

AIRPORT COOPERATIVE RESEARCH PROGRAM

# How Airports Measure Customer Service Performance

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A Synthesis of Airport Practice

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#### AIRPORT COOPERATIVE RESEARCH PROGRAM

## **ACRP SYNTHESIS 48**

## **How Airports Measure Customer Service Performance**

### A Synthesis of Airport Practice

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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), Airlines for America (A4A), and the Airport Consultants Council (ACC) 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.

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#### **FOREWORD**

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

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

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

#### **PREFACE**

By Gail R. Staba Senior Program Officer Transportation Research Board This synthesis examines the growing strategic importance of customer service and how airports are measuring the quality of customer service. The intended audience for this discussion is broad and includes airport operators, customer service managers, governing boards, executives, and others responsible for airport customer service. Because each airport is different in its approach to customer service, the synthesis provides basic information about customer service programs, implementation, and performance measurement. In addition, there are many examples included to inspire and to direct the reader to airports that may be already engaged in a program or service of interest.

There is a rich literature on customer service, considerable data at the airport level (often confidential), and much anecdotal information in trade journals. To get a comprehensive view about this topic, a series of telephone interviews and an online survey of 15 airports in the United States and Canada was undertaken. In addition, the largest third-party vendors that have developed surveys and performance metrics to evaluate customer experience at airports were interviewed. This approach proved fruitful and foundational for the synthesis.

Lois Kramer, Principal Investigator, and Aaron Bothner and Max Spiro of KRAMER aerotek inc., Boulder, Colorado, collected and synthesized the information and wrote the report. The members of the topic panel are acknowledged on the preceding page. This synthesis is an immediately useful document that records the practices that were acceptable within the limitations of the knowledge available at the time of its preparation. As progress in research and practice continues, new knowledge will be added to that now at hand.

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Note: Many of the photographs, figures, and tables in this report have been converted from color to grayscale for printing. The electronic version of the report (posted on the Web at www.trb.org) retains the color versions.

## HOW AIRPORTS MEASURE CUSTOMER SERVICE PERFORMANCE

#### **SUMMARY**

In the last decade, economic upheaval, new security protocols, airline mergers and bankruptcies, and adoption of mobile technology have permanently altered the operating environment at airports. Today, most passengers check in and obtain a boarding pass before they arrive at the airport. However, not knowing how long it will really take to move through the terminal, passengers tend to arrive very early for flights. The ground experience before a passenger boards an aircraft has four distinct segments: (1) getting to the airport; (2) waiting in the terminal before security; (3) passing through security checkpoints; and, (4) finding the gate. Once in the terminal, the greatest uncertainty a passenger faces is the time spent at the security checkpoint. This is the one place where airport management has minimal control.

Many airports are working hard to improve efficiency and to offer a positive passenger experience before and after security checkpoints. Why is this? According to J.D. Power, "Happy passengers are super spenders." Loyal air passengers and increased revenues to the airport sponsors are among the top priorities for airport management.

In the last few years, the airline–airport relationship has continued to evolve in unexpected ways. Domestic airlines were among the few industries that fared reasonably well through the "Great Recession" that began late in 2007. In the early 2000s, airlines had considerable experience with

## Happy Passengers Are Super Spenders in the Terminal

"When passengers reported high levels of satisfaction with an airport, they tended to increase their retail spending. Passengers who report that they are 'disappointed' with the airport only spend on average about \$14.12 during their visit. However, passengers who report being 'delighted' spend an average of \$20.55 at the facility—a 45-percent jump in retail spending."

**2010 North America Airport Satisfaction Study** J.D. Power and Associates

volatile fuel prices, unforeseen events, bankruptcies, and fluctuating passenger demand. The upside of this turmoil was that by 2006, the airlines had effective capacity metrics and cost controls in place. When the recession hit, air carriers were prepared to impose a rapid response to diminished demand for air service that included immediate removal of unprofitable flights and inefficient aircraft, reduced frequencies, attainment of higher load factors, and more widespread impositions of fees for baggage, ticket changes, and seat selection. For many industries, including airlines, 2008 was disastrous. However, by 2009, the major U.S. airlines had put in place capacity controls that allowed them to operate much smaller domestic systems and to achieve net operating profits, which continued into 2010 and 2011.

The airline response to the recession was consequential for most airports. At the largest and busiest airports, capacity reductions concentrated passengers on fewer flights. Imposition of baggage fees translated to more crowded gate areas and a larger number of passengers carrying luggage on board. At smaller airports, capacity controls resulted in fewer flights, and in some cases, termination of commercial service. With fewer airlines and reduced service in many domestic markets, airports competing to retain air service and passengers have become

more customer-oriented enterprises. Reduced revenue from the airlines has also required many airports to seek other sources of non-airline revenue. Offering an outstanding passenger experience has become a strategic priority for many airports and increasingly is viewed as a competitive differentiator. Several airports around the world are renowned for their customer service, including Incheon Airport in South Korea and Changi Airport Singapore. In North America, Ottawa International, Indianapolis, and Halifax Stanfield have received awards for airport service quality. For these airports, customer service goes beyond the "built environment." For example, at Changi Airport, security staffers greet passengers not only by name, but also with an appropriate seasonal or holiday greeting.

When it comes to airport service quality, the five most common competitive factors for airports are:

- 1. Speed through the airport
- 2. Cleanliness and ambiance of the terminal, concourses, and gate areas
- 3. Excellent selection of concessions/services and value for money
- 4. Positive gate experience
- 5. Exceptional customer service and courtesy of staff.

An increasing number of airports are measuring and tracking customer service performance on a regular basis, using a broad spectrum of methods. This synthesis reports on how airports are currently measuring customer service, both quantitatively and qualitatively; and what airports are doing with the information collected.

Customer service benchmarks provide airport management and sponsors with key data points that help to: (1) understand the strengths and weaknesses of airport facilities and services; (2) identify areas of improvement; (3) track progress when improvements are made; and (4) provide a means of ranking or comparing one airport with another. Performance metrics are also a way of monitoring, managing, and influencing other service providers at the airport such as those engaged in gate management, baggage handling, concessions, parking, and security checkpoints. As many of these functions are handled by third parties, these performance measures are critical management tools.

For the purpose of this project, airport customers include passengers, employees, aircraft owners and pilots, airport tenants, and visitors who are dropping off, greeting passengers, or visiting other airport tenants. In addition, there are many tenants as well as third-party contractors and consortiums that are also an airport's internal customers. The intended audience for the synthesis is all airport personnel who have an impact on customer service. While some airports have personnel dedicated to customer service, at the smallest airports this could mean the airport director.

The synthesis explores a series of topics related to current customer service practice and performance measurement, including:

- How the practice of customer service and its implementation can strengthen the core businesses at an airport and differentiate an airport from its competitors;
- · How customer service can assist passengers with reduced mobility or other disabilities;
- How a customer service plan can streamline response to irregular operations;
- The basic components of customer service at a sampling of airports;
- How airports measure and track customer satisfaction;
- How airports use customer feedback to improve airport services and facilities;
- How customer service performance relates to an airport's strategic plan.

The synthesis also offers several examples of surveys currently used by airports to track customer satisfaction, as well as good ideas and suggestions provided by airports interviewed for this project.

The survey resulted in a variety of findings that are summarized here and discussed in greater detail in the synthesis. Twenty airports were selected to reflect diversity with respect to size, geography, aviation services, and recognized commitment to customer service. Fifteen agencies agreed to participate in an online survey followed by a telephone interview.

- Customer service response and problem resolution functions tend to be concentrated in
  one department. However, the department assigned these responsibilities could be operations, public relations, properties, human resources, or even the airport director's office.
- Although customer service programs are administratively concentrated, airports are also promoting a "culture of customer service" in every functional area of the airport, including the airport's business partners.
- Many airports list customer satisfaction as a key element of their business plan, and as such, it becomes a priority within the entire airport organization.
- The measurement of customer service performance is based on an evolving understanding of what is important to a customer's experience at the airport. Research suggests that cleanliness, courtesy of staff, processing times, gate experience, and concession choices are among the most important factors. However, a customer's experience can be seriously affected when unexpected events occur, such as traffic jams on the way to the airport, full parking lots, flight delays, or cancellations.
- Airports rely on a variety of data collection methods to determine customer satisfaction. Passenger, tenant, and visitor intercept surveys are some of the principal methods.
  Custom surveys allow airports to track their own performance over time. There are also a few third-party providers that offer the same survey to multiple airports, who can then compare themselves to each other.
- Interpretation of statistical information that comes from surveys varies widely among users. Some airports pay attention to very small changes in performance measures; others look for trends over multiple quarters.
- Airports with concession programs also conduct audits of business partners to manage contract compliance and dispatch mystery shoppers to check quality of service.
- At general aviation airports, customer service focuses on the direct provision of flight line and concierge services.
- Airports are increasingly using social media, e-mail, and websites to communicate with their customers. Some airports are experimenting with sentiment analysis and others are using these platforms to identify specific customer segments and engage in conversation.
- On the different approaches to data collection, one airport commented that surveys provide the 30,000-foot view (big picture, but slower feedback); customer comments provide the 300-foot view (narrow picture, but fast feedback); and social media the three-foot view (narrow picture but immediate feedback).
- Among surveyed airports, the following is a list of frequently reported customer service issues:
  - Quality of air service (frequency, destinations, and price)
  - Flight delays and cancellations
  - Insufficient updates of flight information on displays
  - Free Wi-Fi
  - Cleanliness and number of bathrooms
  - Signage and wayfinding
  - Security checkpoint
  - Crowding, queuing, and processing times
  - Walking distance to gates, baggage claim, and rental cars
  - Value of money for retail and food and beverage purchases
  - Lost luggage
  - Unusual events such as construction and power outages
  - Services for passengers with reduced mobility or disabilities or for irregular operations (IROPs) such as weather delays, flight cancellations, or medical emergencies.
- Airport staff involved in customer service reported that communication of results and recognition of employees and business partners is critical and an integral part of continuous improvement.

As customer service evolves at airports, so will measurement of performance. This synthesis provides a snapshot of current practice; however, the subject area invites further research in a number of areas.

- Passenger segmentation: How different passenger groups rank satisfaction measures and how understanding this can improve the program design and delivery of parking products, concession mix, and other passenger services.
- Investment: How airports evaluate the return on various customer service initiatives and make decisions about where best to allocate resources.
- Planning: How information about customer satisfaction can improve efficiency in the terminal area and increase revenues from concessions and other airport services.
- Brand: How the airport brand can integrate a culture of customer service and communicate what the airport will consistently deliver.
- Handbook: A low-cost, customer service management strategy and service quality measurement system for small and non-hub airports.

CHAPTER ONE

#### INTRODUCTION

#### **PURPOSE OF THE SYNTHESIS**

Increasingly, airport operators manage a complex of businesses and services, either directly or through third parties. A growing number of airport operators are measuring customer satisfaction as a means to refine performance standards; to allocate resources; to track progress; and to make comparisons with peer airports. Some airports have embraced formal measurement programs; others use customer feedback to respond to and remedy customer service issues. This synthesis was initiated to collect information on current practices and tools for evaluating customer service programs and measuring customer experience at airports.

#### SYNTHESIS STUDY APPROACH

At most airports, customer service is integral to all facets of airport operations. Sometimes there is one person or group responsible for customer service programs; however, customer service initiatives may also be shared among departments of the airport and business partners.

To understand how different airports manage their customer service programs, measure performance, and track progress, a three-pronged approach was taken:

- A literature review on current practices examined industry journals; proceedings from airport customer service conferences; written materials offered by third-party providers of surveys and analysis; relevant ACRP publications; and an Internet search of how customer service is measured in other industries.
- 2. Fifteen airport agencies chosen for diversity of size, location, and customer segments were surveyed online.
- 3. The same 15 agencies were interviewed by telephone to delve into aspects of the planning and execution of their customer service programs and how progress was measured and tracked. Additional interviews of thirdparty providers of customer service assessment tools and awards were conducted.

The online survey and interviews became the cornerstone of the effort. Table 1 shows the airports that participated in the study. In addition to size and location, representation from airports operated by authorities, counties, municipalities, and in the case of Canadian airports, not-for-profit corporations

was also sought. The Port Authority of New York and New Jersey (PANYNJ) responded, representing JFK International, Newark Liberty, LaGuardia, and Stewart International airports. The Ohio State University Airport, a general aviation (GA) airport, also participated. When an airport authority had jurisdiction over both commercial and GA airports, telephone interviews included questions about customer service programs at the GA airports.

Background information about each airport was assembled by reviewing primary planning documents, airport statistics, websites, and articles written. An online survey was developed and tested to discern how airports implemented their customer service program, measured progress, and determined priorities for improvement. Once an airport filled out the online survey, a follow-up telephone interview was scheduled to explore the history of customer service; unique features and most effective aspects of the customer service program; data collection tools and evaluation; priorities moving forward; and any advice the airport would offer to other airports looking to improve their customer service program.

#### REPORT STRUCTURE

The synthesis is organized in six chapters and several appendices as shown in Figure 1. Chapter two provides an overview of customer service at airports, beginning with a clarification of terminology and a discussion of how the role of customer service at airports has become increasingly important as airports compete in a changing domestic and global economy. It also provides an historical context for how the scope of customer service at airports has expanded, and describes the major elements of implementing excellent customer service at airports.

Chapter three discusses the wide range of methods that airports use to collect data about customer service. Airports interviewed use a variety of qualitative and quantitative measures to track customer service performance and identify areas to improve.

Key performance measures offer a mechanism to gauge where the organization is working well and where improvements could be made. Chapter four identifies key performance indicators of how well the organization responds to customer feedback and resolves complaints; subjective measures that track and rank customer satisfaction with various

TABLE 1 AIRPORTS PARTICIPATING IN THE SYNTHESIS

				2011
Airport	Hub Size	Organization	FAA Region	Enplanements
Hartsfield–Jackson Atlanta Int'l.	Large	Municipal	Southern	44,414,121
Dallas/Ft. Worth International	Large	Multi-county board	Southwest	27,518,358
John F. Kennedy International	Large	Authority	Eastern	23,664,830
San Francisco International	Large	City/county	Western-Pacific	20,038,679
Newark Liberty International	Large	Authority	Eastern	16,814,092
Minneapolis-St. Paul International	Large	Airport commission	Great Lakes	15,895,653
LaGuardia	Large	Authority	Eastern	11,989,227
San Diego International	Large	County authority	Western-Pacific	8,465,683
Nashville International	Medium	Authority	Southern	4,673,047
Ottawa International	Medium	Corporation	Canada	4,624,626
Halifax Stanfield International	Medium	Corporation	Canada	3,594,164
Port Columbus International	Medium	Authority	Great Lakes	3,134,378
Jacksonville International	Medium	Authority	Southern	2,700,514
Tucson International	Small	Authority	Southwest	1,779,679
Colorado Springs	Small	Municipal	NW-Mountain	828,516
Aspen/Pitkin County	Non hub	County	NW-Mountain	221,256
Stewart International	Non hub	Authority	Eastern	209,966
				2011 Operations
The Ohio State University Airport	General aviation	University	Great Lakes	68,226

Source: FAA Preliminary CY 2011 Passenger Boarding Data and ATADS Report and Statistics Canada.

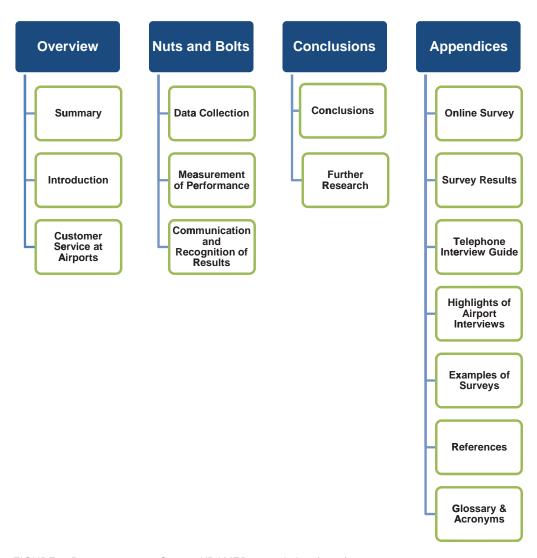


FIGURE 1 Report structure. Source: KRAMER aerotek, inc. (2012).

TABLE 2
RELATED ADDITIONAL TRB PROJECTS, PUBLICATIONS, AND LEGAL DIGESTS

Project Number	Project Title
ACRP 03-19	Passenger Value of Time, Benefit-Cost Analysis, and Airport Capital Investment Decisions
ACRP 07-08	Improving Terminal Design to Increase Revenue Generation and Customer Satisfaction
ACRP 07-12	Guidebook for Airport Terminal Restroom Planning and Design
ACRP 10-16	Guidelines for Improving Taxicab, Limousine, and Shared-Ride Van Operations at Airports
ACRP Report 10	Innovations for Airport Terminal Facilities
ACRP Report 19	Guidebook for Developing an Airport Performance-Measurement System
ACRP Report 19A	Airport Performance Indicators
ACRP Report 20	Guidebook for Strategic Planning in the Airport Industry
ACRP Report 24	Guidebook for Evaluating Airport Parking Strategies and Supporting Technologies
ACRP Report 30	Reference Guide on Understanding Common Use at Airports
ACRP Report 34	Handbook to Assess the Impacts of Constrained Parking at Airports
ACRP Report 55	Passenger Level of Service and Spatial Planning for Airport Terminals
ACRP Report 65	Guidebook for Airport Irregular Operations (IROPS) Contingency Planning
NCHRP Report 487	Using Customer Needs to Drive Transportation Decisions
TCRP B-43	Use of Web-Based Customer Feedback to Improve Public Transit Services
TCRP H-49	Improving Transit Integration Among Multiple Transit Providers
TCRP Report 47	A Handbook for Measuring Customer Satisfaction and Service Quality

Source: Compiled by KRAMER aerotek, inc. (2012).

aspects of airport experience; and indicators of processing time and aircraft delays.

Chapter five describes how airports communicate the results of these findings to employees and business partners, and how they build a culture of customer service across the entire airport community.

Most of the information collected about individual airports is contained in the appendices. Appendix A shows the online survey that was used. Appendix B summarizes survey responses. Appendix C presents the discussion guide used for follow-up telephone calls. Appendix D contains highlights from the telephone interviews and valuable insights about how different airports implement their customer service programs. Appendix E is a collection of customer-intercept sur-

veys used by individual airports and third-party vendors. For airports that want to prepare their own surveys, this appendix is very useful.

The report also includes a glossary of terms used in the synthesis and a list of acronyms and what they mean, followed by the References.

