art noise monitoring equipment, and implement the findings of the FAR Part 150 Study.”

The strategic planning process is a useful tool for identifying business risks that may need to be further managed or mitigated through implementation of an enterprise risk management plan. In its Strategic Plan 2007–2011, the Metropolitan Airports Commission (operator of Minneapolis-St. Paul International Airport) identified one of its five most critical issues as the need to address its exposure to the financial risks presented by the rapidly changing economic health of the airlines. An action item under this issue is to “develop financial and operational contingency plans.”

An airport’s resource and staffing plan and training and development plan are often indirectly tied to the strategic plan through the business plan. As described above, the business plan should include specific department-level objectives that are based on the strategic plan. By measuring each department’s progress toward achieving these objectives, airport management is able to determine the appropriate number of staff needed and their training requirements.

An airport’s strategic plan may also establish goals that directly affect the airport’s human resources plans. For example, the Metropolitan Airports Commission’s strategic plan identified one of its 5-year strategies as “match[ing] employee talent with key business needs.” Specific initiatives supporting this strategy were to ensure that employee wages and benefits remained competitive and to expand employee training programs. The majority (70 percent) of online survey respondents indicated that their training and development plan is linked to their strategic plan.

8 The most recent version of this airport’s strategic plan is available online at www.metroairports.org/mac/docs/2009-2013_Strategic_Plan.pdf (accessed May 28, 2009).
PART 2

The Strategic Planning Sequence
Creating a Process Plan and Road Map

This chapter describes the preplanning activities necessary to ensure that the organizational elements are in place to initiate the strategic planning process so that the process provides maximum benefits to the airport. During preplanning, the key parties develop shared understandings and reach agreement about the planning process. Preplanning is also critical to determining whether the organization is ready to undergo strategic planning.

The information presented in this chapter is intended to assist airport management with the following:

• Defining the need to initiate the strategic planning process
• Defining the specific benefits/outcomes that airport management hopes to achieve from the process
• Assessing the organization’s readiness for strategic planning
• Defining the scope of the process or developing an outline of the steps and activities that will take place during the planning process. This outline should specify the tasks, outcomes, and resources to be expended (time and financial) and the individual(s) responsible for ensuring that each phase in the airport strategic planning process is complete
• Defining the expected outcome of the process in terms of a written plan
• Determining the stakeholders that should participate in the strategic planning process, including the potential leaders of the process and the methods that will be used to keep stakeholders informed
• Defining who should facilitate the strategic planning effort

3.1 Defining the Need to Initiate the Strategic Planning Process

In an ideal situation, strategic planning should be an internalized and regularized process not triggered by anything in particular other than the need, on a routine basis, to revisit the organizational values, mission, and vision; assess the operating environment; examine strategies and objectives; and ensure that other airport planning analyses (master plan, business plan, etc.) are aligned with the organization’s overall strategy.

For those organizations that do not have a regularized process, the need to develop a strategic plan may result from leadership change; major internal changes (e.g., a change of governing structure or dramatic staff turnover) or external changes (e.g., airline bankruptcy or consolidation triggering a decrease in aircraft operations and revenues); a need to cope with vital issues, such as rapid growth; or simply a need for the organization to define its mission and general strategic vision.
Unless a strategic plan was recently completed for the organization, or the organization has a clear understanding of its mission and vision, it is most likely that a strategic planning process will benefit the organization. Key factors that indicate the need to initiate a strategic planning process include, but are not limited to, the following:

- The organization does not have a clear vision of what it wants to achieve and there is no consensus about the organization’s vision
- The organization does not have a mission statement
- Employees do not know, or do not have a clear understanding of, the organization’s mission and vision
- The organization does not have clear strategies and objectives for what it wants to achieve
- No process is in place to monitor achievement of the organization’s vision
- The organization never completed a strategic plan or the existing plan is outdated
- No clear link exists between the organization’s overall strategy and its business processes
- The organization does not have a performance management system in place
- There is no established communication between senior management and staff
- The organization’s strategy is not defined in measurable, operational terms

Regardless of the reasons for initiating the strategic planning process, the planning team should identify the reasons early in the process in order to explain and justify the planning process to others, evaluate the effectiveness and value of the strategic planning process, and define the specific benefits of planning strategically.

Respondents to the online survey indicated that the five best reasons for developing a strategic plan include the following: (1) it provides a sense of direction to the organization; (2) it is an essential management tool; (3) it is an essential leadership tool; (4) it helps with gaining stakeholder buy-in; and (5) it helps to promote future facility improvements.

### 3.2 Defining Specific Benefits

The benefits associated with strategic planning generally go well beyond the tangible products of the written plan. Before initiating the process, however, the organization should weigh the potential benefits against the costs of planning.

For many, developing a strategic plan is a daunting task because of a variety of organizational barriers, including a lack of executive support, an inability to bring together the organization’s various departments, and a lack of understanding of the potential benefits to be derived from the strategic planning process.

Before delving into detailed planning, the organization’s leaders should define the potential benefits of the strategic plan. To define these potential benefits, the organization’s leaders should agree upon the overall direction of the strategic plan and conduct a rapid assessment of the organization’s current capabilities. This information will provide the basis for making a benefits case to support detailed strategic planning and, at the same time, educate department leaders about the strategic planning process and its potential outcomes.

The literature review for this research revealed that organizations that strategically plan typically outperform those that do not. In addition, generic benefits associated with the strategic planning process generally include the following:

To define the need and reasons for initiating the strategic planning process, complete Worksheet 3.01, “Initiating the Strategic Planning Process.”
• Helping to clarify mission and vision statements
• Helping to clarify internal values
• Fostering leadership
• Increasing communication between and among policy board, department leaders, and staff
• Providing a tool for organizational accountability
• Providing a tool for better decisions as a result of the group decision-making process
• Helping to gain community support
• Serving as a communications tool within and outside the organization
• Raising board members’ awareness of current issues and operations
• Increasing organizational performance
• Increasing the likelihood of identifying organizational and environmental conditions that may create problems in the long term.

Airport-specific benefits associated with the strategic planning process include, but are not limited to, the following:
• Improved generation of economic benefits in the surrounding local and regional economies
• Increased ability to attract new airline service and passenger traffic resulting from improved strategic positioning
• Identification and maximization of revenue-generating opportunities
• Adoption of an optimal governance structure

The following three steps are designed to help an organization define and defend the potential benefits of strategic planning.

3.2.1 Step 1: Identify the Scope for a Benefits Case

This first step consists of an assessment of the organization’s current culture and personnel so as to define the need for a benefits case. If limited objection to the strategic planning process is foreseen, there is no need to build a benefits case. An initial meeting/interview with the organization’s department leaders and policy board members will indicate whether there is a need to build a benefits case. From these discussions, a clear set of objectives and a scope for the benefits case should be identified. Typical questions that help to identify the scope include the following:

• Who needs to be convinced that the strategic planning process is essential?
• What parties will be most affected by the process?
• What aspects of the strategic planning process are to be covered? For example, will a benchmarking study of other airports be included?
• Once the benefits case is completed, what will the decision-making process be to gain approval for development of a strategic plan?

3.2.2 Step 2: Present the Plan

To build a benefits case for the strategic planning process, the strategic planning team should present to the Board members and/or key executives its plan of action. This plan should be presented in a manner that shows how the plan will answer the need for the strategic plan identified under Section 3.1 of this Guidebook and how this plan will differ from the status quo.

3.2.3 Step 3: Defend the Benefits

The strategic planning team should defend the benefits of the process and show how those benefits relate specifically to the needs identified under Section 3.1. From the benefits identified, the team may elect to focus on two or three benefits, which would constitute the primary arguments.
To the extent possible, these primary arguments should be supported by statistics, examples, or other types of credible information. In this step, the strategic planning team should explain what will happen as a result of the plan and why these results will benefit the organization.

Airport staff and stakeholders are most likely to help implement the plan if they buy into it. As Goetsch indicates: “The planning process as much as the plan itself offers the most potential for achieving buy-in. When people are involved in the planning process, the product of the process (i.e., the strategic plan) becomes their plan rather than your plan.” Consequently, it is essential that the strategic planning team defend the benefits of the process and achieve buy-in from the organization’s internal and external stakeholders.

Respondents to the online survey viewed strategic planning as important to their organizations. A majority (72 percent) of the online survey respondents indicated that developing a strategic plan is a necessity.

### 3.3 Assessing the Organization’s Readiness

To better assess the organization’s readiness and plan for success, a Readiness Criteria Questionnaire is included (see Worksheet 3.02). This questionnaire provides a high-level check to determine where the airport organization stands and to assess whether the organization is ready to initiate the strategic planning process.

For the process to be successful, the organization should meet the following requirements:

- Everyone in the organization understands what strategic planning is. A shared understanding about what the organization is trying to achieve and how it will go about achieving it should be created. The principles and goals of strategic planning should be explained to everyone in the organization. Even though a person may not be involved in the strategic planning process definition and monitoring, everyone in the organization is likely to play a role in achieving the organization’s mission and vision. The airport’s governing body defines the organization’s vision, but the department leaders and staff fulfill the objectives set forth as part of the strategic planning process.
- Senior management and policymakers understand the process and are willing to commit to it. These leaders should implement programs and allocate resources to meet the objectives of the strategic plan at a level that is “doable” for the organization and level of activity.
- Appropriate resources will be made available to conduct strategic planning. The organization’s leadership must commit resources to adequately conduct the strategic plan.
- Staff will have the time and energy to participate in the strategic planning process. Organizational complexities such as lack of alignment, conflicting parties, differences in values and motivation, and undesirable group dynamics should be minimized.
- The organization can adapt to change and there are no serious internal conflicts. People and, more broadly, organizations respond differently when it comes to expressing awareness, interest, and willingness to adopt proposed changes. For many organizations, attempts to implement change fail because the leadership assumes that all employees are open to change and ignores the needs of those most resistant to change.
- To limit the organization’s resistance to change, the strategic planning team should identify the rationale for the proposed changes, avoid the unknown by clearly communicating the organization’s strategies and associated objectives, and recognize that implementation of the strategic plan will require everyone’s support.

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• No major events (i.e., change of leadership) are expected to affect the process. If major events will take place in the near future, the strategic planning process should not be initiated.
• The decision-making processes are aligned with the organization’s values.
• Unless extraordinary circumstances occur, it is believed that the plan will be implemented once defined.

To assess the organization’s readiness, complete the “Readiness Criteria Questionnaire” (Worksheet 3.02).

3.4 Defining the Scope of the Process

The scope of the strategic planning process will vary based on the organization’s needs and complexity, but, as indicated in Chapter 2, the strategic planning process generally consists of four phases, including preplanning, analysis/evaluation, implementation/execution, and monitoring.

Factors that will influence the scope of the process include, but are not limited to, the following:

• The organization’s complexity
• The reasons for initiating the process
• The intent of the process
• The relationship between the policy board and senior management
• The relationship between senior management and staff
• The extent to which the decision-makers in the organization are analytically focused (data-driven) or driven by intuition.

In addition, the scope of the process should be defined by determining whether communication at all levels of the organization is sufficiently open and clear to make effective use of the planning process. Finally, the scope of the process should be defined by identifying whether other issues might distract the planning team, department leaders, or senior management.

This Guidebook identifies eight major tasks in the strategic planning process, each addressed in a separate chapter in Part 2:

• Creating a Process Plan and Road Map (this chapter, Chapter 3)
• Evaluating and Understanding the Organization (Chapter 4)
• Defining and Articulating the Organization’s Mission, Vision, and Values (Chapter 5)
• Scanning the Environment and Predicting Developments (Chapter 6)
• Identifying Strategic Issues, Strategies, and Long-term Objectives (Chapter 7)
• Formulating Short-term Objectives and Creating Action Plans (Chapter 8)
• Writing, Communicating, and Executing the Plan (Chapter 9)
• Monitoring, Evaluating, and Modifying the Plan (Chapter 10)

It should be noted that there is a great deal of interdependence and overlap among the tasks. For instance, the organization’s mission and vision are generally revisited after scanning the environment and predicting developments. These tasks also require different levels of participation and communication. The scope of the process should be tailored to each organization, but the strategic elements listed in Exhibit 3-1 should be included in the strategic plan for all organizations.

3.4.1 Identifying the Period of Time the Plan Will Cover

The time period covered by the strategic plan is usually the period during which the long-term goals set forth in the plan are intended to be implemented. From the focus groups, it was determined
that the time span for an airport strategic plan is generally 5 to 20 years, with revisions and updates made to the plan every year. Exhibit 3-2 shows the time span for a strategic plan in comparison to the financial plans (capital improvement and business plans) and facility plans (master plans) that airport organizations typically prepare.

As indicated in Exhibit 3-3, the mission and vision statements are generally developed considering the long-term future (up to 20 years). Grand strategies and long-term objectives are generally defined for a shorter period of time (3 to 5 years). The tasks to be completed to meet the organization’s short-term objectives are generally developed considering the short-term future (1 to 2 years).
3.4.2 Establishing a Schedule for Developing the Plan

The length of the process required to complete the strategic plan and conduct the analyses depends on the following:

- The organization’s complexity
- Whether or not the organization has completed a strategic plan in the past
- Whether or not the organization has a performance measurement system in place
- Whether or not the organization is actively monitoring industry trends
- The level of detail desired
- The number of stakeholders involved in the process
- How much time the organization is willing to commit to the process
- The continuity of the process (i.e., the departure of key senior leaders may slow or stop the process)
- The number and frequency of meetings required, to be determined by the organization

Exhibit 3-4 provides a sample of the planning activities and the sequence in which they may be conducted as part of the process. Grouping planning activities are often helpful because the process is then subdivided into manageable and discrete parts.

3.5 Defining the Expected Outcome of the Process in Terms of a Written Plan

A standard output of the strategic planning process is the creation of a written plan setting forth key decisions and findings from the planning process. As described in Section 9.1 of Chapter 9, the exact content of the written plan will vary depending on the stakeholders to whom it will be distributed; however, the contents of the written plan should be envisioned prior to engaging in the planning process.
3.5.1 Content

The content of the strategic plans collected as part of the research for this project varied from plan to plan, but the majority contained some common elements. These elements include mission and vision statements, a review of the business environment in which the airport currently operates, a review of future challenges, a definition of long- and short-term objectives, performance measurement criteria, and an implementation plan. These elements are discussed in the following sections, and an abbreviated outline for a typical strategic plan document is provided.
3.5.1.1 Mission Statement

Mission statements are tailored for the individual circumstances of a particular airport and are typically structured to answer two main questions. The first question (Who are we?) addresses the purpose for the organization’s existence and what it seeks to accomplish. The second question (What do we do?) addresses the main method or activity through which the airport organization tries to fulfill its purpose. Chapter 5 provides a detailed description of how to develop a mission statement, but generally the mission statements reviewed answered the following questions:

- Why does our airport exist?
- What services does our airport provide?
- Who are our airport’s customers?
- What values guide our airport?
- What is our airport’s competitive advantage?

In addition, the majority of the reviewed mission statements included some or all of the following:

- A description of the organization’s desired public image
- A definition of the target customer
- A discussion of the airport catchment area
- Information on the positive economic impact of the airport on the communities it serves

3.5.1.2 Vision Statement

The vision statement contains a brief description of the airport operator’s aspirations and values for the airport and the ideal state that the airport operator aims to achieve in the future. A vision statement is future-oriented, whereas a mission statement is operational and focuses on the purpose of the airport, including its current activities. The vision statement is typically intended to be a memorable and engaging statement that will serve as a benchmark and source of inspiration for airport employees. Chapter 5 provides more information on how to prepare a vision statement.

3.5.1.3 Review of Existing Operating Conditions

The majority of reviewed strategic plans contained an assessment of the business environment in which the airport currently operates. Examples of topics generally included in these assessments include the following:

- The amount of passenger leakage from the airport to surrounding airports.
- A review of all potential competing airports. This may include an examination of how an airport fits into a regional airport system or an analysis of why competing airports may make it difficult for an airport to attract commercial air service.
- Competing modes of transportation.
- A review of local or regional socioeconomic conditions, including population growth, employment, emerging industries, and so forth, and other economic trends affecting demand for air travel at the airport.
- An industry-level evaluation of the current state of airline competition, airfares, alliances, and consolidation.

3.5.1.4 Review of Future Challenges

A review of the future challenges an airport may face is almost always a part of any strategic plan. Commonly addressed challenges include the following:

- Increasing passenger awareness of existing services
- Expanding facilities to accommodate growth in passenger volumes
Positioning an airport to attract new/more frequent airline service
Meeting expectations for customer service
Achieving long-term financial stability
Responding to unfunded or underfunded federal, state, and local mandates

As further discussed in Chapter 6, future challenges can consist of internally focused issues, to which the airport organization has the ability to shape a successful response, or externally focused challenges (e.g., unfunded mandates) to which the airport organization may have less ability to respond successfully.

3.5.1.5 Long- and Short-Term Objectives Definition

Airport strategic plans generally include a definition of the long- and short-term objectives that an airport organization hopes to achieve in the future, including both qualitative and quantitative elements. Typical areas for which objectives are set include the following:

- Air service development (passenger and cargo)/marketing
- Airside/landside operations
- Community/government relations
- Customer/tenant service
- Diversity
- Employee relations
- Environmental sustainability
- Financial sustainability
- Governance/management practices
- Improvement and maintenance of airport infrastructure
- Information technology (IT) systems
- Land development
- Non-airline revenue opportunities
- Regulatory compliance
- Safety and security

3.5.1.6 Performance Measurement

There are examples of both small and large airports pairing their long- and short-term objectives with performance measurement criteria. Fewer than half of the plans reviewed as part of the research for this project contained specific performance measurement criteria. Performance measurement criteria for financial objectives, however, were quite detailed.

Often, objectives are more qualitative and thus more difficult to measure in the areas of employee relations and customer service. Objectives such as conducting user surveys to measure customers’ wants and needs are simply measured by whether or not they are completed.

3.5.1.7 Implementation Plan

Fewer than a quarter of the strategic plans reviewed contained an implementation (action) plan that explained which airport operating divisions would have responsibility for implementing the objectives and how they would be implemented.

3.5.1.8 Typical Outline

An abbreviated outline for a typical strategic plan document generally resembles the following:

- Executive summary (highlights mission, key objectives)
- Existing conditions summary (both airport-centric and general economic)
- Strategic intent and direction (includes the organization’s mission, vision, future challenges, and long- and short-term objectives)
• Implementation considerations (discusses organizational structure, policies and procedures, human resources, and other resource allocation issues likely to affect implementation of the organization’s strategic plan)

While they are important to implementation of the strategic plan, detailed action plans are generally not included in the core document of the written plan. As further discussed in Chapter 9, detailed action plans, performance measurement criteria, the monitoring and evaluation plan, and the communications plan are generally included in appendices to the strategic plan.

3.5.2 Format

The format of a strategic plan can usually be determined by reviewing the size and scope of an airport’s operations. If an airport’s operations are large and complex, it may be necessary to explain the strategic plan in greater detail with more descriptive writing. Larger airports may also have greater financial resources that would enable a more polished plan to be prepared for distribution to interested parties.

3.5.2.1 Level of Detail

A majority of the publicly available strategic plans examined as part of the research conducted for this project were less than 20 pages in length. The large and medium hub airports for which full strategic plans were publicly available had plans between 20 and 40 pages in length.

The length of a strategic plan is not necessarily a useful proxy for the level of detail contained within it. Some plans were short (8 pages), but discussed 10 broad strategic goals with detailed action steps for implementing them.

Most strategic plans reviewed avoided extensive use of technical terms of art, preferring to describe the plan in text understandable to a reader from outside the airport industry. Some plans, however, included extensive detail about industry financial metrics using technical terms such as “operating cost per enplaned passenger” as part of a section on “Key Success Measures.”

As Goetsch has noted, “it is important to separate the strategic and execution elements of the strategic plan. The former provides the big picture information for the organization, and the latter provides the specific day-to-day details.”10 The strategic elements of the strategic plan establish the major programmatic, policy, and management goals of the organization. In the written document, these can be discussed in broad terms. These elements, however, may be too broad to offer useful guidance for an operating manager when making day-to-day decisions on how to allocate resources. As such, it is critical that the execution elements of the strategic plan, including short-term objectives and action plans, provide the details for executing the organization’s strategic plan, describing the work that will be performed by each department to support the organization’s grand strategies and long-term objectives.

Each department within the organization should be responsible for preparing a detailed plan that establishes the activities it will accomplish in a particular year. Ultimately, these detailed plans are the building blocks that collectively support the organization’s annual plan, as well as implementation of the organization’s mission, goals, and objectives. These plans include the level of detail appropriate to enable management and staff to create team and individual work plans. These plans, however, are generally not made available to the public and are only used internally.

10 Ibid.
3.5.2.2 Descriptiveness

A common format used in strategic plans is a simple bullet point structure with most paragraphs consisting of no more than a sentence or two. A hybrid format involved the use of more descriptive paragraphs in some sections of the plan, with bullet points used in other sections. Other plans consisted almost entirely of lengthy paragraphs. Most of the strategic plans reviewed also included tables to display data.

When determining length, style, and understandability of the written plan, the planning team should consider the prospective readership. Brevity and conciseness will likely characterize plans that are useful and widely read. In addition, the planning team should develop a written plan that can easily be made available via the Internet.

3.6 Defining the Stakeholders

Involving several department leaders and groups in the strategic planning process will improve the credibility of the plan and ownership of the process and the results. Involving multiple parties also leads to the definition of a common mission and vision for the organization and the airport(s) it manages and a common understanding of the action plan.

In any case, the strategic planning process should be internal to the organization. Consultants can be engaged to facilitate development of the plan; however, the core plan should be defined and executed in house. Approximately 40 percent of the respondents to the online survey indicated that consultants should facilitate the process and moderate the work sessions, but that, ultimately, the plan should be developed by airport management. Another 40 percent responded that consultants performed detailed analyses that served as input to the process, but that the plan is best developed by airport management. Nine percent of respondents indicated that consultants only provided input to the benchmarking analysis.

There are different ways to involve staff members and internal and external stakeholders in strategic plan development, including strategic planning sessions/retreats, personal interviews, and meetings. However, each individual or group will be responsible for different tasks:

- The core planning team should be responsible for defining, ensuring the execution of, and monitoring the execution of the plan. One or all members of the planning team may be responsible for facilitating the planning sessions. The planning team should be responsible for developing the airport’s mission, vision, and values statements; adopting generic and grand strategies and long- and short-term objectives; and communicating the plan to department leaders and staff members. The size of the strategic planning team will vary according to the size and complexity of the organization. For medium and large hub airports, an effective team would most likely consist of 6 to 10 members, while smaller airports may have strategic planning teams consisting of 2 to 3 members.
- Airport department leaders must meet their objectives (as set by the planning team), define tasks to be carried out by their staff in pursuit of these objectives, allocate needed resources, and ensure the execution of set tasks. The planning team should include sufficient members to represent all departments in the organization, but not so many members that it becomes too cumbersome to manage.
- Airport staff members should be responsible for executing the tasks defined by their department leaders.
- The policy board (i.e., the airport’s governing body) is responsible for reviewing the plan.
- External stakeholders provide input to the process.

The decision regarding who should participate in the strategic planning process should be thoughtfully considered. The number of persons to be involved will vary depending on the size of the airport organization, the planning phase being undertaken, and available resources. Table 3-1
provides an example of participants in the process and Exhibit 3-5 indicates the responsibilities at each organizational level.

### 3.6.1 Bottom-Up versus Top-Down Approach

In a top-down approach, the overall strategy sets the general direction of the organization, which is then interpreted by the different functional areas of the organization (marketing, finance, operations, administration, engineering, and planning, and so forth) in their functional strategies.

<table>
<thead>
<tr>
<th>Strategic Planning Activities</th>
<th>Recommended Participants</th>
</tr>
</thead>
<tbody>
<tr>
<td>Participate in Strategic Planning Awareness Session</td>
<td>All Staff and Board Members/Governing Body</td>
</tr>
<tr>
<td>Evaluate and Understand the Organization</td>
<td>Core Planning Team</td>
</tr>
<tr>
<td>Articulate Values, Mission, and Vision</td>
<td>Core Planning Team and Board Members/Governing Body, with input from all staff</td>
</tr>
<tr>
<td>Scan the Environment and Predict Developments</td>
<td>Core Planning Team</td>
</tr>
<tr>
<td>Analyze Critical Gaps and Reassess Vision</td>
<td>All Staff and Board Members/Governing Body</td>
</tr>
<tr>
<td>Define Generic and Grand Strategies</td>
<td>Core Planning Team and Board Members/Governing Body</td>
</tr>
<tr>
<td>Select Key Strategies</td>
<td>Core Planning Team and Board Members/Governing Body</td>
</tr>
<tr>
<td>Define and Prioritize Specific Objectives</td>
<td>Core Planning Team and Board Members/Governing Body</td>
</tr>
<tr>
<td>Select Key Performance Indicators</td>
<td>Core Planning Team and Department Leaders</td>
</tr>
<tr>
<td>Write, Communicate, and Execute the Plan</td>
<td>Core Planning Team and Department Leaders</td>
</tr>
<tr>
<td>Monitor, Evaluate, and Modify the Plan</td>
<td>Core Planning Team and Department Leaders</td>
</tr>
</tbody>
</table>

Table 3-1. Participants in the process.

### Exhibit 3-5. Responsibilities at the organizational level.

- **Executive Leadership**: Organization Vision
  - What is the social responsibility of the organization?
  - What are the critical issues and opportunities facing the organization?
  - What are the organization’s mission, vision, strategies, and objectives?
  - Should the mission change?
  - Which capabilities need to be developed/strengthened?
  - How will mission support be funded?
  - How should resources be invested/allocated?

- **Core Planning Team**: Consolidated Strategy
  - Do the individual department objectives fit the overall strategy?
  - Are there any repetitions/redundancies in the department objectives?
  - Are all departments working toward the grand and leading strategies set by the organization?
  - Are resources available to support implementation of strategies?

- **Internal Department**: Department Strategy
  - What role should each department play?
  - What is the department’s priority?
  - What services will each department focus on?
  - What elements in the environment must the department consider?
By contrast, in a bottom-up approach, input is generated from the functional and unit levels first and then progresses to the top level of the organization, from which a company vision is derived.

A top-down approach takes a more strategic, longer term, but maybe more interventionist view, while a bottom-up approach is closer to employees and staff and tends to be shorter term. The major challenge for an organization, including airports, is to achieve a synthesis between these two approaches. According to the feedback received during the focus group discussions, both approaches influence the strategic planning process and equal emphasis should be placed on top-down and bottom-up communications, including board members to management; management to department leaders; and board, management, and leaders to the organization’s staff at all levels.

Participants in the focus groups also emphasized the importance of the bottom-up approach with regard to building consensus for the adoption of the organization strategic plan. Key benefits of the bottom-up approach include the following:

- **Developing accountability at all levels.** A bottom-up approach emphasizes the role(s) of each person in the organization in the adoption and implementation of the organization’s strategic plan. It also provides an opportunity to define how to work and communicate more efficiently between and among departments.

- **Building consensus.** Every department in the bottom-up approach is required to translate the top-down message, develop its own strategies that are consistent with the role of the organization, and share its strategies with other departments. Understanding the needs and issues of other departments and developing a common vision for the organization will bring the organization’s departments together and help build consensus for the adoption and implementation of a strategic plan that takes into account the views of the lower levels of the organization.