## OTHER TRANSPORTATION RESEARCH BOARD RESOURCES

TRB has published a number of studies and syntheses that complement this study and provide perspective about specific ways to improve customer experience or measure performance. Table 2 lists relevant studies that are completed, pending, or in process.

CHAPTER TWO

#### **OVERVIEW OF CUSTOMER SERVICE AT AIRPORTS**

#### **TERMINOLOGY**

A widening scope of customer service initiatives at airports has expanded the use of descriptive vocabulary, including customer experience, customer satisfaction, and customer service performance. To place these words in context, it is useful to begin with a definition of excellent customer service. According to Joanne Paternoster of Butterfly Consulting, "Excellent customer service is . . . the synergy created when an airport's ability to exceed its customers' needs and expectations consistently matches the customers' perception that their needs and expectations are well met."

The concept of synergy puts the airport and the customer in a dynamic situation in which the airport operator strives to meet the needs of its customers and exceed their expectations. Figure 2 describes this process and provides a useful framework to discuss the different elements of customer service. In the graphic, the airport operator creates an environment directed at meeting customer needs and expectations (the practice). The customer's experience while in the airport is the outcome. Through various methods of data collection, airports determine whether customers are satisfied (the measure). Evaluation of customer satisfaction data (the analysis) results in continuous improvements to customer service.

This synthesis focuses primarily on current customer service initiatives at airports, how airports measure customer satisfaction and what they do about the information that is gathered.

#### HISTORICAL CONTEXT

Since deregulation, airports have been customer-sensitive enterprises. However, the perception of the customer has changed dramatically. Not so long ago, airports considered their main customers to be the airlines, the concessionaires, rental car companies, parking operators, advertising agencies, and fixed base operators (FBOs). In this world view, airport sponsors were responsible for the infrastructure that supported air transportation. An airport's business partners had direct responsibility for their own customers.

The transformation of airport customer service began in the late 1990s, but accelerated after the tragic events of September 11, 2001 (9/11), when airports were called upon to provide emergency support to many stranded customers. After 9/11, changes in security protocols and substantial

airline losses transformed airport operations and led airport management to take a more direct role in customer service. From the customer's perspective, there is now a need to spend more time at the airport to allow sufficient time to pass security checkpoints. Limited food service on aircraft has increased demand for concessions and eating areas. Many passengers hand-carry baggage onto aircraft and need extra maneuvering space through the terminal, which has led to design changes. Consolidation and cost savings initiatives by airlines, rental car companies, and concessions have translated into fewer customer service agents on airport premises. In the current environment, the airport has become the first recourse.

Airports are also facing revenue challenges. Airport–airline agreements are trending toward shorter duration contracts and some exclusive use agreements have become preferential or common use agreements. Airport sponsors are seeking to diversify revenue streams through other business enterprises such as commercial real estate development or, if natural resources are available, exploration and development of mineral estates. Some airports have also taken more active management control of concession programs and parking. These changes reflect an evolution of the airport from an organization whose principal mission is to provide and maintain airport infrastructure to a complex and diversified business enterprise (see Figure 3).

In keeping with management of a set of diversified businesses, interest in the customer experience has expanded to include gauging how the airport is performing with respect to:

- · Airline services
- · Traveler services
- · Retail services
- Executive and general aviation
- Services to non-aeronautical enterprises.

Figure 4 shows the breadth of an airport's customer groups. Whereas in the past the airport's main customers would have been the group on the left of Figure 4, today airports are also focused directly on the air passengers, meeters and greeters, other airport visitors, and users of general aviation services. It is important to also note that the airport's business partners and suppliers are also their internal customers.

Customer service has become an integral part of most airport functions and today is an important component of

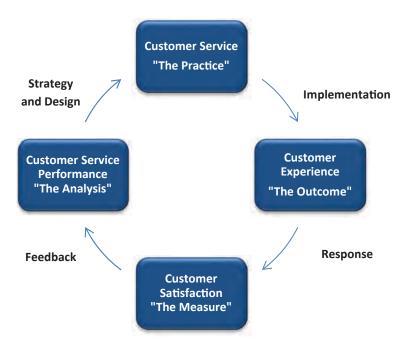


FIGURE 2 Elements and Process of Excellent Customer Service. Adapted by KRAMER aerotek from Seth B. Young, The Ohio State University (2012).

strategic planning, communications, facility improvements, design, and interactions with the various customer groups.

## DATA COLLECTION ABOUT CUSTOMER SATISFACTION

Given the myriad separate businesses and entities that operate or have a presence at an airport, it is easy to see how airports find themselves on the front lines of customer service issues and resolutions. Airports are also in a unique position to monitor, respond, and improve customer experience in many functional areas of the airport, including:

- Passenger processing (airport access, parking, checkin, wayfinding, passport control and customs, security, and baggage handling)
- Airport facilities (lounges, waiting areas, restrooms, walkways, elevators, ambiance, uniqueness, sense of place)
- Concessions (retail, food and beverage)
- Customer services (wheelchairs, baggage carts, Internet access, information and help desks).



FIGURE 3 Shift in the airport portfolio of responsibilities. Prepared by KRAMER aerotek inc. (2012).

Airports collect information about their customers through their employees and volunteers and through mystery shopper programs, surveys, letters, e-mails, comment cards, and social media. What is done with this information represents the full spectrum of customer service initiatives at airports. Many airports have formalized these data collection processes and are using the information to set priorities, improve operations, track improvements, and make comparisons with peer airports. Measuring airport customer satisfaction also provides data to discuss customer service priorities with staff, business partners, contractors, and airport sponsors.

"If you can't measure it, you can't manage it."

Peter Drucker,

Management Consultant

#### **IMPORTANCE OF SATISFIED CUSTOMERS**

Airports managers interviewed described three reasons why customer satisfaction has become a priority:

- 1. Measuring and tracking the customer experience will lead to a better understanding of needed airport improvements from the user's perspective.
- Good customer service helps the passenger feel more at ease and relaxed, which translates to repeat business, higher spending rates at the concessions, and ultimately greater net revenues to the airport sponsor.



FIGURE 4 Airport customers. Prepared by KRAMER aerotek inc. (2012).

 Airports that exceed their customers' expectations will have a competitive edge, especially in regions where fliers can select among multiple airports.

#### **COMMON CUSTOMER ISSUES**

Whether an airport has a formal or informal system to process and respond to customer complaints, compliments, and questions, airports identify a similar list of top issues that impact customer satisfaction:

- · Speed through the airport
- Cleanliness
- · Gate experience
- Concessions
- · Courtesy of the staff.

Airports in congested areas also identify access to the airport as a critical but difficult issue. Airports that have lost air service rank quality of air service as key to customer satisfaction. Airports with active community stakeholders identified communication and community support as critical. Figure 5 groups the most common airport customer issues identified by airports participating in this study.

## CUSTOMER LISTENING AND RESPONSE FRAMEWORK

Since customer service is one of the main ways that airports are in contact with customers, it is also integral to understanding and improving customer experience. This section describes a framework for implementing an airport-wide effort to measure, evaluate, and improve customer satisfaction. Most airports incorporate five elements into a listening and response process, beginning with a strategic foundation and then implementing a process to listen to customers, measure performance, evaluate results, and respond to resolve, improve, or innovate. Figure 6 describes the ongoing process.

#### Strategic Foundation

Most large and many smaller airports have a strategic plan. Based on interviews for this synthesis, customer satisfaction has become an important component of these plans and drives initiatives and measurement of performance throughout the airport organization.

Dallas/Fort Worth International Airport (DFW) offers a good example of how customer satisfaction translates into various initiatives throughout the organization. Each initiative is associated with a measure of progress. Performance on initiatives is tracked for each business unit and for individual staff.

**Profit** reflects an enterprise's ability to **LISTEN** to customer needs and wants.

**Growth** reflects an enterprise's ability to **REACT** to changing customer needs and wants.

Armin Cruz, Dallas/Fort Worth International Airport

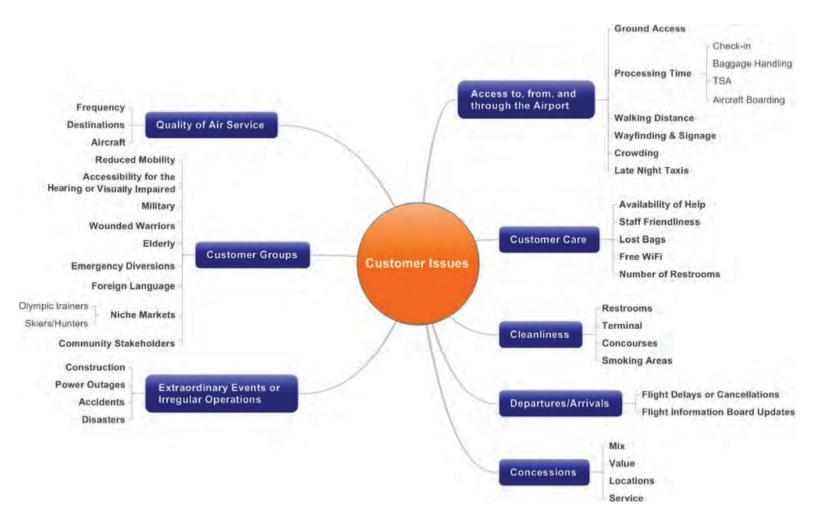


FIGURE 5 Frequent customer issues at airports. Prepared by KRAMER aerotek inc. (2012).

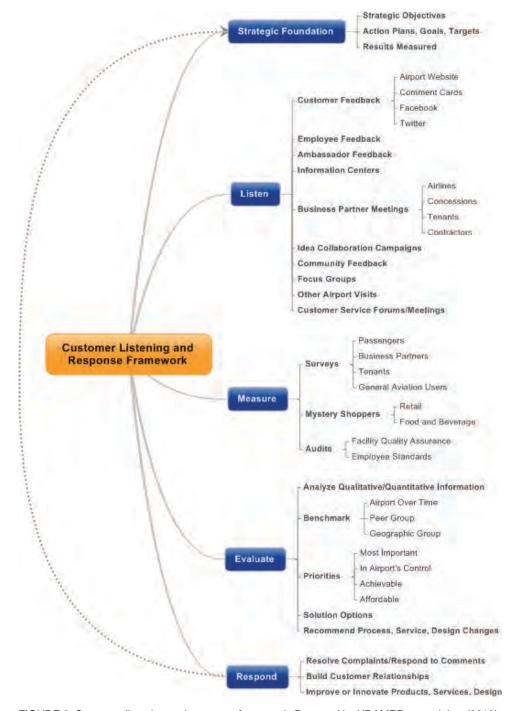


FIGURE 6 Customer listening and response framework. Prepared by KRAMER aerotek inc. (2012).

According to the *DFW International Airport Strategic Plan 2012*, DFW's primary business goal is to "grow the core business" by achieving results in four areas:

- Keeping DFW cost-competitive
- Creating customer satisfaction
- · Delivering operational excellence
- Fostering employee engagement.

In the area of customer satisfaction, the plan offers five strategic objectives:

- Ensure that the customer experience is consistent with DFW's brand attributes: professional, world-class/international, leading-edge, caring/friendly/responsive, and unique.
- · Retain existing customers.
- Collaborate with business partners to satisfy customers. Determine satisfaction metrics and capture the required data to determine current and potential customer satisfaction.
- · Attract new customers.
- Ensure all employees directly or indirectly support customer groups.

#### Listening/Response Process

There are numerous touch-points at an airport where volunteers, airport employees, and business partners engage customers and listen to their feedback. Figure 7 lists many ways, formal and informal, that airports listen and communicate with their customers. The listening/response process is iterative, whereby airports engage their customers, listen, examine the breadth and extent of customer experience, analyze the data, respond to the customer, and review the results. The extent of formal analysis is highly variable as is the choice of listening methods. Some airports primarily respond to phone calls, customer comment cards, and airport website comment. Other airports keep track of the types of customer feedback received and engage in formal data collection by means of surveys, focus groups, and other modes of direct communication.

In practice, customer service activities serve various functions. For example, information desks provide direct help to passengers. At Minneapolis/St. Paul Airport (MSP), there are eight Traveler's Assistance (TA) locations staffed by volunteers. Volunteers at each location keep track of the category of complaints and compliments and the location where the feedback took place. Scanning the database provides a way to pinpoint both issues and location of problems. Table 3 shows the categories used.

Ottawa International Airport launched an eight-week ideas campaign in fall 2011 that engaged travelers in an Internet discussion about how the airport could improve customer experience. Participants logged onto the website and made



FIGURE 7 Listening/response process. Prepared by KRAMER aerotek inc. (2012).

TABLE 3
TRAVELER'S ASSISTANCE COMPLAINTS/
COMPLIMENTS CATEGORIES

Complaints/Compliments Categories						
Airlines	Parking					
Buses	Phones/Wi-Fi					
Cleanliness	Police/CSO					
Connections	Public television					
Construction	Rental cars					
Customs	Restaurants & retail					
Electric carts /wheelchairs	Security checkpoints					
Facilities	Signage					
Disability issues	Smarte Cartes					
Information	Smoking					
Lockers	Taxis					
Lottery	Terminal environment					
MAC employees	Travelers assistance					
Other issues	Vending machines					
Paging						

Source: Metropolitan Airports Commission, MSP (2012).

suggestions. Airport staff responded, adding their own suggestions. Other participants could also join the conversation. Staffers tested the idea of valet parking and received little positive response. On the other hand, they received valuable information about baggage delivery issues and discovered that they needed to move the smoking area away from outside the terminal entrance. The collaborative idea campaign produced good feedback, generated some unexpected suggestions, and opened a communications channel with airport users. Ottawa is considering new idea campaigns that would target tenants in the business park and airport employees.

## ORGANIZATION OF CUSTOMER SERVICE AT AIRPORTS

Interviews with airports revealed wide variation in how customer service is organized. Airports agreed that effective customer service starts at the top of the airport organization. For most airports, customer service is a distributed responsibility where every department has its own initiatives to improve customer experience. Customer service functions reside in operations, public relations, communications, community affairs, property management, human resources, the airport executive offices, or a combination of these. Some organizations such as the Port Authority of New York and New Jersey (PANYNJ) have separate departments that are responsible for collecting and analyzing data.

CHAPTER THREE

#### **DATA COLLECTION**

Airports use a variety of methods to collect feedback from customers. Responding to complaints, compliments, and comments is a high priority for most airports, and is a central element of customer service. For some airports, listening and responding is the main method of communication with customers. Comments or complaints are received and sent on to the responsible party. For complaints, airport staff will follow through to make sure the problem is resolved and the customer notified. If there is time and resources, the airport will track the types of comments, location of the incident, and the time needed to respond and resolve the issue.

Table 4 lists the various ways that airports obtain feedback from their internal and external customers. Figure 8 shows responses from the online survey to the question: "Which methods of customer feedback were most helpful to improve your customer service program?" The five top responses included customer feedback delivered through the airport website, ambassadors, employees, or social media. The Airports Council International (ACI) Airport Service Quality (ASQ) Survey was also cited by the nine airports that use this service. Methods at the bottom of the list were offered as free responses and do not represent the opinions of all airports surveyed.

#### **VOLUNTEER AMBASSADORS**

Many airports use volunteer ambassadors as an integral part of customer service. Volunteers operate help desks and welcome centers and are stationed at key areas of the terminal to answer questions. At airports such as Colorado Springs (COS), ambassadors serve as a primary point of contact for customers transitioning through the terminal and are trained to help special customer segments such as military personnel or athletes going to the Olympic Training Center. At Hartsfield-Jackson Atlanta International (ATL), volunteers distribute airport wings to children and "Be Our Guest" coupons (with a value of \$10) to spend in the airport. At Nashville (Tennessee) International (BNA), ambassadors are assigned to help direct traffic on the baggage claim level and at entrances to security checkpoints. In Port Columbus International (CMH), ambassadors operate the information desks and provide interactive tours upon request. Volunteers also staff the eight Travelers Assistance desks at MSP and provide customer feedback for a complaint/compliment database. San Diego ambassadors drive the courtesy carts. These carts



Atlanta Coupon

are the only ones available in the SAN terminal. At San Francisco International (SFO), volunteers work at help desks on the departure decks, but paid employees staff the help desks on arrival decks.

Airports reported a few management strategies to train and acknowledge the importance of volunteers:

- Stable volunteer coordinators. Volunteers build strong relationships with their coordinators, especially those who serve in the position a long time.
- Recognition awards and appreciation dinners. Recognition of volunteers is exceedingly important. Airports schedule appreciation events quarterly and/or annually. Some give volunteers gas cards or gift cards from stores in the airport.
- Special lounges for volunteers. As part of the recognition package, some airports set up dedicated areas where food, tables, and comfortable chairs are available to volunteers.
- Training. A number of airports are introducing customer service training for employees, volunteers, and business partners. Halifax's Stanfield Way Program and MSP's MSP Nice are two notable training programs.

#### **CUSTOMER FEEDBACK**

Airports use a variety of ways to communicate with their customers. The most traditional are comment cards, customer hotlines, letters, and airport websites. Airport customers use these

TABLE 4 METHODS TO LISTEN AND ENGAGE AIRPORT CUSTOMERS

		Extern	al Cus	tomers			Intern	al Cust	omers	
Methods	Passengers	Meeters and Greeters	General Aviation	Other Airport Visitors	Community	Airlines	Business Partners	Airport Tenants	Government Agencies	Employees
Assistance/Information Desks	X	X								
Ambassadors	X	X								
Web Comments	X	X	X	X	X					
Comment Cards	X	X	X	X	X					
Customer Hot Line	X	X	X	X	X					
Social Media Listening	X	X	X	X	X					
Idea Collaboration	X	X	X	X	X		X	X		X
Surveys	X	X	X	X	X		X	X	X	X
Focus Groups	X	X	X	X	X		X			X
Community/Stakeholder Meetings					X					
Mystery Shoppers							X	X	X	
Tenant Meetings						X	X	X	X	
Station Manager Meetings						X			X	
Business Partner Meetings							X		X	
Customer Experience Committees						X	X	X	X	X
Executive Contact					X	X	X	X	X	X
Quality Assurance Audits						X	X	X		X

 $A dapted \ by \ KRAMER \ aerotek \ inc. \ from \ Metropolitan \ Nashville \ Airport \ Authority: 2012 \ Baldrige \ Award \ Application.$ 

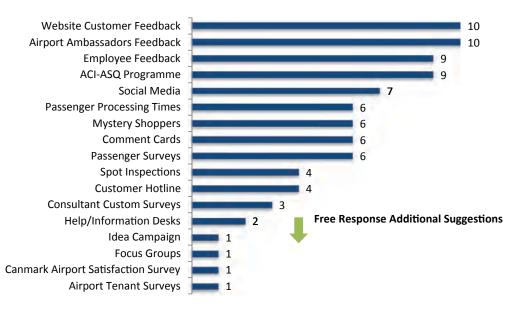


FIGURE 8 Methods to obtain customer feedback. Source: Synthesis Airport Survey (2012).



Social network keyboard

channels effectively, although airports interviewed reported that comment cards were less frequently used than other methods. The Tucson Airport Authority (TAA) also relies on 115 volunteer members who report on community sentiment and other customer service issues heard about the airport.

Airports are also using Facebook, Twitter, Pinterest, and YouTube to communicate with their customers, monitor sentiment, and make announcements about events, construction, and changes in service. Figure 9 shows San Francisco International's Facebook page.

A new element of customer feedback is sentiment analysis. This linguistic analysis technique is used to monitor and characterize the overall feeling or mood of the airport's customers as reflected in social media. Though sentiment analysis predates Twitter, Facebook, and other social media, its use has accelerated with the development of computational capacity to analyze large unstructured textual data sets. Sentiment analysis can provide rapid feedback to an airport. A number of airports monitor sentiment on Twitter and Facebook. BNA and MSP are developing in-house capabilities to analyze key indicators using word analysis.

#### **FOCUS GROUPS**

DFW uses focus groups to find out more about a problem area at the airport or to speak with a particular group of airport users. Four focus groups are held quarterly and facilitated by a marketing contractor.

#### **HELP/INFORMATION DESKS**

Most airports have help or information desks. These may be staffed by paid employees, volunteers, or a combination. A number of airports contract this function out to local Chambers of Commerce or economic development groups. Aspen/Pitkin County Airport contracts with the Aspen Chamber Resort Association. The Ohio State University Airport (OSU)

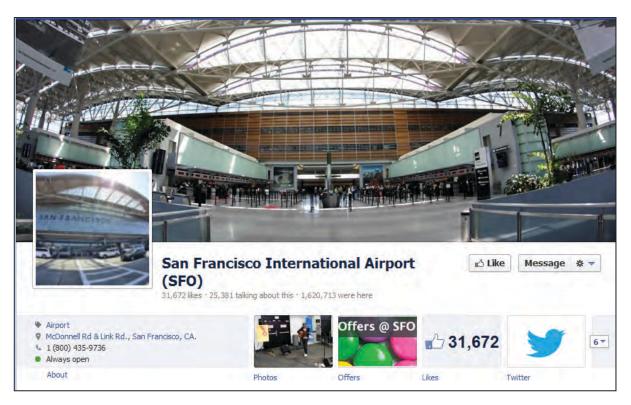


FIGURE 9 San Francisco International Airport Facebook page. Source: https://www.facebook.com/flySFO?ref=ts&fref=ts (2012).



Customer service avatar

uses its own employees to staff the FBO concierge desk. The Airport Foundation at MSP operates Travelers Assistance. At Tucson International, the Convention and Visitors Bureau trains and certifies airport ambassadors and employees to be knowledgeable about the Tucson area when helping passengers. Help desks have telephones that connect directly to the airport authority reception desk or dispatch area. Ambassadors are stationed around the airport.

Airports are also experimenting with interactive information kiosks. Jacksonville (Florida) International implemented an interactive touch screen kiosk. In July 2012, PANYNJ began installing customer service avatars at JFK, LaGuardia and Newark airports, virtual assistants programmed to answer basic questions frequently asked by passengers, but not yet interactive.

#### **IDEA COLLABORATION**

Ottawa International Airport (YOW) has been on the cutting edge in creating an online environment for airport users to make suggestions, evolve the ideas, discuss, and rank them. The airport launched the Ottawa Airport Ideas Campaign which was aimed at "improving the airport passenger experience through ideas generated from crowd sourcing." The idea of crowd sourcing is to tap into the collective intelligence of the public to gain insight into what customers really want. The crowd of airport users was invited to log onto a website and become participants. The airport was striving for a transparent mechanism to engage the community in a discussion about how to improve the airport experience. The objective was to incorporate ideas into operational and capital plans for future years. The campaign was set up in French and English and lasted eight weeks. YOW advertised the campaign extensively on signs and digital media in the airport and also advertised in print and on billboards in the community.

The website had thousands of visitors and 697 registered users. There were 136 improvements suggested and 84 unique ideas. Several passenger "pain points" were revealed, while others that airport staff expected never materialized.



Ottawa ideas campaign

Registered users are now part of an airport data base; however, its plan is to communicate with this group sparingly, so as to keep it engaged on the most important issues.

The top-rated ideas emerging from the campaign were:

- 1. A cell phone lot
- 2. A lounge in U.S. departure areas
- 3. Better food service at U.S. gates
- 4. Speedier baggage handling
- 5. Added chairs at security
- 6. Healthy food improvements
- 7. Improvements to access the BizPark
- 8. Better passenger flow through U.S. Customs
- Remove ashtrays from parking garages and walkway entrances
- 10. O-Train (light rail) to YOW.

For each of these suggestions, airport administration generated an action plan. Many unexpected ideas surfaced during the campaign and for this reason, the airport is considering additional idea campaigns that target specific airport users.

#### **MEETINGS**

Customer service regularly appears on meeting agenda with employees, airline station managers, business partners, airport tenants, and the community. Some airports have standing committees that address customer service. MSP's Customer Service Action Council (CSAC) is one of the longest standing groups. Membership consists of representatives from all MAC divisions and a broad cross-section of airport tenants. Halifax formed an Ambiance Group of 15 participants including legal counsel, the Canadian Border Services Agency (CBSA), customer relations, engineering, and the cleaning contractor. The group meets as needed to discuss improvements in the terminal, such as cleanliness, and the scheduling of art exhibits, performing groups and special events. It was the Ambience Group that recommended introduction of Adirondack and rocking chairs into the terminal.

DFW has a Customer Service Task Force of seven vice president-level participants. Terminal management and marketing vice presidents are permanent members of this group; the remaining five members rotate each year. Port Columbus has the CMH Customer Experience Partnership hosted by the CRAA Customer Service team. The group meets six times per year to discuss customer service issues and effective practices and includes all in-terminal business partners.

#### **QUALITY ASSURANCE AUDITS**

Most airports perform quality assurance (QA) audits of their facilities, employees, and third-party contractors such as concessionaires, rental car companies, parking operators, and other private service providers to measure and track their performance. These audits are completed on a scheduled basis, as spot inspections, and/or through mystery shoppers.

PANYNJ has an extensive QA audit program that is documented in its Customer Care Airport Standards Manual (ASM). The audit program covers four airports and 15 terminals, 13 of which are managed by private entities. The QA monitoring program is comprehensive and includes four components:

 A customer satisfaction survey is conducted annually in May and June at JFK, Newark, LaGuardia, and Stewart airports. This survey asks passengers detailed questions about passenger experience upon arrival or prior to departure from one of PANYJU's airports. A total of 10,400 arriving and departing passengers are

- surveyed each year and 2012 was the 11th year. Twice as many departing passengers are sampled as arriving passengers.
- Mystery shopping is conducted twice per month. Mystery shoppers evaluate performance and quality of service of employees at various concessions in the terminals on the basis of ASM standards, focusing on employee attitude, appearance, awareness, and knowledge.
- 3. QA facility audits are also conducted annually, in April before the passenger surveys. Every facility is inspected for cleanliness, condition, and functionality in accordance with the standards published in the ASM. Deficiencies are considered either "routine"—quick fixes such as cleaning and management issues—or "high priority" deficiencies requiring repair. After the audits, PANYNJ issues evaluation reports to each business partner and posts them on the customer care website.
- 4. Processing evaluations are performed on an as-needed basis. PANYNJ and its partners have looked at queuing and delivery issues at baggage claim, check-in, taxi dispatch, parking lot exits, security checkpoints, U.S. entry points, and truck waiting times at cargo facilities.

Many airports engage in some or all of the quality assurance activities that PANYNJ undertakes. DFW deploys mystery shoppers daily in different parts of the airport. Mystery shoppers also call the various customer service phone lines. ATL has a comprehensive employee and business partner training program based on the Disney Institute model. Its mystery shopper program evaluates employee encounters according to the standards shown in Figure 10.

## Hartsfield-Jackson Atlanta International Airport

	Passport Standards				
	Standard	PV	Yes	No	N/A
1	The guest is acknowledged with a smile and eye contact as they approach within 10 feet or when next in line if a line is present. Employees acknowledge guests non-verbally when engaged with another guest or coworker	1			
2	The employee greets the guest in a professional manner when approaching within five feet	1			
3	The employee uses the guest's name appropriately (when known)	1			
4	Employees anticipate guest needs and/or offer helpful suggestions	4			
5	Employee provides extraordinary service, e.g. having fun, paying a compliment, being flexible	1			
6	The employee ends on a positive note by thanking the guest and/or offering a parting pleasantry	1			
7	Employees who receive a guest complaint listen, apologize, solve and follow up (where applicable) on the problem	4		11	
8	The employee demonstrates sincerity and professionalism through body language and tone of voice (not using a cell phone, listening to ipod, etc.)	1			
9	The employee wears a clean and pressed uniform with proper credentials and is properly groomed to HJAIA standards (no cell phones worn)	1			
10	Employees communicated and worked professionally with co-workers and other departments (presented the airport in a positive light)	T			

FIGURE 10 Hartsfield—Jackson Atlanta International Mystery Shopper Scorecard. Source: Hartsfield—Jackson Atlanta International Airport (2012).

#### **SURVEYS**

Passenger surveys are the primary way that airports collect information about customer experience. A variety of third-party surveys are in wide use to monitor performance of facilities and services. ACI offers its ASQ Survey by subscription. There are other industry ranking systems offered by SKYTRAX, Canmark, and J.D. Power. Many airports use customized passenger surveys to track specific segments of their passenger base. The next sections summarize some of the surveys that are available.

#### **ACI-ASQ Survey**

#### Background

ASQ is an international initiative run by ACI, which was established in 1991 to represent airport interests with governments and international organizations. There are five worldwide regions served by ACI, the largest being North America. The mission of ACI World is "to advance the interests of airports and to promote professional excellence in airport management and operations."

ASQ Service Management (http://www.airportservicequal ity.aero) offers four distinct product lines: (1) the ASQ Survey; (2) the ASQ Performance Program; (3) ASQ Assured Certification; and (4) ASQ Retail. The most widely used product is the ASQ Survey. As of March 2012, more than 224 airports worldwide participated in the ASQ Survey, 44 in North America. Subscribing airports are able to track airport performance over time and compare results with other participating airports, although all ASQ results are confidential. Data collection procedures are standardized and means-tested for each airport. Minimum sample sizes are required to ensure statistical validity.

#### ASQ Survey

ASQ relies on a comprehensive survey to collect information from passengers. Passengers are surveyed at the gate prior to departure. Airports have the choice to have ASQ contractors perform the survey; conduct the survey using airport staff; or subcontract to third-party surveyors. Figure 11 shows the questions in the ASQ Survey that pertain to customer satisfaction. The entire survey is reproduced in Appendix E. The survey presents departing passengers with 34 categories on which they rank the airport. Data are collected on a quarterly basis. Airports with fewer than 2 million passengers can choose to survey two or four times per year. Survey data are collected on paper surveys. ACI determines the sample size and the exact flights/gates to be surveyed.

ASQ provides participating airports with six deliverables after each survey period:

1. Management summary. The summary is an interactive file allowing airports to create customized reports

- showing ASQ results for selected airports. The management summary is available three weeks after the end of each quarter.
- Core report. This report includes graphs and tables covering all service items and demographics for each participating airports. In addition, each airport selects its own benchmark panel of up to 24 airports and receives a customized report of rankings just for that group of airports.
- 3. ASQ Data Centre. This custom-designed analysis tool allows users to run their own analysis of the service items, looking at performance over time, split by any of the available dimensions, and for any participating airports. It also allows direct benchmark comparisons and analysis of customer groups.
- 4. Tables in Excel. The cross-tab tables prepared for the core report are available in Excel format. This is useful for creating graphs linked to the tables or analyzing the data directly from the spreadsheet.
- 5. Raw data in SPSS/database formats. This is the full set of raw data in SPSS format, which includes the data of all participating airports. Using SPSS, airports can prepare custom tables and comparisons. (Several airports interviewed found the raw data the most useful ASQ deliverable.)
- Prioritization analysis. This analysis shows the relative importance of each factor and indicates the relative urgency of issues.

ASQ offers other custom services including airport specific surveys, a detailed analysis of individual airport processes and services, focus groups and interviews, root cause analysis, and success measurement and review. In addition, the ASQ Certification program involves a rigorous assessment of service quality management processes and an on-site verification audit. Recertification is required each year.

## J.D. Power and Associates—North America Airport Satisfaction Survey

J.D. Power and Associates is a global consumer satisfaction and marketing services firm based in California. The firm positions itself as a trusted, independent evaluator and rates hundreds of products and services each year in a wide variety of industries ranging from finance to electronics to health-care. J.D. Power and Associates develops survey and indexes for its rankings, then solicits customer feedback, aggregates the data, and releases its findings. Typically the company releases an abridged version of its findings through a press release and sells the complete set of findings to companies or organizations or sells the rights to use the results.

J.D. Power's methodology reflects its market position as an independent evaluator. For the 2010 North America Airport Satisfaction Study, J.D. Power identified 81 large, medium, and small airports across the United States in major markets. Airports were not permitted to opt in or opt out of the study. For all of its syndicated studies, J.D. Power hires

Write in Your Response or Place an 'X' in the Box Where Applicable							Write in Your Response or Place an 'X' in the Box Where Applicable						
7. Based on your experience today, p	please rate	THIS airp	ort on eac	ch service 3	ce item:	1 🗇	AIRPORT FACILITIES Did	not e/use	5 ©©© Excellent	4 ©© Very Good	3 © Good	2 ⊕ Fair	1 ⊗ Poor
	notice/use		Very Good	Good	Fair	Poor	U. Availability of bank/ATM facilities/	7					
A. Ground transportation to/from airport							money changers  V. Shopping facilities	7					
B. Parking facilities								_					
C. Value for money of parking facilities							W. Value for money of shopping facilities	_	П				
D. Availability of baggage carts/trolleys							X. Internet access/Wi-fi		Ш				
OUE OF THE COLUMN TO THE COLUM							Y. Business/Executive lounges						
CHECK-IN (at this airport)  E. Waiting time in check-in queue/line							Z. Availability of washrooms/toilets						
							AA. Clean liness of washrooms/toilets						
Efficiency of check-in staff     Courtesy and helpfulness of check-in staff							BB. Comfort of waiting/gate areas						
PASSPORT/PERSONAL ID CONTROL							AIRPORT ENVIRONMENT						
H. Waiting time at passport/personal ID inspect	tion 🗍						CC. Clean liness of airport terminal						
I. Courtesy and helpfulness of inspection staff							DD. Ambience of the airport						
SECURITY							Overall satisfaction with the airport	7	П				
J. Courtesy and helpfulness of security staff							Citizan caticacaen man the amport	_					
K. Thoroughness of security inspection							8. Which of the items listed in Question 7	are M	OST IMPO	ORTANT	you at	THIS airp	ort?
L. Waiting time at security inspection							(Please use the letters in front of the items for ye	our rati	ng)				
M. Feeling of being safe and secure							1st: (e.g. P) 2nd:		(ê g	( K)	3rd:		(eg V
FINDING YOUR WAY							9. What was your BEST and WORST expe	rience	at THIS	airport tod	ay?		
N. Ease of finding your way through airport							Best:						
O. Flight information screens													
P. Walking distance inside the terminal							Worst:						
Q. Ease of making connections with other flight	ts 🗌						Arrivals services at this airport:  (Based on previous experience  Did		5	4	3	2	1
AIRPORT FACILITIES							(based on previous expenence Did in last 3 months) notice	not e/use	Excellent	Very Good	Good	Fair	Poor
R. Courtesy and helpfulness of airport staff (excluding check-in, passport control and security)							A. Passport/Personal ID inspection						
S. Restaurant/Eating facilities							B. Speed of baggage delivery service						
T. Value for money of restaurant/eating facilitie	s 🗍						C. Customs inspection						

FIGURE 11 Sample questions from the ASQ survey. Source: ACI (2012).

panelists from nationally represented panel companies to conduct the research. Panelists contact survey participants to determine their eligibility. In the case of the airport study, participants needed to be 18 years of age or older and have flown out of one of the airports in the study in the past 30 days. J.D. Power required at least 100 responses between January and December 2009 in order for an airport to be eligible for the study. Once determined eligible, participants received an online survey from a panelist. Of the 81 pre-selected airports, panelists collected enough responses for 42.

A total of 24,000 passengers took the North America Airport Satisfaction Survey in 2009. J.D. Power ranked airports on the following six attributes:

- Airport accessibility
- · Baggage claim
- Check-in/baggage check process
- · Terminal facilities
- Security check-in
- · Food and retail services.

Passengers answered three different types of questions: (1) basic demographic questions; (2) rating questions; and (3) diagnostic queries (e.g., "How long did it take you to collect your baggage?"). J.D. Power's analysts aggregated each response from every airport and created an index model using a series of hierarchical regressions that weighted the importance of each of the six attributes.

J.D. Power published the North America Airport Satisfaction Study from 2001 to 2010, but the survey has been discontinued. The company reported that airports were not finding value in purchasing the study or advertising rights, and as of May 2012, it had no plans to replace the survey with a new product.

#### **SKYTRAX**

SKYTRAX was founded in 1989 and is operated as a non-profit, independent purveyor of airport customer experience rankings. SKYTRAX markets itself as a research advisor for airlines, airline alliances, airports, and related air transport product and service suppliers (www.skytraxreasearch.com). The company is based in London with an office in Beijing.

SKYTRAX offers four airport products: (1) World Airport Audit; (2) Quality Certification; (3) Airport Star Rankings; and (4) Service Benchmarking. All assessments of airports are completed in-house. SKYTRAX staff looks at more than 800 key performance indicators per airport to prepare "star" rankings of airports. The ranking system is based on an internally developed, internationally standardized methodology. In 2012, the company compiled data in 39 different airport service and product areas from over 12 million passengers in 160 different countries at 388 different airports. Customer experience is evaluated for each airport for departures, arrivals, and transit through the terminal to the boarding gate. SKYTRAX data collection relies primarily on an online survey questionnaire that passengers complete. SKYTRAX does not charge airports to participate, nor does it pay customers to take the survey.