- **Building ownership.** The bottom-up approach creates a sense of ownership of the organization’s strategic plan. Using this approach, staff steer the transformation of their organization.

Exhibit 3-6 illustrates the top-down and bottom-up approaches as part of the strategic planning process.

### 3.6.2 Defining Who Should Lead the Strategic Planning Process

The strategic planning process can be led either by an individual (i.e., an airport manager) or a group, referred to here as the core planning team. This individual or core planning team should be responsible for the following sequence of activities:

1. Defining the strategic planning process to be followed by the organization
2. Facilitating the meetings or recruiting a strategic planning facilitator

Exhibit 3-6. Top-down and bottom-up approaches.
3. Developing a communications plan
4. Developing an action plan
5. Monitoring and evaluating the strategic plan
6. Reporting progress to board members/policymakers

For airports with limited staff, a core planning team is not needed. Rather, the airport manager and key staff members would act as the unified team that oversees development of the strategic plan in addition to participating in developing and implementing the strategic plan.

### 3.6.3 The Role of Consultants

The role of consultants in the strategic planning process varies from one organization to another. Typically, however, consultants guide the process, work to achieve buy-in from all involved, facilitate and schedule all meetings, conduct the research and analyses, bring organizational development best practices and expertise, and document the process. In addition, a consultant can help ensure participation and be a neutral reminder for attendance. The airport organization and its employees, however, remain the owners of and main contributors to the process.

As indicated previously, this definition of the role of consultants was confirmed by the online survey. A majority (80 percent) of respondents indicated that the role of consultants is to facilitate the process, moderate the work sessions, and perform detailed analyses that serve as inputs to the process. Conversely, only 1 percent responded that their consultants developed the strategic plan and airport management executed it. These results confirm that the plan is generally developed by airport management, not consultants.

### 3.6.4 Defining Who Should Participate in the Process

The strategic plan will have greater support if many people are involved in its development. As part of the strategic planning process, it is of key importance to hear from people who have different points of view. These different points of view will help the planning team make decisions with more complete information and avoid some unexpected problems.

If a strategic plan is to be successful, stakeholders must be managed in a systematic manner over the life cycle of the planning process. As part of this process, the opinions of the most powerful stakeholders can be used to define or refine the organization’s objectives. Gaining support from stakeholders will also support implementation of the plan, as stakeholders who favor the plan are likely to engage in its implementation and/or bring the assets needed to
ensure successful implementation of the strategic plan. Stakeholder management involves the following steps:

- Identify key stakeholders
- Determine stakeholder expectations
- Define stakeholder roles
- Develop a communications strategy

3.6.4.1 Identify Key Stakeholders

Stakeholders are those individuals, groups, or entities that have a particular interest in the airport. Stakeholders are important because they have the power to influence the outcome of airport projects that may be linked to the organization’s strategic plan. Thus, they are an integral component of the strategic planning process.

No matter what data are collected or methods are used, an organization’s situational analysis is fundamentally characterized by inquiries into the organization’s context and practices that go beyond general inquiries about the organization’s routine, day-to-day operations. Stakeholder involvement among the airports surveyed tended to focus on board members, elected officials, key tenants, airlines, and the FAA.

Deciding who should be involved in the strategic planning process, how, and when is a key strategic choice. In general, people should be involved if they have information that cannot be gained otherwise or if their participation is necessary to ensure the successful implementation of initiatives built on the analyses.11 As it may be difficult for the strategic planning team to define what is too much or too little participation in the early stages of the process, the selection of stakeholders can be approached as a sequence of choices, in which the process is initiated by an individual or small group and then others are added later as the advisability of doing so becomes apparent.12

Stakeholder groups include both internal and external stakeholders. Lists of internal and external stakeholders follow. The values given in parentheses following a stakeholder group indicate the percentages of respondents to the online survey that indicated that the stakeholder group listed should be involved in developing the airport’s strategic plan.

Internal Stakeholders are the following:

- Airport employees (41 percent)
- Department leaders (84 percent)
- Policy board/governing body (65 percent)
- Senior management (96 percent)

According to the respondents to the online survey, the primary role of the board of directors (or equivalent governing body) is to approve the final strategy (34 percent). Other roles included

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monitoring performance against established goals (19 percent), participating in and helping to
develop strategic content (16 percent), identifying key strategic issues (15 percent), and challeng-
ing emerging strategies (10 percent).

External Stakeholders are the following:

- Airlines (67 percent)
- Federal Aviation Administration (61 percent)
- Department of Homeland Security (51 percent)
- Metropolitan Statistical Area representatives (24 percent)
- Local area elected officials or community representatives (49 percent)
- Local regulatory agencies
- State agencies
- Other federal agencies (e.g., U.S. Environmental Protection Agency, U.S. Department of
  Transportation, and U.S. Department of Justice)
- Airport tenants (71 percent)
- Airport users (71 percent)
- Passengers (39 percent)
- The general public (41 percent)
- Chamber of Commerce

A majority (52 percent) of the online survey respondents stated that airlines and other air-
port tenants should be major contributors to the airport’s strategic plan development. Another
34 percent indicated that airlines and other airport tenants should play only a specific role in
the process, while 14 percent indicated that they should be excluded altogether.

To help identify the internal and external stakeholders that should be involved in
the strategic planning process and determine the extent of their involvement, fill
out Worksheet 3.05, “Stakeholder Identification and Involvement.”

3.6.4.2 Determine Stakeholder Expectations

The next step is to determine the expectations of each stakeholder. This determination should
be objective and, to the extent possible, fact-based, not based on preconceived judgments or
assumptions. The expectations of the stakeholders are generally gathered through interviews and
discussions. The expectations of passengers and employees can also be empirically verified by
surveys, focus groups, or other methods.

To map stakeholder expectations, the strategic planning team should answer the following
questions:

- What is the stakeholder’s interest in our organization?
- What is the stakeholder’s expectation from its relationship with our organization?
- What contribution could the stakeholder make to our organization?
- What is the stakeholder’s influence on our organization?
- What is the stakeholder’s current opinion of our organization?

3.6.4.3 Define Stakeholder Roles

Once the stakeholders are identified, their levels of participation should be defined. The lev-
els of participation range from a minimum of simply informing stakeholders to empowering
CASE STUDY
Defining Participants in the Process—Louis Armstrong New Orleans International Airport

In August 2006, the New Orleans Aviation Board (NOAB) initiated a 14-month comprehensive audit of the management and operational practices at Louis Armstrong New Orleans International Airport (the Airport). The audit resulted in the creation of a comprehensive strategic plan, consisting of 16 strategic initiatives. Unlike some airport organizations that conduct the entire strategic planning process internally, the NOAB hired two outside consultants to conduct the process.

The audit and strategic planning process was executed in five phases. The first phase involved a situation analysis, which included interviews with over 35 Airport stakeholders. The purpose of the interviews was to gather data about the Airport’s vision, mission, values, structure, markets, customers, employee and contractor abilities, processes, systems, tools, stakeholder relationships, and reputation within the airport community and external community at large. The interviewees were as follows:

- Core Airport Staff—Deputy Directors, as well as other managers and employees of various Airport departments.
- Board Members—Select NOAB members.
- Airlines—Representatives of the major airlines serving the Airport.
- Concessionaires—Representatives of concessionaires, including disadvantaged business enterprise (DBE) partners.
- Government Officials—Representatives from Jefferson Parish, St. Charles Parish, the City of Kenner, and the City of New Orleans.
- Community Leaders—Local community and business leaders.
- Professional Services Contractors—Providers of select professional services to the NOAB (e.g., outside legal counsel).

As part of the audit and strategic planning process, the consultants met with the “audit endorsement team” to present and finalize the results of each phase of the process and to receive their feedback. The audit endorsement team included the Chairperson of the NOAB Audit Committee, the Airport’s Director of Aviation, and two other members of the NOAB. At the end of the audit and strategic planning process, the final strategic plan was presented to the full NOAB and the Director of Aviation for approval.

Implementation and monitoring of the strategic plan are led by the Airport’s Director of Aviation with the assistance of a consultant. The NOAB, similar to any organization seeking to successfully implement a strategic plan, is being guided to do the following:

- Sustain a genuine commitment from executives and senior managers.
- Make sure key stakeholders understand why the organization is changing.
- Appoint an executive champion of the implementation process.
- Have executives and senior managers model needed behavioral changes.
- Learn to think and act strategically.
- Manage the natural human resistance to change.
- Monitor and share results with key stakeholders.
- Solicit and act upon feedback from key stakeholders.
- Make necessary course corrections in the implementation process.
- Emphasize that executives and senior managers lead with honesty and trustworthiness.
stakeholders by including them as part of the strategic planning team and the decision-making process. Each participation level has a different goal and makes a different kind of promise to the stakeholders. In addition, not all stakeholders need to be involved in all aspects of the process.

The participation matrix shown in Worksheet 3.05 can assist the strategic planning team in categorizing its strategy for involving stakeholders. The types of participation shown in the worksheet are generic and should reflect the desires of the strategic planning team. The types of participation included in Worksheet 3.05 are the following:

- **Inform.** Stakeholders will be kept informed of the process status and its outcomes.
- **Consult.** Stakeholders’ opinions and suggestions will be taken into account and they will be kept informed of the process status and its outcomes.
- **Involve.** Stakeholders will work with the strategic planning team, and their concerns, ideas, or tactics will be considered and reflected as part of the strategic plan.
- **Collaborate (Planning Team Member).** Stakeholders will be part of the strategic planning team so that their advice and recommendations can, to the extent possible, be incorporated into the organization’s strategic plan.

To summarize stakeholder participation and stakeholder roles, the strategic planning team should develop a power versus interest grid, as illustrated on Exhibit 3-7. This grid provides a clear snapshot of which stakeholders should be involved and consulted and which stakeholders are likely to be advocates/supporters of the process. This grid should include all stakeholders expected to take part in the process and be color-coded to differentiate advocates and supporters, potential critics, and others who will most likely be neutral.

### 3.6.4.4 Develop a Communications Strategy to Keep Stakeholders Informed

Deciding when and how to involve stakeholders can be a challenge. No single process works well in all cases, and a standardized strategy to address all of the complex situations encountered

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**Exhibit 3-7. Power versus interest grid.**

Note: Dep. Stands for Department.

by airport department leaders is unrealistic. In most instances, the following questions should
be asked when developing a communications strategy:

- What information do the stakeholders expect from the planning team?
- How do the stakeholders want to receive information from the planning team?
- What is the best way of communicating the organization’s message to the stakeholders?

The planning team’s communications strategy should provide the framework for all commu-
nications regarding the strategic plan and include a plan for all communications that reflects the
number and type of stakeholders, the objectives of the communication, and the stakeholders’ roles
and expectations. This plan should also include information on who is responsible for all activi-
ties in the planning process and identify the links and critical activities through a detailed work
schedule. The aim in developing a communications strategy is to show how the planning team
will involve stakeholders so that they can contribute to and shape the organization’s strategic plan.

**Stakeholder Information Needs.** The planning team must define the information needs of
the stakeholders who it is anticipated will contribute to the organization’s strategic planning
process. These needs include both the information required by the stakeholders and the informa-
tion required from the stakeholders. The information needs pertaining to each stakeholder
group can be recorded using Worksheet 3.05. Typical questions that should be answered by the
planning team when defining the information needs of the stakeholders include the following:

- What information is this stakeholder group interested in?
- What information does this stakeholder need to contribute to the strategic planning process?
- What is expected from this stakeholder?
- What are the mandatory communication needs for this stakeholder?
- What are the informational communication needs for this stakeholder? (Typical informational
  needs include updates and progress reports on the planning process. Stakeholders can
  be kept informed through staff newsletters, focus groups, soliciting their input at different
  stages of the process, and building two-way feedback into already scheduled meetings.)
- What are the marketing communication needs for this stakeholder? (Marketing communica-
tion should be designed to build buy-in and enthusiasm for development of the strategic plan
and its implementation. Typical marketing products that the team can develop as part of the
process include newsletters and posters.)
- What is the information level of detail required for this stakeholder?
- How often does the stakeholder need an update?
- What is the preferred delivery mechanism?

**Informing Stakeholders and Inviting Stakeholder Participation.** Typically, it is a good idea
to provide a number of ways for stakeholders to participate in the strategic planning process and
be informed about it. The planning team needs to create several ways for stakeholders to partici-
-pate in development of the plan based on their level of interest and available time. Opportunities
for informing stakeholders and inviting their participation that can be built into the strategic
planning process include the following:

- **Website updates (intranet/Internet).** Stakeholders can remain informed through a dedicated
  web page on the organization’s intranet or Internet site. Use of an organization’s intranet or the
  Internet provides a means to communicate a large volume of information, distribute materials
  and the process timeline, and gather feedback from stakeholders. In addition, the organization’s
  intranet or Internet site can be used as a portal to other methods of communication, including
  newsletters and PowerPoint presentations. The main disadvantage associated with use of the
  Internet or an intranet to communicate with stakeholders is that significant development time
  would be required if the organization does not already have a website.
• **Pamphlets, brochures, newsletters**. Progress, results, and activities conducted as part of the strategic planning process can be documented through the use of pamphlets, brochures, or newsletters. Pamphlets, brochures, or newsletters should be used when regular communication is necessary (monthly, quarterly, and so forth). The production of pamphlets, brochures, or newsletters presents several advantages. They can be produced electronically for large or small audiences and can include significant details. However, they would require a printing and production budget when produced in hard copy.

• **Draft strategic plan**. A draft of the organization’s strategic plan can be presented to stakeholders at meetings.

• **Email database**. A comprehensive project email database including all stakeholders can be compiled early in the planning process. This database can then be used to communicate with stakeholders.

• **Presentations**. The planning team can set up presentations to discuss the organization’s strategic plan, distribute information to stakeholders, provide information on the planning process, and help build support for implementation of the plan.

• **Electronic memoranda/emails**. Electronic memoranda/emails can be used to communicate broad themes, applicable to the entire audience, or a personalized message. Electronic memoranda/emails can be used solicit feedback from stakeholders; inform them about the progress, results, and activities conducted as part of the process; or invite them to meetings or workshops. Stakeholders are more likely to respond to an email message that they have received than take the time to send a message to an email address listed in a newsletter.

• **PowerPoint presentations**. PowerPoint presentations can be used to raise stakeholder awareness and provide detailed or high-level project information. Presentations are generally used to present materials in a more formal setting, present key points, and obtain buy-in and support. Presentations can be used for audiences of differing levels, and the message can be delivered differently based on the audience.

• **Mailers**. Mailers are best used when targeting stakeholders outside the organization. Mailers can be used to distribute large volumes of information, which the reader can take time to read and digest. The production and postage costs, however, are major drawbacks of mailers.

• **Meetings and “brown bag” sessions**. Meetings and brown bag sessions can take place regularly during the planning process to keep stakeholders informed, solicit feedback, and evaluate opinions or reactions to a project or issues.

### 3.7 Defining Who Should Facilitate the Strategic Planning Sessions

The strategic planning sessions can be led by a member of the core planning team or by an outside facilitator. Professional consensus-building facilitators offer the benefit of experience in group dynamics to maximize individual participation and reach milestones. Knowing what has worked and what has failed in other instances is useful expertise. Listed below are the key benefits that facilitators can provide and some potential drawbacks.

Benefits of engaging a professional facilitator include the following:

• A designated person keeps order and the process on track.
• Facilitators provide fair assessments of organizations.
• The core planning team is freed up to get involved in the process without worrying about process issues.
• Facilitators are immune to internal conflicts.
• Facilitators are trained professionals who can handle conflicts and focus the group’s attention on key issues.
Facilitators generally have several years of experience and have worked for several organizations. As such, facilitators offer a wealth of experience and can offer insights, ideas, and an outside perspective.

Drawbacks of engaging a professional facilitator include the following:

- Some external stakeholders may prefer to work directly with the management of the organization.
- It may be difficult for an outside facilitator to lead the planning sessions if the invited participants and the facilitator do not have a good working relationship and the atmosphere is not genuinely collaborative.
- Engaging a facilitator can be time consuming and challenging.
- Engaging a facilitator will result in additional costs.

### 3.7.1 Finding a Facilitator

There are four basic steps to finding a facilitator:

- Identify the candidates.
- Check the candidates’ references or prior work.
- Narrow the list of candidates to those that will be interviewed; consider issuing a Request for Qualifications (RFQ).
- Interview the candidates. In an interview, observe each candidate’s personality, style of interaction, and ability to communicate effectively.

Airport managers may also decide to draw upon their own professional networks to identify prospective facilitators/strategic planning consultants or issue an RFQ or Request for Proposals (RFP).

Select a facilitator by completing Worksheet 3.06, “Scoring Guide for Selecting an External Facilitator.”

### 3.7.2 Developing and Implementing the Scope of Work

Once selected, the facilitator should work in collaboration with the core planning team to develop a scope of work. This scope should define the role of the facilitator and map out the tasks that the core planning team expects the facilitator to accomplish. This scope should include the number of meetings to be led by the facilitator and the tasks to be accomplished. The scope of work is generally accompanied by a project schedule that reflects the length of time expected to be required to produce the organization’s strategic plan. Generally, the facilitator and the core planning team will use the RFQ or RFP as the basis for refining the scope of work.
CASE STUDY
Selecting a Strategic Planning Facilitator—Chicago Executive Airport (Wheeling, Illinois)

Chicago Executive Airport (the Airport) is one of the busiest airports in Illinois and serves as a reliever airport for the region. The Airport is publicly owned by the municipalities of the City of Prospect Heights and the Village of Wheeling, and is managed by the Chicago Executive Airport Board of Directors under an intergovernmental cooperative between the two municipalities. The Airport has three active runways, approximately 410 acres of land, and is home to approximately three hundred general aviation aircraft. The Airport serves as a key building block and powerful economic engine for both communities and the surrounding region.a

To promote the Airport’s continued growth and strength in the community, Airport management initiated a strategic planning process. A facilitator was selected to lead the process for several reasons. A facilitator was viewed as better able to assemble the numerous stakeholders and get them involved in the process. Also, Airport management believed it was the best option politically to have an independent facilitator leading the process to ensure that the process remained neutral and did not favor one community over the other.

Airport management selected a facilitator experienced in working with governmental agencies who had previous experience with the stakeholders and was highly regarded by them. Once the facilitator was selected, the Airport Manager met with the facilitator to explain the unique issues facing the Airport and to define the scope of work, which included involving as many stakeholders as possible. The strategic planning process included more meetings than might typically be held in a similar process, based upon the Airport’s political history and the desire to allow sufficient time to develop a realistic and implementable strategic plan that was supported by all the stakeholders. The major tasks that were led by the facilitator included stakeholder interviews and resident surveys, a Board retreat and a major stakeholder focus group, business-specific focus groups, the establishment of strategic directions, and the training of staff.

Given the Airport’s ownership structure, an outside, independent facilitator leading the strategic planning process ensured that the process remained neutral and didn’t favor the needs of one community or the other. Having been through the strategic planning process, Airport staff recommends use of a facilitator with experience in this process and in the industry. The facilitator must be highly credible with the stakeholders and must be able to elicit responses from the stakeholders and ensure the establishment of benchmarks to ultimately measure compliance with the plan.

The information in this chapter will enable the planning team to identify trends, critical events, and ideals that characterize the historical context, culture, and structure of their organization.

This chapter is designed to help the planning team do the following:

• Document key events and trends in their organization’s history by conducting a historical review
• Review historical performance statistics (operational, financial, and so forth)
• Identify factors critical to achieving, or failing to achieve, the goals previously identified for the organization
• Examine how the organization’s governance structure has evolved (optional)

4.1 Conducting a Historical Review of the Organization

In many cases, the further back in time a stream of events can be analyzed, the longer into the future a potential action and event stream can be projected. By reviewing the past, members of the planning team will be able to develop a shared sense of perspective (often known as “institutional memory”) and an appreciation that will draw them together and create enthusiasm for tackling future challenges.13

In the process of completing Worksheet 4.01, “Documenting Key Past Events and Historical Trends,” the planning team will do the following:

• Create a timeline of past airport-specific events that have affected the organization’s performance. The length of time considered should be sufficient to cover events that have had a significant impact on the organization’s current state (typically at least 10 to 20 years).
• Create a timeline of past external events that have affected the organization’s performance. The length of this timeline should mirror the timeline selected for the past airport-specific events above.
• Analyze how the events depicted on each timeline interrelate and determine if any discernible trends have the potential to affect the present state of being or future performance of the organization. These trends should then be ranked in order of importance. The answers to this

13 For general background on the productivity benefits that can result from cultivating institutional memory, see Arnold Kransdorff, Corporate DNA: Using Organizational Memory to Improve Poor Decision-Making (Surrey, UK: Gower Publishing/ Ashgate, 2006).
4.2 Reviewing Historical Performance Statistics

Members of the planning team should supplement the historical events analysis with a review of historical performance statistics. The results of the online survey indicated that many airport operators (46 percent of survey respondents) currently sort, review, and analyze historical performance data. Of these, 88 percent use past performance data to project future trends. Historical trend analysis was also cited by survey respondents as their top tool (out of eight options) for assessing future risks/uncertainties.

While any pertinent statistic can be reviewed using the framework set forth in Worksheet 4.02, “Analyzing Historical Performance Statistics,” the most commonly reviewed statistics relate to four general categories: operational, financial, market share/market presence, and other. The main sample statistics as well as “additional” sample statistics are listed for each category below:

- **Operational sample statistics include, but are not limited to, the following:**
  - Aircraft movements for different types of traffic (domestic, international, general aviation, military, and so forth)
  - Enplaned passengers for airports with commercial service, categorized as domestic, international, and total, as well as connecting versus origin and departure passengers
  - Cargo volume (in tons or pounds)
  - Based aircraft
  - Jet fuel and Avgas sales (in gallons)

- **Additional operational sample statistics are the following:**
  - Landed weight for different types of traffic (passenger airline, all-cargo airline)
  - Enplaned passengers per departure
  - Enplaned passengers per gate
  - U.S. Customs and Border Protection arrival clearances

- **Financial sample statistics include, but are not limited to, the following:**
  - Cash flow from operating activities
  - Operating revenue/operating expense ratio
  - Operating margin
  - Total operating revenue per enplaned passenger

If a common strategic plan is being developed for a multi-airport system, Worksheet 4.01 should be completed for each airport that the organization oversees.
Strategic Planning in the Airport Industry

- Operating expense per enplaned passenger
- Airline cost per enplaned passenger
- Non-aeronautical revenue as a percentage of operating revenue
- Debt service coverage ratio
- Bond ratings

- Additional financial sample statistics are the following:
  - Debt capacity
  - Airline revenue per enplaned passenger
  - Cargo revenue per cargo operation
  - Concession, parking, and rental car revenue per enplaned passenger and by facility/unit.
  - Total general aviation/FBO revenue (for airports that are not general aviation)
  - Landing fee (per 1,000 pound units of landed weight) for signatory and nonsignatory passenger airlines and signatory all-cargo airlines
  - Capital contributions such as passenger facility charge [PFC] revenue, government grants, and so forth (reviewing government grant statistics is particularly important for general aviation airports as they are typically dependent on government grants to fund most of their capital improvements)
  - Operating cost per square foot of terminal space

- Market share/market presence sample statistics include, but are not limited to, the following:
  - Airline market shares based on enplaned passengers
  - Airline market shares based on cargo weight
  - FBO market share
  - Number of nonstop cities served by airlines and service frequencies on key routes
  - Number of outbound airline seats available (international and domestic)

- Additional market share/market presence sample statistics are the following:
  - Number of origin and destination passengers in most important markets
  - Average airfare(s) (could separate into short-haul, 0 to 600 miles; medium-haul, 601 to 1,800 miles; and long-haul, over 1,800 miles)

- Other sample statistics include, but are not limited to, the following:
  - Passenger satisfaction survey results
  - Operating revenue per employee/operating expense per employee
  - Percentage of employees satisfied with their jobs
  - Number of safety and security incidents
  - Number of noise complaints
  - Economic impact on the surrounding communities

- Additional other sample statistics are the following:
  - Total employees per enplaned passenger and per square foot of terminal space
  - Employee turnover rate
  - Security screening wait times

By completing Worksheet 4.02, “Analyzing Historical Performance Statistics,” the planning team will be able to do the following:

- Compare actual performance versus targeted performance (if available) for the relevant statistics selected.
- Assess whether there is a relationship between the performance reflected and a particular key event internal or external to the organization.
- Review the historical statistical data analyzed and determine whether any discernible trends have the potential to affect the organization’s future performance. These trends should then be ranked in order of importance. Similar to Worksheet 4.01, “Documenting Key Past Events and Historical Trends,” the answers to Worksheet 4.02 are particularly important, as they will be inputs to the strategic planning process.
CASE STUDY

Historical Performance Statistics of Particular Relevance to General Aviation Airports—Centennial Airport (Denver, Colorado)

Centennial Airport (the Airport) in Denver, Colorado, is the second busiest general aviation airport in the United States. The Airport is currently home to over 700 based aircraft, consisting of a mix of single-engine, multi-engine, and jet aircraft and helicopters. Five fixed base operators provide a full variety of services for both locally based and transient pilots.

According to Robert Olislagers, Executive Director of Centennial Airport, the airport operator, Arapahoe County Public Airport Authority, has tracked the following fuel and operational statistics on a monthly basis for many years and reports them as part of monthly Board of Commissioners meetings (actual example below for December 2008):

- Year-to-date (YTD) Operations: Down 4.8% from 2007 at 319,593 operations.
- YTD Fuel Totals: Down 10.2% from 2007 at 11,654,719 gallons.
- YTD AvGas Totals: Down 13.8% at 623,341 gallons.
- YTD Market Share [listed by FBO] for AvGas and Jet Fuel Combined: 59.2% for Denver Jet Center; 22.9% for TAC Air; 15.8% for Signature; 1.9% for Xjet Club; and 0.1% for the Heliplex.
- Monthly Operations: Down 6.5% at 19,461 operations.
- Monthly Jet Fuel Sales: Down 21.5% at 815,473 gallons.
- Monthly AvGas Sales: Down 8.2% at 35,375 gallons.
- Monthly Market Share [listed by FBO] for AvGas and Jet Fuel Combined: 53.7% for Denver Jet Center; 21.2% for TAC Air; 21.2% for Signature; 3.9% for Xjet Club; and 0% for The Heliplex.

The Arapahoe County Public Airport Authority also tracks various financial and noise statistics as part of the monthly Board reports. Financial statistics tracked for the Airport consist of operating revenues, operating expenses, and capital expenses and any deviation from the budget for each statistic. Noise complaints are tracked on a YTD and monthly basis (according to the total number of noise complaints and number of households reporting) and are further sorted by region and distance from the Airport.

Informally, the Executive Director regularly checks with numerous vendors that use or are based at the Airport regarding their level of business activity. These checks include updates on flight school activity (including hours flown and aircraft rented) and the activity of various aircraft detailing companies, aircraft charter operators, and caterers.

The two most useful statistics for gauging Airport performance are jet fuel sales and operational activity and, in particular, the relationship between the two statistics. For example, Mr. Olislagers noted that, “during the summer [of 2008] when fuel prices escalated, our operational levels continued at the same pace, but fuel sales dropped. Following conversations with our FBOs, we discovered more customers [filled up their tanks] at their home [airport] or wanted to enter into contract fuel deals. We adjusted our prices and volume went up along with ancillary service purchases.”

If a common strategic plan is being developed for a multi-airport system, Worksheet 4.02 should be completed for each airport that the organization oversees.