In addition, SKYTRAX also seeks audiences input through four other methods: business research groups or travel panel interviews; corporate travel questionnaires and interviews; telephone interviews; and selective passenger interviews.

#### **Individual Airport Custom Surveys and Samples**

Most airports conduct surveys to explore specific aspects of customer experience. Table 5 summarizes data collection tools that airports participating in this synthesis reported using. A few of the different types of surveys are highlighted

TABLE 5
OTHER PERFORMANCE MANAGEMENT TOOLS USED BY AIRPORTS

Airport	Other Performance Management Tools
Aspen/Pitkin County	Visitor/Resident Survey
Dallas/Fort Worth International	ASQ, Monthly Special Focus Follow-up Surveys, Mystery Shopper
Halifax Stanfield International	ASQ, Passenger Processing
Hartsfield-Jackson Atlanta Int'l.	ASQ, Mystery Shopper
Jacksonville International	ASQ, Online Website Passenger Survey, Airport Survey.com
Minneapolis/St. Paul Int'l.	ASQ, Mystery Shopper
Nashville International	ASQ, Meeters Survey in June, Leisure Passenger Survey during Spring Break, Passenger Survey in Fall, Mystery Shopper
Ottawa International	ASQ, Mystery Shoppers, Baggage Delivery Time, Concession Satisfaction Survey
Port Columbus International	ASQ, Secret Shoppers
San Diego International	ASQ, Additional 200 Passengers Survey each Quarter, In-Terminal Tenant survey
San Francisco International	ASQ, Annual Passenger Survey in May, 3,800 passengers, Mystery Shoppers, Wait Time Analysis
The Ohio State University Airport	Customer Survey for GA Users
The Port Authority of NY and NJ	Customer Satisfaction Survey, Mystery Shopper, Facility Quality Audit
Tucson International	Survey of Business Travelers

Source: Synthesis Airport Interviews (2012).

in the next sections. Appendix E presents examples of custom surveys that airports use.

#### Aspen/Pitkin County (ASE)

Aspen is a destination resort and ski area in the Colorado Rocky Mountains. In 2007, the Pitkin County Commissioners requested a survey of four groups that were either users or stakeholders for the airport or both: county residents, second-home owners, visitors using the airport, and residents in the region. The purpose of the survey was to:

- Obtain sentiment about the airport, use of the facilities, and expectations;
- Gather suggestions about what could be done to improve passenger experience and increase use of the airport; and
- Develop a basis for community outreach.

The survey was distributed to residents by mail, the Internet, and telephone calls. There were also face-to-face interviews. Survey results were instrumental in assisting with air service development, in-terminal improvements, and design specifications for a new terminal.

#### Jacksonville International (JAX)

Jacksonville International is an origin and destination airport with more than 2.7 million annual enplaned passengers. It serves as a regional transportation center in northeast Florida and a destination airport for many visitors. The airport is very proactive with respect to customer service and measurement of customer service performance. The Airport Authority subscribes to quarterly ASQ passenger surveys. In addition, the Authority invites passengers to fill out a "How Are We Doing?" survey on the airport website.

The online survey parallels ASQ in content and gives the customer service manager immediate feedback on any customer service issues that arise. The survey also provides space for free response comments and invites participants to leave their contact information. A full copy of the survey is reproduced in Appendix E.

#### Nashville International (BNA)

Nashville is also a medium hub with approximately 4.7 million annual enplanements. The Metropolitan Nashville Airport Authority has employed both the Performance Excellence (Baldrige) management framework and the Lean Six Sigma management approach to continuous improvement. Customer service is a focus of both of these methodologies. Performance Excellence and the Voice of the Customer program that includes three customer surveys each year that are administered by BNA staff. A passenger survey targeting leisure travelers is

conducted during spring break. In the early summer, another survey targets concert-goers. (Both the Country Music Association Fan Fest and Bonnaroo Music and Arts Festival are held in June.) In the fall, the same survey is administered during what the airport considers a normal travel period.

Also in June, BNA conducts intercept surveys of meters and greeters and of passengers who will soon check in in the waiting areas outside security checkpoints for Concourses A/B and Concourse C. The meeter survey asks why people wait outside security and, if they are meeting someone, what is their relationship to that passenger. The survey also asks how the person got to the airport and why he or she chose to wait inside the terminal rather than go to the cell phone waiting area or 10-minute parking area. The passenger survey asks how the person checked in, information about the travel party, trips per year, frequent destinations, and airport access. Full copies of the surveys are reproduced in Appendix E.

Both surveys have rating questions about airport services and features and overall airport experience. These questions seek to pinpoint the most important features and services that drive customer experience. (Live music in the terminal ranks very high!)

#### *The Ohio State University Airport (OSU)*

The Ohio State University Airport is the fourth busiest airport in Ohio and is the only GA airport to participate in this synthesis. The university owns and operates the airport and the FBO. For GA users, the customer experience is directly related to line operations, concierge services, aircraft maintenance, restaurant, and aircraft storage (community hangars, T-hangars, and tie-downs). In the past, airport management has surveyed its customers; this short survey is shown in Figure 12.

#### The Port Authority of NY and NJ (PANYNJ)

PANYNJ oversees customer service for more than 100 million passengers using JFK International, Newark Liberty International, LaGuardia, and Stewart International airports. The Port Authority uses its own arriving and departing passenger surveys which measure overall customer experience and delve in detail about the passenger experience through key airport touch-points:

- 1. For departing passengers, the survey investigates their experience with:
  - a. Getting to the terminal
  - b. Check-in process
  - c. Terminal facilities
  - d. Security check
  - e. Food and beverage
  - f. Retail
  - g. Gate area.



## THE OHIO STATE UNIVERSITY AIRPORT CUSTOMER SURVEY CARD

	E								
1) How would yo		he res	spons	ivenes	s of the Li	ne Ser	vice I	Repre	sentative?
	Poor	2	3	4	5 6 Average	7.	8	9	Great
	roor				Average				Oreal
2) Were you park	ed and	areet	ed by	a Line	Service A	ttenda	nnt?		
A de para San Santo	1	2	3	4	5 6	7	8	9	10
	Poor				Average				Great
3) How would yo	u rate t	he ov	erall a	ttitude	of the Lin	e Serv	rice S	taff?	
of from modice yo	1	2	3	4	5 6	7	8	9	to to
	Poor				Average				Great
4) Were the Line	Sarvice	Pon	rocont	ativos	knowleda	ahla	and h	alnfu	12
4) Were the Line	Service	2	3	4	5 B	7	8	eipiu	10
	Poor				Average				Great
CHETOMER	EDV	CE							
CUSTOMERS									
5) How would yo	u rate t	ne ov	eran a	tutude 4	or the Cu	7	Serv	nce N	tepresentative?
	Poor	-			Average			4	Great
ALLAS YOURS.	1000	- 151					0.00	-	Salar and
6) Were the Cust	omer S	ervice	Repr	esenta 4	atives know	vledge 7	eable	and h	nelpful?
	Poor	-	3		Average	1.	9	7	Great
			1000			3.5.	Chron		
7) How would yo	u rate t							Loun	ge and Terminal?
	Poor	2	3	4	5 6 Average	7	8	9	10 Great
8) How would yo								ot Lo	
	1	2	3	4	5 6	7	8		
	Poor				Average		9	8	Great
	Poor				Average		0	8	10 Great
9) How would yo		he Re	stroo	m Faci		4		9	
9) How would yo	u rate t	he Re	strooi	m Faci	lities in the	4		9	Great 10
9) How would yo				m Faci	lities in the	4	inal?		Great
9) How would yo	u rate t			m Faci	lities in the	4	inal?		Great 10
	u rate t Poor			m Faci 4	lities in the	4	inal?		Great 10
MISCELLANE	u rate t	2	3	4	lities in the 5 6 Average	e Term	inal?		Great 10
MISCELLANE	u rate t Poor OUS ou rate	2	3	4	lities in the 5 Average	e Term	inal?		freat 10 Great
MISCELLANE	u rate t	the o	3 verall	4 Airpor	lities in the 5 6 Average	e Term	inal?		Great 10 Great
MISCELLANE 10) How would y	Poor  OUS  ou rate 1 Poor	the o	verall	Airpor	lities in the 5 6 Average	e Term	ninal?	9	freat 10 Great
MISCELLANE 10) How would y	Poor  OUS  ou rate 1 Poor	the o	verall	Airpor	Average  t services Average  (If so, coi	e Term	ninal?	9	Great 10 Great
MISCELLANE 10) How would y	Poor  OUS  ou rate 1 Poor	the o	verall	Airpor	lities in the 5 6 Average	e Term	ninal?	9	freat 10 Great
MISCELLANE 10) How would y	Poor  OUS  ou rate 1 Poor a car w	the o	verall 3 t the A	Airport	Ities in the 5 6 Average  It services 5 8 Average  It so, col YES NO	Term	s s please	9	Great 10 Great 10 Great
9) How would yo  MISCELLANE 10) How would you 11) Did you rent a) Rate the	Poor SOUS OU rate Poor a car w	the o	verall 3	Airport	Average  It services  Average  It services  Average  (If so, con YES NO	Term	ninal?	9	Great 10 Great 10 Great
MISCELLANE 10) How would you	Poor  OUS  ou rate 1 Poor a car w	the o	verall 3 t the A	Airport	Ities in the 5 6 Average  It services 5 8 Average  It so, col YES NO	Term	s s please	9	Great 10 Great 10 Great
MISCELLANE 10) How would you	Poor  OUS Ou rate Poor a car w	the o	verall t the A	Airport Airport	t services Average  (If SO, CO) YES NO e rental pro	e Term	s s please	9 9.)	Great  10 Great  10 Great

\*\* Please write any comments you may have on the back. \*\*

FIGURE 12 OSU Airport Customer Survey Card. Source: The Ohio State University Airport.

TABLE 6 SAMPLE SIZES BY AIRPORT FOR PANYNJ PASSENGER SURVEYS

	JFK	Newark	LaGuardia	Stewart	Total
Arriving	1,607	1,068	928	100	3,703
Departing	3,260	1,612	1,672	203	6,747
Total	4,867	2,680	2,600	303	10,450

Source: PANYNJ (2012).

- 2. For arriving passengers, the survey investigates their experience with:
  - a. Gate area
  - b. U.S. entry
  - c. Terminal facilities
  - d. Baggage claim
  - e. Leaving the terminal.

Each point is examined in detail. Surveys are conducted for two weeks in May. The sampling distribution among PANYNJ airports is listed in Table 6.

PANYNJ has conducted this annual survey for more than 10 years and has accumulated an extensive database of information about its passengers and their airport experience. Results of surveys, audits, and benchmarking are posted on a website that is maintained by the Port Authority for its Airport Customer Care Performance Measurement and Research Program and available to PANYNJ's business partners. Figure 13 reproduces a portion of PANYNJ's departing passenger survey to provide a glimpse at the level of detail probed.

#### Tucson International (TUS)

Tucson is a small-hub airport with 1.8 million enplanements. The area has a large retirement population and many business travelers. With limited resources for customer service, Tucson targets its efforts carefully. In 2012, the Airport Authority sponsored a 500-response business traveler survey which measured business use of the airport and was designed to create a conversation about air service among the airlines

ABO	OUT THIS TERMINAL'S CONC	ESSIONS OFFERINGS		7 2 to 2	
9a.	beverages today. (RECORD	UP TO 5 ESTABLISHMENTS) P	(AY) Please indicate each establishn lease indicate approximately how m TOF ESTABLISHMENTS FOR EACH	uch you spent today in	
	Name:	Amount Spent: \$	Name:	Amount Spent: \$	
9b.	merchandise today. (RECO		TODAY) Please indicate each estal Please approximate how much you REACH TERMINAL.		
	Name:	Purchased—Ar	nount Spent: \$		
	Name:	Purchased—Ar Purchased—Ar	nount Spent: \$		
9c.			IDISE IN Q.9a OR Q.9b) Which of the al? Please Check All That Apply	e following situations	applies to when you
		Control of the second s	Planned to buy an item in advance Planned to buy an item in advance	Bought an item to ea	the state of the s
9d.	Was there any particular iter have seen?	n that you shopped for in the te	rminal today, but were unable to find	l within a particular sto	ore you would like to
	□ No	Yes (Please Specify:			
9ė.	Was there any particular sto	re that you were unable to find v	within the terminal that you would like	te to have seen?	
	□ No	Yes (Please Specify:			
9f.	[IF PURCHASED FOOD-BEV what you did with the food!	ERAGE IN Q.9a AND NOT BOUG severage you purchased at this a	GHT TO CONSUME ON PLANE IN Q.S airport today? Please check all that	c, ASK:] Which state	ment below describes
	Ate/	drank items at a gate seating area drank items in a seating area with drank items within a common seat er (Please Specify) 't recall	n restaurant/bar		
9g.		.1 OR "YES" IN Q.4 BOX D, ASK pe or retail establishments in the	:) Just before or after passenger sec terminal?	curity screening, do yo	ou recall seeing any
	Yes GO TO O	.9h No - SKIP TO Q.	9i Don't recall - SKIP TO Q.	91	
9h.	Which, if any, of the following	g advertisements did you see?	Please Check All That Apply.		
C	Map/display of concessions	Brochures listing concessions	Wall/billboard advertisements of	particular concessions	Hanging or floor signs None of the above



FIGURE 14 Measuring customer service at MSP. *Source*: Metropolitan Airports Commission (MAC).

and the business community. The survey covered the following areas:

- Booking practices for business travel
- Priorities for purchase
- Airport services that appeal to business travelers
- Frequent destinations and originating airports
- Connecting travel patterns.

#### **VISITS TO OTHER AIRPORTS**

Airports in the United States frequently compare themselves to other airports of similar size or competing airports in the region. This type of data collection is often qualitative and can be an idea generator. At the Metropolitan Airport Commission (MSP airport), staff undertakes a semi-annual airport benchmarking tour to visit airports that offer innovative or competitive services and facilities. In 2010, site visits were made to:

- Boston, Terminals A & C
- JFK Terminal 5
- · Halifax, Canada
- Detroit, McNamara and North Terminals
- Portland, Oregon
- San Francisco International
- · DFW and Dallas Love Field

These trips produce good visual comparisons and stimulate ideas about how MSP can immediately improve airport operations, customer service, signage, concessions, and facilities and move MSP from "good to great." Figure 14 shows the different data inputs used by MSP.

CHAPTER FOUR

#### **MEASUREMENT OF PERFORMANCE**

Key Performance Indicators (KPIs) help airports and their stakeholders understand how well they are performing in relation to their strategic goals and objectives and whether initiatives are on track or not (Advanced Performance Institute). Because airports operate under very different circumstances in terms of magnitude and type of aviation activities, non-aeronautical activities, and ownership and governance structures, individual airports use different types and combinations of performance indicators (Oliver 2012). Just as airports tend to "right size" their customer service programs to their particular circumstances, airport managers will have different views about which KPIs are most important and how many to track. The emphasis on customer satisfaction, while not new, is an evolving area of subjective measurement. Initiatives and performance indicators are likely to change as priorities shift and improve with advances in methodology.

At the present time, many big picture and detailed indicators are in use. Some airport managers are not using quantitative measures at all. Others use KPIs extensively to track performance over time and to compare themselves with other airports (internal and external benchmarking). This chapter provides an overview of the various KPIs currently in use for measuring customer service and customer satisfaction.

#### **ORGANIZATIONAL RESPONSE**

Tracking organizational response is one of the first performance measures airports adopt. This type of analysis evaluates customer feedback and airport response. It includes keeping track of the following aspects of the process:

- Method of communication (comment cards, websites, help desks, hotlines, or social media)
- Nature of the communication (information request, complaint, compliment)
- Positive or negative sentiment
- Specific category of compliment or complaint
- Airport location driving the compliment or complaint
- Party responsible for resolution
- Response time
- Resolution cycle time
- Follow-up completion date.

Each of these items can be quantified, analyzed and tracked. For example, MSP maintains a daily compliments

and complaints database. This database is similar to the log kept by the Traveler's Assistance desks. The two databases allow for cross-checking and triangulation of problems. Table 7 shows the categories that the database tracks.

Colorado Springs Airport houses its customer response program within its executive offices and places a high priority on quick response and resolution times for customer inquiries or complaints. COS also has started to track this effort.

#### **CUSTOMER SATISFACTION**

Airports are in both research and tracking modes about what factors lead to customer satisfaction, only some of which are in the airport's direct control, such as wayfinding, in-terminal cleanliness, and mix of retail and food and beverage choices. Other factors, such as the speed of security checkpoints and quality and availability of air service, are beyond the control of an airport. Of all airport performance indicators, customer satisfaction is a subjective set of measures that come from customers' ranking of a particular aspect of their airport experience.

Several noteworthy examples of performance indicators for customer satisfaction exist at various levels of detail. This section describes the ASQ and SKYTRAX indicators that are applied to many airports and also looks at performance measures used by PANYNJ.

#### **ACI-ASQ Performance Indicators**

The ASQ Survey is designed to provide individual airport ratings (1.0 to 5.0) on 34 indicators related to nine areas of passenger experience:

- Airport access
- Check-in
- · Passport/personal ID control
- · Security
- Wayfinding
- Airport facilities
- Airport environment
- · Arrivals services
- · Overall satisfaction.

TABLE 7
MSP COMPLIMENT/COMPLAINT CATEGORIES

Database Categories						
Airlines	Phones/Wi-Fi					
Buses (all types)	Police/CSO					
Cleanliness	Public television					
Connections	Registered traveler					
Construction	Rental cars					
Customs	Restaurants & retail shops					
Electric carts/wheelchairs	Security (field)					
Facilities	Security checkpoints					
Disability/accessibility issues	Signage					
Information issues	Smarte Cartes					
Lockers	Smoking					
Lottery	Taxi(s)					
MAC employees	Terminal environment					
Other MAC issues	Travelers assistance					
Paging	Vending machines					
Parking						

Source: Metropolitan Airports Commission (MAC).

In addition, the ASQ Survey asks respondents to identify the top three factors important to his/her airport experience and to state what was the best single experience at the airport on this particular day and what was the worst.

The identical ASQ Survey is completed by more than 220 airports worldwide. This allows airports not only to track

performance over time but also to compare performance with other airports. Participating airports receive four benchmarking reports including: (1) a custom report which compares the airport to a personalized list of other airports; (2) a comparison with airports in the region; (3) a comparison with airports of comparable size; and (4) a detailed report of the individual airport ratings. All of these data are confidential. In addition, many airports use the raw data to generate custom reports. Figures 15–17 show examples of benchmark reports from the ASQ Survey. The complete survey is included in Appendix E.