To review an organization’s historical performance, complete Worksheet 4.02, “Analyzing Historical Performance Statistics.”
4.3 Identifying Factors Critical to Achieving or Not Achieving Previously Set Goals

By identifying the factors critical to achieving (or not achieving) goals previously identified for the organization, the planning team will be able to leverage past successes and avoid future failures as the strategic planning process progresses. Even though a formal strategic plan may not be in place for the organization, it is likely that long-term goals (typically 5 years to attain) or short-term goals (typically 1 to 2 years to attain) were set as part of other business planning efforts.

The first step in completing Worksheet 4.03, “Reviewing Recently Set Goals and Their Attainment,” is for the planning team to select the most important goals set for the organization over the past decade, describe why they are important, and note whether the goals were achieved. The number of goals listed will vary. Ideally, the 10 most important goals should be considered, and there will likely be a mixture of goals that have been achieved and goals that have not been achieved.

To complete Steps 2 of Worksheet 4.03, the planning team may benefit from conducting a problem tree analysis and a related objective tree analysis. A problem tree analysis may assist the planning team in assessing the causes (key failure factors) and effects of the failure to achieve a goal. A problem tree analysis is typically conducted using a flip chart. The goal that was not achieved is written in the center of the flip chart and becomes the trunk of the tree. The planning team should then identify the causes and effects of failing to achieve the goal. As indicated in Exhibit 4-1, such an analysis can reflect reality, so that the roots represent the root causes of the failure and the branches represent the consequences of the failure.

![Exhibit 4-1. Sample cause-and-effect chart—problem tree analysis.](image-url)
After the key failure factors have been identified through the problem tree analysis, the planning team should brainstorm about how the identified key failure factors can be avoided in the future. To avoid landside commercial development yielding lower revenues than budgeted in the future, for example, the organization might develop an airport land use plan, and ensure that land leasing policies encourage third-party development.

A similar type of analysis, an objective tree analysis, can be used to assess the means (key success factors) and ends of the successful achievement of a goal. The causes at the bottom of the diagram depicted in Exhibit 4-1 should be replaced with success factors, and the effects at the top of the diagram should be replaced with results. The same process as described above for the key failure factors should be used for the key success factors, and the planning team should brainstorm about how the identified key success factors could be leveraged in the future.

4.4 Examining How the Organization’s Governance Structure Has Evolved (Optional)

Depending on the circumstances of the particular organization, the planning team may find it useful to understand how the organization’s governance structure evolved to its current form and how the structure might affect attainment of the organization’s future strategic objectives. As part of completing optional Worksheet 4.04, “Examining How the Existing Governance Structure Has Evolved,” the planning team will first describe the existing governance structure of the organization, including any future changes to the structure that are currently planned and the reasons for selecting the existing governance structure. The planning team will then assess if the current governing structure has been successful in addressing the objectives for which it was created.

4.4.1 Organizational and Jurisdictional Structures of Public Use Airports

Various organizational and jurisdictional structures have been developed for the ownership and management of the nation’s public use airports. Ownership and operational authority usually reside with the same entity; however, in some instances, they may be separated. For example, Bob Hope Airport is owned by the Burbank-Glendale-Pasadena Airport Authority, but is operated by TBI Airport Management, a private company, through a management agreement with the Authority.

An airport may be owned by a public entity, such as a city, but operated by a separate commission or authority created solely for the purpose of airport management. An airport may also be owned by a government entity or authority and operated by a private company. While many airports outside the United States are operated by national governments, the operating entity is more varied in the United States. The responsibility for airport operations and management can be vested with one or more of the following entities:

- City government
- County government
4.4.2 Benefits and Drawbacks of Various Governance Structures

Once the planning team has examined the existing governance structure of the organization, the team should examine the benefits and drawbacks associated with the organization’s existing governance structure and any previous governance structures for the airports in the organization. The following are some commonly cited benefits and drawbacks associated with the main entities that operate and manage airports (city/county government, airport authority/board, and private entity).

4.4.2.1 City/County Government

The benefits of city/county government operation and management include the following:

- The airport organization has access to other city/county department resources (legal, accounting, engineering, and so forth).
- The city/county retains control over revenues, use of funds, contractual agreements, and staffing.
- There is low staff turnover.
- The organization has the ability to issue general obligation bonds through the city/county.

The drawbacks of city/county government operation and management include the following:

- There is a diffusion of leadership focus, with decisions sometimes based on broader city/county needs.
- This governance structure is accompanied by additional burdens—such as budgetary control, hiring restrictions/staffing inflexibility, complicated purchasing procedures—that make it difficult for the airport organization to function as a business.
- The airport organization may not be the city’s/county’s first priority for issuing general obligation bonds.
- Commingling of airport revenues with city/county funds may be cumbersome and cause FAA concern regarding the diversion of airport revenues.

4.4.2.2 Airport Authority/Board

The benefits of airport authority/board operation and management include the following:

- This governance structure provides the greatest autonomy from the local government; the needs of the airport organization/users are the sole focus.
- The airport organization can potentially enter into contractual agreements, make purchases, and hire personnel more efficiently and cost effectively.
- The airport organization can have the ability to issue debt, acquire property, and exercise eminent domain powers.
• Authorities are self-sustaining entities, which allows them to operate more as businesses, without outside influences.

The drawbacks of airport authority/board operation and management include the following:

• The airport organization must be self-sustaining from staffing, operational, and financial standpoints.
• The airport organization cannot draw upon the personnel and services offered by the local government.
• The airport organization typically does not have the ability to levy taxes.

4.4.2.3 Private Entity

The benefits of private entity operation and management include the following:

• Operation as a private entity can provide efficient and businesslike management of airport operations.
• Operation as a private entity can offer an infusion of third-party capital investment into the airport organization.
• Operation as a private entity can provide increased corporate income taxes from the private entity.

The drawbacks of private entity operation and management include the following:

• There is a potential for increased costs to tenants, airlines, and other airport users resulting from the desire of a private entity to make a profit.
• There can be increased expenses to the local airport owner (i.e., city or county) resulting from the fees of a management contract.
• There is a potential for a lack of investment in facility maintenance or improvement to maintain operating profits.

Once the planning team has completed its examination of the benefits and drawbacks associated with the organization’s existing governance structure and any previous governance structures for the airports in the organization, the team should perform the most critical step of Worksheet 4.04: assessing the effects of the information collected in the first two steps of the worksheet regarding selection of the organization’s future strategic objectives. For example, a city department in charge of operating and managing an airport may have difficulty achieving the goal of optimizing staff efficiency because of the limitations posed by its governance structure. Therefore, it may not be realistic for the organization to adopt this type of goal in its strategic plan.

To examine how an organization’s existing governance structure has evolved, complete optional Worksheet 4.04, “Examining How the Existing Governance Structure Has Evolved.”
This chapter is intended to assist the planning team with defining and articulating the basic philosophies that will shape the organization’s strategic posture.

The purpose of the chapter is to enable the planning team to do the following:

- Develop a statement that defines the organization’s role and market in a way that reflects the values and priorities of management (mission statement)
- Develop a statement that describes the desired future position of the organization (vision statement)
- Develop a statement that reflects the organization’s beliefs and its social responsibilities (values statement)
- Communicate each of these statements in clear, simple, and precise language and develop buy-in and support at all levels of the organization

The results of the online survey strongly support the development of mission, vision, and values statements during the strategic planning process. Of the survey respondents, 84 percent indicated that vision and mission statements belong in a strategic plan and 76 percent indicated that a definition of organizational values should be included. In addition, 45 percent of the respondents noted that the most important reason for developing a strategic plan is that it provides a sense of direction for the organization. The mission, vision, and values statements play a critical role in establishing this sense of direction.

5.1 Mission Statements

A mission statement is a concise statement of the organization’s purpose and reason for existence, developed from the perspective of an organization’s customers. Almost all of the airport strategic plans reviewed during the research phase of this project included a mission statement. A mission statement should be tailored for the individual circumstances of a particular organization and is typically structured to answer three core questions. The first question (“What do we do?”) addresses the purpose for the organization’s existence and what it seeks to accomplish. The second question (“How do we do it?”) addresses the main method or activity through which the organization tries to fulfill its purpose. The third question (“For whom do we do it?”) addresses the target market for the organization’s services.

Below is a list of key questions that the airport mission statements reviewed during the research phase of this project answered:
• Why does our airport exist?
  
  Example answer: “To serve the aviation needs of the Upper Valley” (City of Lebanon, New Hampshire, Lebanon Municipal Airport).14

• What services does our airport provide?
  
  Example answer: “Safe, convenient, environmentally sound and cost-competitive aviation services” (Metropolitan Airports Commission, Minneapolis-St. Paul International Airport, Minneapolis, Minnesota).15

• What is the airport’s competitive advantage? (A competitive advantage is a condition that enables an airport to operate in a more efficient or otherwise higher quality manner than its competitor airports, which results in benefits accruing to the airport.)
  
  Example answer: “[DFW] shall be the Airport of Choice . . . by exceed[ing] our customer’s expectations” (Dallas/Fort Worth International Airport Board, Dallas/Fort Worth International Airport, Texas).16

• What values guide our airport?
  
  Example answer: “To operate in harmony with the surrounding environment” (Aéroports de Montréal, Montreal-Mirabel International Airport and Montreal-Trudeau International Airport, Canada).17

• Who are the airport’s customers?
  
  Example answer: To provide “efficient and effective service to aviation and local business, tourist and second home travelers, and recreational flyers” (District Municipality of Muskoka, Muskoka Airport, Ontario, Canada).18

The mission statements reviewed varied in length and specificity, and there was no apparent relationship between the size of the airport and the length/specificity of the mission statement. Some mission statements for large and medium hub airports were extremely general (e.g., see the mission statement for Bradley International Airport below), while others were longer and more tailored to the particular business environment in which the airport operates (e.g., see the mission statement for Toronto Pearson International Airport below).

5.1.1 Example Mission Statements

Mission statements (from airports, corporations, and public sector organizations) collected during the research phase of this project follow.

Airports

• We are dedicated to developing and managing Bradley International Airport in a way that allows it to become and remain the best airport within the United States (Connecticut Department of Transportation, Bureau of Aviation & Ports, Bradley International Airport, Windsor Locks, Connecticut).19

• To develop and operate for the public benefit an airport system which supports the economic development and cultural diversity of South Central Ontario and Canada, providing aviation facilities that achieve: the highest standards of safety and security; excellence in customer service, environmental stewardship and sustainability; and cost effectiveness

16 Dallas/Fort Worth International Airport Strategic Plan, March 2006.
and efficiency. This mission will be achieved through: developing a skilled and dedicated workforce; maximizing technology innovation; and excellence in corporate governance (Greater Toronto Airports Authority, Lester B. Pearson International Airport, Ontario, Canada).20

- The Muskoka Airport will be a regional asset by providing efficient and effective service to aviation and local business, tourist and second home travelers, and recreational flyers (District Municipality of Muskoka, Muskoka Airport, Ontario, Canada).21

**Corporate**

- Our mission is to profitably grow the company by providing our guests with great food, service and hospitality, in a clean, comfortable restaurant, twenty-four hours a day (Denny’s).22

- Bringing sweet moments of Hershey happiness to the world every day. To our stakeholders, this means:
  - Consumers—Delivering quality consumer-driven confectionery experiences for all occasions
  - Employees—Winning with an aligned and empowered organization . . . while having fun
  - Business Partners—Building collaborative relationships for profitable growth with our customers, suppliers and partners
  - Shareholders—Creating sustainable value
  - Communities—Honoring our heritage through continued commitment to making a positive difference (The Hershey Company).23

**Public Sector**

- The mission of the Department is to serve the United States by ensuring a fast, safe, efficient, accessible and convenient transportation system that meets our vital national interests and enhances the quality of life of the American people, today and into the future (U.S. Department of Transportation).24

- The mission of the Port of Houston Authority is to provide, operate and maintain waterways and cargo passenger facilities, to promote trade and generate favorable economic effects upon and contribute to the economic development of the Port Authority, the City of Houston, the communities of Harris County and the Texas Coastal Region at rates that provide sufficient funds to cover the Port Authority’s operational expenses and capital investments (Port of Houston Authority).25

In contrast to traditional corporate mission statements, which emphasize maximizing the profitability of the corporate entity, airport mission statements tend to place greater emphasis on the airport’s community economic development role. The Port of Houston Authority mission statement is a unique hybrid example that may be instructive to airport organizations, blending community economic development objectives with internal financial considerations.

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Recent strategic planning research has shown that establishing staff-level employee focus groups to review the mission, vision, and values statements generated by the planning team leads to greater buy-in from these employees.26

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Members of the planning team should complete Steps 1 through 5 of Worksheet 5.01 individually and then share their suggested mission statements with other members of the team. The planning team should then jointly complete the entire mission statement worksheet and draft a mission statement that will be adopted by the organization.

To create a mission statement for an organization, complete Worksheet 5.01, “Developing a Mission Statement for Your Organization.”

5.2 Vision Statements

A vision statement provides a brief description of the goals of the organization and the ideal state that the organization aims to achieve in the future. A vision statement is consistent with the preferred definition of strategic planning, as reflected in the online survey, as a process that helps define an organization’s long-term future. Not all airport strategic plans reviewed during the research phase of this project included a vision statement; however, a majority of the strategic plans did.

Whereas a mission statement is operational and focuses on the purpose of the organization, including its current activities, a vision statement is future-oriented. Research has shown that a vision statement can improve organizational performance as well as individual follower performance, but only if the vision statement contains certain characteristics:

- A vision statement should be both concise and clear. The average vision statement is about 35 words or two to three sentences. The statement should be long enough to clearly describe the vision, but not so long as to be difficult to remember. Clarity can be enhanced by avoiding jargon and buzzwords and using understandable terminology.
- A vision statement should be future-focused and inspirational. The vision statement should be a stable enough benchmark that only infrequent updating is necessary. A vision statement can be made inspirational by emphasizing fundamental organizational values, emphasizing working together, highlighting the organization’s uniqueness, and referring to employee capabilities.
- A vision statement should explain what the organization will look like in the future by addressing the organization’s desired customer focus, the market position that the organization’s management aspires to achieve, the business activities the organization plans to pursue, and the capabilities the organization plans to develop.

5.2.1 Example Vision Statements

Examples of vision statements (from airport, corporate, and public sector organizations) collected during the research phase of this project follow.

Airports

- The Authority’s vision is to exceed our customer’s expectations by making the aviation system in Hillsborough County one of the most efficient, safe, secure, convenient, and cost competitive air transportation centers in the world. (Hillsborough County Aviation Authority, Tampa, Florida).


• The Nanaimo Airport will maximize its potential to be a dynamic, customer focused, air services gateway to western North America. (Nanaimo Airport Commission, British Columbia, Canada).  

• To be recognized as safe, innovative and progressive; financially strong; a leader in pursuit of globally emerging opportunities; and a source of pride to all. Building on the strengths of our valuable community and employee resources, we are dedicated to quality and customer service. (Winnipeg Airports Authority, Manitoba, Canada)

Corporate

• People: Being a great place to work where people are inspired to be the best they can be. 

• Portfolio: Bringing to the world a portfolio of quality beverage brands that anticipate and satisfy people’s desires and needs. 

• Partners: Nurturing a winning network of customers and suppliers, together we create mutual, enduring value. 

• Planet: Being a responsible citizen that makes a difference by helping build and support sustainable communities. 

• Profit: Maximizing long-term return to shareowners while being mindful of our overall responsibilities. (The Coca-Cola Company)

• Grace strives to be a premier specialty chemicals and materials company. We provide innovative technologies and value-added products and services around the world to enhance the quality of life. (W. R. Grace and Company)

Public Sector

• BPA will be an engine of the Northwest’s economic prosperity and environmental sustainability. BPA’s actions advance a Northwest power system that is a national leader in providing: 

  – High reliability; 
  – Low rates consistent with sound business principles; 
  – Responsible environmental stewardship; and 
  – Accountability to the region. 

  We deliver on these public responsibilities through a commercially successful business. (Bonneville Power Administration)

• Providing timely, convenient, safe and environmentally friendly transportation alternatives . . . SFMTA [San Francisco Municipal Transportation Agency] enhances the quality of life of San Francisco. (San Francisco Municipal Transportation Agency)
5.2.2 Defining a Vision

Worksheet 5.02, “Defining a Vision for Your Organization” will assist the planning team in developing a vision statement by doing the following:

- Suggesting that individual planning team members describe the present and desired future state (5 to 10 years out) of their organization in 11 different areas and note where gaps exist between the present and desired future conditions. Important background information that may be of assistance in completing this worksheet is provided in the Chapter 4 worksheets, any economic impact study prepared for the airport, and other airport planning documents, such as the business plan, master plan, and marketing plan.
- Suggesting that individual planning team members critique any existing vision statement.
- Instructing the planning team to jointly draft a vision statement and evaluate the statement against the requirements for a successful vision statement (e.g., the vision statement is clear and concise and builds upon the organization’s competitive advantage). The planning team should then make any necessary changes to the vision statement and seek internal and external review. The vision statement may also need to be revised to take into account any new information obtained through completion of the environmental scanning worksheets provided in Chapter 6.

5.3 Values Statements

A values statement describes the way an organization desires to conduct itself, both internally and externally, while engaging in its business activities. The values statement should answer the following three questions: (1) How should our organization treat external stakeholders? (2) How should we treat our fellow employees? and (3) How do we want our organization to be viewed by external stakeholders and employees?

Elements of an organization’s values are often embedded in mission and vision statements, as reflected by the examples of the airport strategic plans reviewed during the research phase of this project (less than one-third of the strategic plans reviewed contained a separate values statement). However, best practices from outside the airport industry suggest that a separate values statement should be developed to accompany the organization’s mission and vision statements. A recent study of the corporate sector shows that almost 90 percent of companies have a written corporate values statement.35 Research on customer-driven strategic planning also shows that “best in class” organizations rely heavily on their core values to shape their actions.36 These guiding principles transcend time, market conditions, executive personalities, and planning assumptions. Therefore, both stakeholders and employees can more easily identify an airport organization’s values if they are contained in a separate statement.

In the corporate sector, according to a 2005 study by the Aspen Institute and Booz Allen Hamilton, the top five most common values included in corporate values statements relate to the following:37

- Ethical behavior/integrity (90 percent of companies surveyed)
- Commitment to customers (88 percent of companies surveyed)
- Commitment to employees (78 percent of companies surveyed)
- Teamwork and trust (76 percent of companies surveyed)
- Commitment to shareholders (69 percent of companies surveyed)

Although an explicit values statement is a significant tool for reinforcing an organization’s ability to act on its values, this tool is most effective when accompanied by explicit Chief Executive Officer (CEO) support for the values contained in the statement.38

5.3.1 Example Values Statements

Examples of values statements (from airport, corporate, and public sector organizations) collected during the research phase of this project follow.

Airports

- Lebanon Municipal Airport shall:
  – Manage responsibly all resources entrusted to us.
  – Value forward thinking and innovation.
  – Serve with honor and integrity.
  – Be responsible for our actions.
  – Provide friendly and efficient service.
  – Value the public’s confidence and trust.
  – Value our community and corporate partnerships.
  – Value open and honest communication.
  – Work as a team39
    (Lebanon Municipal Airport)

- Our Core Values:
  – Integrity
    We do business in an honest, fair, open and respectful manner.
    We live up to our responsibilities, meet our objectives, and fulfill our commitments.
    We maintain our credibility through timely communication with customers, employees and stakeholders.
    We instill confidence in all who deal with our organization that we can be depended to act with the highest moral and ethical standards.
  – Fiscal Responsibility
    We make sound financial decisions that balance the interests of the community, partners, stakeholders and customers.
    We make decisions that help to drive the economic vitality of this region.
    We maintain policies to provide adequate revenues to operate without general tax support or the exercising of our authority to levy taxes.

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– Innovation and Excellence
We seek creative and innovative solutions to complex challenges.
We set high standards in all aspects of our organization and focus on continuous improvement.
– Commitment to the Community and the Environment
We are responsive to the environmental concerns of the community.
We demonstrate leadership in sound environmental management.
We promote open and honest communication about environmental concerns.
– Teamwork
We reach common goals through strong relationships based on trust.
We commit ourselves to open and respectful communication
(Metropolitan Airport Commission)

Corporate
• Do What's Right
We are committed to the highest standards of ethical conduct in all that we do. We believe that honesty and integrity engender trust, which is the cornerstone of our business. We abide by the laws of the United States and other countries in which we do business, we strive to be good citizens and we take responsibility for our actions.

Respect Others
We recognize that our success as an enterprise depends on the talent, skills and expertise of our people and our ability to function as a tightly integrated team. We appreciate our diversity and believe that respect—for our colleagues, customers, partners, and all those with whom we interact—is an essential element of all positive and productive business relationships.

Perform With Excellence
We understand the importance of our missions and the trust our customers place in us. With this in mind, we strive to excel in every aspect of our business and approach every challenge with a determination to succeed.

JetBlue
– Safety
– Caring
– Integrity
– Fun
– Passion
(JetBlue Airways)

Public Sector
NASA is privileged to take on missions of extraordinary risk, complexity, and national priority. NASA employees recognize their responsibilities and are accountable for the important work entrusted to them. If good strategic planning provides the long-term direction of our Agency, our shared core values express the ethics that guide our behavior. We value:

• Safety—NASA’s constant attention to safety is the cornerstone upon which we build mission success. We are committed, individually and as a team, to protecting the safety and health of the public, our team members, and those assets that the Nation entrusts to us.

• Teamwork—NASA’s most powerful tool for achieving mission success is a multi-disciplinary team of competent people. The Agency will build high-performing teams that are committed to continuous learning, trust, and openness to innovation and new ideas.

• Integrity—NASA is committed to an environment of trust, built upon honesty, ethical behavior, respect, and candor. Building trust through ethical conduct as individuals and as an organization is a necessary component of mission success.

• Mission Success—NASA’s reason for being is to conduct successful space missions on behalf of this Nation. We undertake missions to explore, discover, and learn. And we believe that mission success is the natural consequence of an uncompromising commitment to safety, teamwork, and integrity.43

(National Aeronautics and Space Administration)

5.3.2 Drafting a Values Statement

By completing Worksheet 5.03, “Drafting a Values Statement for Your Organization,” the planning team will do the following:

• Individually inventory the organization’s currently practiced values, list any additional values they would like to see their organization adopt, rank the top values that they would like to see reflected in the values statement, and evaluate any existing values statement that the organization currently has.

• Jointly draft a values statement using the results of the individual assessments detailed above and evaluate the statement against the requirements for a successful values statement (e.g., the values statement is understandable to people internal and external to the organization). The planning team should then make any necessary changes to the values statement and seek internal and external review.

• Use a technique to establish group consensus on what values should be reflected in the values statement, such as “Las Vegas Voting,” a type of queue sorting technique.44 After individual team members have ranked their most desired values in Step 3 of the worksheet, as part of Step 5 of the worksheet, the leader of the planning team should list each team member’s two most desired values on a flip chart. The planning team leader should then instruct the team that they have five votes to distribute among the values as they choose and take an oral tally of the votes associated with each value. Team members can use all five votes on one value if they choose. After the votes for each value are tallied, the three or four values that receive the most votes will then be articulated in the values statement.

To create a values statement for an organization, complete Worksheet 5.03, “Drafting a Values Statement for Your Organization.”


This chapter is divided into three main sections that present each of the elements of an environmental scan (also referred to as a situational analysis) that will help the organization predict future developments. Section 6.1, “Internal Assessment” will help the planning team identify the internal strengths and weaknesses of their organization. Section 6.2, “External Environment Scan,” focuses on the opportunities and threats presented by changes in the external environment (e.g., macroeconomic factors), the structure of the airport industry, and the airport’s operating environment. The process for conducting these assessments is generally referred to as a SWOT analysis because it involves a review of an organization’s internal strengths (S), weaknesses (W), external opportunities (O), and threats (T). Section 6.3, “Tools to Assess the Future of the Organization and Formulate Strategies,” provides a summary of the tools available to assess the future of the organization and potential uncertainties that may positively or negatively affect its operations.

According to the online survey respondents, the top sources of uncertainty that are considered in an airport strategic plan are the airline industry in general (e.g., airline mergers, bankruptcies, and hub restructuring), the national and local economy, the size and complexity of airport development projects, organizational resources (personnel), and unfunded mandates pertaining to airport security or safety. As noted by the respondents to the survey, other unique sources of future uncertainty faced by airport organizations include the retirement of key leadership, fuel prices, environmental over-regulation, the effects of the economic downturn on tourism, airline de-hubbing, demand variability, and airline changes to network capacity.

The strategic assessment of an airport environment is not simply an evaluation of existing facilities, but a macro-level overview of the airport as a whole, including its business and environmental characteristics. When conducting the external environment scan, airport organizations should evaluate the performance of their competitors and peers and also scan the industry and the environment for changes in the economy, technology, and society as a whole. This chapter reviews the key steps required to review best practices at other airports, including benchmarking, and to conduct an environmental scan, which is completed by means of a thorough review of the external opportunities and threats that might promote or hinder pursuit of the organization’s mission and vision.

Although the scan of the environment is one of the most detailed and time-consuming phases of the strategic planning process, the outcomes of this scan/analysis are extremely important. The purpose of the environment scan is to determine the degree to which the organization’s vision is realistic based on a review of internal and external factors that are affecting or will be likely to affect the organization.

According to the online survey results, the CEO (or equivalent) and airport department leaders are mainly responsible for assessing potential sources of future uncertainty. Thus, the planning team should complete the situational analysis, and department leaders and employees should be involved in collecting and analyzing the data to enhance their understanding of the organization.
Fifty-seven percent of the respondents to the online survey indicated that when assessing future uncertainties, collaboration with external stakeholders, such as airlines, regional government, and regulatory agencies, is required. Airline passenger surveys, for instance, can be used to capture accurate measures of the organization’s performance with regard to customer satisfaction. These surveys can also be used to identify which services should be offered to match passenger needs, collect information on passenger characteristics, and identify system breakdown. The data collected generally include information on passenger trip origins and destinations (i.e., market data); demographic characteristics; travel characteristics (trip purpose, wait time at the ticket counters and security screening checkpoints, number of passengers traveling together, and so forth); and access and egress characteristics (travel modes, parking location and cost, and so forth). Online respondents also indicated that they used historical trend analysis, future market analysis, SWOT analysis, benchmarking, and life cycle analysis.

This chapter is intended to assist the planning team with the following strategic planning elements:

- Assessing the organization’s internal strengths and weaknesses
- Identifying the organization’s external opportunities and threats
- Defining competitor and peer airports
- Conducting a benchmarking analysis of other airports
- Developing a scenario analysis
- Determining the degree to which the organization’s vision is realistic
- Developing strategic initiatives that account for a range of, or the most-likely, scenarios

### 6.1 Internal Assessment

The first component of the situational analysis is the internal assessment. The internal structure, processes, and operations of the organization are assessed to identify its strengths and weaknesses. The internal assessment also reveals the paradigms and values that represent the organization’s current philosophy and drive or that disrupt current operations.

#### 6.1.1 Areas to Be Considered

Among the areas to be considered as part of the internal assessment are management practices, human resources, external relations, planning and development, operations, safety and security, environmental, customer satisfaction, and finance. Questions to consider in each area are provided below:

- **Management practices**
  - Does the organization use a multiyear strategic planning process that links the planning process with the annual budget review?
  - Does the organization use a variety of external and internal checks, such as audits, to verify that its processes are performed as required?
  - Does the organization critically examine its business processes in an effort to increase productivity, reduce waste and duplication, and improve the quality of services provided to its internal customers, including tenants and passengers?

- **Human resources**
  - Does the organization have a written personnel handbook/policy?
  - Does the organization have current job descriptions including qualifications, duties, reporting relationships, and key performance indicators?
  - Does the organization conduct employee performance appraisals?
  - Does the organization periodically review compensation plans, salary ranges, and benefits?
– Does the organization provide opportunities for employee professional development and training within their job skill areas?
– What is the employee turnover rate?
– Does the organization have a program in place to reward or compensate outstanding employees?
– Are employees given the freedom to express their opinions, ideas, and suggestions?

• External relations
– Does the organization have a clear perception of primary community concerns and a defined administrative process to react to those concerns?
– Does the organization have a sense of the effectiveness of its public relations program, including publicity and participation in local/community events?
– Do the organization’s CEO, department leaders, and managers have a clear appreciation of community interests and concerns?
– Do the organization’s purpose and activities meet community needs?
– Is the organization’s strategic plan communicated to external stakeholders and the general community?

• Planning and development
– Have the board and staff developed and adopted a written strategic plan to achieve the stated vision of the organization or airport?
– Does the strategic plan include a review of the organization’s strengths, weaknesses, opportunities, and threats?
– Has the planning process identified the critical issues facing the organization?
– Does the strategic plan include goals and measurable objectives that address the critical issues?
– Are all of the organization’s activities integrated around a focused mission in the strategic plan?
– Are the organization’s projects/programs congruent with the organization’s mission and strategic plan?
– Are the projects/programs congruent with the organization’s vision?
– Are the timeframes and cost estimates for each project/program realistic?
– Has a risk management plan been established for every major development project?

• Operations, safety, and security
– Does the airport meet the requirements of 14 CFR Part 139, “Certification and Operations: Land Airports Serving Certain Carriers,” and is the Airport Operations Manual up-to-date?
– Are the responsibilities for complying with security and safety regulations clearly allocated to individual managers and staff?
– Is a security training program in place for all personnel with direct responsibilities for security?
– Are employees at all levels within the organization required to attend a training course or a security awareness presentation adapted to the particular needs of the various levels?
– Are occasional risk and vulnerability assessments conducted to determine how to improve airport security?

• Environmental
– Have the board and CEO developed and adopted a clear environmental policy?
– Are new employees, tenants, and major contractors made aware of the organization’s environmental policy as part of their induction program?
– Has the organization established key environmental issues and objectives?
– Does the organization assess all current and new tenants, retail concessionaires, contractors, and so forth on the basis of their actual or potential environmental aspects and impacts?
– Are meetings conducted regularly with major tenants to discuss environmental initiatives, review past environmental accidents and incidents, and share information on the latest technologies and approaches to environmental management?
– Are contractors advised of sensitive environmental features of the airport and informed of 
necessary emergency action procedures should these features be threatened?

- Customer satisfaction
  – Are the organization’s customer satisfaction rankings adequate?
  – Does the organization have a clear, written customer satisfaction program?
  – Does the organization participate in national and worldwide surveys that recognize and 
rank overall passenger/customer satisfaction?
  – Does the organization conduct regular passenger surveys?
  – Does the organization have a set of training methods for all airport employees to provide 
consistent service to customers?
  – Does the organization assess all current and new service providers, including retail conces-
sionaires, on the basis of customer satisfaction?
  – Does the organization have procedures to review, address, and respond to customer 
comments/requests in a timely manner?

- Finance
  – What is the airport’s debt service coverage ratio?
  – Is the organization’s cost per enplaned passenger in line with that of the industry?
  – What is the organization’s bond rating?
  – Are the organization’s operating expenses per enplaned passenger in line with that of the 
industry?
  – Does the organization have suitable insurance coverage, which is periodically reviewed to 
ensure that appropriate levels and types of coverage are in place?
  – Do the organization’s departments develop annual comprehensive operating budgets, 
which include costs for all programs and applicable sources of funding?

6.1.2 Data Collection Techniques

The planning team should conduct the internal assessment in collaboration with staff and 
department leaders. Most often, staff and department leaders fail to honestly identify their organ-
ization and staff weaknesses. If possible, the planning team should seek assistance from an exter-
nal source skilled at assessing organizations. Data collection techniques that will help airport 
organizations identify their strengths and weaknesses include surveys and interviews (including 
Internet surveys), inspections and observations, focus groups, and audits.

6.1.2.1 Surveys and Interviews

As noted by Caves and Gosling: “The most direct way of checking service quality to the ulti-
mate consumers is to survey achievement against standards.”45 By continuously surveying pas-
sengers, employees, and tenants, airport operators can easily check on the level of satisfaction of 
their passengers, employees, and tenants.

Through passenger surveys and interviews, the planning team can inquire about terminal 
cleanliness, queue lengths, wait times, comfort, level of satisfaction with concessions, congest-
tion, airport staff behavior, and so forth. Similarly, airport operators can gauge their employees’

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and tenants’ levels of contentment by conducting surveys or interviews addressing criteria such as overall job satisfaction, pay/benefits satisfaction, promotions/career advancement, supervisory promotion of teamwork and participation, supervisory instruction/guidance, communication, job stress, and so forth. These surveys and interviews can provide valuable information on how employees view the organization and can be conducted by a neutral third party.

Another alternative for obtaining feedback on airport organization performance is the use of an Internet-based survey. This type of survey allows data collection on customer satisfaction, process times, passenger characteristics, and so forth.

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**CASE STUDY**

**Conducting Surveys and Interviews—Bob Hope Airport**

In 2008, Bob Hope Airport (the Airport) served approximately 5.3 million passengers. The Airport also generated a total economic impact of $3.9 billion in Southern California, generated 2,400 airport positions, and indirectly accounted for an additional 34,000 full-time jobs in the broader economy.

The Burbank-Glendale-Pasadena Airport Authority prepared a Customer Satisfaction Assessment in July 2007 to obtain a profile of the passengers who utilized Bob Hope Airport. The passenger survey determined passengers’ demographic and economic characteristics; their use of the airport’s facilities; use of local facilities such as hotels and transportation; and the passengers’ overall impression of the airport. This study was conducted in conjunction with the Airport’s economic impact report, and both were published in May 2008.

Prior to the data collection, the Airport’s airline market shares were analyzed to determine the optimal days and times to collect data. Interviewers collected data by distributing questionnaires to departing passengers waiting to board their flights. Data were collected over a 3-day period using a self-administered questionnaire. The questionnaire was designed to obtain specific information from both local residents and visiting departing passengers about their experiences at the airport. The questionnaire contained approximately 60 questions and collected relevant information in three areas: (1) trip characteristics, including trip purpose, length of stay in the local area, local and airport facilities used (e.g., hotels and transportation), type of check-in, security checkpoint wait-time, and spending habits at the airport; (2) the customer’s experience of the airport (e.g., getting to the airport, checking in at the airport, security check, and airport facilities); and (3) customer characteristics, including gender, age, education, income, zip code, the customer’s perception of the importance of “convenience,” and customer comments and suggestions on what they would like to see at the airport and how the airport could better serve them. A minimum sample goal of 1,000 passenger questionnaires was set to provide an accurate customer profile. Over 1,200 questionnaires were collected.

Survey results indicated that 74 percent of passengers were influenced by convenience in their decision to use Bob Hope Airport, especially area residents. Based on convenience, passengers rated Bob Hope Airport highest in comparison with John Wayne Airport, Long Beach Airport, Los Angeles International Airport, and LA-Ontario International Airport. Since convenience is such an important factor for passengers selecting Bob Hope Airport, airport management weighs most decisions in terms of how they affect passenger convenience.

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* Ibid.
6.1.2.2 Inspections and Observations

Inspections and observations can also be used to measure the organization’s performance relative to terminal cleanliness, level of service, and other physical or operational factors. To be a suitable performance measure, the results of the physical observation must be measurable and reliable on a scale that identifies several variations of the condition to be measured (e.g., never, seldom, sometimes, often, always). As such, different observers at different times can give the same or similar ratings to similar defined levels of service.

6.1.2.3 Focus Groups

Focus groups are small, facilitated sessions designed to gather in-depth information on specific topics. Information and ideas are generated by the interactive nature of the group discussion. Focus groups provide qualitative insights and can often be dominated by the opinions and viewpoints of the participants. Focus groups also provide data from a group of people at a lower cost than individual interviews and provide the flexibility to examine a wide range of topics and subjects.

Focus groups can be used to discuss passenger satisfaction programs and other passenger-related topics, but they can also be used to better understand how airport services affect tenants such as airlines, concessionaires, and FBOs, and vice versa. Focus groups can also be used to establish benchmarks of future performance measures.

6.1.2.4 Audits

Audits are key elements of an organization’s internal assessment. For the majority of airports, however, audits focus on factors related to the organization’s finances and are aimed at identifying and verifying the main financial flows and opening and closing fund balances. These audits are conducted to determine an organization’s compliance with the requirements of laws, regulations, contracts, and grant assurances applicable to its major federal program, as described in the U.S. Office of Management and Budget (OMB) Circular A-133: Audits of States, Local Governments and Nonprofit Organizations. These financial audits are conducted by an independent auditor in accordance with generally accepted auditing principles covering financial audits and standards as presented within Circular A-133.

System audits covering the areas listed below also provide key information regarding the organization’s performance. While the majority of airports may not have the resources to conduct such comprehensive reviews and assessments of the adequacy, efficiency, and effectiveness of their organization, these audits generally provide key input to the assessment of an organization’s strengths and weaknesses. Areas that can be monitored and audited include the following:

- Legal framework
- Organizational structure
- Human resources and payroll
- Working environment
- Use of contractors
- Concessions, including rental cars, hotels, parking, and retail
- Contract and change order compliance (including labor, material, equipment, and billings)
- Internal performance
- Planning and budgetary control mechanisms

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Methods commonly used to conduct internal audits may include interviews with senior management, detailed reviews of financial records, reviews of federal and local regulations governing airport operations, reviews of leases between the organization and its tenants, analyses of airport rates and charges, reviews of the organization’s capital improvement program (may include one or several airports), reviews of local agreements, and project management and performance practices, among others.

6.2 External Environment Scan

Airports must function in an external environment over which they have little control. The purpose of the external assessment is to identify and assess external changes and trends, including economic, technological, demographic, social, and political trends that are likely to have an effect on the airport organization. This assessment includes a scan of the current operating environment, including identification of potential changes in the future environment that may hold opportunities or constraints/threats for the organization.

Several analytical tools are available to scan an organization’s environment. This Guidebook focuses on a description of competitive benchmarking and a scan of the external macro-environment in which the organization operates. As no two airports are alike, the input required for completion of these analyses will vary. Airport organizations should tailor their analyses based on the environment in which they operate, their stakeholders, their internal organizational structure, and factors that can affect the organization positively or negatively.

6.2.1 Assessing the Competition

As part of the review of the airport organization’s external environment, the planning team should benchmark other organizations to determine whether or not its systems are in alignment with those at peer organizations. This type of review provides a means to identify an organization’s strengths and weaknesses by comparing the organization’s current practices with practices at other organizations. The comparison of an airport’s performance with performance at other airports or other modes of transportation (e.g., rail) that directly compete with the airport is generally referred to as “competitive benchmarking.” Competitive benchmarking targets operating procedures or characteristics used by direct competitors or peer airports. The chief objective is to identify specific information about competitors’ products (e.g., concession variety), processes (e.g., number of employees per enplaned passenger), and business results (e.g., cost per enplaned passenger), and then to make comparisons with the products, processes, and business results of the planning team’s organization.

Other industries or organizations can also be benchmarked for comparison of a similar function (e.g., customer satisfaction). This type of benchmarking is generally referred to as “functional benchmarking.” However, only 9 percent of airport organizations responding to the online survey indicated that data from a different industry sector were used for a similar function (functional benchmarking).

In this phase of the strategic planning process, benchmarking is an effective way to identify best practices. Benchmarking allows the planning team to assess the organization’s position relative to its peers regarding a specific factor. Later in the process, however, benchmarking can be used as a tool to set the organization’s key performance indicators and targets. Benchmarking is also used to link the organization’s strategic initiatives to a measurable set of metrics, which can be used to assess the organization’s progress toward achieving its vision. In this later phase, benchmarking is a continuous process in which the organization’s key performance indicators
are compared with those of competitor or peer airports. Benchmarking can be a valuable tool for airport organizations looking to create a continuous performance improvement process.

Worksheet 6.02, “Competitor Benchmarking Analysis,” provides guidance for identifying comparable peer airports and undertaking the benchmarking analysis.

6.2.1.1 Purpose

As part of the assessment of the external environment, benchmarking allows airport organizations to do the following:

- Identify the organization’s weaknesses (in comparison to other airports) and practices that can be improved or eliminated. A reason to benchmark, for instance, may be to identify organizations that may be more efficient or more capable of satisfying passenger needs.
- Identify the organization’s strengths or other airports’ best practices that could be integrated into the organization. Benchmarking allows the identification of trends in the industry that the organization may decide to respond to, take advantage of, or adopt.
- Define peer airports that are similar in terms of characteristics such as number of enplaned passengers, types of passengers (i.e., international versus domestic and leisure versus business), types of traffic (i.e., origin and destination versus connecting), and governing entity (i.e., an authority versus a city government).
- Define the airport’s competitors. The definition of an organization as a competitor will depend on the process/activity being reviewed. For instance, an organization could be defined as a competitor based on its geographic location and the number of potential passengers it can attract, while other organizations may be defined as competitors based on the volume of cargo handled at their airports. Although this Guidebook focuses on airports, competitors may also include other transportation modes, such as rail and ground transportation.
- Collect data that will be used later in the process when defining key performance indicators and targets.

As part of the review of the external environment, benchmarking can provide other benefits as well, including the following:

- A better knowledge of peer/competitor airport performance
- A deeper understanding of the organization’s processes
- Assistance in identifying new technologies and practices that may have been implemented at other airports
- An impetus for the organization to look outward

6.2.1.2 Limitations

Airport operators should be aware of some challenges they may face when conducting benchmarking analyses:

- **Availability and quality of data.** As publicly owned airports are required to report their financial activities, financial metrics are generally available. However, the majority of airport organizations do not keep track of other performance measures. The issues of data quality and data consistency also make benchmarking analyses challenging. Operating expenses per employee, for instance, may be skewed due to the percentage of work at an airport that is contracted out.
- **Number of variables.** Airports are very difficult to compare due to their differences and the number of variables that must be taken into consideration. The operating expenses of an airport located in southern Florida cannot be compared to the operating expenses of an airport
located in northern Michigan, where cold climates and snowfalls require a large allocation of funds for snow removal and deicing. Financial benchmarks, such as cost per enplaned passenger, are also difficult to compare on an “apples to apples” basis because each airport organization allocates costs to different cost centers and these may or may not be part of the airline rate base.

Factors that generally affect the benchmarking of peer or competitor airports include, but are not limited to, the following:

- Weather
- Form of governance
- Degree of contracting out
- Traffic mix (international versus domestic) and passenger types (leisure versus business)
- Capacity constraints (e.g., slot allocation, hourly traffic caps, and curfews)
- Currency exchange (when comparing foreign airports)
- Services provided to the airlines by the airport organization
- Local regulations or regulatory environment
- Business relationships with tenants

6.2.1.3 Key Airport Benchmarking Measures

The scope of the benchmarking analysis will vary based on the organization’s complexity, resources available to conduct the analysis, the number of measures the planning team decides to benchmark, and the type of data to be measured. As airports differ in type, interrelationships with local government, business, and internal and external stakeholders, no two airport benchmarking analyses are alike.

A medium or large hub airport operator, for instance, may conduct a detailed benchmarking analysis of its terminal processes (baggage delivery and reclaim, passenger security screening, ticketing, and so forth). Conversely, general aviation airport operators would likely gather pertinent information about their organizational performance by benchmarking broader metrics (numbers of aircraft operations, number of FBOs, aeronautical versus non-aeronautical revenues, and so forth).

Benchmarking of operating procedures or characteristics generally includes, but is not limited to, aircraft/passenger activity, aircraft operations and safety, facilities, internal processes (organizational structure, productivity, and efficiency), service quality and customer satisfaction, retail concessions, and finance and rates and charges. These areas and sub-areas within them are listed below:

- Aircraft/passenger activity
  - Numbers of enplaned passengers and aircraft operations
  - Cargo volume (handled and processed)
  - Passenger types (business versus leisure and origin and destination versus connecting)
  - Operation types (military, air carrier, general aviation, cargo, and local versus itinerant)
  - Based aircraft (number and type)
- Aircraft operations and safety
  - Security performance measures (customer satisfaction and complaints at security screening checkpoints, security breaches and violations, and number of citations and warnings issued)
  - Safety performance measures (runway incursion, aircraft accidents and incidents, and employee accidents and incidents)
  - Environmental performance measures (noise exposure levels and complaints, air quality, stormwater runoff contamination levels, energy and water consumption, and utility cost per enplaned passenger)
The document discusses the following topics:

- **Facilities**
  - Airport characteristics (number of runways, terminals, gates, parking spaces, and so forth)
  - Performance of existing processes (aircraft delays, passenger processing times at security screening checkpoints, average passenger wait times at baggage claim, Customs clearance processing times, walking/travel distances, and remote parking shuttle transfer times)
  - Constraints to airport growth (terminal space available for concessionaires, number of gates available, and airport operator–owned property available for development)

- **Internal processes (organizational structure, productivity, and efficiency)**
  - Operating efficiency (enplaned passengers per direct employee, total terminal complex maintenance costs per enplaned passenger, ground maintenance costs per acre, and time to respond to comment cards/complaints)
  - Personnel costs (salaries and benefits for airport employees per enplaned passenger, overtime as a percentage of total wages, and training hours per full-time equivalent employees)
  - Outsourcing (percent of contract employees and cost of contract employees as a percent of total operating costs)
  - Diversity (percent of female, minority, and disabled employees)
  - Personnel satisfaction (absenteeism percentage and annual turnover percentage)

- **Service quality and customer satisfaction**
  - Air service diversity (number of direct destinations and average airfares)
  - Satisfaction with processing times
  - Satisfaction with retail concessions (concession diversity and variety and value for money for food and beverage concessions)
  - Satisfaction with facilities (cleanliness, number of restrooms, availability and cost of airport parking, and complaints per enplaned passenger)

- **Retail concessions**
  - Revenue sharing agreements
  - Quality of services provided (courtesy and appearance of staff, speed and quality of cashier service, availability of wireless Internet access and Internet stations, and availability of electrical outlets or charging stations)
  - Diversity of concessions (services versus food/beverage, food, and retail offerings)

- **Finance and rates and charges**
  - Leasing and subleasing philosophies/structures
  - Revenue sharing agreements
  - Revenue sources (aviation-related, non-aviation-related, and other)
  - Capital expenditures and costs
  - Budgetary cost control measures
  - Cash flow and liquidity
  - Debt level
  - Return on equity and assets

### 6.2.1.4 Steps Required to Conduct a Meaningful Benchmarking Analysis

This section provides a brief overview of the steps required to complete a competitive benchmarking analysis that focuses on similar organizations (i.e., airports). The best model for benchmarking is whichever model best fits the specific organization, but, as indicated in Exhibit 6-1, this process generally involves determining what to benchmark, which airports and/or organizations to benchmark, defining competitors’ best practices and comparing the organization’s performance against that of its competitors by collecting and analyzing benchmarking information, and taking actions based on the results of the analysis.

**Deciding What to Benchmark.** Before collecting data, the planning team must choose what measures to compare. It is of little value to benchmark irrelevant processes or activities or processes or activities for which key performance indicators do not exist. The measures the organization
should benchmark should have the potential to provide a real, sustainable, competitive advantage. By answering the following questions, the planning team should be able to determine the measures to benchmark:

- Is there a specific area where frequent complaints arise?
- Which functions contribute most to our organization’s favorable or unfavorable image?
- What function has the most impact on achieving strategic goals and objectives?
- What is the most critical factor to our organization’s success?
- What factors are causing the most trouble?
- What are some of our organization’s weakest points?
- What key factors do passengers generally refer to in terms of satisfaction/dissatisfaction?
- Which functions have the greatest potential for differentiating our organization from its competitors in the marketplace?
- What does our organization need to learn more about?
- What is critical to our organization’s ability to positively serve the community/region?

After answering these questions, the planning team should develop and categorize a final list of measures to be benchmarked. Each airport operator should decide upon a few key measures that are critical to its benchmarking assessment. Potential focus areas that can be used to categorize benchmarking metrics include, but are not limited to, the following:

- Airport operations and safety
- Facilities
- Productivity and efficiency
- Service quality and customer satisfaction
- Retail concessions
- Finance and rates and charges

Other comprehensive, non-airport specific, frameworks for measuring organizational performance include the Malcolm Baldrige criteria and the Kaplan and Norton criteria.
The Malcolm Baldrige National Quality Award was created by the U.S. Congress in 1987 to enhance U.S. competitiveness with regard to quality and productivity by doing the following:

- Helping to stimulate American companies to improve quality and productivity for the pride of recognition while obtaining a competitive edge through increased profits;
- Recognizing the achievements of those companies that improve the quality of their goods and services and providing an example to others;
- Establishing guidelines and criteria that can be used by business, industrial, governmental, and other organizations in evaluating their own quality improvement efforts; and
- Providing specific guidance for other American organizations that wish to learn how to manage for high quality by making available detailed information on how winning organizations were able to change their cultures and achieve eminence.47

The program promotes quality awareness, recognizes quality achievements of U.S. organizations, and provides a vehicle for sharing successful strategies. The Baldrige criteria focus on results and continuous improvement. They provide a framework for designing, implementing, and assessing a process for managing all business operations.

The Baldrige performance excellence criteria provide a framework that any organization can use to improve its overall performance. As illustrated on Exhibit 6-2, seven categories make up the award criteria, including leadership; strategic planning; customer and market focus; measurement, analysis, and knowledge management; workforce focus; process management; and results. These criteria are briefly described below:

- Leadership: This category relates to how senior executives guide the organization and how the organization addresses its responsibilities to the public and practices good citizenship through ethical, legal, and community responsibilities.

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This category is used to examine how leaders set and communicate the organization’s vision and values and how they practice these values. It focuses on leaders’ actions to create a sustainable, high-performance organization with a business and customer focus. In addition, it focuses on leaders setting values and direction, communicating, creating value for all stakeholders, and creating an organizational bias for action.

Typical questions to address as part of this category include the following: How do leaders set organizational vision and values? How do leaders deploy organizational vision and values? How do leaders encourage frank, two-way communication throughout the organization?

- **Strategic Planning:** This category relates to how the organization sets strategic direction and how it determines key action plans. It is also used to examine how organizational strategic objectives and action plans are implemented, measured, and changed if circumstances require.

  The Strategic Planning category encourages strategic thinking and acting in order to develop a basis for competitive position in the marketplace. This category is used to examine how organizations optimize the use of resources; determine strengths, weaknesses, opportunities, and threats; and execute the overall strategy.

- **Customer and Market Focus:** This category is used to examine how the organization determines requirements and expectations of customers and markets; builds relationships with customers; and acquires, satisfies, and retains customers.

  The Customer and Market Focus category focuses on gaining knowledge about the need and desires of current and future customers and markets, with the aim of offering relevant products and services; understanding emerging customer requirements, needs, and expectations; keeping pace with market changes; and reacting to those changes.

  Typical questions to address as part of this category include the following: How does the organization identify customers and market segments? How does the organization determine key customer requirements, needs, and changing expectations? How does the organization keep customer and market listening and learning methods current with business needs and direction?

- **Measurement, Analysis, and Knowledge Management:** This category focuses on gathering information about measuring, analyzing, and improving performance and managing organizational knowledge to drive improvement and organizational competitiveness.

  Applicants for the Malcolm Baldrige National Quality Award must answer, among other questions, how the organization selects, collects, aligns, and integrates data and information for tracking daily operations and overall performance and how the organization keeps the performance measurement system current with business needs and direction.

- **Workforce Focus:** This category is used to examine how the organization enables its workforce to develop its full potential and how the workforce is aligned with the organization’s overall mission, strategy, and action plan. This category is also used to examine the organization’s ability to assess workforce capability and capacity needs in order to build a high-performance workforce environment.

  Typical questions to address as part of this category include the following: How does the organization’s workforce development and learning system address the needs and desires for learning and development identified in the workforce? How does the development and learning system develop personal leadership attributes?

- **Process Management:** This category is used to examine how key production/delivery and support processes are designed, managed, and improved. The Process Management focus consists of the identification and management of core competencies to achieve efficient and effective work process management.

  Typical questions to address as part of this category include the following: How does the organization determine its core competencies? What are the core competencies of the organization?
• Results: This category focuses on the organization’s performance and improvement in its key business areas. This category is also used to examine how the organization performs relative to its competitors.48

Kaplan and Norton Criteria (Balanced Scorecard). The Kaplan and Norton criteria refer to a strategic approach that enables organizations to translate their vision and strategy into implementation from four perspectives: (1) the financial perspective, (2) the customer perspective, (3) the internal (business process) perspective, and (4) the organizational learning and growth perspective. These four perspectives provide a comprehensive view of an organization’s performance from different viewpoints. The financial perspective measures the ultimate results that the business provides to its shareholders, including profitability, revenue growth, return on investment, economic value added, and shareholder value. The customer perspective focuses on customer needs and satisfaction, as well as market share, including service levels, satisfaction ratings, and repeat business. The internal (business process) perspective focuses attention on the performance of the key internal processes that drive the business, including quality levels, productivity, cycle time, and cost. The organizational learning and growth perspective focuses on the organization’s people and infrastructure. Key measures might include intellectual assets, employee satisfaction, market innovation, and skills development. For each of the four perspectives that are part of the Kaplan and Norton Criteria, objectives, measures, targets, and initiatives shall be monitored and scored. Objectives shall include major objectives to be achieved to translate the organization’s strategy into implementation. Objectives have to be defined for each of the four perspectives defined by Norton and Kaplan. Measures relates to the observable parameters that will be used to measure progress towards reaching the objectives. Targets specify the specific target values for the measures, and initiatives include all projects or programs to be initiated in order to meet the objective.

The Kaplan and Norton framework and the Baldrige Award criteria are similar: “In both models, the focus is on a set of measures that provides a comprehensive perspective on organizational performance, and any measure an organization might use can be assigned to an appropriate category in either framework.”49 Additional information on the balanced scorecard can be found on the Balanced Scorecard Institute’s website at www.balancedscorecard.org.

Deciding Which Organizations to Benchmark. Direct competitor and peer airports are prime candidates for benchmarking, but for certain functions and processes, an organization may decide to benchmark the best airports or business functions regardless of their location or type.

As indicated in Worksheet 6.02, “Competitor Benchmarking Analysis,” criteria to be considered when deciding which airports to benchmark will depend on the area/measure being benchmarked and the different set of airports that may be associated with each area/measure to be benchmarked.

Typical criteria that airport organizations account for when deciding which airports to benchmark include the following:

• Location
• Numbers of enplaned passengers


• Airport type
• Governing entity type
• Degree of contracting/outsourcing
• Weather (cold versus warm climates)
• Passenger type (leisure versus business)
• Traffic type (origin and destination versus connecting)
• Traffic type (domestic versus international)
• Level of congestion
• Metropolitan area population
• Dominant airlines
• Airport activity focus (general aviation, cargo, or commercial)

Functional benchmarking of other industries may be useful, particularly where it relates to customer satisfaction. For example, as a low-end benchmark, an airport organization may want to compare its customer satisfaction rate with that of public transit agencies, and, as a high-end benchmark, the organization may want to compare its customer satisfaction rate with that of leading hotels.