#### **SKYTRAX**

SKYTRAX also uses a ranking system for its customer satisfaction surveys according to the following 39 product and service factors:

- 1. Getting to and from the airport, ease of access
- 2. Public transport options, efficiency, and prices
- 3. Taxi availability and prices
- 4. Availability of luggage trolleys (airside and landside)
- 5. Terminal comfort, ambiance, and general design and appearance
- 6. Terminal cleanliness, floors, seating, and public areas
- 7. Seating facilities throughout terminals
- 8. Immigration—queuing times and system for departure and arrivals
- 9. Immigration—staff attitude for departure and arrivals
- 10. Waiting times at security screening

#### Overall satisfaction

Mean score rating on a scale of Excellent (5) to Poor (1)

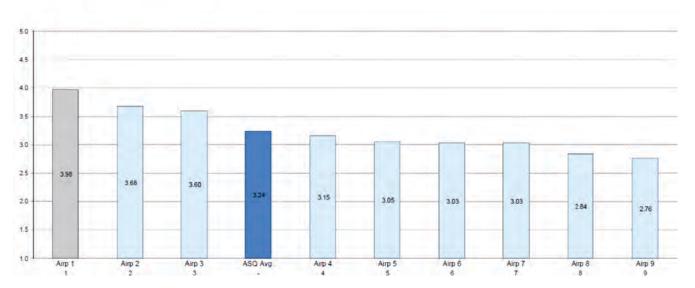


FIGURE 15 Overall satisfaction benchmark report. Source: ACI (2012).

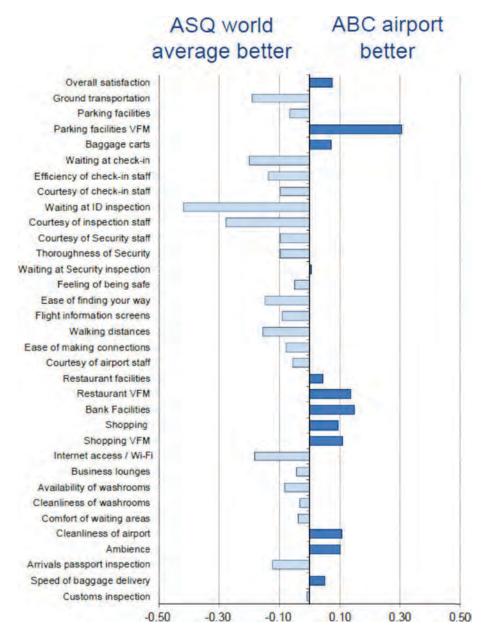


FIGURE 16 Airport strengths and weaknesses, satisfaction gap. Source: ACI (2012).

- 11. Courtesy and attitude of security staff
- 12. Check-in facilities, queuing systems, and seat availability
- 13. Terminal signage for facilities, boarding gates, transfer, and arrivals
- 14. Clarity of boarding calls and airport public announcements
- 15. Flight information screens—clarity and quality of information
- 16. Friendliness of airport staff
- 17. Language skills for airport staff
- 18. Ease of transit through the airport between flights for domestic and international travel
- 19. Location of airline lounges

- 20. Washroom and shower facilities in terminal
- 21. Cleanliness of washroom facilities
- 22. Television and entertainment facilities
- 23. Quiet areas, day rooms, hotel facility, rest areas
- 24. Children's play area and facilities provided
- 25. Choice of shopping—tax free and other outlets
- 26. Prices charged in retail outlets
- 27. Choice of bars, cafes, and restaurants, including international options
- 28. Prices charged in bars, cafes, and restaurants
- 29. Internet facilities and Wi-Fi availability
- 30. Business center facility
- 31. Telephone and fax locations

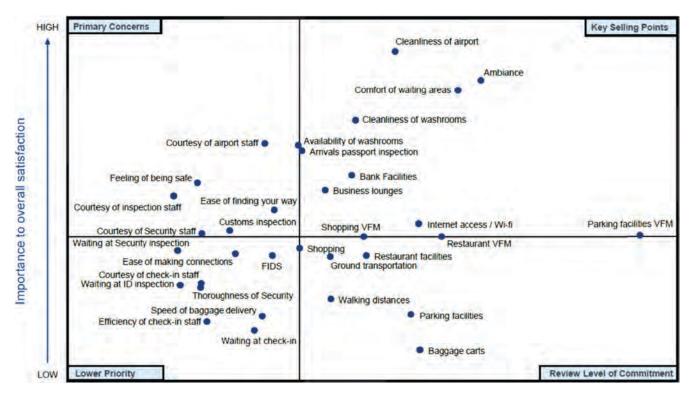


FIGURE 17 Priority analysis. Source: ACI (2012).

- 32. Bureau de change facilities
- 33. ATM facilities
- 34. Smoking policy and standard of smoking lounges
- 35. Standards of disabled access and facilities
- 36. Baggage delivery times
- 37. Priority baggage delivery efficiency
- 38. Lost luggage services
- Customer perception of airport security and safety standards.

The methodology and weightings of factors for the SKYTRAX airport rankings are not available in the public domain.

## Port Authority of NY and NJ Passenger Satisfaction KPIs

On the other end of the spectrum, customer satisfaction KPIs that PANYNJ prepares are based on very detailed categories of customer experience. Departing passengers rank their experiences across nine categories and arriving passengers across eight categories:

- Departing passengers
  - 1. Getting to the terminal
  - 2. Check-in process
  - 3. Security check

- 4. Terminal facilities
- 5. Food and beverage
- 6. Retail
- 7. Gate area
- 8. Overall experience.
- Arriving passengers
  - 1. Gate area
  - 2. International arrivals experience
  - 3. Terminal facilities
  - 4. Baggage claim
  - 5. Waiting for a taxi
  - 6. Leaving terminal
  - 7. Overall experience.

Each of these categories request passengers to rank their experience from 1 (unacceptable) to 10 (outstanding). For example, Figure 18 shows the KPI rankings requested for the check-in process. Other categories are equally detailed.

PANYNJ has the capability to compare satisfaction rankings over time and amongst all airports operated by the Authority. Surveys also request detailed information about passenger demographics, expenditures at the airport, connecting experience if relevant, visibility of advertising and use of smart phones for check-in, and airport information. Each year, PANYNJ publishes a Passenger Experience Progress Report. These reports and detailed benchmarks are also

Where di	I you check-in today to receive your boarding pass for you
light?	Curbside Main check-in counter
S	elf check-in kiosk Airlines Club Lounge
	Printed Boarding Pass before coming to airport
☐ Do	vnloaded Boarding Pass on Web-enabled cell phone
Ease of F	nding Check-In Location
Ease of L	sing Check-In Kiosk, if applicable
Time Red	uired to Check-In and Receive Boarding Pass
(on the	Internet or at the airport)
Courtesy	Helpfulness of Check-in Staff
Appearar	ce of Check-in Staff
Condition	Cleanliness of Check-In Area
CHECK-	N PROCESS-OVERALL

FIGURE 18 Satisfaction rankings for check-in process. *Source*: PANYNJ (2012).

available to employees and business partners on the Airport Customer Care website.

## PROCESSING TIMES AND DELAYS

The last group of customer satisfaction KPI's involves objective measures of service quality, such as the time it takes to move through an airport terminal and whether an aircraft is delayed. This last cluster of performance indicators are measurable calculations of wait times and average aircraft delays. This particular list of performance measures was originally published in *ACRP Report 19a: Airport Performance Indicators* (Hazel et al. 2011) and the ACI *Guide to Airport Performance Measures* (Oliver 2012). However,

processing time and aircraft delays are also mentioned in the literature as valid contributors to a passenger's overall experience.

- 1. Processing times
  - a. Wait time at check-in
  - b. Check-in to gate time
  - c. Security clearing time
  - d. Wait times at customs and border patrol
  - e. Baggage delivery time
  - f. Number of baggage carts available.
- 2. Delays
  - a. Percent of departing flights delayed
  - b. Percent of arriving flights delayed.

CHAPTER FIVE

## COMMUNICATION AND RECOGNITION OF RESULTS

This synthesis began with the premise that an airport is a complex organization supported by airport employees, volunteers, business partners, and government agencies. When the airport organization makes customer satisfaction a strategic objective, most people that work at the airport will become engaged in this strategic effort. Customer service ultimately is a matter of continuous communication and relationship building throughout the airport community.

To accomplish excellent customer service, airports interviewed made the following suggestions:

- 1. Leadership of the airport must make customer service a top priority and commitment.
- 2. As a strategic objective, customer service must then translate into individual initiatives within the entire airport organization.
- Performance measures can track progress on these initiatives at the department, business unit, and individual level.
- 4. Communication of a culture of customer service is assisted by training sessions that engage everyone who works at the airport: executives, staff, volunteers, station managers, business partners, TSA, and law enforcement.
- Recognition of results and appreciation for employees, business partners, and volunteers reinforce the commitment to customer service.

## **IMPLEMENTING A CULTURE OF EXCELLENCE**

At Dallas/Fort Worth International, the strategic objectives of the airport are tied closely to the ACI-ASQ performance metrics. Airport management is looking to achieve an overall ASQ satisfaction score of 4.2 (out of 5.0) and to obtain ranking within the top five large airports in North America. Each year, every department and most employees have performance measures to achieve. Work on department-level goals is supported by other strategic objectives including:

- Fostering employee engagement
- Creating an environment for excellence
- Providing education, training and career development opportunities
- Implementing talent reviews to prepare and enhance leadership.

The Metropolitan Nashville Airport Authority (MNAA) uses the Performance Excellence (Baldrige) framework to focus on self-assessment and improvements in the following categories:

- Leadership
- · Strategy customer
- · Measurement workforce
- Operations
- Results (desired outcomes).

As at DFW, the goals of the organization translate to initiatives at the departmental level. BNA has a customer service goal to go "above and beyond expectations to provide outstanding customer service." Current objectives for the customer service business unit are:

- 1. Complaint management through the airport website
- 2. Lost and found management
- 3. Paging/information service to internal and external customers.

#### **CUSTOMER SERVICE TRAINING**

A number of airports offer airport-wide training that focuses on the airport brand and culture of excellent customer service. At Colorado Springs Airport, ambassadors are specially trained to provide assistance to wounded warriors, returning military personnel, and athletes arriving to go to the Olympic Training Center.

Halifax Stanfield International developed the Stanfield Way workshop designed by the airport community to promote a consistent approach to customer service. The airport hopes to put the entire airport community through the program.

Hartsfield–Jackson Atlanta International is in its third year of an eight-hour training program based on the Disney Institute model. Representatives from various airport departments, cleaning contractors, parking operators, concessions, and customer service representatives worked together to develop the standards and a statement of core values and expectations that went into the program.



The Stanfield Way

At MSP, the airport authority has introduced the MSP Nice Airport Community Customer Experience Training. This program is sponsored by the Customer Service Action Council and includes:

- · Setting the MSP internal brand standards
- · Cascading those standards throughout MSP
- Measuring performance on the internal brand slogan, "MSP Nice, one experience at a time."

The program's central theme is, "Good customer service is good business." It is designed to reach all MSP employees and any person at the airport that has contact with customers. The training sessions are run by representatives from the concessions, airlines, volunteers, TSA, and MAC executives.

### **RECOGNITION OF RESULTS**

In addition to training, airports have appreciation programs that recognize employees, volunteers, and business partners.

Halifax Stanfield offers employees recognition through the Thank You Program. Each month, recognized employees receive a letter from the airport CEO and a nominal gift or gift card. Quarterly awards of \$200 gift cards are also given and the airport organizes an annual gala event to thank employees. Often 500 people attend the gala.



Employee recognition program

Atlanta is in its 17th year of a recognition program held the first week of October to coincide with Customer Service Week. Employees receive awards in four categories for exceptional performance. Nominations come from customer letters. A focus group of employees reads the letters each month for a monthly award of a gift card donated by airport vendors. Monthly award winners are eligible for the annual award, which includes larger gift cards and the hanging of their pictures on the Customer Service Hall of Fame wall. The event is jointly sponsored by the airport and airport vendors. The airport provides the facility and food; the vendors the awards.

CHAPTER SIX

## CONCLUSIONS AND FURTHER RESEARCH

#### **CONCLUSIONS**

Managing airports today involves complex partnerships between public and private entities. From the customer's view, an airport is a monolithic organization. Airport staff or volunteers are often the first point of call when there is a problem. Increased use of self-service technology to check in, change seats, find the gate, order food, or return rental cars has sharply reduced passenger contact with airport and airline representatives and other business partners.

Research reviewed for this synthesis suggests that a positive customer experience results from a combination of improved terminal design, clean facilities, good signage, help desks, and an inviting mix of retail and food and beverage choices. There is also a shared belief that when passengers feel more at ease, they tend to spend more for services and retail.

Methods of measuring customer satisfaction, organizational response, and improvement run the gamut from informal to quantitative. Because achieving excellent customer service is a shared endeavor within the airport organization, measurement of performance may reside in the executive office, the customer service office, public relations, marketing, business development, property management, human relations, operations, or the office of continuous improvement.

The range of tracking and evaluation techniques is equally broad and depends on the size and resources of an airport, whether the airport functions from within a strong strategic planning framework, or whether the person(s) in charge of performance measurement is statistically oriented. Even airports that subscribe to the same benchmarking tools use them in very different ways. For example, some Airports Council International Airport Service Quality (ACI-ASQ) benchmarks subscribers only use the raw data to evaluate performance and build custom comparisons with other airports. Other airports use the benchmarks provided by ACI-ASQ to set action priorities and employee bonuses. The subjective nature of the rankings themselves leads most airports to track problem issues over time and apply other methods to determine the root causes of low or declining scores. In that sense, benchmark scores are almost always followed up by more surveys, focus groups, and/or processing time studies.

The distributed nature of responsibility for customer service also makes it difficult for airports to know precisely how many resources (time, people, and money) are directed at

customer service. When airport managers interviewed were asked how much is spent on customer service, they reported a large variation in philosophy and estimates of expenditures.

### **FURTHER RESEARCH**

The measurement of customer service performance is based on an evolving understanding of what is really important to a customer's experience. Research suggests that cleanliness, courtesy of staff, processing times, gate experience, and concession choices are the most important factors that contribute to a customer's experience. However, it appears likely that factors not under the airport's control—delays getting to the airport, parking congestion, slow shuttle buses, bad weather, and flight cancellations—can drastically alter a customer's experience. Three extensive databases maintained by ACI-ASQ, by the Port Authority of New York and New Jersey, and by the Nashville Metropolitan Airport Authority present an opportunity to statistically analyze the factors that contribute most to customer satisfaction and the relative importance of each factor.

At the present time, there are many assumptions about what customers want, and indications that suggest happy customers are loyal and will spend more money. Through an extensive a la carte fee structure for baggage check and other services, airlines have assembled a large data set about minimum customer requirements and preferences. Airlines already track which of the following services are essential and important to their patrons:

- · Checked baggage
- Extra legroom
- Early boarding on or exit from the aircraft
- Meals
- · Music and entertainment.

Further research could test these hypotheses and confirm which performance measures are most important to track.

Airports are beginning to look in more detail into what customers want and what they are willing to spend. Most of the literature on customer satisfaction focuses on basic experiences at an airport, ranking cleanliness and fast processing through security checkpoints as important contributors to customer satisfaction. But it is also likely that what the business traveler perceives as excellent customer service is different from that of a family of four or a passenger with limited mobility. Understanding the factors that drive different customer segments is

the next frontier of measurement of customer satisfaction at airports.

Some of this research has been done for airport parking products where greeters, weekday travelers, weekend, and long-term travelers are offered different parking products. Jacksonville International understood its business customer expectations when it implemented its Preferred Passenger Lane. Other airports have implemented Trusted Traveler and Clear Programs.

Understanding different customer segments will also make it possible for a more personalized dialogue with customers. Social media enable airports to communicate better with their customers about interests and preferences, and several of the airports interviewed recognized the potential use of social media to engage in a two-way conversation.

Better knowledge of customer wants and needs will become especially important as aging baby-boomers, a group of frequent air travelers, continue to travel, perhaps with more limited mobility. As a demographic reality, customer service for this group is already a priority for many airports.

As customer service evolves at airports, so will measurement of performance. This synthesis provides a snapshot of current practice. The subject area invites further research in a number of areas:

- Passenger segmentation: How different passenger groups rank satisfaction measures and how this understanding can improve the program design and delivery of parking products, concession mix, and other passenger services.
- Investment: How airports evaluate the return on various customer service initiatives and make decisions about where best to allocate resources.
- 3. Planning: How information about customer satisfaction can improve efficiency in the terminal area and increase revenues from concessions and other airport services.
- Brand: How the airport can integrate a culture of customer service and communicate what the airport will consistently deliver.
- 5. Handbook: A low-cost, customer service management strategy and service quality measurement system for small and non-hub airports.

## **GLOSSARY**

- Benchmarking: The process of comparing performance metrics of an organization. Internal benchmarking involves a comparison of a particular metric over time. External benchmarking involves comparison with an industry average or standard or comparison with other peer airports.
- Crowd sourcing: The basic idea of crowd sourcing is to tap into the collective intelligence of the public at large to gain insight into what customers really want.
- Customer care: Involves putting systems in place to maximize the customer's satisfaction.
- Customer experience: The connections that an airport makes with its customers across all functions and touch-points. Customer experience is the outcome of the practice of customer service.
- Customer satisfaction: A measure of how products and services meet or surpass customer expectation. Customer satisfaction is defined as "the number of customers, or percentage of total customers, whose reported experience with a firm, its products, or its services (ratings) exceeds specified satisfaction goals" (Farris et al. 2010).
- Customer service: An organizational function in which an individual or group is responsible for a subset of interactions with customers.
- Enplanements: Number of passengers embarking on an aircraft at an airport.
- Hub type: The FAA defines primary hub airports by the percentage of annual passenger enplanements. Large hubs are airports that enplane 1% or more of annual passenger enplanements in the United States. Medium hubs enplane at least 0.25% but less than 1%. Small hubs enplane at least 0.05% but less than 0.25%; and non-hubs enplane more than 10,000 passengers but less than 0.5% of the annual total. Nonprimary non-hub airports must enplane at least 2,500 passengers and no more than 10,000.