Deciding How to Collect the Data. There is no one way to conduct a benchmarking analysis. Benchmarking is a process used to derive quantifiable goals and targets, but, more importantly, it is also used to investigate and document best industry practices, which can help an organization achieve its goals and targets.

The benchmarking analysis must involve a careful understanding of the organization’s current processes and practices, as well as those of the organizations being benchmarked. What is desired is an understanding of internal performance on which to assess the organization’s strengths and weaknesses.

Publicly Available Benchmarking Studies. Airport industry organizations and consulting firms have initiated several studies designed to collect information relative to airport performance. Airport organizations participate in these collaborative studies on a voluntary basis, and the results of the related surveys are generally made available to the public. These studies present a review of a wide range of performance measures that generally fall within the categories of activity and operations, facilities, productivity and efficiency, customer satisfaction, retail concessions, and finance.

A large majority of airport operators will find data relative to the performances they want to benchmark in these studies. To assess which study would be the most appropriate for a particular benchmarking analysis, complete Worksheet 6.02, “Competitor Benchmarking Analysis.”

Two related Airport Cooperative Research Program projects, ACRP Project 01-06 “Guidebook for Developing an Airport Performance-Measurement System,” and ACRP Project 01-09 “Airport Performance Indicators,” are also focused on providing detailed information about available sources of airport benchmarking data.

A brief description of benchmarking studies conducted by government agencies, industry associations (such as ACI and AAAE), and other organizations that the planning team should review when assessing the operational procedures and characteristics of peer airports and competitors is provided below. This list is broken down into seven categories: aircraft/passenger activity, aircraft operations and safety, facilities, productivity and efficiency, service quality and customer satisfaction, retail concessions, and finance and rates and charges.
Studies focused on aircraft/passenger activity (to be used to determine peer airports) include the following:

- **ACI’s Monthly Worldwide Airport Traffic Statistics Report:** This report features detailed data on member airports participating in the monthly data collection. The report provides data on passengers, cargo, and aircraft movements for the reporting month and for the year-to-date period. Based on a review of this report, the planning team can seek airports of comparable size and with similar aircraft operations and enplanement levels.

- **FAA Terminal Area Forecast:** This document contains historical aviation activity data and FAA forecasts for active airports in the NPIAS. Forecasts are provided for air carriers, commuters/air taxis, general aviation, and military operations as well as enplaned passengers. This document provides relevant statistical information that can help an airport organization determine airports of similar size/profile.

- **FAA National Plan of Integrated Airport Systems, Appendix A:** This appendix lists all active airports in the NPIAS and includes projected development costs (not including planning costs) for a 5-year period (for airport improvements that are eligible for federal development grants under the Airport Improvement Program [AIP]). This appendix is useful for identifying airports of comparable size and similar geographic region.

- **FAA Passenger Boarding and All-Cargo Data:** Enplaned passenger and cargo data are extracted from the Air Carrier Activity Information System (ACAIS), a database that contains revenue passenger boarding and all-cargo aircraft data. The database supports the FAA’s AIP apportionment formula calculations. Passenger boarding and all-cargo data are collected for a full calendar year and are used to determine entitlements for the next full fiscal year (i.e., Calendar Year 2007 data determine Fiscal Year 2009 entitlement funds). This database is useful in identifying airports that have similar passenger and cargo traffic.

Studies focused on aircraft operations and safety include the following:

- **FAA Runway Safety Report:** The FAA Runway Safety Report presents data related to runway safety in the United States. The report is updated every four fiscal years and highlights runway safety initiatives intended to reduce the severity, number, and rate of runway incursions.

- **NTSB Accident Database and Synopses:** The NTSB aviation accident database contains information beginning in 1962 about civil aviation accidents and selected incidents within the United States, its territories and possessions, and in international waters.

- **FAA Accident/Incident Data System:** The FAA, in an attempt to promote the open exchange of safety information in order to continuously improve aviation safety, developed the Aviation Safety Information Analysis and Sharing (ASIAS) system. The ASIAS system enables users to perform integrated queries across multiple databases, search an extensive warehouse of safety data, and display pertinent elements in an array of useful formats.

- **Bureau of Transportation Statistics (BTS), Airline On-Time Statistics:** Each month, the domestic carriers that account for at least 1 percent of total domestic scheduled-service passenger revenues, plus two other carriers that report voluntarily, report their on-time data to the BTS. The data include nonstop scheduled-service flights between points within the United States, including territories. Data are available from January 1995 forward.

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50 Available online at www.aci.aero/cda/acicommomon/display/main/aci_content07_cjsp?zn=aci&cp=1-6-435732^2003_666_2__.
52 Available online is www.faa.gov/airports/planning_capacity/npias/reports/.
53 Available online at www.faa.gov/airports/planning_capacity/passenger_allcargo_stats/passenger/.
54 Available online at www.faa.gov/airports/runway_safety/media/pdf/RSReport08.pdf.
55 Available online at www.ntsb.gov/ntsb/query.asp.
56 Available online at www.faa.gov/data_research/accident_incident/.
57 Available online at www.bts.gov/xml/ontimesummariystatistics/src/index.xml.
Studies focused on facilities include the following:

- **ACI-North America (NA), Airport General Information Survey:** ACI-NA’s General Information Survey is a comprehensive survey of general characteristics for approximately 130 North American airports. The survey provides detailed information on airport ownership and governance, physical characteristics, activity statistics, airport/airline use and lease agreements, and financial and economic characteristics. Airport operators have found the survey results to be invaluable in comparing their facilities and charges with those at other airports. The database is ideal for general fact finding and informal airport benchmarking and is an important resource for airport planning, assessments, research, and background information for papers and articles.

- **ACI-NA, Airport Parking Study:** This study is a comprehensive analysis of airport parking facility rates and charges. Review of this study can assist the planning team in identifying best practices with regard to parking facilities and associated rates and charges.

- **ACI-NA, Air Cargo Facilities Survey:** This survey provides a comprehensive analysis of air cargo facilities in the United States.

- **International Facility Management Association, Benchmarks V:** This survey, which includes data from airports, is designed to collect facility data that will easily allow comparison of costs and practices across various types of facilities.

A study focused on productivity and efficiency is the Air Transportation Research Society’s Airport Benchmarking Report: Global Standards for Airport Excellence. The annual global Airport Benchmarking Report is an unbiased and comprehensive assessment of airport performance that includes three volumes of productivity, efficiency, and unit cost competitiveness data. Released every summer, the report provides over 30 performance measures identifying effects of the operating environments of airports, business diversification efforts, outsourcing, and service quality. Peer airports are benchmarked within geographical boundaries, which currently span three regions: North America, Europe, and Asia Pacific and Oceania.

Studies focused on service quality and customer satisfaction include the following:

- **J. D. Power, Global Airport Satisfaction Index Study:** This study measures airport satisfaction in three segments: large (30 million or more passengers per year), medium (10 million passengers to fewer than 30 million passengers per year), and small (less than 10 million passengers per year). The survey considers the following as key measures of airport satisfaction: airport accessibility, the check-in process, security processing, terminal facilities, baggage claim, and overall airport satisfaction.

- **Transportation Research Laboratory, Airport Service Quality Monitor (ASQM):** The ASQM assesses actual airport services by comparing the processes and practices at airports. The ASQM includes more than 500 measurements to cover all service areas experienced by passengers. Performance metrics included in the ASQM database include the average passenger wait time at the ticket counter, the average time for the first bag to arrive on baggage claim devices, the distance to the furthest gate, the frequency of trains between airports and city centers, and the information presented on flight information display screens.

- **ACI Airport Service Quality (ASQ) Programme:** The ASQ Programme is a comprehensive ACI initiative to help airport operators in their continuing efforts to improve the quality of service.
service experienced by passengers. The ASQ Programme identifies and disseminates best practices from top-performing airports around the world. The ASQ rankings are based on the results of questionnaires completed by passengers. The surveys capture the passengers’ immediate appraisals of 34 airport service factors, from check-in through departure at the gate.

A study focused on retail concessions is the Airport Revenue News (ARN) Fact Book. The 2008 edition of the ARN Fact Book contains comprehensive data on food and beverage, specialty retail, news and gift, duty free, advertising, parking, and rental car concessions at 95 major airports. Data included in the Fact Book include concessionaire company details, concession sales, planned expansions, lists of terminal/concourses, management contacts and structure, passenger traffic, gross sales per enplaned passenger, rent revenue to the airport operator and current square footages broken down by category (food/beverage, specialty retail, and so forth), revenues from passenger services, revenues from parking and rental cars, ratio of pre- versus post-security concession locations, and tenant details.

Studies focused on finance and rates and charges include the following:

- **Airport Financial Reports (FAA Forms 5100-126 and 5100-127):** Each year, the operators of U.S. commercial airports must file with the FAA a Financial Governmental Payment Report (FAA Form 5100-126) reporting the payments made to governmental entities, the services the airport provides for governmental entities, and the land and facilities the airport provides to governmental entities as well as an Operating and Financial Summary (FAA Form 5100-127) reporting airport revenues, expenses, and other financial information.
- **ACI Airport Economics Survey:** The ACI Airport Economics Survey provides an overview of airport business activity and an analysis of economic performance based on data collected from a sample of airports representing global passenger traffic.
- **ACI-NA, Airport Macro-Benchmarking Survey:** ACI-NA and the airlines developed a small set of highly defined macro-benchmarks to ensure accurate measurement and comparison of key, high-visibility industry benchmarks. Clearly defined statistics are used as the base, and subcomponents that vary significantly across airports because of institutional and management practice differences are added or subtracted to derive net macro-benchmarks that more accurately reflect relative performance.
- **ACI-NA, Airport Initiatives in Measurement (AIM) Benchmarking Study:** The AIM study attempts to benchmark various components of an airport’s operation and to use this information to develop best practices. Additionally, ACI-NA is developing an ongoing airport performance measurement group to chronicle the differences among the participating airports, identify possible peer airports, define a common measurement methodology, and agree on compilation practices to ensure data comparability.
- **AAAE Rates and Charges Survey Report:** This survey provides a broad range of information on airport revenue sources, fee structures, and physical characteristics. The survey contains data from over 200 airports ranging from large air carrier airports to small general aviation airports. The survey includes airport activity statistics, airport positions/staffing, airline agreements, landing and apron fees and the methodology used to calculate them, revenues, concessions, and financial statements.
- **Rating Agency Reports:** Reports on the airport industry and specific airports from Fitch Ratings, Moody’s Investors Service, and Standard & Poor’s provide a broad range of financial metrics that can be used for benchmarking.

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66 Available online at www.airportrevenuenews.com/subscribe/subscribe.php.
68 Available online at www.aci-na.org/.
69 Ibid.
70 Ibid.
71 Available online at www.aaae.org/federal_affairs/regulatory_affairs/rates_and_charges_survey/.
**Benchmarking Partners.** The information to be collected for the benchmarking analysis is not always proprietary and airport organizations may agree to mutually exchange information beneficial to all parties in a benchmarking group and share the results within the group.

At Tampa International Airport, for instance, the Hillsborough County Aviation Authority initiated an AIM benchmarking program. This program, which was initiated in 2003, allowed a small group of airports to submit data for comparative purposes. AIM was later expanded to other airports and, eventually, ACI took over the program (see Airport Initiatives in Measurement (AIM) Benchmarking Study above).

### 6.2.2 Assessing External Opportunities and Threats

External opportunities and threats should be analyzed as part of the external environment scan. Opportunities are outside factors that the organization can take advantage of to better fulfill its mission, meet its mandates, achieve its strategic initiatives (vision), or provide public value. As Ziegenfuss has indicated, “achieving a vision for the future requires a readiness to exploit opportunities that appear as the organization moves towards its vision.”\(^72\) Conversely, threats are outside factors that might hinder pursuit of the organization’s vision. Opportunities and threats are the external components of the SWOT analysis. The planning team can choose to review external opportunities and threats before they examine internal strengths and weaknesses.

Use of Kepner-Tregoe\(^73\) situational analysis techniques allows the potential impact of particular opportunities or threats to be assessed according to three criteria: (1) seriousness, (2) urgency, and (3) growth potential. If the opportunity is critical to the future success of the organization, it is highly serious. If the opportunity must be acted upon immediately for it to be effectively taken advantage of, it is highly urgent. If the seriousness is expected to increase dramatically over time, the opportunity has high growth potential. Similarly, if a threat is expected to have a significant negative impact on the future success of the organization, it is highly serious. If the threat must be resolved immediately for the resolution to be effective, it is highly urgent. If the seriousness of the threat is expected to increase dramatically over time, the threat has high growth potential.

According to the online survey data, the identification of uncertainties as part of the strategic planning process was extremely important to 68 percent of the respondents and somewhat important for 26 percent of respondents. Only 6 percent of respondents indicated that the identification of uncertainties is not important.

Further, a majority of online survey respondents (89 percent) account for or somewhat account for outside factors, uncertainties, and extreme events as part of the strategic planning process and integrate these factors into their organization’s strategic plan. They develop contingencies for identified potential vulnerabilities and implement projects that reduce the level of risk over time through the use of sensitivity analysis or through specific operational, budgetary, and capital improvement plans.

The driving forces that create momentum or pressure for change in the airport industry and result in the creation of opportunities or threats include the macro-level economic environment, the population and economic base, technological development/trends, regulatory changes, com-

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petition, the airline industry, public support, and catastrophic events. These forces are listed and explained in further detail below:

- **Macro-level economic environment.** This category includes the macro-level economic factors that are likely to affect airport growth. The following global economic and commodities indicators should be considered when assessing the external environment:
  - Inflation
  - Consumer confidence index
  - Consumer spending and income
  - Employment
  - Housing and construction markets
  - Manufacturing and industrial markets
  - Commodities data, including data on oil demand and supply trends

**CASE STUDY**
**Assessing Opportunities and Threats—Houston Airport System**

This case study provides a tangible example of external assessment findings for an airport organization.

The Houston Airport System (the System)—encompassing George Bush Intercontinental Airport, William P. Hobby Airport, and Ellington Airport—constantly scans its external environment as part of its Destination 2020 program. The three-airport system served more than 50 million passengers in 2008, including more than 7.9 million international travelers. The aim of the Destination 2020 program is to ensure the airports maintain optimal efficiency while determining how to best handle 80 million passengers by 2020.

The main participants in the Destination 2020 program are a strategic leadership team (SLT) composed of the aviation director and five deputy directors, an implementation team (IT) composed of 10 upper middle managers, and various deployment teams (DT) composed of individuals from various areas of the organization. The SLT is responsible for developing the mission and vision statements, reading the organization's internal and external environment (both presently and with a 10- to 20-year horizon) and setting broad objectives that are then refined by the IT and DT. The SLT meets monthly and the IT meets weekly.

The SLT has concluded that the most immediate threat to the System is the current economic recession and its impact on the System’s existing capital development program and bond ratings. With the potential for more airline bankruptcies and mergers, it is a challenge to determine what particular capital projects should be implemented now. This is made particularly difficult by the fact that both Intercontinental and Hobby airports have one air carrier with a dominant market share (Continental and Southwest, respectively). Future activities and capital projects at competing airports (e.g., Dallas/Fort Worth International Airport, Hartsfield-Jackson Atlanta International Airport, and Miami International Airport) that make them a more attractive connecting point for transfer traffic are also a potential threat.

The relative economic strength and rapid population growth of the Houston area, when combined with the network effects from the dominant hub carriers at each airport, present an opportunity for growth in the number of nonstop destinations served from Houston. To fully leverage this opportunity, the SLT is focused on cost (e.g., cost per enplaned passenger) and customer service issues.

The IT also plays an important role in identifying opportunities and threats, particularly those that are immediate. Since these managers have day-to-day responsibility for functional areas, they are particularly good at identifying opportunities and threats on a real-time basis and proposing activities or programs to address them to the SLT.
• Population and economic base. Together with considering the economic environment at a macro level, the planning team should consider local and regional economies and identify trends that may affect their organization’s operations. Local and regional economic indicators that should be considered include, but are not limited to, the following:
  – Employment
  – Per capita income
  – Home sales
  – Retail sales
  – Poverty level
  – Trade indicators, including gross national product (GNP), gross domestic product (GDP), and net foreign direct investment (FDI) per capita
  – Cross-border air freight

• Technological development/trends. This category includes the technological factors that are likely to influence the organization’s future. Examples of technological developments that have affected the airport industry in the past include introduction of the A380 aircraft (new large aircraft), introduction of e-tickets, and the emergence of self-service check-in kiosks.

• Regulatory changes. Regulatory factors that have influenced or will influence the airport industry include the runway safety area (RSA) compliance deadline set by the FAA for 2015 and the required screening of passengers and carry-on and checked baggage.

• Competition. Existing and potential competitors may include the following:
  – Local/regional airports (e.g., airports that compete for the same passenger, cargo, or general aviation base)
  – Organizations that fulfill the same customer needs (e.g., Amtrak provides an alternative for travel between Washington, D.C., and New York)
  – Other airports marketing a specific product (e.g., airports seeking certification as spaceports capable of handling horizontal launches of reusable spacecraft, airports marketing aircraft maintenance repair, and overhaul companies)
  – Other airports or organizations that offer facilities or processes similar to those offered by an organization (e.g., large hub airports generally define their competitors as other large hub airports attracting a large portion of connecting traffic; customer satisfaction programs from other industries, such as the hotel industry, may be considered)

• Airline industry. The current state of the airline industry should be assessed and potential trends should be identified. The following trends have affected the airline industry in the past:
  – Airline bankruptcies
  – Airline mergers and acquisitions
  – Influence and effects of low-cost carriers
  – Hub development and de-hubbing activities
  – Major and regional airline partnerships
  – New aircraft type introduction
  – Rising fuel costs

• Public support. When conducting a review of the environment in which they operate, airport operators should identify any anticipated public support for or opposition to the airport.

• Catastrophic events. Catastrophic events include human-made accidents or attacks and natural events. Examples of catastrophic events that could affect airports and that should be considered when determining the effect of external factors on the organization include the following:
  – Terrorist acts
  – Major aircraft accidents
  – Natural disasters (e.g., hurricanes)
Worksheet 6.03, “External Opportunities and Threat Identification,” will help the planning team identify the types of driving forces that could affect the organization’s future, including opportunities and threats.

Exhibit 6-3. **SWOT analysis.**

6.2.3 Developing the SWOT Matrix

The SWOT matrix is a commonly used tool for developing a strategy that is a byproduct of the organization’s internal resources and capabilities and the state of the industry. Using the outcomes of the internal assessment, competitor and peer group analysis, and external opportunities and threats assessment, the planning team should develop a SWOT matrix. This matrix will help the planning team visualize the results of the previous analyses and provide the foundation for the definition of the organization’s strategy. Ultimately, the SWOT matrix will help the organization build strategies (determine the best ways to achieve a competitive advantage), formulate objectives (identify specific improvements that should be made), and build in accountability (identify key performance indicators to be used to measure improvements). “The premise of SWOT is that the goal of the strategy-making process is to produce a good fit between the company’s internal capabilities and the environmental conditions.”  

Examples of strengths, weaknesses, opportunities, and threats that airport organizations may identify while scanning the external environment include the following:

- **Strengths**
  - The airport is well positioned to accommodate further air cargo traffic. Landing fee rates are the lowest in the region, the airfield facilities are rated in excellent to good condition, additional air cargo warehouse space is available to accommodate future demand, and the airport is centrally located in the region with easy access to interstate highways and seaports. The adjoining Foreign Trade Zone (FTZ) provides an added incentive to potential air cargo tenants.
  - The airport’s balance sheet is very healthy, with 700 days of cash on hand as of September 30, 2008, and an operating ratio of 30 percent. Total debt service coverage and revenue


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diversity are also very strong. Nonairline revenues account for approximately 50 percent of all airport revenues.

• Weaknesses
  – The airport’s customer satisfaction rankings are low. The number and variety of concessions, terminal cleanliness, and staff courtesy are at issue. These issues need to be resolved for our airport to be able to thrive against its competitors.
  – The organization has no established strategic direction, and employee morale is low.
• Opportunities
  – The introduction of very light jets (VLJs) could lead to increased general aviation activity at the airport. We could begin marketing our services to VLJ operators.
  – The City will host the Olympic Games in 4 years. Our terminal modernization program may need to be fast-tracked to meet the needs of the volume of travelers that will be visiting then.
  – The airport service region’s economy is booming, leading to increased disposable income. Numbers of enplaned passengers are likely to increase, and opportunities may exist to increase non-aeronautical revenues.
• Threats
  – Increasing gas prices will reduce flight training operations at the airport. Aeronautical revenues are likely to decrease in the coming years.
  – The local government will likely require the airport to be financially self-sufficient by 2010. There is a need to develop a financial plan that includes aiming to get off the tax rolls by using revenues to invest in income-producing capital improvements.

Using the outcomes of the Internal Assessment (Worksheet 6.01), Competitor Benchmarking Analysis (Worksheet 6.02), and External Opportunities and Threat Identification (Worksheet 6.03) worksheets, the planning team should develop the matrix included in Worksheet 6.04, “SWOT Matrix.”

6.3 Tools to Assess the Future of the Organization and Formulate Strategies

This section provides a summary of the tools available to assess the future of the organization and the potential uncertainties that may positively or negatively affect its operations. These tools are generally used to complement the other components (internal assessment, competitor and peer group analysis, and external threats and opportunities assessment) of the external environment scan.

6.3.1 Scenario Planning

Scenario planning is a systematic approach to imagining future scenarios. Each scenario tells a different story of how the future might unfold and how critical elements might interact. The main objective in developing scenarios is to reduce the risks related to strategic direction through the evaluation of potential developments that may adversely affect strategy implementation. Examples of “what if” scenarios applicable to the airport industry include the following:

• The airport’s primary airline is applying for Chapter 11 bankruptcy protection.
• Two of the airport’s primary airlines are consolidating their operations.
• A major hurricane is expected to hit the airport.
• Passenger traffic is expected to decrease 10 percent next year.
To conduct the scenario planning analysis, the planning team should organize one or more workshops with department leaders and senior management. At times, external or internal stakeholders may also participate in the workshop(s). The intent is to bring together a wide range of perspectives to consider scenarios other than the widely accepted forecasts. Department leaders should participate because later they will formulate and implement strategies based on the scenarios.

6.3.1.1 The Process

The objective of scenario planning is to apply sound data and analytical methods to a base case and alternative growth scenarios for the organization to demonstrate how different growth patterns would affect airport(s) operations, such as traffic congestion, rates and charges, level of services, and the like. Scenario planning is also used to inform and facilitate the dialogue among stakeholders regarding the long-term vision for the organization. Steps in scenario planning are the following:

- **Step 1**: Determine the specific decision (focal issue) to be analyzed or whether the workshop will be used to test the robustness of strategies across broad-ranging global scenarios.
- **Step 2**: Identify the key factors that affect the focal issue.
- **Step 3**: Identify the political, economic, social, and technological forces driving the key factors.
- **Step 4**: Determine the two environmental factors that have the largest impact on the organization and are the most uncertain. Make future uncertainties explicit and transparent and try to account for unpredictable events.
- **Step 5**: Develop different future scenarios (probable, possible, plausible, and less probable).

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**CASE STUDY**

Conducting a Scenario Analysis—Dallas/Fort Worth International Airport

The executive management team at Dallas/Fort Worth International Airport (the Airport) engaged in a scenario planning exercise as part of the process of developing the most recent strategic plan for the Airport, which was completed in late 2007. Scenario planning was conducted as part of a SWOT analysis in which the executive management team looked at competing North American airports and the potential impact of airline consolidation on operations at the Airport.

An air service consultant provided the Airport’s executive management team with three potential airline consolidation scenarios. The executive management team concluded that the Airport would not be significantly affected by any of the three consolidation scenarios. Therefore, the direct impact of the scenario analysis on the strategies and objectives contained in the plan was minimal.

However, the analysis highlighted the Airport’s dependency on American Airlines and the fact that American’s fleet will have limited growth for the foreseeable future (which will limit growth opportunities for the airline at the Airport). As a result of this understanding, one of the main strategic objectives included in the strategic plan is the following: “Grow profitability of non-pasenger-dependent businesses that achieve the established financial returns.” By setting the objective to increase the profitability of non-pasenger-dependent businesses, such as commercial development (including hotels) and natural gas exploration, the Airport’s revenue stream should eventually be less influenced by year-to-year airline network planning decisions.

*Dallas/Fort Worth International Airport’s most recent strategic plan is available online at [www.dfwairport.com/about/pdf/publications/14816_DFWAIR_STRATEGIC_PLAN_012508_resize.pdf](http://www.dfwairport.com/about/pdf/publications/14816_DFWAIR_STRATEGIC_PLAN_012508_resize.pdf) (accessed May 28, 2009).*
Step 6: Assess the implications of each scenario for the organization and determine what could be done differently in each scenario.

Step 7: Select leading indicators and signposts for each scenario and set up a process for monitoring them. As a 2004 issue of *Business HR* advises, “Monitoring these indicators will allow [an organization] to know what the future holds . . . and how that future is likely to affect strategies and decisions in the [organization]. If the scenarios have been carefully developed, then the scenarios will be able to translate movements of few key indicators into an orderly set of [organization]-specific implications.”

### 6.3.1.2 Benefits

The benefits of scenario planning are as follows:

- Assessing the vulnerabilities of a given strategy and recognizing the need for clear alternative strategies
- Enabling the planning team to quickly alter course in response to changes in the business environment
- Providing an opportunity to rehearse potential changes in advance of the scenario occurring, thereby enabling the organization to react quickly if the scenario occurs
- Changing the mental map of senior executives
- Helping to align views and create a common language within a team
- Helping to foster “out-of-the-box” thinking
- Facilitating an ongoing strategic conversation

Worksheet 6.05, “Scenario Planning,” will help the planning team identify types of driving forces that could affect the organization’s future, define potential effects on the organization, and summarize potential conditions for the organization under each scenario.

### 6.3.2 The Delphi Technique

The planning team can also use the Delphi Technique to analyze a specific trend or emerging event. This technique can be used in tandem with identifying scenarios or with elements of a SWOT analysis. The Delphi Technique consists of brainstorming sessions conducted in a series of rounds. The basic idea of a Delphi survey is to interview experts on a set of alternatives or strategies. A set of questions is associated with alternatives or strategies, such as the estimated degree of importance, the expected time of realization, and the type of constraints. In the first round, the panel of experts is asked their opinions on the topics and asked to independently rank the alternatives according to their likelihood of occurrence. The opinions of all participants are then summarized and presented to these same participants. The participants are then asked to develop new thoughts and judgments on the topic and provide a second ranking, still working independently. This second round provides the participants with an opportunity to change their original opin-

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ions or stay with them and explain why. This process may continue for several rounds to revamp ideas and summarize thoughts. In the end, the group comes to a consensus on the topic.77

6.3.3 Business War-Gaming

War-gaming has been used by the military as a standard training tool to prepare officers for real situations and to simulate battlefield conditions. Drawing on the military experience, commercial war-gaming simulates a set of business conditions and challenges executives may face in designing successful strategies that evolve with the changing nature of the environment. Because war-gaming can be a valuable process to support planning and decision-making in the airport industry, the concept of business war-gaming and the ways that war games may help a planning team deal with future uncertainties are discussed in this section.