- Key performance indicators: Can be defined as measures that provide managers with the most important performance information to enable them or their stakeholders to understand the performance level of the organization. Key indicators should be clearly linked to the strategic objectives of the organization and therefore help monitor the execution of the business strategy (Advanced Performance Institute n.d.).
- Sentiment analysis: A linguistic analysis technique where text is examined to monitor and characterize the overall feeling or mood of customers as reflected in social media toward a specific brand, organization, or company. Though the method predates modern technological tools, the use of sentiment analysis has accelerated in recent years with the development of large-scale computational infrastructure that can analyze large unstructured textual data sets (*Financial Times Lexicon*).
- Six Sigma: A disciplined, data-driven approach and methodology for eliminating defects. The fundamental objective is the implementation of a measurement-based strategy that focuses on process improvement and variation reduction through the application of Six Sigma improvement projects. This is accomplished through the use of two sub-methodologies, DMAIC and DMADV. The Six Sigma DMAIC process (define, measure, analyze, improve, control) is an improvement system for existing processes falling below specification and looking for incremental improvement. The Six Sigma DMADV process (define, measure, analyze, design, verify) is an improvement system used to develop new processes or products. It can also be employed if a current process requires more than just incremental improvement (http://www .isixsigma.com/new-to-six-sigma/getting-started/ what-six-sigma/).

## **ACRONYMS**

ACI Airports Council International
ASE Aspen/Pitkin County Airport
ASM Airport Standards Manual
ASQ Airport Service Quality

ATL Hartsfield–Jackson Atlanta International Airport

BNA Nashville International Airport
CBSA Canadian Border Services Agency
CMH Port Columbus International Airport

COS Colorado Springs Airport

CRAA Columbus Regional Airport Authority
CSAC Customer Service Action Council (MSP)
DFW Dallas/Fort Worth International Airport
EWR Newark Liberty International Airport

FBO Fixed-base operator GA General aviation

GSA General Services Administration

IROP Irregular Operation

JAA Jacksonville Aviation Authority
JAX Jacksonville International Airport
JFK John F. Kennedy International Airport

KPI Key Performance Indicators

LGA LaGuardia Airport

MAC Metropolitan Airports Commission
MNAA Metropolitan Nashville Airport Authority
MSP Minneapolis–St. Paul International Airport

OSU The Ohio State University Airport

PANYNJ The Port Authority of New York and New Jersey

PPL Preferred Passenger Lane (JAX)

QA Quality assurance SAN San Diego International

SASO Specialized Aviation Service Operators SFO San Francisco International Airport SWF Stewart International Airport

TA Traveler's Assistance
TAA Tucson Airport Authority

TRIP Terminal Renewal and Improvement Program (DFW)

TUS Tucson International Airport

YHZ Halifax Stanfield International Airport

YOW Ottawa Macdonald-Cartier International Airport

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## **APPENDIX A**

## **Online Survey Instrument**

The synthesis team prepared an online survey that explored the ways airports implement their customer satisfaction programs and measure progress. Twenty airports were selected to reflect diversity with respect to size, geography, aviation services, and recognized commitment to customer service. Fifteen of these agencies representing 18 airports, agreed to participate in an online survey followed by a telephone interview. This appendix presents the online survey instrument. Appendix B presents the aggregate results of the online survey. Appendix C shows the discussion guide for the follow-up telephone interviews, and Appendix D provides highlights from those interviews.

# ACRP S01-06: How Airports Measure Customer Service Thanks for participating in this ACRP research on how airports measure customer service. We'd like to learn a little more about your airport's customer service program before our interview. Please take a few minutes to answer these questions. All individual airport responses will remain confidential and will not be published by ACRP or any other entity. 1. Your Name 2. Your Airport's Name 3. Please identify the Airport Sponsored Programs that your airport uses to measure customer service. (Select all that apply.) Passenger/Pilot Intercept Surveys Airport Tenant Surveys Customer Service Help Centers Comment Cards Survey Kiosks Airport Ambassadors Customer Hotline Website Customer Feedback Social Media Other (please specify) 4. Which of the following external groups do you work with to measure customer service? ACI-ASQ Programme Canmark Airport Satisfaction Survey SKYTRAX World Airport Customer Satisfaction Survey Consultants for custom surveys and other evaluations 5. Please list other ways your airport measures customer service. For example, mystery shoppers, spot inspections, passenger processing times (i.e. baggage claim, check-in, security), feedback from employees and ambassadors.

RP S01-06: How Airports M	
	pful to improving your customer service program?
elect all that apply.)	
Passenger/Pilot Intercept Surveys	ACI-ASQ Programme
Airport Tenant Surveys	SKYTRAX World Airport Customer Satisfaction Survey
Customer Service Help Centers	Canmark Airport Satisfaction Survey
Comment Cards	Consultants for custom surveys and other evaluations
Survey Kiosks	Mystery Shoppers
Airport Ambassadors	Spot Inspections
Customer Hotline	Passenger Processing Times
Website Customer Feedback	Employee Feedback
Social Media	Ambassador Feedback
er very helpful tools:	
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ACRP S01-06: How Airports Measure Customer Service
9. How does your airport staff its customer service representatives? (Select all that apply.)
Paid Airport Employees
Volunteers
Third Party Contractors
FBO
Other (please specify)
<ul><li>10. How much did your airport spend on its customer service program in the last fiscal year?</li><li>11. Does your airport have a customer service business plan?</li></ul>
Yes
○ No
In the works
12. Does your airport have customer service objectives?  Yes  No  In the works
13. If you answered "yes" to question 11, please list your airport's current customer
service objectives.
Example Objective: Develop a complaint/comment management process to respond to customer problems reported on the airport website
Objective #1 Objective #2
Objective #3
Objective #4
Objective #5
Objective #6
Objective #7
Thank you so much for filling out this survey.

## **APPENDIX B**

## **Summary of Online Survey Findings**

#### WAYS AIRPORTS LISTEN TO CUSTOMERS

Airports reported that websites and comment cards were the most common methods with which customers communicated directly with the airport administration. Airport ambassadors also provided an effective listening post, as did social media. More than half the airports conducted regular surveys to measure customer satisfaction (see Figure B1).

#### THIRD PARTY EVALUATION TOOLS

Small hub, non-hub, and general aviation airports participated in customized satisfaction surveys. Ten of the large and medium airports subscribed to the ASQ Survey. Canmark and SKYTRAX survey airport targets are decided by the vendors of these products (see Figure B2).

## MOST HELPFUL LISTENING AND MEASUREMENT TOOLS

Figure B3 shows those tools that airports reported as most useful. There was a strong correlation between what the airports had and what they liked to use, probably because over time, the ineffective tools dropped away. The top-ranked tools reflect all survey respondents; the free response suggestions were added by individual airports.

## MANAGEMENT OF CUSTOMER SERVICE

This question about how customer service is managed elicited interesting information. For the smallest airports, customer service was typically handled with other responsibilities. Large airports tended to have one senior manager in charge of customer service programs, and often someone in communications or public relations that monitored the web, social media, and/or comment cards (see Figure B4). Performance measurement was often the responsibility of the customer service manager, but also could reside in an overall airport performance group. Airports that required each department to pursue customer satisfaction as an objective had even greater distribution of responsibility across the organization.

## **FULL-TIME CUSTOMER SERVICE POSITIONS**

Of the 14 airports responding to this question, most had four or fewer full-time employees dedicated to customer service and three airports had one person (see Figure B5). Once again, if an airport pursues a distributed model where customer service is integral to every functional area of the airport, there may be considerable time devoted to customer service but not specific job titles that would equate to a full time position. In one instance, a municipal hiring freeze made creation of new jobs impossible

for the airport and customer service functions were distributed among several people.

### STAFFING OF CUSTOMER SERVICE REPRESENTATIVES

Question 9 asked how the customer service representative function was staffed. Mostly this function involved multiple groups: Seven airports used airport staff and volunteers and three airports used both contractors and volunteers. Three airports only used contractors; one airport used volunteers; and the general aviation airport used airport staff and the FBO (see Figure B6).

## ANNUAL CUSTOMER SERVICE PROGRAM SPENDING

Nine airports answered this question, although several respondents reported it was difficult to quantify expenditures. Expenditures typically do not include salaries and benefits for full-time employees dedicated to customer service. During the interviews, it became clear that at airports where customer service responsibilities are distributed, no one really knew how much is spent on customer service except for third-party expenditures (see Figure B7).

# CUSTOMER SERVICE BUSINESS PLAN AND OBJECTIVES

All 15 agencies responded to this question. Five had customer service business plans, seven did not, and three reported that a plan was in the works. More interesting was the varied scope of customer service objectives listed. Airports that regularly measured performance were focused on improvements to particular metrics. Other airport objectives focused on enhancement of specific customer service programs. Examples of customer service objectives are listed here:

### ASPEN/PITKIN COUNTY AIRPORT

- 1. Make check-in as seamless as possible
- 2. Have a maximum one-minute walk from parking to check-in
- 3. Reduce security wait times
- 4. Install in-line baggage screening
- 5. Construct a new parking garage and terminal.

### NASHVILLE INTERNATIONAL AIRPORT

- 1. Complaint management through website
- 2. Lost and found management
- Paging/Information service to internal and external customers.

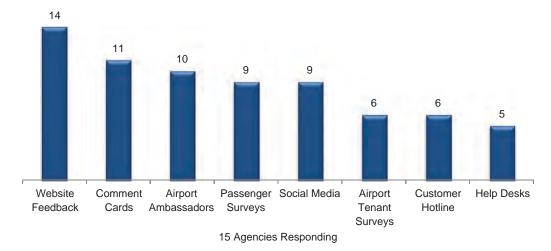


FIGURE B1 Ways that airports listen to customers. Source: Synthesis Online Survey (2012).

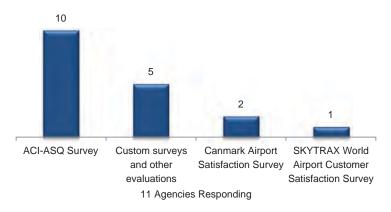
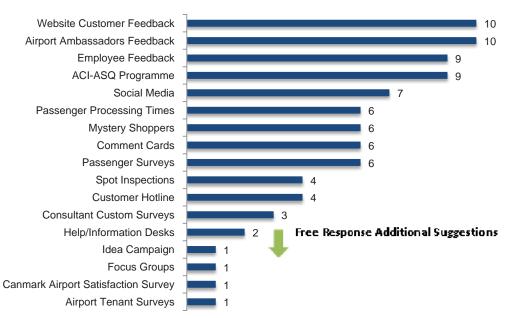


FIGURE B2 Third party evaluation tools. *Source*: Synthesis Online Survey (2012).



Most Helpful Tools to Improve Customer Experience - 15 Agencies Responding

FIGURE B3 Most helpful tools to improve customer experience. Source: Synthesis Online Survey (2012).

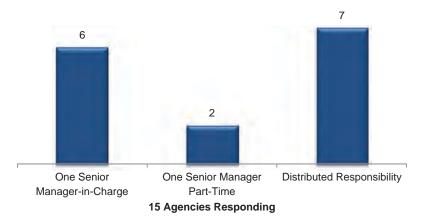


FIGURE B4 Ways airports organize customer service. Source: Synthesis Online Survey (2012).

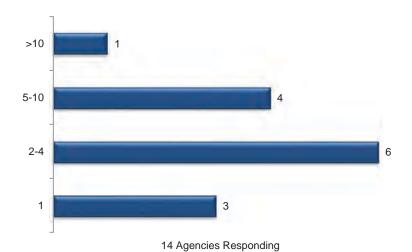


FIGURE B5 Number of full-time customer service employees. *Source*: Synthesis Online Survey (2012).

	Airport Staff	Volunteers	Contractors	FBO
Airport Staff		7		1
Volunteers		1	3	
Contractors			3	
FBO				

FIGURE B6 Staffing of customer service representatives (15 airports responding). *Source*: Synthesis Online Survey (2012).

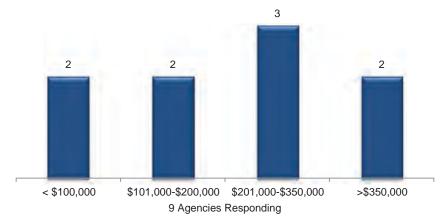


FIGURE B7 Annual budget for customer service programs. *Source*: Synthesis Online Survey (2012).

## COLUMBUS REGIONAL AIRPORT AUTHORITY

### Strategy—Exceed Customer Expectations

- 1. Enrich the Customer Experience
  - Diversify and expand services to address the needs and interests of customers
  - Improve customer convenience, amenities, ambiance, cleanliness, and service to ensure a satisfying, easy, and customer-centric experience.
- 2. Enhance & Leverage Tenant & Stakeholder Alliances
  - Pursue creative business arrangements and incentives that will entice prospective and existing tenants to develop or improve facilities, increase investment, or enhance service
  - Nurture and value relationships with business partners, governmental agencies, and other community-based organizations.

## COLORADO SPRINGS AIRPORT

- Establish and maintain a system that ensures a seamless, coordinated, and timely response when concerns are raised by our customers, regardless of the source of the problem
- 2. Use the lessons learned through interactions with our customers to improve the overall level of service.

#### DALLAS/FORT WORTH INTERNATIONAL AIRPORT

- 1. Achieve ACI-ASQ score of 4.2
- 2. Obtain Top 5 standing in large-hub airport annual list
- 3. Other goals by departments.

### HALIFAX STANFIELD INTERNATIONAL

- Retain ASQ Assured Certification and increase customer focus rating
- 2. Develop and implement a new airport community culture program & training
- 3. Ensure volunteer hosts are reflective of the community we live in
- 4. Create a formal agreement with the Red Cross for the provision of comfort and care during emergency situations
- 5. Enhance the Volunteer Tour Program
- 6. Enhance Performing Arts Program.

## JACKSONVILLE INTERNATIONAL AIRPORT

- 1. Develop a customer service business plan
- 2. Expand the customer service program to the three general aviation airports
- 3. Create a customer service training video to be included with SIDA badge training
- Personally train internal and external stakeholders on Airport Service Quality Survey results, giving each stakeholder relevant, actionable information.

### MINNEAPOLIS-ST. PAUL INTERNATIONAL AIRPORT

- 1. Public restroom remodeling
- 2. Institute free Wi-Fi
- 3. Expand arts and culture program
- 4. More technology for customers
- 5. Vision Statement: Give our customers the *best* airport experience in North America.

## OTTAWA INTERNATIONAL AIRPORT

- Provide a fully transparent mechanism to collaborate with airport users on ideas to improve the passenger experience
- Maintain high scores and strong performance in the ASQ program
- Incorporate ideas into operational and capital plans for future years.

## THE OHIO STATE UNIVERSITY AIRPORT

1. Address any customer complaints to the customer's satisfaction.

#### THE PORT AUTHORITY OF NEW YORK AND NEW JERSEY

- Improve/maintain customer satisfaction to benchmark levels
- Improve/maintain mystery shopper scores at 95% compliance to airport standards
- Improve/maintain facility Q/A evaluations at 90% compliance to airport standards
- 4. Respond to all customer e-mails.

## **APPENDIX C**

## **Telephone Interview Discussion Guide**

Below please find a list of questions we would like to cover in our telephone interview.

## **Overview Questions**

- 1. Could you give us a brief history of customer service at Airport?
- 2. What are the most unique features of your customer service program?
- 3. What are your responsibilities for customer service?
- 4. Where does/will the director of passenger experience reside within the airport organization (e.g., operations, marketing/business development)?
- 5. Your airport uses a number of tools to measure customer service performance. Which tools does the airport rely on the most? Can you say a little more about why these work so well?
- 6. What are your airport's most reoccurring customer service issues?
- 7. Are there aspects of customer service that you current don't measure, but would like to?

## **Data Collection and Reports**

First a few questions about ACI-ASQ (if the airport is a subscriber).

- 1. Which components of ACI-ASQ do you use?
- 2. Of all the deliverables provided to you by ASQ, which are most useful?
- 3. How do the ASQ scores drive customer service priorities at the airport?
- 4. When it comes to conducting surveys for ASQ, do you do this in-house or hire consultants to perform the quarterly surveys?

Now we'd like to turn to other ways that you measure customer service.

- 5. Can you please describe the airport ideas campaign and how it was executed? What is the follow-up plan for implementing some of the ideas? Will the campaign be repeated?
- 6. What has been your experience with comment cards and website feedback? Is one used more than the other?
- 7. How does the airport use social media?
- 8. Do you have a fulltime staff member devoted to responding to customer comments and social media?
- 9. Can you please describe how the mystery shopper program works?
- 10. We are also interested in the concession customer satisfaction surveys. Are these custom surveys? How often do you conduct the surveys?
- 11. Please describe the Airport Ambassador Program.
- 12. You indicated in the online survey that the customer service program costs about \$\_\_ per year? What does this figure include?

## **Action Plan Development**

- 1. Please describe your customer service planning process and how the airport sets objectives.
- 2. How do you instill a positive culture of customer service amongst staff, the airlines, security, contractors, and concessionaires?
- 3. How do you keep airport staff informed about customer service performance?
- 4. What are your priorities for your customer service program moving forward?

## **Concluding Questions**

- 1. What key points would you make to airports looking to improve their customer service program?
- 2. Were there questions we failed to ask in this interview that you think are important?

## APPENDIX D

## **Highlights from Airport Interviews**

### **APPROACH**

Fifteen airport agencies agreed to participate in a telephone interview about their customer service program. Each discussion guide (see Appendix C) was customized to follow up on responses to the online survey. The Port Authority of New York and New Jersey (PANYNJ) represented JFK, Newark, LaGuardia, and Stewart airports. Airports interviewed included two Canadian airports as well as a sample of different hub sizes, origin and destination (O&D) airports, connecting hubs, destination airports, and a general aviation airport (Table D1).

### **ASPEN/PITKIN COUNTY AIRPORT**

Aspen is a non-hub airport located on the Western Slope of Colorado. It is primarily a destination market that has peak seasons in the winter and summer and is a popular second-home mountain resort town. Residents not only use the airport but are actively engaged as stakeholders. The customer base extends into the town and down the valley from the Eagle County portion of Basalt to Glenwood Springs.

The airport relies primarily on employee and ambassador feedback. The airport contracts with Aspen Chamber Resort Association to serve as the customer service representatives and staff the airport help desk. The airport does not get many comment cards. Most of the information known about customer experience has come from two surveys conducted in the last five years about passenger experience and design features for a new terminal. There are also well-attended community meetings about airport plans.

The airport's major customer satisfaction issues are:

- The terminal is too small.
- Passengers arrive at the cutoff time to get their flights.
- Passengers would like to have more food and retail options at the terminal.
- Lost luggage is a problem, especially in the winter.

Its recommendations for other airports looking to improve their customer service are:

- Keep the lines of communication open for passengers and members of the community.
- Focus on and listen to what is said about the airport and plans for change. Take it to heart and respond.

## **COLORADO SPRINGS AIRPORT (COS)**

COS is a small hub airport that is host to Peterson Air Force Base, headquarters for the U.S. Air Force Space Command, NORAD-Northern Command, and Army Strategic Command. The airport leases the base to the U.S. Department of Defense and maintains and operates the airfield for both military and civilian use. Customer service has always been a top priority with airport leadership, and as a small airport, COS views its personal, high level of customer service as a competitive advantage over larger airports.

The airport has several special groups of customers that include: military personnel, deploying troops, and professional athletes using the Olympic Training Center. In an effort to lower air fares for military travel, the airport intervened to increase the number of General Service Administration (GSA) City Pair Program contract rates bid by airlines each year. COS also has developed a reputation for excellent customer care for passengers diverted by bad weather from nearby Denver International Airport, and diversions as a result of medical emergencies on cross-country flights.

Customer care services are handled through the executive office, with key personnel devoting a portion of their time to managing volunteer coordination and customer response. The airport has monthly meetings with business partners and addresses individual issues immediately as needed. The airport receives customer feedback through its website, comment cards, and phone calls. There is also a notable amount of walk-in traffic to the airport offices. For three years, the airport has collected data on compliments and complaints.

Its recommendation for airports that are looking to start or improve their customer service are:

- Pay attention to the way customers are treated by everyone
  who provides services at the airport. The airport has direct
  control over only a small part of the overall customer experience; however, the customer will hold the airport accountable regardless of the source of the customer service issue.
- Relationships matter. Establish strong connections with the people who handle customer service issues for each of your business partners. This effort requires strong relationships both at the local level and at the corporate level. Establish these connections before a problem arises.
- To the greatest extent possible, establish a program that blends the local and corporate level customer service efforts into a seamless response from the customer's perspective.

## DALLAS/FORT WORTH INTERNATIONAL AIRPORT (DFW)

DFW operates a distributed model of customer service responsibilities that is tightly organized by a set of strategic initiatives originating at the executive level and reinforced within every department. The vice-president (VP) of each department is responsible for setting annual customer service goals that are measurable with a metric. The metrics become the basis for tracking progress for the department and for individual employees in the department. The metrics connect customer service performance directly to reviews and bonuses. Departments have monthly review meetings with employees. There are also midyear and annual reviews for front-line employees. Contractors are held to minimum requirements and there are quarterly incentives built into the contracts. A contractor must meet all of the goals to receive the incentive.

Complaints are routed through the Airport Operations Center (AOC) and are then sent to the appropriate department. Any complaints that originate at the departmental level and have a system impact are sent back to the AOC for oversight and resolution.

TABLE D1 AIRPORTS INTERVIEWED

	-	•	-	2011
Airport	Hub Size	Organization	FAA Region	Enplanements
Hartsfield–Jackson Atlanta Int'l.	Large	Municipal	Southern	44,414,121
Dallas/Ft. Worth International	Large	Multi-County Board	Southwest	27,518,358
John F. Kennedy International	Large	Authority	Eastern	23,664,830
San Francisco International	Large	City/County	Western-Pacific	20,038,679
Newark Liberty International	Large	Authority	Eastern	16,814,092
Minneapolis/St. Paul International	Large	Airport Commission	Great Lakes	15,895,653
LaGuardia	Large	Authority	Eastern	11,989,227
San Diego International	Large	County Authority	Western-Pacific	8,465,683
Nashville International	Medium	Authority	Southern	4,673,047
Ottawa International	Medium	Corporation	Canada	4,624,626
Halifax Stanfield International	Medium	Corporation	Canada	3,594,164
Port Columbus International	Medium	Authority	Great Lakes	3,134,378
Jacksonville International	Medium	Authority	Southern	2,700,514
Tucson International	Small	Authority	Southwest	1,779,679
Colorado Springs	Small	Municipal	NW-Mountain	828,516
Aspen/Pitkin County	Non hub	County	NW-Mountain	221,256
Stewart International	Non hub	Authority	Eastern	209,966
				2011 Operations
The Ohio State University Airport	General Aviation	University	Great Lakes	68,226

Source: FAA Preliminary CY 2011 Passenger Boarding Data and ATADS Report and Statistics Canada.

DFW also has a standing Customer Service Task Force composed of seven VPs. The VPs of terminal management and marketing have permanent positions on the task force. The remaining five positions rotate each year. Participating in the task force gives VPs the opportunity to have an impact on customer service initiatives at the airport.

The airport has a large ambassador program staffed with 800 volunteers, three-quarters of whom are retirees. The program is operated within terminal management. Volunteers are used extensively to answer day-to-day questions.

The ACI-ASQ Survey is a central component of performance measurement. DFW relies on both internal tracking over time and benchmark comparisons with other airports to highlight progress and issue areas. The airport also follows up with management walk-arounds, monthly surveys, and quarterly focus groups to probe particular issues in more detail. Daily, mystery shoppers go into different parts of the airport or make phone calls to help and assistance centers or individual vendors.

In addition, DFW also collects comment cards daily and responds to feedback from the website. More recently, the marketing department is experimenting with social media to establish relationships with its customer base.

In 2010, the airport began a seven-year Terminal Renewal and Improvement Program that involves parking, security, and extensive renovations to the terminals. The airport has a special website (http://www.dfwairport.com/redefine/construction/index.php) that describes future plans, current construction, and road conditions; and includes an invitation to sign up for e-mail updates about construction.

The airport is also constantly refining its customer appreciation events. One July 4th, the airport hired temporary porters to assist travelers with luggage in the parking garages and lots. These young men were dispatched to the parking facilities to help passengers over the holiday. However, in the absence of advance publicity and proper airport identification, many passengers were afraid the porters intended to steal their luggage. DFW learned that special customer service initiatives must be announced through multiple channels, and that in this case, the porters should have been clearly branded with DFW logos and identification.

## HALIFAX STANFIELD INTERNATIONAL (YHZ)

For many airports, September 11, 2001, was transformative. As the North American air system shut down, airports were called upon to take care of stranded passengers. After this experience, many airports came to view passengers as their principal customers rather than the airlines. Forty-three diverted aircraft landed at the Halifax Airport on September 11th. Although the airport authority quickly mobilized to provide care and comfort to passengers, it learned from that experience that it is important to have specific supplies on hand, such as blankets, baby formula and diapers, and large quantities of bottled water. They also have pre-paid calling cards, food vouchers, and cell phones available. Volunteer hosts welcome passengers, provide blankets, mats and access to cell phones. This was the beginning of YHZ's customer service program and an enhancement to an already strong sense of community.

"The Stanfield Way" grew out of an airport-wide initiative to develop a workshop that trained employees to be "happy, helpful, courteous, caring, and kind." The program incorporates the beliefs, vision, and values of YHZ's culture of superior service, summarized in its promise: "Great people delivering the best airport experience in the world." Everyone from the president/ CEO down through the organization, along with the entire airport community, is invited to participate in the program.

The customer service program also includes comment cards, a database that tracks comment cards and website feedback, a volunteer host and tour program, special needs assistance, a performing arts program, and a Nova Scotia Tourism Information Centre.

A 15-member Ambience Group composed of legal counsel, border control, the VP of Communications and Operations, engineering, and the cleaning contractors meets on an as-needed basis.

YHZ has several recognition programs to acknowledge employees. The Thank You program involves monthly, quarterly, and annual recognition of employees and an annual employee appreciation event. In addition, the airport celebrates Mother's Day, Father's Day, Canada Day, and Valentine's Day. Volunteers have their own lounge, and are invited to three special appreciation dinners each year, to which they may bring a guest at the airport authority's expense.

YHZ uses the ACI-ASQ Survey and participates in the ASQ Assured Airport Certification Program as the centerpiece of its performance measurement system. The ASQ Certification program helps every department plan for the future. Certification involves the following steps:

### · Available Services Assessment

The airport completes the ASQ Assured "Available Services" questionnaire. This detailed questionnaire is a check-list of all services and facilities provided to the passengers, helping to identify how services offered are lacking and verification that the service offering matches the airport's passenger needs and expectations.

## • Service Quality Processes

The airport completes a comprehensive ASQ Assured "Service Quality Management Processes" which identifies the management practices relating to customer services using predefined best practice criteria.

### · Passenger Approval

ACI performs an analysis of ASQ Survey passenger satisfaction results in order to assess passenger approval and the airport's focus on key drivers of satisfaction. Participation in the ASQ Survey is a requirement for certification, because it provides the industry customer satisfaction measurement and benchmark indicator.

### • Audit

When an airport is assessed as meeting the minimum certification requirements, an on-site verification audit by accredited ACI auditors will be arranged with the airport. If significant gaps are identified, options are discussed with the airport on how the system or processes could be made more efficient or effective. The airport decides what, how, and how quickly improvements will be pursued. The auditors inform the organization of the results of the audit within four weeks of completion. The results take the form of the ASQ Assured report.

## Certification

Upon successful completion of the certification audit, the airport will be issued the ASQ Assured Certificate.

### · Reassessment

Participation in the ASQ Assured program provides for a remote annual re-assessment and progress audit, and a biannual physical audit before recertification (http://www.airportservice quality.aero/content/assured/certification.htm).

In addition, YHZ participates in the annual ASQ North American Forum and finds the sessions a productive time to share ideas with airports.

## HARTSFIELD-JACKSON ATLANTA INTERNATIONAL (ATL)

Important elements of the ATL customer service program have been established for many years. About 10 years ago, airport staff joined with contractors and business partners to develop a set of core standards for appearance and behavior. The standards were modeled after those used at Walt Disney World. Many airport partners participated in the effort, so acceptance and ownership of the standards was not an issue.

In 2010, the airport rolled out a training initiative for all employees and managers. The goal is to have 11,000 employees participate in the training in three years. Among features of ATL's customer service program are:

- A mystery shopper program that involves 325 monthly interactions
- An employee recognition program that recognizes exceptional performance monthly, quarterly, and annually
- Focus groups organized by the marketing division
- \$10 "Be Our Guest" vouchers given to passengers in the terminal.

ATL uses a distributed model for its customer service programs. Marketing manages ASQ benchmarking and social media; customer service manages mystery shopping, training, and employee recognition programs. Volunteers are coordinated by the operations division.

A positive culture of customer service is conveyed by monthly meeting with airport tenants and a monthly meeting with airline station managers, TSA, and Customs and Border Protection. ATL considers the key to a successful customer service program to be its relationship with employees, the airlines, business partners, and government agencies.

### **JACKSONVILLE INTERNATIONAL AIRPORT (JAX)**

The Jacksonville Aviation Authority (JAA) manages JAX, Cecil Airport, Jacksonville Executive at Craig Airport, and Herlong Recreational Airport. The customer service program is concentrated at Jacksonville International, although JAA has begun steps to send ambassadors to the other airports and to survey those customers. However, each airport has a unique customer base and will require a unique approach.

Customer service at JAX was originally within the administrative department, located away from the terminal. More recently, it was moved to the operations department on site. In addition, volunteer ambassadors, lost and found, and the Preferred Passenger Lane were consolidated into customer service. Having customer service within airport operations has served as an effective way to resolve issues quickly.

JAX operates an extensive customer service program. It collects information about passenger satisfaction through three

main sources: the ACI-ASQ Survey, an online passenger survey, and AirportSurvey.com (Canmark Research). In addition, customers can complete comment cards in the terminal or online. All customer comments receive a response, and action items are sent to the responsible party. Managers can view the data from comments online and in real time.

AirportSurvey.com representatives come to the airport once a month for a few days and distribute cards at security checkpoints or at exits to the concourse. The survey is free and as an incentive, Canmark offers to those passengers that fill out the survey a chance to win a free airline ticket. Canmark surveys approximately 30 U.S. airports. The samples are not means-tested, but each quarter, JAX receives a report that has demographic information about passengers arriving or departing from the airport. A recent quarterly report provided about 1,500 observations.

JAX also operates the JAX Action Line. This is a dedicated phone number and e-mail address, with a link on the JAA website. JAA receives about 15 e-mails and 30 calls per day through the Action Line, mostly from individuals seeking information or wanting to do business with the airport.

To a large extent, JAX relies on the results of the ASQ Survey to determine what the priority customer service issues at the airport are. When the Registered Travel Program went bankrupt, business traveler satisfaction declined. There were many requests through phone, e-mail, and mail for a replacement service. In response, JAA consulted with all the airlines and TSA; carved out space at the security checkpoint; and instituted the Preferred Passenger Lane (PPL). The PPL is a smashing success, and ASQ satisfaction scores have climbed.

As for advice to other airports, JAX is very positive about having customer service on-site at the airport. A small staff of one to three can accomplish a lot, even if it is focusing both on the air passengers and internal customers such as the airlines, employees, and other business partners.

# MINNEAPOLIS/ST. PAUL INTERNATIONAL AIRPORT (MSP)

Customer service at MSP is integrated into strategic planning. Each department has, as one of six strategic goals, a requirement for enhancing customer experience. There are also five standards expected of all MSP employees.

The history of Metropolitan Airports Commission (MAC) customer service initiatives dates back many years. The Airport Foundation at MSP was incorporated as a 501(c) (3) nonprofit in 1982. The foundation is charged with "enhancing the experience and exceeding the expectations of travelers at MSP International Airport, as well as supporting the airport and broader aviation community" [http://www.airport foundation.org]. Among its activities, the foundation manages the Travelers Assistance (TA) program, which is staffed by more than 300 volunteers (see Figure D1).

In 1998, the MAC formed the Customer Service Action Council (CSAC) to take the lead in an effort to "provide world-wide customer-oriented air transportation services at MSP." One of the earliest airport customer quality initiatives in the United States, CSAC began as a group of MAC employees, but later Northwest Airlines and concessionaires joined the group. Today membership includes representatives from all MAC divisions and a cross-section of airport tenants.



FIGURE D1 MSP employee standards. *Source*: Metropolitan Airports Commission.

MAC does not have a customer service manager; it sees customer service as every department's responsibility. The Customer Experience and Operations Analyst resides within Airport Operations and is responsible for customer service training and customer feedback to all MSP organizations. MSP uses a combination of the ASQ Survey, customer comments, and social media to measure customer service performance. ASQ provides the 30,000-foot view (big picture, but slower feedback); customer comments provide the 300-foot view (narrow picture, but fast feedback); and social media, the three-foot view (narrower but immediate feedback).

All customer comments are routed to the appropriate manager for direct response to the customer. MSP maintains two databases of compliments and complaints. Information is collected by the volunteers at the eight travelers assistance desks. The other database compiles similar information that arrives through the website, social media or comment cards. Social media is managed by the Public Affairs and Marketing Group and is monitored during regular operating hours.

MAC is also a long-term subscriber to the ASQ Survey. Surveys are conducted in-house by travelers assistance. The components of the survey that MAC uses are the raw data, panel scores, and prioritization. The analysis is used to help managers make informed decisions. (The data does not drive management decisions.)

MAC maintains a distributed model of responsibility for customer service. Each department has its own strategic customer service goals. To assure consistency of brand, MAC has developed a training program which emphasizes employee standards and the MSP internal brand. In addition, CSAC holds monthly meetings that are open to all organizations where common concerns, training, and performance data are shared. Each year, a group of MAC representatives tours other airports to gather ideas and compare airport facilities, concessions, and passenger processing.

Advice to other airports sharpening their customer service program includes:

- Senior management must drive a clear vision of customer service.
- There must be well-defined standards established which apply to all members of the airport.

### NASHVILLE INTERNATIONAL AIRPORT (BNA)

Nashville is a medium-hub airport governed by the Metropolitan Nashville Airport Authority (MNAA), a 10-member board appointed by the mayor of Nashville. Customer service at the airport reflects the disciplined approach dictated by management systems and a strong commitment to creation of a friendly, helpful, and hospitable airport environment; as a consequence, the customer service program is well developed, guided by a detailed strategic plan, and tracked by performance measures.

Organizationally, customer service programs reside under the Director of Community Affairs and Customer Service; performance measures reside within the Office of Continuous Improvement, where staff performs extensive statistical analyses on data. Figure D2 diagrams the system MNAA follows in developing and monitoring its branded customer service program.

BNA is a subscriber to the ACI-ASQ Program, participates in the Canmark Airport Satisfaction Survey, and has implemented its own passenger intercept and meeter/greeter intercept surveys. MNAA's survey is completed three times per year for both passengers and meeter-greeters. One of the passenger surveys coincides with the annual Country Music Association festival in June. BNA's intercept surveys are conducted over two days, a more concentrated timeframe than the ASQ survey. Copies of these surveys are in Appendix E.

Staff analyzes raw data from all of the surveys using factor and multiple regression analyses. Based on study of overall airport satisfaction, the MNAA has determined that the following factors are important:

- Clean gates
- · Clear in-terminal signage

- · Efficiency of screening area
- Overall terminal cleanliness
- Safe/secure feeling
- Variety of restaurants
- Visibility of flight information
- Waiting time for check-in.

Of these, business travelers indicated a stronger interest in clean gates, efficiency of screening area, and safety/security. Leisure travelers indicated a stronger desire for shopping variety and shorter waiting times for check-in. Both groups ranked variety of restaurants as an important factor.

BNA also has an extensive customer service program that includes 104 volunteers working under a coordinator. The Information Center was originally staffed by three paid employees and has expanded to six. The center is open 365 days per year and distributes tourism brochures, oversees convention welcomes, answers telephones, operates the paging system, and takes comments and complaints. BNA has an active Arts at the Airport program which includes live music and visual arts. Because of convention activity, the airport also maintains close relations with the Nashville Area Chamber of Commerce and the Nashville Convention and Visitors Bureau. BNA requires employees to participate in an annual one-hour training course that instills the importance of customer service and the "Nashville Experience."

For airports that want to improve their customer service program, BNA recommends the following:

- Listen to the customers.
- There are plenty of good ideas out there at different airports. It's important to isolate priorities first and then gather information at other airports.
- Stick to the plan.

## **OTTAWA INTERNATIONAL**

As a Canadian airport, Ottawa does not receive any funding from the federal government. Management operates the airport as a business and is required to pay taxes. Customer service has always been a priority. The airport is a long-term subscriber to

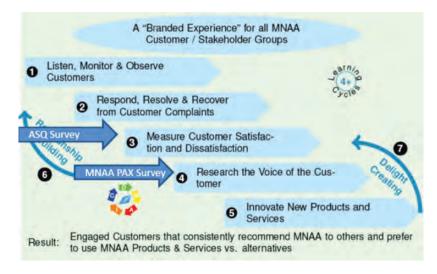


FIGURE D2 MNAA customer focus system. Source: MNAA (2012).

ACI-ASQ Survey and has won many awards for quality of service. Its strategic approach emphasizes:

- · Core focus on the airport organization
- Simplicity of the facility
- A facility that caters to its travelling demographic
- Emphasis on elements that are important to overall customer satisfaction
- · Celebration of successes.