6.3.3.1 The Process

The war game process forces a rigorous examination of a situation from several different perspectives, not just the perspective of the organization sponsoring the war game. Through examining alternative perspectives, some of them hostile, the organization learns to recognize opportunities and threats that would never have been noticed using an “inside out” approach.

War games are most often conducted at two points in an organization’s planning process. At the outset of the planning process, a war game can be especially helpful in converting data and information about an organization’s markets, channels, competitors, and so forth, into actionable intelligence that will be used in subsequent planning. Alternatively, after a basic plan has been developed, a war game can be conducted to test whether the plan is robust enough to succeed in any realistic combination of events or actions.

War-gaming offers a dynamic, simulated, real-world environment in which to test an organization’s strategy. However, the war game must be set up specifically for each situation. The process for conducting strategic simulation is summarized below.

Before the war game simulation can occur, a game book must be prepared that provides (1) profiles of all stakeholders represented in the game, including information on strategy, financial performance, business activities, service offerings, and strengths and weaknesses and (2) an overview of the current environmental situation, including information on the past and present industry landscape and future projections.

Once the characteristics of the stakeholders and the environment of the game have been established, the players must be set up to act as passengers, tenants, employees, and others in the market. The planning team will execute the strategy to be tested, and the players acting as passengers and tenants will simulate passenger and tenant reactions to the strategy. A market team will simulate market reactions. A control team will monitor and evaluate the simulation, determining external shocks and assessing the impacts of actions taken by the teams playing the game. (External shocks are interventions that force different teams to address certain topics or move in a certain direction. In an airport setting, external shocks could include the announcement of an airline merger or emerging concerns about the construction timing for a major project, such as a passenger terminal.)

Once the game starts, the players play the simulation, starting with the current strategy and adjusting it to the changing environment move by move to test the quality of the strategy. This

should be done in light of market acceptance and customer reactions and in light of unexpected
dynamic changes in the market (e.g., based on external shocks). Following the simulation is a
debriefing session in which lessons learned are summarized and strategy is adjusted according
to new insights.

6.3.3.2 Benefits and Drawbacks

As noted in the Journal of the Association for Business Simulation and Experiential Learning, the
benefits and drawbacks associated with war-gaming include the following:78

• Benefits
  – The game allows sufficient control so as to ensure internal validity while at the same
time being sufficiently realistic so as to have some external validity.
  – The simulated environment removes the sensitivity associated with the problem area.
  – The game allows for high participant involvement.
  – The game permits the simulation of complex decision processes.
  – The game fosters a relationship between and among participants.
  – The planning team can analyze a number of situational variables to explore the dynamic
    interaction and impact of those variables on the organization’s proposed strategic plan.
  – The shift-in-time perspective allows participants to avoid a sole emphasis on short-term
    results.
  – The game allows for far greater control because it is possible to make certain that situations
    arise (e.g., higher fuel prices and lower passenger demand and airline change to networks
    and capacity).

• Drawbacks
  – There is a lack of resemblance to the real organization and participants are aware that they
    are participating in a “game.”
  – There is a relative lack of control of the participants’ status in the game. The participant’s
    status at any given time is a function of his/her previous decisions, as well as the starting
    conditions.
  – The game may result in vastly different perceptions of the manipulation.

6.3.4 Risk Analysis

Risk is associated with events or conditions that could have a positive or negative effect on an
organization’s objective if they occur. Risk analysis consists of risk identification and risk evalu-
ation. The process of conducting a risk analysis mainly consists of the following:

• Identifying and describing all relevant risk issues and types from all areas of the organization,
such as management, finance, procurement, quality management, and information technology.

• Evaluating all risks identified according to probability and effect and considering potential
  mitigation actions.

• Prioritizing and plotting risks on a risk map (as illustrated in Exhibit 6-4). A risk map priori-
tizes each risk according to its potential impact (significance) and probability (likelihood).
The map is generated by plotting the risk significance on the horizontal axis and the risk prob-
ability on the vertical axis. Positions in the map help prioritize the risks and indicate the level
of concern and attention which should be directed toward mitigating that risk given the poten-
tial impact on the organization’s ability to accomplish its vision. Risks above the bold line are
both significant in consequence and likely to occur. Risks below the bold line, on the other
hand, are less likely to occur and less significant.

78 James W. Gentry et al., “Simulation Gaming as a Means of Researching Substantive Issues: Another Look, Developments in
Business Simulation & Experiential Exercises,” Journal of the Association for Business Simulation and Experiential Learning,
6.3.5 Decision Tree Analysis

Decision tree analysis is a methodology typically used to actively support decision-makers in assessing alternative courses of action. Generated from statistical decision theory, decision tree analysis was developed in the field of business administration as a practical approach to assist corporate managers in weighing their options and designing logical solutions in a systematic fashion. It is usually applied in a consultative, prescriptive mode with decision-makers, helping them work through immediate problems.79

In decision tree analysis, the decision options and calculations can be displayed graphically as a network, sequentially indicating the decision choices that can be made, the actions of other negotiating parties, and the occurrence of uncontrollable and situational events. Decision trees also present the probability of occurrence of future events, the value of the alternate final outcomes, and expected intermediate values at each node in the tree. As one author has noted, “Overall, decision tree analysis offers an assessment of probable outcomes given choices made and the probabilities of occurrence of other party actions or events.”80

The process for conducting a decision tree analysis is as follows:

- Create a graphic in which decisions, solutions, events, and the range of possible outcomes are connected in the form of a tree, starting with the base decision.
- Assign a target/expected value to each possible outcome (estimate a cash value or score).
- Estimate and assign probabilities to the various outcomes (use empirical data or best estimate); the sum at each node must be 1 (or 100 percent).
- Calculate the tree values by multiplying the outcome values by their probability and adding them (and subtracting costs still to be incurred) starting with the last node to the root of the tree (“roll back” method).
- Determine which option has the largest resulting benefit; this is the best decision (based on current information).

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This chapter discusses the ways the planning team can identify the issues that should be addressed in the strategic plan, determine the organization’s strategies, and set long-term objectives to address the strategic issues identified.

The purpose of this chapter is to enable the planning team to do the following:

- Identify the most significant strategic issues that the organization faces. A strategic issue is a fundamental policy choice affecting an organization’s mandates, mission, product or service level and mix, customers or users, financing structure, processes, or management.
- Determine if the organization has adopted, or needs to adopt, a generic strategy. The concept of “generic strategies,” developed by Harvard Business School Professor Michael Porter, suggests that cost leadership, differentiation, and focus (cost focus and differentiation focus) are the primary sources of an organization’s competitive advantage.81
- Determine the grand strategy or strategies that the organization should adopt. Grand strategies provide a comprehensive general approach to guide the major actions necessary to accomplish the long-term objectives of the organization.
- Set long-term objectives that address the organization’s strategic issues and support the organization’s strategies. Long-term objectives are statements of the results an organization seeks to achieve over a specified period of time (typically 3 to 5 years). They represent enabling actions for achieving the organization’s strategies.

7.1 Identifying Strategic Issues

Strategic issues are the most important challenges for an organization to address during the term of the strategic plan, particularly during the 12-month or fiscal year cycle following completion and adoption of the strategic plan. Strategic issues may be identified, in part, by reviewing the information from the organizational review (Chapter 4 worksheets) and the internal and external environment scan (Chapter 6 worksheets).

The 2008–2012 strategic plan of the Metropolitan Airports Commission (MAC, owner and operator of Minneapolis-St. Paul International Airport [MSP]) is an example of the types of strategic issues that may be identified by the operators of larger airports in their strategic plans:

The most critical issues [the] Metropolitan Airports Commission will face in the next 5 years [are]:

- Meeting Customer Expectations for Service Levels
  - Challenge: Customers expect MAC to maintain and improve service levels throughout our system of airports. Allocation of financial resources necessary to meet expectations needs to keep pace as the size and complexity of the infrastructure continues to grow.

• Operating in a Changing Airline Industry
  – Challenge: Our challenge is to remain financially viable as the structure of the airline industry continues to evolve. The potential exists for more airline bankruptcies, mergers, dissolutions, and shifts in market share.
• Transitioning the Organization through Changes in Leadership
  – Challenge: A majority of senior staff are eligible to retire during the life of this plan. Retirements will also occur in a number of key technical and professional positions.
• Evaluating and Determining MSP Development Plan Options
  – Challenge: Our challenge is to match the development of expanded airport facilities to correspond with customer demands while remaining financially viable.
• Addressing Unfunded or Underfunded Mandates
  – Challenge: Federal, State, and local mandates continue to increase as funding is reduced or eliminated.
• Complying with the 2007 Noise Mitigation Decree
  – Meeting the timelines set out by the court to complete this process and maintaining high quality in the products and services delivered.

An example of strategic issues that may typically be identified in strategic plans for GA airports was taken from Yuba County Airport’s 2008 Strategic Plan (Yuba County is located in the north central part of California, 125 miles northeast of San Francisco and 125 miles west of Reno, Nevada):

The strategic concern involves the constant generation of sufficient revenue to be a key contributor for the future economic development of the County. Other challenges are removing negative cash flow, increasing business opportunities, funding airport expansion projects and boosting revenues through recreational opportunities.

By completing Worksheet 7.01, “Identifying Strategic Issues,” members of the planning team will do the following:
• Individually describe the most important strategic issues that should be addressed in the strategic plan and explain why each issue is a priority. Explain how the issue relates to the organization’s strengths, weaknesses, opportunities, or threats and how the issue relates to the organization’s mission, vision, or mandates.
• Jointly compile the individual lists of strategic issues into a master list and make certain that a balance exists between internally and externally focused issues. Each issue on the master list should also be examined against a set of criteria designed to ensure that the issue is strategic rather than operational.
• Jointly develop a final list of six to eight of the most important strategic issues to be addressed, ranked by order of importance.

To identify an organization’s most significant strategic issues, complete Worksheet 7.01, “Identifying Strategic Issues.”

7.2 Determining a Generic Strategy

The concept of “generic strategies” was developed by Michael Porter, a professor at Harvard Business School. According to Porter, these strategies—cost leadership, differentiation, and focus (for airports this translates into both cost focus and differentiation focus)—are the primary sources of competitive advantage. Exhibit 7.1 illustrates Porter’s sources of competitive advantage and the resulting generic strategies.

84 Ibid.
7.2.1 Cost Leadership

A broad cost leadership strategy aims to place an organization among the lowest cost producers. Low costs are achieved by focusing on low-cost inputs and capital programs, by offering a standardized product, and by achieving a high volume of operations and economies of scale. Southwest Airlines uses this strategy in the airline industry. Memphis International Airport is an example of an airport where a broad cost leadership strategy is practiced. According to an April 2008 presentation, the Memphis-Shelby County Airport Authority is attempting to position the airport as “America’s Low-Cost Model Airport Hub.” An example of an airport outside of the United States where a broad cost leadership strategy is practiced is Frankfurt-Hahn Airport in Germany.

7.2.2 Differentiation

In adopting a broad differentiation strategy, an organization aims to develop a product or range of products that are perceived to be unique compared with products offered by its competitors. Singapore Airlines uses this strategy in the airline industry by offering superior in-flight service.

An example of an airport where a broad differentiation strategy is practiced is Austin-Bergstrom International Airport. In May 2008, the low-cost, no-frills South Terminal opened. This terminal is the first dedicated facility constructed in the United States to accommodate low-cost airlines (but is currently temporarily closed until a new ultra-low-cost carrier tenant can be found). The South Terminal has common ticket counters and gate areas for all airlines occupying the terminal and no loading bridges for passengers. The airport’s architectural award-winning Barbara Jordan Terminal continues to cater to full-service airlines. An example of a non-U.S. airport where a broad differentiation strategy (with a dedicated low-cost terminal) is practiced is Kuala Lumpur International Airport in Malaysia.

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86 Further information on this airport’s low-cost strategy can be found in “Basic Information,” available online at http://www.hahn-airport.de/default.aspx?menu=press_basic_infos&cc=en (accessed May 28, 2009).
CASE STUDY
Adopting a Broad Differentiation Strategy—Austin-Bergstrom International Airport

Since Austin-Bergstrom International Airport (the Airport) opened in 1999, the City of Austin’s Department of Aviation, the airport operator, has attempted to leverage a broad differentiation strategy by developing unique products for both airline tenants and passengers. The most visible manifestation of this strategy is the low-cost, no-frills South Terminal that opened at the Airport in May 2008.

According to Airport Director Jim Smith, the idea for the South Terminal originated with an environmental scan revealing that the ultra-low-cost airline model, which had already been successfully used in Asia (AirAsia) and Europe (Ryanair), would soon be adopted in the Mexican marketplace. Reasoning that the Airport would eventually be competing with the airports in Houston and San Antonio for potential trans-border service operated by this type of airline, the Department of Aviation decided to contact the ultra-low-cost Mexican airline, VivaAerobus. In an article in Airport Business Magazine, Mr. Smith explained that “Once we started to get into negotiations with VivaAerobus, it became clear to us that to compete successfully, we needed to differentiate our product. In addition to having the main [Barbara Jordan] terminal here, we needed to have the type of facility that was more suited to the business model of these carriers.”

To meet the needs of VivaAerobus and other ultra-low-cost airlines, the Department of Aviation entered into a partnership with General Electric’s subsidiary, GE Commercial Aviation Services (GECAS), to operate a streamlined, one-story terminal building (previously owned by the National Guard) with no jet bridges or complex baggage system and common use holdrooms, gates, and ticket counter areas. GECAS also operated the parking and rental car facilities at the terminal, while the Department of Aviation operated the airfield and security. The reduced frills level allowed the Department of Aviation to charge rental rates at the South Terminal that were roughly half of what the airlines in the main terminal building paid. However, the airlines operating at the South Terminal paid the same airfield charges as the airlines operating at the main terminal.

VivaAerobus started with twice-weekly service to Cancun and Monterrey, Mexico, in May 2008 and added new service between the Airport and Puerto Vallarta, Mexico, in January 2009. In fall 2008, VivaAerobus, which is partly owned by the large Mexican bus group, IAMSA, also began offering $20 bus service between the South Terminal and downtown San Antonio and Houston. This unique service competitively benefitted the Airport as well, by expanding the Airport’s catchment area to include passengers in the San Antonio and Houston areas. In June 2009, however, the negative impact on bookings from the swine flu virus caused VivaAerobus to announce a suspension of its service from Austin. The Airport has temporarily closed the terminal until a new ultra-low-cost carrier can be recruited to begin new service.


7.2.3 Focus

Organizations that use focus strategies concentrate on a particular niche segment of the market and within that segment attempt to achieve either a cost advantage or differentiation. For example, in the airline industry, Allegiant Air uses a cost focus strategy by providing nonstop service to leisure travelers in smaller markets while maintaining low operating costs. OpenSkies, a British Airways affiliate, uses a differentiation focus strategy by offering a high level of service, including an all-business class (84 seats) configuration onboard its B-757-200 aircraft, to travelers in the New York-Paris market.
An example of an airport where a cost focus strategy is used is St. Petersburg-Clearwater International Airport. The airport operator’s vision for the future is to continue its low operating costs to attract new entrant airlines that provide low-cost, point-to-point service, as well as new international nonstop transatlantic flights to Europe.

An airport where a similar cost focus strategy is practiced is Phoenix-Mesa Gateway Airport. According to its 2008–2009 Strategic Business Plan, the Williams Gateway Airport Authority (the airport operator) strategy is to provide a very low cost operation to the airlines to encourage the establishment of passenger airline service at the airport as an alternative to Phoenix Sky Harbor International Airport.\(^{87}\) The Authority would specifically like to position the airport as a reliever airport for point-to-point North American service. The Williams Gateway Airport Authority is also pursuing the same strategy for air cargo, as the City of Phoenix does not intend to build additional cargo facilities at Phoenix Sky Harbor International Airport.

An example of an airport where a differentiation focus strategy has been adopted is Fort Worth Alliance Airport. The first purely industrial airport in the western hemisphere is the anchor of a thriving master-planned development focused on intermodal distribution and residential development. A differentiation focus strategy has also been adopted at Rickenbacker International Airport in Columbus, Ohio, where the focus is on air cargo operations and charter passenger services.

Table 7-1 shows requirements for successfully adopting a particular generic strategy.

Risks associated with each of the generic strategies are as follows:

Cost Leadership:
- Myopic viewpoint toward cost reduction (overlooks user wants and needs)
- Rivals may successfully imitate the low-cost strategy
- Heavy investment in a low-cost approach can lock an organization into this strategy

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Differentiation:
• If selling price is too high, buyers may become price sensitive despite customer loyalty or uniqueness
• Users may decide they do not need the special features (means of differentiation no longer provides value)
• Rival firms may imitate the product, decreasing product uniqueness

Focus:
• Broad-range competitors may find ways to match focused organization’s services
• Buyer preferences and needs may shift
• A competitor may find a smaller segment within the targeted market segment

By completing Worksheet 7.02, “Does Your Organization Have a Generic Strategy?” members of the planning team will do the following:
• Explain which generic strategy best describes the organization’s current strategy. If the organization does not currently fit into one of these strategies, it may be “stuck in the middle” and unable to develop a long-term competitive advantage.
• Specify what particular generic strategy, if any, the organization should adopt to guide its future development and explain why this particular strategy was selected.

7.3 Grand Strategies

Grand strategies provide a comprehensive general approach to guide the major actions necessary to accomplish the organization’s long-term objectives. While any of these strategies could serve as the basis for achieving the organization’s long-term objectives, airport organizations (particularly those operating multi-airport systems) may choose to pursue more than one grand strategy. The most common grand strategies for airport organizations to pursue are the following:

• **Concentrated Growth.** A concentrated growth strategy directs an airport’s resources toward capturing a larger market share by increasing the use rate of present customers or tenants, by attracting competitors’ customers or tenants, or by selling the airport’s services to new customers or tenants. This strategy has been adopted at Dallas/Fort Worth International Airport.

• **Market Development.** A market development strategy focuses on marketing the airport’s existing services to customers in new market areas. An example of this strategy would be Milwaukee’s General Mitchell International Airport, located 85 miles north of Chicago, advertising in the Chicago media market to attract new passengers for a website designed to implement this strategy at the airport.88

• **Product Development.** A product development strategy involves developing new products for current markets. The low-cost, no-frills South Terminal at Austin-Bergstrom International Airport is an example of a product development strategy.

• **Concentric Diversification.** A concentric diversification strategy involves the pursuit of opportunities that are synergistic with an airport’s core aeronautical services. An example of a concentric diversification strategy is the Columbus Regional Airport Authority’s develop-

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• **Vertical Integration.** A vertical integration strategy may involve either forward integration, wherein airport operators seek increased control of user-support functions, or backward integration, wherein airport operators seek control of suppliers. An example of a vertical integration strategy would be Capital Region International Airport’s (Lansing, Michigan) booking engine.89

• **Horizontal Integration.** A horizontal integration strategy involves an airport combining with other organizations in the same industry. An example of this strategy is The Port Authority of New York and New Jersey’s acquisition of the lease for Stewart International Airport in Newburgh, New York.

• **Joint Venture or Alliance.** A joint venture or alliance strategy provides for some of the benefits of collaboration without the transfer of ownership or operational control. An example of this strategy is Vancouver Airport Services, the consulting practice of the Vancouver International Airport Authority, which manages an expanding network of 18 airports on three continents and provides specialized consulting services to clients worldwide.

• **Turnaround or Retrenchment.** An airport operator pursuing a turnaround or retrenchment strategy usually focuses on cost reduction or asset reduction in an attempt to regain financial strength. The operator of Lambert-St. Louis International Airport pursued this strategy after American Airlines dismantled its mainline hub operation at the airport in 2003, following the airline’s completion of its merger with Trans World Airlines.

• **Divestiture or Liquidation.** This strategy involves the sale or closure of an airport or part of an airport. This strategy is not commonly pursued because, particularly in the case of liquidation, it may be difficult to implement rapidly if the airport receives FAA grants.

By completing Worksheet 7.03, “What Are Your Organization’s Grand Strategies?” members of the planning team will be able to do the following:

• Determine which grand strategy or grand strategies are appropriate for the organization by determining where the organization fits on the grand strategy matrix presented in Exhibit 7-2. An organization’s grand strategies are typically a function of market growth and competitive positioning. The text accompanying Worksheet 7.03 discusses appropriate strategies for airports that fall within each quadrant of the matrix.

• Explain the strategies that the organization will adopt to guide its long-term business objectives and why these strategies were selected.

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**7.4 Setting Long-Term Objectives**

Long-term objectives are statements of the results that an organization seeks to achieve over a specified period of time (typically 3 to 5 years). Long-term objectives should address the organization’s strategic issues. Airport strategic plans typically include long-term objectives for the following areas:

• **Financial Responsibility or Performance.** This includes profitability and productivity (82 percent of respondents to the online survey have these types of long-term objectives in their strategic plans).

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89 See www.flylansing.com/ (accessed May 29, 2009).
Rapid Market Growth

1. Concentrated Growth – e.g., DFW (Using market or product development)
2. Vertical integration – e.g., LAN
3. Concentric diversification – e.g., LCK

Strong Competitive Position

1. Concentric diversification
2. Joint ventures or alliances – e.g., YVR

Slow Market Growth

1. Reformulation of concentrated growth
2. Horizontal integration – e.g., PANYNJ
3. Divesture or liquidation

Weak Competitive Position

1. Turnaround or retrenchment – e.g., STL
2. Concentric diversification
3. Divesture or liquidation

Notes:
DFW = Dallas/Fort Worth International Airport
LAN = Capital Region International Airport (Lansing, MI)
LCK = Rickenbacker International Airport (Columbus, OH)
PANYNJ = Port Authority of New York and New Jersey
YVR = Vancouver International Airport
STL = Lambert-St. Louis International Airport

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Exhibit 7-2. Grand strategy matrix.

- **Human Resources.** This includes employee relations, training and diversity, and organizational structure.
- **Technology.** This includes goals for technology implementation, such as improving productivity.
- **Public Responsibility.** This includes regional economic development; environmental programs and practices; and outreach to communities, regional businesses, and government agencies.
- **Safety and Security.** This includes both airside and landside enhancements.
- **Customer Service.** This includes customer service delivery and customer research (40 percent of respondents to the online survey have these types of long-term objectives in their strategic plans).
- **Airport Operations and Access.** This includes facilities maintenance, parking, and ground transportation options (21 percent of respondents to the online survey included these types of long-term objectives in their strategic plans).
- **Airport Development.** This includes capital development programs.
- **Competitive Positioning of Core Business.** This includes brand image, efforts to expand user and customer bases, and growth of air service options (domestic, international, cargo).
- **Growth of Non-Core Business.** This includes non-aeronautical revenue development opportunities, both airside and landside.

The type and number of long-term objectives selected will vary by airport. According to the results of the online survey, most airport strategic plans currently include four or five long-term objectives.

Members of the planning team should jointly complete Worksheet 7.04, “Setting Long-Term Objectives,” for each long-term objective selected. In completing the worksheet, the planning team will do the following:
- Specify and explain the strategic issues that the long-term objective will address
- Describe the long-term objective, how the long-term objective addresses the strategic issues, and the challenges that might arise in implementing the long-term objective (as well as strategies for overcoming those challenges)
- Critique the long-term objective against the qualities of a successful long-term objective

Set an organization’s long-term objectives by completing Worksheet 7.04, “Setting Long-term Objectives.”
Formulating Short-Term Objectives and Creating Action Plans

This chapter is intended to guide the planning team through the process of formulating short-term objectives and creating action plans that will guide the day-to-day activities of the organization.

The purpose of this chapter is to enable the planning team to do the following:

- Formulate the organization’s short-term objectives that should be accomplished in 1 to 2 years. Respondents to the online survey indicated that they typically set four to six short-term objectives in support of each long-term objective.
- Create an action plan for each short-term objective that specifies who will do what and by when to achieve the particular objective. These tasks should be undertaken now or in the immediate future and should be completed within a year. The action plan section of the strategic plan should be consistent with, and integrated into, the organization’s department-level business plan.

8.1 Formulating Short-Term Objectives

Short-term objectives add specificity to the incremental actions that must be accomplished to achieve long-term objectives and implement strategies. According to Pearce and Robinson, short-term objectives (and their associated action plans) help implement strategies in at least three ways:

- Short-term objectives often “operationalize” long-term objectives. For example, if an airport’s stated long-term objective is a 15-percent increase in enplaned passengers over 3 to 5 years, a specific target or objective for increasing numbers of enplaned passengers during the current and upcoming years should be set to indicate that sufficient progress is being made toward achieving the long-term objective.
- Discussion about and consensus on short-term objectives help raise issues and potential conflicts within an organization that usually require coordination to avoid dysfunctional consequences (e.g., conflict between the marketing department, which wants to implement an expensive airline incentive program, and the finance department, which wants to reduce costs).
- Short-term objectives help identify measurable outcomes of action plans, which can be used to ensure that feedback, correction, and evaluation are more relevant and acceptable. Chapter 9 explains how short-term objectives can be paired with quantitative and qualitative performance measures.90

The value-added benefits of short-term objectives (and their associated action plans) include the following:

- Short-term objectives (and action plans) give operating personnel a better understanding of their roles in the organization’s mission. This clarity of purpose may assist an airport operator in applying its human resources more effectively, which may add tangible value.
- Short-term objectives (and action plans) provide a clear, measurable basis for developing budgets, schedules, trigger points, and other mechanisms for controlling implementation of a strategy.
- Short-term objectives (and action plans) can be powerful motivators of managerial performance, particularly when the objectives are linked to the airport’s compensation structure.91

An example of short-term strategic plan objectives, and the associated long-term objective, for a medium hub airport are as follows (from Bradley International Airport’s 2009 strategic plan):

**Long-term Objective**
- Deliver an exceptional customer experience at the airport (short security wait times, concessions options, facilities upkeep, and so forth).

**Short-term Objectives**
- Continue to implement new signage program to ease passenger wayfinding—consistent lettering and use color coding.
- Expedite the efforts of Project Development and Leasing to market the opening of new concessions in Terminal A West, particularly the full-serve restaurant and bar.
- Continue to recognize the importance of the Bradley Ambassador program.
- Expand in-terminal passenger amenities—interactive kiosks, education oriented activities, and so forth.
- Remain flexible in order to be able to provide for unforeseen customer needs and amenities.92

An example of short-term strategic plan objectives, and the associated long-term objective, for a non-hub airport are as follows (from the Lebanon Municipal Airport strategic plan):

**Long-term Objective**
- Identify additional financial resources and revenue generating opportunities.

**Short-term Objectives**
- Explore additional revenue generating opportunities such as additional hangars, Business Park, and on-site restaurant.
- Establish an airport TIF [Tax Increment Finance] district.
- Explore additional grant opportunities.93

Members of the planning team should jointly complete Steps 1 and 2 of Worksheet 8.01, “Formulating Short-Term Objectives and Creating Action Plans,” for each short-term objective that will be included in the strategic plan. In completing Steps 1 and 2 of the worksheet, the planning team will do the following:

- Describe the short-term objective and the challenges that might exist in implementing the short-term objective (as well as strategies for overcoming these challenges). The planning team should also critique the short-term objective against the qualities of a successful short-term objective.
- Explain the long-term objective that the short-term objective supports, if any, and explain how the short-term objective supports the long-term objective.

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91 Ibid, 292–293.
8.2 Creating an Action Plan to Implement Short-Term Objectives

The detail and level of specificity contained in an action plan depend on several factors, including the complexity of the short-term objective to which the action plan applies, and the number of staff who will participate in implementing the action plan. An action plan typically specifies the following:

- The short-term objectives to which the action plan applies.
- The actions or decisions necessary to achieve the short-term objective.
- The deadline for completing each action necessary to achieve the short-term objective. Sometimes only the deadline for completing the action is noted, but often the deadlines for completing interim steps toward accomplishing each action are noted as well. Of the respondents to the online survey, 75 percent indicated that they set specific deadlines for completing each action necessary to achieve a short-term objective.
- The party responsible for ensuring the accomplishment of each action. This responsible party should be defined in terms of a particular position in the organization rather than a particular person, as people may change positions or roles or leave the organization.
- The resources required to accomplish each action. Resources are typically specified in terms of people, time, materials, equipment, facilities, and budget. When developing the action plan, the planning team should involve the people responsible for ensuring the accomplishment of each action in determining the resources required to accomplish the action. According to the online survey data, only about half of the respondents currently involve department leaders or their staff in assessing the resources required to accomplish each action.
- The budget allocated for accomplishing each action. Online survey data indicate that this important consideration may be overlooked at many airports during the strategic planning process. Of the respondents to the online survey, 80 percent indicated that they did not assign a specific budget for implementing each of the short-term objectives included in the organization’s strategic plan.
- The frequency of reporting the status of the actions to be accomplished.

A brief example of an action plan is included in Step 3 of Worksheet 8.01, “Formulating Short-Term Objectives and Creating Action Plans.”

Once all action plans that are to be contained in the strategic plan have been drafted, the planning team should carefully examine them to be sure that the information related to each short-term objective is complete and that the action plans are efficiently organized and integrated for use by the entire organization. Considering all of the action plans collectively, the planning team should ask the following questions:

- Is there any duplication of actions among the different action plans?
- Can any of the actions be combined for any particular action plan?
- Do any of the actions conflict with one another (i.e., would accomplishment of one action make it difficult or impossible to accomplish another action)?
- Should any of the actions be divided into one or more other actions?
- Are some or all of the actions interconnected in some way?94

Once the action plans are integrated, the planning team should ensure that they are realistic, which can be tested by answering the following questions:

- Are there enough people in the organization to accomplish the actions envisioned in all of the action plans?

• Is there enough money to support the budgets specified across all of the action plans?
• Are there sufficient materials, equipment, and facilities to support implementation of the various action plans?
• Have any other issues become apparent during the review of the integrated action plans?95

The actions specified in the action plans should also be consistent with, and be integrated into, each of the organization’s operating units’ (e.g., department, division, and so forth) annual business plans.

Members of the planning team should jointly complete Step 3 of Worksheet 8.01, “Formulating Short-Term Objectives and Creating Action Plans,” to create an action plan for each short-term objective that will be included in the strategic plan. In completing Step 3 of the worksheet, the planning team will do the following:

• Describe the short-term objective to which the action plan applies and
• Formulate the action plan by filling out a chart that contains the contents of the action plan.

Formulate an action plan by completing Step 3 of Worksheet 8.01, “Formulating Short-Term Objectives and Creating Action Plans.”

95 Ibid.
This chapter is intended to prepare the planning team for the challenging task of effectively communicating the strategic plan to employees and other stakeholders.

The purpose of this chapter is to assist the planning team with the following:

• Defining the purpose and content of the written strategic plan
• Defining internal and external communication strategies
• Implementing the plan by defining roles and responsibilities, selecting key performance indicators and targets, implementing reward/incentive programs, and developing a training and development program

9.1 Defining the Purpose and Content of the Written Strategic Plan

The written strategic plan is an essential tool for communicating the organization’s vision, mission, values, and future activities and programs throughout the organization and for assigning accountability to managers and staff for goal achievement. However, a written plan is not the only tool available for disseminating the organization’s strategic plan. As indicated below, other communication tools include meetings, newsletters, articles, and media interviews.

The majority of the organizations surveyed document the results of their strategic planning process in a written document, generally referred to as the organization’s strategic plan. Results of the online survey were the following:

• 28 percent of respondents indicated that their strategic plan is a clear and concise document that summarizes the results of a detailed analysis and is distributed to key staff members/leaders.
• 20 percent of respondents indicated that their strategic plan is a list of goals and objectives that include performance metrics.
• 16 percent of respondents indicated that their strategic plan is a clear and concise document that summarizes the results of a detailed analysis and is made available to the public and stakeholders.
• 12 percent of respondents indicated that their strategic plan is a list of goals and objectives.
• 8 percent of respondents indicated that their strategic plan is a clear and concise document that summarizes the results of a detailed analysis and is distributed to all employees.
• 4 percent of respondents indicated that their strategic plan is a detailed analysis and report distributed to key staff members/leaders.
• 12 percent of respondents did not answer this question.

As suggested by the responses to the online survey, strategic plans vary in content and design, but the written document generally provides a summary of the analyses and includes a description of the organization’s strategies and objectives. The planning team should note that the main
output of the planning process is not the written document, but the information, learning, considerations, and decisions that result from the process. Therefore, the written document should be brief and include only the key outcomes of the process.

The written strategic plan generally serves as a key internal and external communication tool and as a marketing tool. Internally, a strategic plan can be used to communicate the organization's vision, strategies, and objectives to staff and assert the importance of their contribution to the organization's overall performance. The goal is to unite staff and department leaders with a set of common goals on which they can act every day. As participants in the focus groups indicated, communication of the plan is critical to gaining staff buy-in. Employees have to understand the organization's vision so that they can contribute to it in some way. Communication of the strategic plan allows for better-coordinated actions and allows staff to share a common vision for the organization. If staff and department leaders understand the organization's vision, strategies, and objectives, they have an opportunity to take actions and make decisions that contribute to achievement of the vision and are in alignment with the organization's strategies and objectives.

Externally, a strategic plan can be used to effectively communicate the organization's vision, strategies, and objectives to the general public, businesses, and government agencies. Additionally, communication of the strategic plan to external stakeholders helps build the partnerships and support mechanisms required to meet the organization's needs. Communicating the organization's plan to external stakeholders may also improve the organization's image by advertising positive initiatives and results and improve transparency by providing information that explains the process by which programs are initiated.

Finally, an organization's strategic plan, especially the executive summary, can be used as a marketing tool for advertising the organization's strategies and programs. The organization's strategic plan, for instance, can be used to attract new tenants (such as airlines) that may have interest in the programs to be completed for the airport. As noted in the focus group discussions, communication of the strategic plan also helps ensure the support of community leaders. If external stakeholders are kept informed of the organization's long-term objectives, they are less likely to question the organization's programs.

Each organization should tailor its plan according to the size of the organization and its needs. It is recommended that the plan be formatted so that the body of the plan can be sent to external stakeholders such as Metropolitan Statistical Area representatives, the general public, and local businesses and be posted on the Internet. In addition, the plan should include appendices that provide the details of the analyses conducted and that would be for internal distribution only. Table 9-1 provides a summary of the elements of a strategic plan and to whom the plan should be distributed. This table was prepared based on information received from the participants to the focus groups that were established as part of this project.

To define the elements of the written strategic plan that should be communicated to internal and external stakeholders, refer to Worksheet 9.01, “Checklist for Determining Strategic Plan Content.”

To the extent possible, the strategic plan document should be reviewed both internally and by key external stakeholders. Internally, the plan should be reviewed for accuracy, completeness, and

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Writing, Communicating, and Executing the Plan

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clarity. In addition, the planning team should make sure that the actions that the plan requires and the order in which they are to be taken are clear, the plan can be implemented in a reasonable manner, and the persons responsible for implementing the strategic initiatives are identified.

The final written document should be submitted to the policy board for comment and approval.

9.2 Defining Internal Communication Strategies

Beyond the written plan, the findings of the strategic planning process can also be disseminated to staff via other communication strategies, such as large group meetings, workshops, and the organization’s intranet site. According to the online survey, communication tools used to communicate an organization’s strategic initiatives/objectives to employees include the following:

- Large group meeting(s) led by senior management (34 percent)
- Small group meetings with department leaders and their staff (26 percent)
- Distribution of the strategic plan to each employee (14 percent)
- Internal newsletters and/or the organization’s intranet site (12 percent)
- Display of highlights of the organization’s strategic plan in prominent locations (8 percent)
- Individual meetings between department leaders and each member of their staff (6 percent)

9.3 Defining External Communication Strategies

To build the partnerships and support mechanisms required to meet the organization’s needs, its grand strategies/long-term objectives should be communicated to key community/external stakeholders. Airport organizations reported using the following communication tools when reaching out to community/external stakeholders:

- Referencing the strategic initiatives/objectives in speeches (15 percent)
- Senior management conducting media interviews (15 percent)

Table 9-1. Strategic plan content and distribution.

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<tr>
<th>Element</th>
<th>To Be Included in:</th>
<th>Internal Stakeholders</th>
<th>Senior Management Team (CEO or Equivalent)</th>
<th>External Stakeholders</th>
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<td>Communication Plan</td>
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</table>

Posting the strategic plan on the organization’s Internet site (13 percent)
Senior management making presentations at luncheons (12 percent)
Mailing the strategic plan to those who request it (9 percent)
Mailing the strategic plan to key stakeholders (7.5 percent)
Writing newsletter articles (7.5 percent)
Issuing press releases (7.5 percent)
Printing the organization’s mission statement on letterhead/business cards (6 percent)
Distributing a video to key stakeholders (1.5 percent)
Issuing a newsletter dedicated to the plan’s implementation (1.5 percent)
Other: encouraging continuous dialogue, posting the mission statement on the organization’s website, and listing strategic objectives in the organization’s financial reports (4.5 percent)

9.4 Implementing the Plan

“The payoff of strategic planning is in its application, in the execution, and implementation of the strategic plan.” For implementation of the strategic plan to be successful, objectives should involve each of the organization’s operating/business units (as defined in Chapters 5 and 6). In addition, for the plan to be successful, progress toward realization of the organization’s vision should be monitored by frequently reviewing key performance indicators.

Implementation of the plan should involve the initiation of several tasks led by individuals. The respondents to the online survey indicated that the leadership team (63 percent), department leaders and their staff (21 percent), and department leaders only (16 percent) should be responsible for translating the strategic plan into specific goals and actions. Thus, for the plan to be successful, department leaders and senior management must carefully manage initiation of these tasks. As illustrated in Exhibit 9-1, for implementation of the plan to be successful, it is imperative that department leaders and senior management do the following:

- Define Internal Stakeholder Roles and Responsibilities. As indicated in Chapter 8, each short-term objective necessary to realize the organization’s vision should be associated with department-level responsibilities. If not, progress toward attaining a desired future will stall.

Exhibit 9-1. Key elements of the implementation plan.

• **Select Key Performance Indicators and Targets.** The selection of key performance indicators and targets is essential to gauging progress toward achieving the organization’s established objectives.

• **Implement Reward/Incentive Programs.** As indicated during the research team workshop and noted by several participants in the focus groups, a key element in implementing the plan is to ensure that individual performance is linked to organizational performance. As such, staff should be held accountable and rewarded for achieving results.

• **Define and Develop a Training and Development Program.** To ensure proper implementation of the plan, a training and development program may have to be developed.

Respondents to the online survey indicated that execution of the tasks and goals set forth in the strategic plan can be ensured by the following:

- Measuring key performance indicators and targets (41 percent)
- Assigning individuals/departments specific goals and tasks (38 percent)
- Conducting periodic presentations to the Board and/or developing monthly reports (16 percent)

The remaining 5 percent of respondents indicated that they have not set any specific performance indicators to ensure execution of the tasks and goals set forth in their strategic plans.

### 9.4.1 Defining Deadlines and Responsibilities

As indicated in Chapter 8, each short-term objective should be associated with a deadline and a person responsible for implementing and executing the actions required to fulfill the objective. The online survey data show that 75 percent of respondents set specific deadlines for each short-term objective included in their organization’s strategic plan. As illustrated in Exhibit 9-2:

- Senior management (in collaboration with the planning team) should be responsible for defining the organization’s generic and grand strategies and long-term objectives.
- Department leaders (in collaboration with the planning team) should be responsible for defining the short-term objectives and action items required to make progress toward achieving the organization’s vision while supporting its mission.

![Exhibit 9-2. Vision and individual responsibility alignment.](image-url)
• Staff should be responsible for conducting the actions that will lead to accomplishing the department’s objectives.

With regard to assessing the resources (staffing, training, and so forth) required to accomplish the organization’s strategic goals, the online survey results were mixed: 49 percent of the respondents think that the leadership team should be responsible for assessing the required resources, while 34 percent consider it the department leaders’ responsibility. The remaining 17 percent indicated that department leaders and their staff should be the responsible parties.

Of the respondents to the online survey, 86 percent indicated that their organizations reinforce departmental responsibilities for achieving the organization’s strategic objectives by incorporating these responsibilities into the annual business planning or budgeting process for each department.

In addition, 75 percent of the respondents indicated that individual responsibilities for achieving the organization’s strategic goals are reinforced by incorporating the responsibilities into individual employee performance objectives.

9.4.2 Pairing Short-Term Objectives with Key Performance Indicators and Targets

Airport management should monitor its progress toward achieving specific short-term objectives by pairing them with appropriate key performance indicators. These performance indicators can include both quantitative and qualitative measures. Such indicators inform senior management and department leaders of the progress made toward achieving the organization’s vision, and can also be used to motivate and compensate staff. If the organization’s employees can relate their efforts to measures of success, they are more likely to be motivated to reach their performance targets.

Before any performance indicators are selected, it is vital to identify the organization’s short-term objectives (refer to Chapter 8), which are, in turn, dependent upon the organization’s vision, strategies, and stakeholders. Consequently, performance indicators are used to measure progress toward achieving these objectives. Performance indicators are critical to implementation of the strategic plan and, therefore, the success of the organization. Exhibit 9-3 illustrates the relationship between strategy and key performance indicators.

Key performance indicators can be categorized by business units (departments) or strategic initiatives. Operators of large hub airports may decide to categorize their performance indicators by department so that each department leader can monitor its department’s performance. A performance indicator for the finance department of a medium or large hub airport, for instance, may be cost per enplaned passenger while, for the planning department, an indicator may be the number of enplaned passengers per gate or level of service. Small organizations, on the other hand, may elect to monitor their performance as a whole according to the strategic initiatives they have agreed to pursue.

Exhibit 9-4 illustrates the process for establishing key performance indicators. The way that performance will be measured should be established in advance, and performance indicators should be tested before being selected as measures of success/failure. In addition, once performance indicators have been defined and a way to measure them has been determined, clear targets should be identified. The targets should be specific so that each person within the organization can take action toward accomplishing them.
The definition, review, and analysis of metrics or performance indicators that are available to airport organizations are the subject of a separate research project being conducted by the ACRP: ACRP Project 01-06, “Guidebook for Developing an Airport Performance-Measurement System.”

### 9.4.3 Performance Management Techniques

To determine how successful the implementation of the organization’s strategic plan is, the planning team must set up a control mechanism to measure performance. According to the online survey, customer surveys and benchmarking are the two most commonly used mechanisms for measuring performance. Of the respondents to the online survey, 68 percent indicated that their organization is involved with some form of benchmarking to measure performance. Other mechanisms mentioned by the respondents included activity-based costing, environmental management, Balanced Scorecard, quality management systems, and value-based management. Other basic techniques used to collect internal performance data include existing records and reports, observation of individual and group performance, focus groups, and interviews with individuals.

**Exhibit 9-3. Performance indicators and strategy alignment.**

**Exhibit 9-4. Performance measurement process.**
The purpose of these performance management techniques is to help the management team determine whether a strategy is on target or whether the basic direction should be altered. Setting performance metrics is a responsibility shared by senior management and department leaders, whereas monitoring is a responsibility to be shared by department leaders and frontline employees.

According to the online survey respondents, the primary reasons for using performance metrics are to have a means for measuring annual performance (45 percent), allow progress toward achieving the strategic goals (35 percent), provide a means for measuring financial performance (15 percent), and provide a means for improving efficiency (5 percent).

It should also be noted that 63 percent of the respondents to the online survey made a distinction between operations (“day-to-day work process”) and strategic targets with regard to performance measurements.

As indicated before, performance management techniques available to airport organizations are further discussed in ACRP Project 01-06, “Guidebook for Developing an Airport Performance-Measurement System.”

9.4.3.1 Survey

Surveys are a simple but effective way to measure performance. Tools available to measure customer and employee satisfaction include complaint cards, web-based feedback and survey, comment cards, and individual or group interviews. To develop an effective survey, the planning team will need to determine the number of needed respondents to provide a meaningful sample and will need to avoid subtle bias when wording the questions.

9.4.3.2 Activity-Based Costing

Activity-based costing is a method of allocating costs to products and services based on the understanding that different activities and products consume different proportions of resources. “The method was originally developed to measure manufacturing processes in which overhead was either immaterial or was mainly a function of direct labor, which, in turn, was dependent upon production volume.”

Activity-based costing represents a rational approach to product, service, and customer costing, identifying the major activities performed in each function across the business. The actual consumption of company resources (employee time, assets, money, and so forth) by each activity is assessed. As part of the strategic planning process, activity-based costing provides a means for an organization to enhance its cost and revenue control system to support decision making and strategy in the changing market. In an airport setting, activity-based costing can be used to answer the following questions:

- Where can the organization achieve additional efficiencies?
- Which market segments and which customers account for profits, which account for losses, and why?
- What drives the degree of resource utilization, and which resources are used efficiently and which are not?
- What resources will be needed to meet projected demand and what cost impact will result?

For instance, airport operators typically measure their direct operating costs—such as costs for personnel, maintenance, and utilities—very precisely. A significant amount of the cost of airport operations, however, is often lumped under administrative expenses. These expenses are difficult to link to specific activities and, therefore, difficult to reduce. Some airport organizations, for instance, pay their government sponsor (e.g., city or county) for services such as legal, payroll, security, and information technology. In the past, governments have used traditional cost accounting, “assigning overhead costs based on the relative size of each department, often in terms of full-time equivalent staff or total operating costs. Since many airports work independently of their government sponsors and often use central services to a lesser extent than typical government departments, they pay more than their true share of overhead costs under this accounting method.”99 The use of activity-based costing instead of traditional cost accounting provides a more realistic assessment of the costs associated with each activity. The airport enterprise pays only for the services rendered/activity performed rather than a share of the costs based on the size of the airport organization. Thus, in this scenario, activity-based costing can be used to monitor the implementation and success of those strategic initiatives that were designed to reduce administrative/overhead costs.

9.4.3.3 **Balanced Scorecard**

The Balanced Scorecard is a performance management system that can be used to align the organization’s vision and mission with customer requirements and day-to-day work, manage and evaluate business strategy, monitor operational efficiency improvements, build organizational capacity, and communicate progress to all employees. Introduced by Robert Kaplan and David Norton in 1992, the Balanced Scorecard is a management system that maps an organization’s strategic objectives into performance metrics using four perspectives: financial, customer, internal processes, and learning and growth. The scorecard shows how these measures are interrelated and affect one another, enabling an organization’s past, present, and potential performance to be tracked and managed.

“Originally developed as a framework to measure private industry nonfinancial performance, Balanced Scorecard systems are equally applicable to public sector organizations, but only after changes are made to account for the government mission and mandates, not profitability, that are unique to almost all public sector entities.”100 Within each of the Balanced Scorecard financial, customer, internal processes, and learning and growth perspectives, the organization must define the following:

- **Strategic Objectives** (what the strategy is to achieve in each perspective)
- **Measures** (how progress for that particular objective will be measured)
- **Targets** (the target value sought for each measure)
- **Initiatives** (what will be done to facilitate reaching the target)

The financial perspective addresses the question of how shareholders view the organization and which financial goals are desired from the shareholders’ perspective. Examples of financial metrics include the following:

- Capital expenditures
- Airline cost per enplaned passenger
- Aeronautical revenue per outbound aircraft operation

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• Non-aeronautical revenue percentage
• Non-aeronautical revenue per enplaned passenger

The customer perspective addresses the question of how the organization is viewed by its customers, including passengers and tenants. Examples of specific customer objectives and measures include the following:

• Concession quality satisfaction
• Concession variety satisfaction
• Terminal cleanliness

The internal processes perspective addresses the question of which processes are most critical for satisfying customers and shareholders. Examples of internal processes measures include the following:

• Progress in strengthening partnerships
• Percentage of invoices paid within 30 days of receipt of invoice
• Information technology expenses per employee

Finally, the learning and growth perspective addresses the question of how the organization and its employees must learn, improve, and innovate in order to meet the objectives set forth in the strategic plan. Examples of learning and growth metrics include the following:

• Number of training hours per employee
• Percentage of perfect attendance
• Turnover rate
• Length of employment
• Cost per hire
• Percentage of employees who are satisfied with the learning and growth opportunities in the organization
• Percentage of employees who report training opportunities among the top three reasons they accepted the job

Examples of the Balanced Scorecard are provided in Exhibits 9-5 and 9-6.

9.4.3.4 Maintaining Momentum

To maintain momentum toward achieving the organization’s strategic goals and performance targets, the respondents to the online survey indicated that they used the following techniques:

• Department leaders monitor and communicate progress (28 percent)
• Senior management monitors and communicates progress (26 percent)
• Positive results/accomplishments are recognized and celebrated (23 percent)
• Department leaders internally market the organization’s goals and objectives (13 percent)
• Senior management internally markets the organization’s goals and objectives (9 percent)

The following section briefly discusses the implementation of incentive/rewards programs used to maintain momentum.

Worksheet 9.02, “Developing a Balanced Scorecard,” will help the planning team develop a Balanced Scorecard for their organization.
9.4.3.5 Implementing Incentive/Rewards Programs

To support implementation of the organization’s strategic plan, the planning team should develop monetary and nonmonetary incentives for encouraging employees to meet their goals and objectives. Incentives available to airport organizations are discussed below.

Monetary and nonmonetary incentives are key motivational and accountability tools. “Studies have confirmed that significant incentives compensation, both short- and long-term, motivates performance.”\(^{101}\) Thus, it is key that incentive compensation be tied to the organization’s short- and long-term objectives, such as passenger satisfaction. The purpose of an incentive program is to establish a careful balance between motivating employees to meet and exceed ordinary performance metrics and championing strategic initiatives. Of the respondents to the online survey, 45 percent indicated having a performance measurement system tied to their compensation program.

Monetary Incentives. Monetary incentive programs include the following:

- **Special Act/Service Awards.** One-time incentive awards can be given to employees for a significant contribution, a special service, or sustained high job performance.
- **Gain Sharing.** Gain sharing distributes rewards to all team members when the team attains a common goal. Most organizations use gain-sharing plans to help instill in employees the

\(^{101}\) C. Davis Fogg, Implementing Your Strategic Plan, How to Turn ‘Intent’ into Effective Action for Sustainable Change (C. Davis Fogg, 2006).
notion that improved performance results in higher pay. Gain sharing and profit sharing are similar in several ways, but the redistribution of profits in gain sharing results from improved performance. “In gain sharing plans, baseline measures are established to determine the actual gain in productivity. If an increase is made, the leftover profits are divided among the organization and employees.” The improvements from which the gains can be shared can be determined through a comparative analysis of the results of the current year with those of the preceding year.

### Performance Awards/Bonuses
Well-planned bonus programs can help foster implementation of the organization’s strategic plan by encouraging superior employee performance. Typically, organizations set their incentive bonus programs on an annual basis. Employees generally earn bonuses based on the degree of success in attaining their goals. Bonuses may be based on specific performance criteria or on the judgment of department leaders and senior management. As part of the strategic plan, selecting appropriate criteria will be crucial to the success of any incentive program. The criteria must reinforce organizational goals and encourage behavior that leads to accomplishment of these goals.

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**Key Focus Areas “SMART” Objectives**

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<tr>
<td>Response Time to Comment Card Complaints</td>
<td>10 Business Days</td>
<td>82.58%</td>
<td>92.57%</td>
<td>97.00%</td>
<td></td>
</tr>
<tr>
<td>Reduce Aircraft Delays</td>
<td>2 Closures</td>
<td>2</td>
<td>4</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Monthly Cash Flow for Facilities Projects</td>
<td>$97,584,000</td>
<td>$1,989,000</td>
<td>$2,958,000</td>
<td>$3,393,000</td>
<td></td>
</tr>
<tr>
<td>Monthly Cash Flow for Capital Projects</td>
<td>$363,013,000</td>
<td>$16,778,000</td>
<td>$14,617,000</td>
<td>$23,042,000</td>
<td></td>
</tr>
<tr>
<td>Number of Facilities Projects Awarded per Quarter</td>
<td>3, 9, 5, 10</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Number of Capital Projects Awarded per Quarter</td>
<td>14, 11, 3, 5</td>
<td>14</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Measurement of Passenger Transit Time from Roadway to Gate</td>
<td>37.50 minutes</td>
<td>52.22 min.</td>
<td>41.20 min.</td>
<td>45.35 min.</td>
<td></td>
</tr>
<tr>
<td>Measurement of Passenger Transit Time from Gate to Roadway</td>
<td>30.50 minutes</td>
<td>26.42 min.</td>
<td>28.50 min.</td>
<td>28.50 min.</td>
<td></td>
</tr>
<tr>
<td>Federal Inspection Service’s Processing Time</td>
<td>45.00 minutes</td>
<td>59.00 min.</td>
<td>24.00 min.</td>
<td>50.00 min.</td>
<td></td>
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</table>

<table>
<thead>
<tr>
<th>Financial Management</th>
<th>“SMART” Objectives</th>
<th>Target</th>
<th>JAN</th>
<th>FEB</th>
<th>MAR</th>
</tr>
</thead>
<tbody>
<tr>
<td>Increase Revenue by 5% over prior year</td>
<td>5%</td>
<td>$28,141,646</td>
<td>$15,542,110</td>
<td>$21,169,967</td>
<td></td>
</tr>
<tr>
<td>Reduce Overtime by 10% (Aviation)</td>
<td>10%</td>
<td>0.39%</td>
<td>15.28%</td>
<td>14.49%</td>
<td></td>
</tr>
<tr>
<td>Reduce Overtime by 10% (Fire)</td>
<td>10%</td>
<td>85.27%</td>
<td>105.55%</td>
<td>-24.39%</td>
<td></td>
</tr>
<tr>
<td>Reduce Overtime by 10% (Police)</td>
<td>10%</td>
<td>135.31%</td>
<td>-33.38%</td>
<td>-6.23%</td>
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</tr>
<tr>
<td>Maintain Debt Coverage Ratio at 1.65 or better</td>
<td>&gt; 1.65</td>
<td>1.49</td>
<td>1.53</td>
<td>1.52</td>
<td></td>
</tr>
</tbody>
</table>

- **Manage within Budget:**
  - a) Explanation for all overruns (DOA) 100% $4,990,827 $3,772,862 $3,998,776
  - b) Explanation for all underruns of 5% or greater 5% or more $4,990,827 $3,772,862 $3,998,776
  - a) Explanation for all overruns (Fire) 100% $1,290,915 $1,142,310 $1,181,757
  - b) Explanation for all underruns of 5% or greater 5% or more $1,290,915 $1,142,310 $1,181,757
  - a) Explanation for all overruns (Police) 100% $1,396,935 $914,784 $899,422
  - b) Explanation for all underruns of 5% or greater 5% or more $1,396,935 $914,784 $899,422

<table>
<thead>
<tr>
<th>Learning &amp; Growth</th>
<th>“SMART” Objectives</th>
<th>Target</th>
<th>JAN</th>
<th>FEB</th>
<th>MAR</th>
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<tbody>
<tr>
<td>Number of Training Hours per Employee</td>
<td>30 hours</td>
<td>5.69</td>
<td>3.80</td>
<td>6.44</td>
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<tr>
<td>Reduction in Turnover</td>
<td>8%</td>
<td>0.29%</td>
<td>0</td>
<td>0</td>
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<tr>
<td>Absenteeism – Reduce Sick Time Hours</td>
<td>10%</td>
<td>1.144 &lt; 1092</td>
<td>2184 &gt; 1328</td>
<td>2232 &gt; 2011</td>
<td></td>
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<tr>
<td>Employee Satisfaction Survey</td>
<td>Survey Conducted Quarterly</td>
<td>N/A</td>
<td>N/A</td>
<td></td>
<td></td>
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</tbody>
</table>

- a) Time Vacant 10 Week Maximum 46 46 36
- b) Reduce Number of Vacancies > 50% 91.67% 91.67% 91.67%
- Vacancy vs. Total Position Count in Fire | 5% | 17.07% | 18.05% | 16.59%
- Vacancy vs. Total Position Count in Police | 5% | No Report | 22.01% | 11.95%

- Increase Percent of Perfect Attendance 10% or > 94 340 Perfect 213 Perfect 180 Perfect

<table>
<thead>
<tr>
<th>Internal Process</th>
<th>“SMART” Objectives</th>
<th>Target</th>
<th>JAN</th>
<th>FEB</th>
<th>MAR</th>
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</thead>
<tbody>
<tr>
<td>All Invoices Paid Promptly After Receipt of Invoice</td>
<td>Within 30 Days</td>
<td>296 of 831</td>
<td>474 of 839</td>
<td>503 of 839</td>
<td></td>
</tr>
<tr>
<td>All Invoices Paid Promptly After Receipt of Invoice</td>
<td>Within 30 Days</td>
<td>31.83%</td>
<td>58.56%</td>
<td>63.11%</td>
<td></td>
</tr>
</tbody>
</table>


**Exhibit 9-6. The Hartsfield-Jackson Atlanta International Airport Balanced Scoreboard.**
Writing, Communicating, and Executing the Plan

To design an appropriate compensation program, the following key points should be considered:

- Incentives must be tightly linked to performance targets in the organization’s strategic plan.
- To the extent possible, incentive programs must be based on objective measures of productivity and performance rather than subjective opinions.
- Incentive programs should extend to all levels of the organization, including managers and front-line employees.
- Incentive programs must be consistent and, once established, they must be unalterable during the course of the year.
- Performance targets for individuals and groups must be linked to outcomes they can affect.

CASE STUDY

Airport Customer Excellence Employee Incentive Program—Philadelphia International Airport (Philadelphia, Pennsylvania)

Philadelphia International Airport (the Airport) was ranked “highest in overall customer satisfaction among large airports” in the J. D. Power and Associates 2008 North America Airport Satisfaction Study.\(^a\) Initiatives such as the Airport Customer Excellence (ACE) Program (an incentive program for Airport employees) enabled the Airport to receive recognition for outstanding customer service, which also encourages employees to “keep up the good work.”\(^b\)

All Airport employees are eligible to participate in the ACE Program. The focus of the incentive program is to inspire employees to provide exceptional customer service. Employees are nominated by passengers or other employees. Each nomination is verified and evaluated by the ACE Committee, which consists of stakeholders from the Airport community, including airlines and tenants, who determine whether the nominee receives an ACE award. These awards are typically given to employees who have provided extraordinary service to passengers and have left the recipients with a positive impression of both the Airport and the city and a belief that the people who represent Philadelphia International Airport care about their customers.

ACE awards are presented four times a year. The recipients are recognized in a ceremony conducted by the Aviation Director. Each award winner receives a special ACE pin, certificate, and small gift and is then eligible for a grand ACE award, such as a plaque and tickets to a special event (e.g., a concert or a sporting event).

The ACE Program spotlights and reinforces the importance of customer service. The realization that assisting passengers and fellow workers above and beyond the “call of duty” could result in special recognition can spur an employee to take that extra step. Therefore, serving the customer becomes ingrained in an employee’s daily routine and permeates the Airport workforce as a group. The result is a customer-friendly airport. The ACE Program’s customer service focus also encourages employees to become more aware of passengers’ needs, pinpoint trouble spots, and seek/offer solutions to improve the Airport experience for all passengers.

Philadelphia International Airport management recommends that airport executives who are considering developing an employee incentive/reward program do the following: (1) identify a committee of dedicated, enthusiastic employees to manage the program; (2) provide support and guidance to make the program a success; and (3) include the airport community in the process.

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Incentive programs must be communicated and well understood by everyone in the organization.

**Nonmonetary Incentives/Rewards.** The organization can use nonmonetary incentives and rewards to motivate and reward employees. Nonmonetary incentives are used to increase awareness and recognition. Awareness means acknowledging the importance of a goal or objective. An example of nonmonetary incentives that can raise employee awareness of the organization’s strategic initiatives is to print these initiatives on selected items for distribution to all employees of the organization, regardless of their performance. Examples of nonmonetary incentives used for recognition include medals, certificates, plaques, trophies, and other tangible incentives that connote an award or honor. In addition, nonmonetary incentives can include educational allowances, time off awards, and media showcasing, in which the achievements of a person or group or persons are featured via email, newsletter, or on the organization’s intranet site. A time-off award is an organizational incentive that allows for all employees to take a day (or days) off when a specific goal or objective has been reached. An alternative is to allow employees to accumulate days for additional vacations.

9.4.4 Defining and Establishing Training and Development Programs

The organization should establish priorities and leverage investments in training and development programs to achieve its vision. Key questions related to the definition and development of training programs include the following:

- Are the organization’s training goals consistent with its overall mission, goals, and culture?
- To what extent do the organization’s training and development programs address the organization’s priorities?
- How does the organization determine the skills and competencies needed by its workforce to achieve the organization’s vision and strategic objectives, including those that training and development strategies can help address?
- Does the organization consider targeted initiatives to improve management and performance when planning its training and development programs?
- Does the organization have a formal process to ensure that strategic and organizational changes are promptly incorporated in training and development efforts, as needed?

9.4.5 Implementation Tips

Implementation tips identified by the participants in the focus groups and respondents to the online survey include the following:

- Set performance goals that can be measured.
- Monitor performance periodically.
- Tailor the performance management system to the organization type (for instance, a government structure, such as a city or county, may require specific metrics to be measured as part of the overall organization’s strategic plan).
- Develop leadership support.
- Engage each department in the organization by determining individual department performance metrics.
- Identify meaningful performance measures that individuals in the organization can understand.
- Ensure that a moderator is present to move the process along.
- Train staff in the development and use of measures.
- Use a collaborative approach to developing measures.
- Choose a limited number of meaningful measures.
CASE STUDY
Employee Incentive Programs—Vancouver International Airport
(Vancouver, British Columbia, Canada)

Vancouver International Airport (the Airport) is Canada’s second busiest airport, with approximately 400 employees. The Airport was ranked by the International Air Transport Association (IATA) as the #1 Mid-Size Airport in North America for overall passenger satisfaction and eighth in the world. A significant reason for the Airport’s success in being ranked as one of the world’s best airports is its innovative team of employees. “The Airport Authority believes the best way to nurture a strong team is to invest in the development of its members.”\(^{a}\) To assist employees in developing a positive, balanced work and personal life, the Airport Authority has developed several employee incentive programs focused on recognition, health and safety, and wellness.

The Airport Authority’s recognition programs include Bravo, STAR (Suggestions That Achieve Results), Totem Awards, Long Service Awards, and Scholarships. Bravo allows managers to recognize employees who have given extra effort with cards and gift certificates valued from $5 to $100. The STAR program encourages employee creativity and continuous improvement in the areas of customer service, financial performance, internal business processes, and learning and innovation. STAR awards range from $100 to $2,500. Totem Awards are presented annually to individuals who have been nominated by their coworkers for exceptional effort or performance. Award winners exemplify the Airport’s corporate values and, through their actions and achievements, have made an outstanding contribution to the Airport Authority’s success. The Totem Award gifts are valued at $1,000. Long Service Awards are presented by the Board of Directors and the Executive Committee at a yearly luncheon to honor employees who have achieved 5, 10, 15, 20, 25, or 30 years of service with the Airport Authority. Gifts for each level of service range from $140 to approximately $2,000. Employees with 30 years of service also receive a cruise to Alaska for two. The Airport Authority’s Scholarship program assists children of employees with post-secondary education. Twenty $750 scholarships are given out each year.

The Airport Authority also provides one health and safety incentive to its employees, as well as one employee attendance incentive program. These incentive programs are referred to as (1) the President’s Award for Safety and Excellence and (2) Perfect Attendance. The President’s Award recognizes the outstanding efforts of two high-risk and low-risk groups each year for their implementation of health, safety, and wellness goals and action plans. The winners are recognized at an awards banquet and receive a choice of $150 gift cards. Perfect Attendance is awarded with a congratulatory card form the President of the Executive Committee, along with $25 in YVR Bucks that may be spent at any of the Airport’s vendors.

Four wellness programs are available to employees: the Wellness Program; Employee Family and Assistance Program; Green Commuter Rebate Program; and Smoking Cessation Program. The Wellness Program encourages employees to enjoy healthy, balanced lifestyles and reach personal health goals. Using a point-based system, employees are rewarded for participating in activities that promote wellness, including exercise, recycling, education, training, and community involvement. Gift cards up to $210 can be earned. Monthly “Lunch n’ Learns” are held on a variety of topics, including posture care and stress management. An onsite gym/fitness facility, with exercise classes, is provided exclusively for Airport employees. The Employee Family and Assistance Program provides professional counseling and psychological assistance at no cost to employees. Assistance is available 24 hours per day, 7 days per week. The Green Commuter Rebate Program offers a $50 per month rebate to employees who commute by means other than a single occupancy vehicle. The Smoking Cessation Program provides employees who stop smoking with awards, plus a one-time $500 payout. The cost of smoking cessation aids is also covered.

\(^{a}\)Vancouver International Airport Authority, www.yvr.ca (accessed May 28, 2009).
This chapter discusses methods for ensuring that the organization continues to follow the direction established during the strategic planning process. By effectively monitoring, evaluating, and modifying the strategic plan, the planning team can make the strategic plan a “living” document and preserve the continuity of the strategic planning process (a concern raised by participants in the focus groups).

The purpose of this chapter is to enable airport management to do the following:

- Decide who should be responsible for monitoring overall implementation of the plan and who should be responsible for ensuring that specific long-term and short-term objectives are achieved
- Determine how frequently implementation status should be monitored and how results should be reported
- Establish a process for conducting periodic reviews of implementation of the strategic plan objectives and for modifying the strategic plan when necessary

### 10.1 Monitoring Strategic Plan Implementation

The first step in the monitoring process (as reflected in Step 1 of Worksheet 10.01, “Monitoring Implementation of the Strategic Plan”) is for the planning team to jointly determine who has responsibility for monitoring overall implementation of the strategic plan and reporting the plan’s status to the organization’s full board/policy-making authority. Typically, this task is performed by the airport director/manager/CEO, but it could also be performed by the head of the planning team (if this person is not the airport manager). How often this individual must report the plan’s status and the form and content of the status report should also be noted on the worksheet.

The next step in the monitoring process (as reflected in Step 2 of Worksheet 10.01) is to determine who has responsibility for ensuring implementation of the strategic plan’s long-term objectives and reporting the implementation status to the individual(s) determined in Step 1. The operators of some airports, particularly smaller airports with fewer strategic plan objectives, may choose to skip this step and have the individual responsible for the implementation of each short-term objective directly report implementation status to the individual delegated in Step 1. If responsibility is delegated for ensuring implementation of the strategic plan’s long-term objectives, best practices suggest that only one individual be given monitoring authority (even though implementation of the long-term objective may require a collaborative effort from more than one department), as this gives the person a sense of responsibility and increases his/her motivation to ensure that the objective is implemented successfully. As in Step 1, the frequency, form, and content of the status report should also be noted on the worksheet.
The third step in the monitoring process (as reflected in Step 3 of Worksheet 10.01) is to determine who has responsibility for ensuring implementation of the strategic plan’s short-term objectives and reporting implementation status to the individual determined in Step 1 or 2. Most often, the individual responsible for ensuring implementation of a specific short-term objective will be the head of the department whose staff will carry out the majority of the actions specified in the action plan for that particular objective. For example, if the short-term objective is to “aggressively pursue low-cost and new-entrant airlines to diversify the airport’s tenant airlines and provide more alternatives for the public,” then most of the actions to implement this objective will be taken by the marketing/air service development department. Therefore, the logical person to assume responsibility for monitoring this short-term objective is the manager of the marketing/air service development department. As in Steps 1 and 2, the frequency, form, and content of the status report should be noted on the worksheet. Individuals responsible for carrying out the specific actions necessary to implement a particular short-term objective should provide frequent verbal status updates to the individual responsible for monitoring implementation of the short-term objective.

After Worksheet 10.01 has been completed, the planning team should ask the following questions:

- Are the individuals responsible for monitoring the long- and short-term strategic plan objectives able to break down the implementation process so that it is manageable and doesn’t overwhelm them or others involved? Are they effective project managers?
- Do these individuals have the skills and resources, the training, and the education to ensure their success as translators of the planning initiatives into the life of the organization?
- Are the individuals responsible for monitoring the long- and short-term strategic plan objectives committed and passionate about the objectives so that they have the ability to generate the enthusiasm necessary to motivate others who may show reluctance toward the change effort?
- Are there opportunities for short-term recognition, appreciation, and rewards for those individuals who are successful in monitoring and ensuring the implementation of long- and short-term strategic plan objectives?


104 The discussion in the remainder of this paragraph was adapted Carter McNamara, Field Guide to Nonprofit Strategic Planning and Facilitation, 3rd ed. (Minneapolis: Authenticity Consulting LLC, December 2007): 124.

10.2 Reviewing Strategic Plan Implementation and Modifying the Strategic Plan

The environment in which airports operate will eventually trigger the need for revisions to the strategic plan. Valid reasons for modifying the strategic plan typically include changes to the organization’s external environment or changes in the availability of time or resources necessary to implement the plan. Valid changes often relate to the extent of achievement of particular objectives rather than changes to the objectives themselves.

The steps in Worksheet 10.02, “Reviewing the Implementation of Strategic Plan Strategies and Objectives and Making Necessary Modifications,” should be completed at least twice a year (as
Strategic Planning in the Airport Industry

a joint exercise by members of the planning team) as part of a full review of the strategic plan strategies and objectives and their implementation. The results of the online survey indicated that some organizations assess whether or not changed circumstances may necessitate strategic plan revisions even more frequently (34 percent of respondents indicate that they conduct this type of review either quarterly or monthly). To understand how the organization’s internal and external environment has changed, the planning team should first re-conduct the SWOT analysis using the techniques described in Chapter 6. The planning team should then compare the results of this new SWOT analysis with the results of the prior SWOT analysis and note any changes (Step 1 of Worksheet 10.02).

Next, the planning team should describe the implementation status of the organization’s strategies. Any impediments to accomplishing the strategies should be noted as well. Finally, any recommended changes to the organization’s strategies should be detailed. If the planning team determines that substantial changes are necessary to the organization’s strategies, team members should consider the possibility of recommending that a new strategic plan be drafted as the design of the existing plan may be incompatible with the new strategies that will be adopted.

In Step 3 of this worksheet, the planning team assesses the implementation status of the plan’s long-term objectives. If progress toward achieving a particular long-term objective has been minimal, the planning team should assess whether or not the objective needs to be modified. As part of this assessment, input should be sought from the individual responsible for monitoring implementation of the long-term objective. The planning team should then assess the strengths and weaknesses of the long-term objective and note any modifications that would improve the long-term objective. Finally, the team should recommend a resolution for the long-term objective.105 Options may include the following or a combination of the following: keep the objective, terminate the objective, replace the objective with a new or revised objective, extend the deadline for completion, or allocate additional resources. If the decision is made to replace the particular long-term objective with a new or revised objective, each of the short-term objectives and performance metrics associated with the long-term objective must also be revised.

The final step in completing this worksheet is for the planning team to assess the implementation status of each short-term objective in the strategic plan. The process is similar to the process described above for the plan’s long-term objectives, except for additional focus on the performance metric(s) that are paired with the short-term objective. Replacing the current performance metric with a new or revised performance metric is an additional option for modifying the short-term objective (as well as the options mentioned above). If significant changes are made to the short-term objective, the planning team may choose to revise the action plan associated with the objective or delegate this responsibility to the individual responsible for monitoring implementation of the short-term objective.

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105 The planning team may be empowered to make necessary changes to the strategic plan directly, but often is required to make preliminary recommendations for changes that must then be approved by senior management or the policy-making authority.
Glossary of Terms

The definitions of terms given below are only applicable in this guidebook. The terms and concepts may have different meanings in different contexts.

**Hub airport.** A hub airport is an airport that airlines use as a connecting point to transfer passengers to their intended destination. Hub airports allow airlines to increase frequency in small markets by connecting small markets to a central airport, or hub. Generally, large shares of passengers at hub airports connect with other flights. The term “hub airport” is generally used when referring to the hub-and-spoke system used by airlines, in which hubs serve as central transfer points through which to collect passengers from and distribute passengers to cities connected to the hubs through the airlines’ route networks.

The FAA’s categorization of airports included in the National Plan of Integrated Airport Systems (NPIAS) provides a more specific definition of a hub airport. The NPIAS defines a large-hub airport as one that accommodates at least 1.0 percent or more of all enplaned passengers in the United States and its territorial possessions; a medium-hub airport accommodates between 0.25 percent and 0.99 percent of all such passengers; a small hub accommodates between 0.05 percent and 0.24 percent of such passengers; and a non-hub accommodates less than 0.05 percent of all enplaned passengers in the United States and its territorial possessions. Airports that do not accommodate an appreciable amount of commercial airline traffic are classified as corporate/general aviation airports.

**Mission.** An organization’s mission is its chartered or silent definition of its reason or justification for existing. The mission statement generally sets forth the rationale for an organization’s existence, its culture, core values and competencies, and, most importantly, its function/purpose.

**Origin and destination (O&D) airport.** An O&D airport mostly accommodates passengers beginning or ending their air travel at that airport rather than using the airport to connect with another flight to reach their destination.

**Process.** A process is a set of activities/actions that must be followed by an individual or a group to achieve the desired result. These activities are generally interrelated and follow a defined sequence. A process generally involves substantial interactions among individuals, groups, and organizations.

**Risk and uncertainty.** A risk is a known uncertainty that can be anticipated and evaluated. Conversely, uncertainties are totally unexpected. As noted by Ziegenfuss, “Planning does not remove uncertainties but it does limit the degree of surprise that the organization must handle.”

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Stakeholders. Stakeholders are individuals, groups, and entities that have an interest in or will be affected by an organization’s strategic planning or actions. According to Mitroff, “Stakeholders are all those interest groups, parties, actors, claimants, and institutions—both internal and external to the corporation—that exert a hold on it. That is, stakeholders are all those parties who either affect or who are affected by a corporation’s actions, behavior, and policies.”

Strategic initiatives. Strategic initiatives are actions taken to carry out an organization’s strategy, generally defined by department leaders, as necessary, to meet the organization’s objectives and contribute to the organization’s overall success, which is defined by accomplishment of the organization’s vision.

Strategy. A strategy is an organization’s large-scale, future-oriented plan for interacting with its competitive environment in a way that leads to the accomplishment of the organization’s objectives and vision.

Value. In the context of strategic planning, “value” refers to the summation of all elements that define an organization’s culture, philosophy of operation, and beliefs. A value statement sets forth the principles behind which everyone in the organization can rally. Some examples of value statements include corporate social responsibility, respect for the individual, service to the customer, teamwork, and open communication.

Vision. An organization’s vision refers to its long-term goals. This term is generally used in the context of a “vision statement,” in which an organization explicitly defines the markets and customers it elects to serve and the services it elects to provide in the future. “Vision is the destination that must be “seen” if strategy formulation is considered complete.”

A large number of individuals provided vital input to ACRP Report 20: Strategic Planning in the Airport Industry through their participation in focus groups and online surveys. These individuals are listed in Tables B-1 and B-2.
### Table B-1. Focus group contributors.

<table>
<thead>
<tr>
<th>Contact</th>
<th>Title</th>
<th>Governing Entity</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Large Hub/Gateway International Airports</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ms. Maria E. Bordas</td>
<td>General Manager Strategic Planning Policy and Human Resources</td>
<td>The Port Authority of New York and New Jersey</td>
</tr>
<tr>
<td>Ms. Cheryl Cohen-Vader</td>
<td>Chief Deputy Director</td>
<td>City and County of Denver Department of Aviation</td>
</tr>
<tr>
<td>Mr. Jeffrey P. Fegan, AAE</td>
<td>Chief Executive Officer</td>
<td>Dallas/Fort Worth International Airport Board</td>
</tr>
<tr>
<td>Mr. Sunil Harman</td>
<td>Chief of Aviation Planning</td>
<td>Miami-Dade County Aviation Department</td>
</tr>
<tr>
<td>Mr. Louis Miller</td>
<td>Executive Director</td>
<td>Hillsborough County Aviation Authority</td>
</tr>
<tr>
<td>Ms. Jane Morris</td>
<td>Deputy Aviation Director</td>
<td>City of Phoenix Aviation Department</td>
</tr>
<tr>
<td>Ms. Angela L. Shafer-Payne</td>
<td>Vice President Strategic Planning</td>
<td>San Diego County Regional Airport Authority</td>
</tr>
<tr>
<td>Mr. Jim Szczesniak</td>
<td>Deputy Commissioner – Planning Division</td>
<td>City of Chicago, Department of Aviation</td>
</tr>
<tr>
<td><strong>Medium Hub, Small Hub and Non-Hub Airports</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ms. Krys T. Bart, AAE</td>
<td>Executive Director/Chief Executive Officer</td>
<td>Reno-Tahoe Airport Authority</td>
</tr>
<tr>
<td>Mr. Larry D. Cox, AAE</td>
<td>President and Chief Executive Officer</td>
<td>Memphis-Shelby County Airport Authority</td>
</tr>
<tr>
<td>Ms. Lili Gutierrez</td>
<td>Administration Analyst</td>
<td>City of El Paso Aviation Department</td>
</tr>
<tr>
<td>Mr. Bill F. Morrison, AAE</td>
<td>President</td>
<td>Metropolitan Knoxville Airport Authority</td>
</tr>
<tr>
<td>Mr. Dean E. Shultz, AAE</td>
<td>Senior Director, Planning and Engineering</td>
<td>Reno-Tahoe Airport Authority</td>
</tr>
<tr>
<td>Mr. Chip Snowden, AAE</td>
<td>Consultant</td>
<td>CH2M Hill (Previously Chief Operating Officer of Jacksonville Aviation Authority)</td>
</tr>
<tr>
<td>Mr. Mark H. Webb</td>
<td>Director of Aviation</td>
<td>City of San Antonio Aviation Department</td>
</tr>
<tr>
<td>Mr. Roy A. Williams</td>
<td>Aviation Strategic Planning &amp; Development Manager</td>
<td>CH2M Hill</td>
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<td>Ms. Clara E. Bennett</td>
<td>Airport Manager</td>
<td>City of Fort Lauderdale, Executive Airport</td>
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<tr>
<td>Mr. Timothy M. Doll, AAE</td>
<td>Airport Director</td>
<td>City of Eugene, Eugene Airport</td>
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<tr>
<td>Mr. Joseph R. Frasher, AAE</td>
<td>Airport Director</td>
<td>Greenville Airport Commission</td>
</tr>
<tr>
<td>Mr. J. Russell Kilgore</td>
<td>Manager</td>
<td>Gulf Shores/Jack Edwards Airport Authority</td>
</tr>
<tr>
<td>Mr. Richard Lewis</td>
<td>Aviation Director</td>
<td>City of Concord Airport Department</td>
</tr>
<tr>
<td>Mr. Gary E. Petersen</td>
<td>Airport Manager</td>
<td>City of Salinas Airport Commission</td>
</tr>
<tr>
<td>Mr. Carl L. Remmel, AAE</td>
<td>Airport Director</td>
<td>DeKalb County, DeKalb-Peachtree Airport</td>
</tr>
<tr>
<td>Mr. Dennis G. Rouleau, CM</td>
<td>Airport Manager</td>
<td>Intergovernmental Cooperative of the City of Prospect Heights and the Village of Wheeling, Chicago Executive Airport</td>
</tr>
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</table>
### Table B-2. Online survey contributors.

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<thead>
<tr>
<th>Contact</th>
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<tbody>
<tr>
<td>Mr. Iftikhar Ahmad</td>
<td>Director of Aviation</td>
<td>City of Dayton Department of Aviation</td>
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<tr>
<td>Mr. Mike Brown</td>
<td>Senior Planner</td>
<td>Vancouver International Airport Authority</td>
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<tr>
<td>Mr. Tim Campbell, AAE</td>
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<td>Maryland Aviation Administration</td>
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<tr>
<td>Mr. Timothy M. Doll, AAE</td>
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<tr>
<td>Mr. Peter Gargiulo</td>
<td>Director, Strategy Management</td>
<td>Wayne County Airport Authority</td>
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<tr>
<td>Mr. R. Hupp</td>
<td>Director</td>
<td>City of Bangor</td>
</tr>
<tr>
<td>Ms. Pamela Jensen</td>
<td>Airport Program Administrator</td>
<td>N/A</td>
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<tr>
<td>Mr. Robert Kemp</td>
<td>Director of Airports</td>
<td>Horry County Department of Airports</td>
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<tr>
<td>Mr. Brian Kulpin</td>
<td>Director of Marketing and Public Affairs</td>
<td>Reno-Tahoe Airport Authority</td>
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<tr>
<td>Mr. Richard K. Lewis</td>
<td>Aviation Director</td>
<td>City of Concord Airport Department</td>
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<tr>
<td>Mr. Joseph Malfait</td>
<td>Airport Business Manager</td>
<td>City of Vero Beach, Airport Commission</td>
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<tr>
<td>Mr. Ericson W. Menger</td>
<td>Airport Director</td>
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<tr>
<td>Mr. Louis E. Miller</td>
<td>Executive Director</td>
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<tr>
<td>Mr. Skip Miller, AAE</td>
<td>Executive Director</td>
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<tr>
<td>Ms. Marilyn Mora</td>
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<tr>
<td>Mr. Jeff Mulder</td>
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<tr>
<td>Mr. Will Plentl</td>
<td>Deputy Aviation Director</td>
<td>City of Charlotte, Aviation Department</td>
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<tr>
<td>Mr. Carl (Lee) Remmel, AAE</td>
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<tr>
<td>Mr. Mark Reis</td>
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<td>Ms. Elaine Roberts</td>
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<td>Mr. Stephen Takashima</td>
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<td>Mr. Richard M. Vacar</td>
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<td>Mr. Ian R. Van Praagh</td>
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<td>The Port Authority of New York and New Jersey</td>
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<tr>
<td>Mr. Timothy D. Ward</td>
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<td>Mr. John Wheat</td>
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