The airport has many methods of interacting with airport users, including comment cards, website comments, Twitter, Facebook, community events, and airport business partners. Most recently, the airport sponsored an idea campaign that is described in chapter three of this synthesis. In addition, the airport conducts its own passenger intercept survey, shown in Appendix E.

All of the input is reviewed, analyzed, and shared with business partners on the airport campus; through these discussions, airport staff identifies areas of improvement. To support this effort, the airport has created a new position, the Director of Passenger Experience, who will lead the effort to implement improvements to customer service.

Ottawa also has a mystery shopper program. Evaluation factors are shown in Appendix E. The airport has two prime concessionaires. Twice per year, third parties conduct mystery shopper trips to measure customer service against a set of standards that are agreed upon beforehand.

## PORT COLUMBUS INTERNATIONAL AIRPORT (CMH)

CMH is operated by the Columbus Regional Airport Authority (CRAA), Rickenbacker International, and Bolton Field. Customer service functions were consolidated in 2008 under the Business Development and Communications Department. The current Manager of Customer Service is also the Manager of General Aviation Business Development. Most customer service initiatives focus on the airport.

CRAA has been using the ASQ Survey since 2002 and it is the primary performance measure tool in use. Staff uses the raw ASQ data for analysis and creates action plans for changes in ASQ scores. If a particular score drops 0.25 in one quarter or 0.1–0.25 in two consecutive quarters, the responsible department is asked to prepare an action plan to improve the score. All departments meet quarterly to discuss the previous quarter's score.

The Port Columbus terminal was originally constructed in 1958. The CRAA Board of Directors is considering a major terminal modernization program. One reoccurring customer issue is low ASQ scores on ambiance and cleanliness of the terminal. For older facilities, "the vibe of the building" is hard to change without a major remodeling effort. In the meantime, CRAA has added charging stations, free WiFi, and convenience outlets to the terminal. In addition, the airport sponsors regular art shows, and a \$2 million upgrade to airport stores is under way.

CMH supports customer service in several other ways. In the past, comment cards were used to solicit customer feedback but response rates have been so low, the airport plans to discontinue their use and rely on feedback through the website. About 65% of all comments through the website are requests for information; 20% is customer feedback. Customer service tries to have a 24-hour turnaround time for responses. Port Columbus also has an

ambassador program of approximately 60 volunteers that staffs the Information Desk and provides interactive tours of the airport. The Manager of Communications handles the airport's Facebook page and Twitter account. At this point in time, social media is used primarily to push information about the airport out to users. The Manager of Concessions contracts out for mystery shoppers. Each retail and restaurant location is visited twice per month.

In addition, the airport has formed the CMH Customer Experience Partnership, which meets approximately six times per year on various customer service topics. The group includes representatives from public safety, concessions, TSA, Sky Cap providers, ground transportation, the airlines, and stakeholder liaisons.

Each month, CRAA's customer service team publishes a newsletter, "The Buzz," that goes out to the entire airport community. There are four Passenger Appreciation Days each year and an employee recognition program that honors employees throughout the airport for "WOW" service.

### SAN DIEGO INTERNATIONAL AIRPORT (SAN)

San Diego is a large-hub airport that reported 8.5 million enplanements in 2011. The airport is operated by San Diego County Regional Airport Authority and currently is in the midst of a \$1 billion upgrade to be completed in 2013. The project, referred to as the Green Build, includes many components that will improve passenger experience at the airport, among them:

- Ten new gates to reduce terminal congestion and provide expanded, more comfortable passenger waiting areas;
- Enhanced curbside check-in, allowing passengers to print boarding passes, check baggage, and view gate information at an easy-to-use curbside kiosk before entering the terminal;
- Dual-level roadway to relieve curb-front traffic congestion by separating arriving and departing passengers;
- More security lanes to improve flow of passengers through the terminal; and
- Expanded concession area providing more dining and shopping options [http://www.san.org/sdcraa/airport\_initiatives/green\_build/default.aspx].

Airport staff uses several tools to measure customer service performance. SAN is a subscriber to the ASQ Survey. In addition, the airport authority has a contract with a third party to conduct a sample of 200 departing passengers each quarter. The sample is random and the core questions remain the same. The airport is considering a few additional questions to probe specific customer service issues. SAN used to sample arriving passengers, but no longer conducts this survey. For airport business partners, the airport deploys a tenant satisfaction survey whenever there is a construction project going on in the terminal. The plan going forward is to survey tenants twice per year and publish the tenant satisfaction survey online.

SAN has an ambassador program that involves 300 volunteers. These volunteers run two information centers, operate two courtesy carts, and are on foot in the terminal. Once the Green Build project is completed, there will be an additional information desk. The courtesy carts are the only carts available in the terminal area; airlines put in requests to use them.

Because of the construction, comments originating on the "contact us" page of the website are frequent. Customer service has a goal of a response within six hours. There are also links

to the SAN Facebook, Twitter, Flickr, and Pinterest sites on the airport website.

SAN was the location of a 2010 video that went viral about a passenger who refused, as an invasion of privacy, a full body scan at the security checkpoint and who also would not submit to a pat-down. The passenger declined to travel that day, received a refund on the ticket, but uploaded a video about the experience which had 70,000 viewers in the first day. The public relations and customer service personnel at the airport received an avalanche of heated conversation through social media about the incident.

The airport uses the scores provided by ACI-ASQ and results from custom passenger and tenant surveys to help set customer service priorities. In addition, the airport has a training program for employees and airport business partners, and conducts monthly meetings to discuss customer service issues and performance.

The Customer Relations Coordinator offered the following suggestions to airports looking to improve their customer service program:

- Have a great working relationship with the whole airport community including employees, contractors, TSA, and business partners.
- Social media can be both positive and negative. Public relations and customer service must cooperate closely and be prepared for a rapid response as issues arise.
- Always respond to customers as quickly as possible.

## SAN FRANCISCO INTERNATIONAL AIRPORT (SFO)

San Francisco is a large-hub airport operated as a department within the city and county of San Francisco. Enplanements in 2011 were over 20 million.

The Customer Service Manager is part of the Communications and Marketing Department. Customer service is supported by two full-time employees and three part-time contract staffers who help manage the approximately 225 volunteers.

SFO collects considerable data about customer service. For the last 20 years or so, the airport has conducted an annual passenger survey. The survey is taken for two weeks every May and intercepts approximately 3,800 passengers. In addition, SFO recently became an ACI-ASQ subscriber. There is an overlap of approximately 50% of the core questions, but the SFO custom survey delves into specific SFO issues. The airport likes the option of personalizing its survey each year. The airport works with the raw data from the ASQ survey and the annual passenger survey. So far, the results of both surveys tend to coincide. SFO also is a participating airport in the SKYTRAX survey.

SFO's recurring customer service issues are: staff friendliness, signage, walking distance, security, and value for money at the concessions. Going forward, the airport intends to take a closer look at beverage offerings and the mix of local and national brands.

SFO receives a lot of comment cards, website feedback, and questions via Facebook and Twitter. Approximately 80% are questions or requests for information. The Internet is gaining share in traffic, but written comment cards are also frequent. SFO uses its website, Facebook, and Twitter to provide travel infor-

mation, news stories, and events at the airport. A person in communications monitors customer comments on these sites. The airport also has a YouTube channel and photographs on Pinterest.

SFO operates 15 information desks. Volunteers staff the eight desks on the departure deck. The remaining seven desks on the arrival deck are operated by paid personnel. In addition, SFO runs a summer intern program and increases volunteers during Thanksgiving, spring break, and other holidays.

The role of customer service manager as the customer's advocate is very strong at SFO. The manager participates in business planning, terminal design discussions, and meetings with business partners on a regular basis; and is committed to factoring customer satisfaction into all aspects of airport decision-making.

## THE OHIO STATE UNIVERSITY AIRPORT (OSU)

OSU is a general aviation (GA) airport and the fourth busiest airport in Ohio. It is located in the competitive Columbus market. OSU is financially self-sufficient and makes most of its revenue from fuel sales, hangar rentals, and aircraft maintenance. Airport activity is primarily flight training and business aviation.

As a GA airport, its philosophy is: "Everything we do is customer service. Customer service must be flawless. It can begin days before the aircraft departs from its origin since we play a role in the customer's initial planning. Once the aircraft arrives we must carry out every task safely, [in a] timely [manner], and to the customer's complete satisfaction until they depart" [Mike Eppley, General Manager].

Many of the details of customer service involve careful handling and continual improvement of line operations, facilities, aircraft maintenance, and concierge services. For example, 2012 improvements included:

- Placing cones around aircraft to protect them from vehicle traffic
- High visibility ramp clothing
- · Safety whistles
- Marshalling out all departing aircraft (as well as arriving aircraft)
- Consolidation of vending equipment into one room and installation of seating areas for crew
- Upgrades to the fixed-base operator (FBO) facility, including new chairs, tables, TV's, and flooring.

One of the challenges for this airport is proper staffing of the ramp area. Activity is highly cyclical with respect to day of week and time of day.

Customer service issues are typically handled on a case-bycase basis. The general manager holds weekly meetings with staff and students that work at the airport and FBO. Each year, a group of employees goes to the annual National Business Aviation Association (NBAA) for inspiration. Results of national surveys of FBOs are a frequent topic of discussion.

The key takeaways to achieve exceptional customer service at this general aviation airport are:

 Airports need enough manpower on the ramp to greet, park, and service aircraft.

- It is important to analyze staffing requirements and find the right people to execute the plan. In OSU's case, this involves the use of employees and students.
- Willpower triumphs resources and often requires a cultural shift toward a high standard of excellence, individual accountability, and a strong work ethic.
- Customer service at GA airports is all about the details.
   There are many touch-points for a customer: greeting the aircraft, parking, concierge services, flight planning, crew lounges, etc.
- Many GA airports face significant competition from surrounding airports. Recruitment of business is a constant activity. OSU uses e-mail, letters, cold calls, and National Business Aviation Association meetings to recruit pilots and businesses.

# THE PORT AUTHORITY OF NEW YORK AND NEW JERSEY (PANYNJ)

Of all the participating airports or authorities in this synthesis, PANYNJ is by far the largest, operating four commercial service airports: JFK, LaGuardia, Newark Liberty, and Stewart International. In 2011, this encompassed more than 52 million enplanements at 15 terminals, 13 of which are managed by private entities. Many different groups within PANYNJ and the Authority's business partners are engaged in the delivery of customer service. There is a research team in the Aviation Department that monitors and reports on customer service performance at the Port Authority commercial airports. The four components of the Aviation Department's performance measurement program are:

- A customer satisfaction survey that is conducted annually in May/June at JFK, LaGuardia, Newark, and Stewart airports. This survey intercepts passengers and asks detailed questions about passenger experience upon arrival or prior to departure. A total of 10,400 arriving and departing passengers are surveyed each year; 2012 was the 11th year. Twice as many departing passengers are interviewed as arriving passengers.
- 2. Quality assurance facility audits are also conducted annually in April before the passenger surveys. Every facility is inspected for cleanliness, condition, and functionality in accordance with the standards published in the Airport Standards Manual (ASM). Deficiencies are considered either "routine," quick fixes, such as cleaning and management issues; or "high priority" deficiencies requiring repair. After the audits, PANYNJ issues evaluation reports to each business partner and posts them on the customer care website.
- 3. Mystery shopping is conducted twice per month. Mystery shoppers evaluate performance and quality of service at various concessions in the terminals. Mystery shoppers evaluate on the basis of airport standards, focusing on employee attitude, appearance, awareness, and knowledge.
- 4. Processing evaluations are completed on an as-needed basis. PANYNJ and its partners have looked at queuing and delivery issues at baggage claim, check-in, taxi dispatch, parking lot exits, security checkpoints, and U.S. entry points; and truck waiting times at cargo facilities.

Quality assurance programs at the PANYNJ airports have been in place for a long time and provide an extensive database on passenger experience and preferences. Annual survey results and analyses are presented at senior staff briefings at each airport. Results are also posted on the Port Authority Customer Care website so that all business partners can review the detailed results of the facility audits, mystery shopping, and customer satisfaction surveys. PANYNJ has the capability to report performance information about a specific location, a specific terminal, a particular airport, or multiple airports. Appendix E shows a few examples of the web portal results and how they are reported.

#### **TUCSON INTERNATIONAL AIRPORT (TUS)**

Tucson International is a small-hub airport which operates on a highly participatory model of shared responsibility for customer service. The Tucson Airport Authority (TAA) was formed in 1948 and comprises 115 community volunteers and a nine-person board of directors that oversees policy decisions. The community members of the TAA participate in many airport initiatives and serve as a conduit of feedback about the airport from businesses, visitors, and residents.

Customer service is central to the airport culture, and any person working at the airport is expected to help a person who appears lost or in need of assistance. New employees are required to view a 40-minute video about customer service as part of the badging process. In addition, the Metropolitan Tucson Convention and Visitors Bureau offers a Tucson-wide training program for anyone in the hospitality industry directly involved with customer service. Participants spend one half-day learning about Tucson, take a test, and if they pass, become certified ambassadors.

The airport is very responsive to comments and complaints and to user suggestions for terminal improvements. TAA changed the flow of arriving passengers to lessen congestion around security checkpoints, and installed a live video feed of arriving passengers that makes greeters happy to wait downstairs at a more remote location. TAA also improved wheelchair services from baggage claim to the consolidated rental car facility.

In 2006, TAA implemented performance standards and accountability measures for concessionaires. The standards call for annual, quarterly, and monthly audits to inspect the premises for signage, convenience, accessibility, cleanliness, and maintenance. Service time, price and value, quality, and presentation of products are also checked, as well as customer service and the appearance and professionalism of concession employees.

In addition, contact information for customer service is posted throughout the terminal. Comments and inquiries are monitored daily and responses shared with the relevant department. All inquiries are personally responded to by TAA staff, if contact information is provided.

Suggestions for customer service programs include:

- Identify customer segments.
- Identify the customer service issues associated with each segment.
- Determine what the airport can fiscally and operationally do to solve the problem.
- Implement the solution.
- Maintain strong relationships with airport departments and business partners to quickly address customer service issues.
- Establish a multi-point rating system that measures customer service performance year-over-year to ensure standards are being exceeded, and allows direct feedback from customers.

## **APPENDIX E**

## **Examples of Surveys**

ACI-ASQ—Airport Service Quality Survey

ACI-ASQ—Retail, Beverage and Food Survey

Jacksonville International—Online Customer Survey

Nashville International—Meeter Survey

Nashville International—Passenger Survey

Ottawa International—Departing Passenger Survey

Ottawa International—Mystery Shop Evaluation Form

Port Authority of New York and New Jersey—Samples of Performance Reports and Web Portal

Tucson International—Business Travel Survey



# **AIRPORT SERVICE QUALITY**

## Dear Passenger

You have been randomly selected to take part in a survey which is part of this airport's continuing commitment to provide the highest levels of service. This survey is an ACI (Airports Council International) initiative; it helps airports understand how you, the customer, judge their performance and helps the airport improve services to meet your needs more effectively.

Your opinion of your airport experience today is essential to us. Please take a few minutes to complete this questionnaire and hand it back to the interviewer before your departure.

Airline:				
Flight Numbe		Departure Date	2012	Departure Time : (24 hours e.g. 19:30
Have you ju	st made a c	onnection/transfer at THI	S Airport?	Yes No
Which airp	ort are you	flying to on the flight that	t you are abo	out to board?
				CC.45.4
What is/was	your MAIN	reason for this air trip?		Other
Business			 n?	Other
Business		Leisure	n?	Other  Economy/Tourist
Business  Which secti First Class  Including th	on of the ai	Leisure rcraft are you travelling in		Economy/Tourist

## Write in Your Response or Place an 'X' in the Box Where Applicable

7.	Based on your experience today, pl	ease rate	THIS airp	ort on eac	h servic	e item:	
AC	CESS	? Did not notice/use	5 ©©© Excellent	4 ⊚⊚ Very Good	3 ⊚ Good	2 ⊜ Fair	1 ⊗ Poor
A.	Ground transportation to/from airport						
В.	Parking facilities						
C.	Value for money of parking facilities						
D.	Availability of baggage carts/trolleys						
CH	IECK-IN (at this airport)						
E.	Waiting time in check-in queue/line						
F.	Efficiency of check-in staff						
G.	Courtesy and helpfulness of check-in staff						
PA	SSPORT/PERSONAL ID CONTROL						
н.	Waiting time at passport/personal ID inspection	on 🗌					
I.	Courtesy and helpfulness of inspection staff						
SE	CURITY						
J.	Courtesy and helpfulness of security staff						
K.	Thoroughness of security inspection						
L.	Waiting time at security inspection						
M.	Feeling of being safe and secure						
FIN	NDING YOUR WAY						
N.	Ease of finding your way through airport						
0.	Flight information screens						
P.	Walking distance inside the terminal						
Q.	Ease of making connections with other flights						
All	RPORT FACILITIES						
R.	Courtesy and helpfulness of airport staff (excluding check-in, passport control and security)						
S.	Restaurant/Eating facilities						
т.	Value for money of restaurant/eating facilities						

#### Write in Your Response or Place an 'X' in the Box Where Applicable 3 2 00 000 **AIRPORT FACILITIES** Did not 0 0 8 **Excellent Very Good** Good Fair Poor notice/use U. Availability of bank/ATM facilities/ money changers V. Shopping facilities W. Value for money of shopping facilities Internet access/Wi-fi Business/Executive lounges Z. Availability of washrooms/toilets AA. Cleanliness of washrooms/toilets BB. Comfort of waiting/gate areas AIRPORT ENVIRONMENT CC. Cleanliness of airport terminal DD. Ambience of the airport Overall satisfaction with the airport Which of the items listed in Question 7 are MOST IMPORTANT to you at THIS airport? 8. (Please use the letters in front of the items for your rating) 1st: (e.g. P) 2nd: (e.g. K) 3rd: (e.g. V) What was your BEST and WORST experience at THIS airport today? 9. Best: Worst: Arrivals services at this airport: 4 3 2 5 1 ? 000 (Based on previous experience 00 0 (1) 8 Did not in last 3 months) Poor notice/use Excellent Very Good Good Fair Passport/Personal ID inspection B. Speed of baggage delivery service C. Customs inspection

60					
	Private/Company Car		Bus/Shuttle	Taxi/Limo	
	Rail/Subway		Rental Car	Other	
12.	How long before the the airport?	scheduled dep	parture time of your flight	did you arrive at	
	Less than 30 mins	30 - 45 m	ns 45 - 60 mins [	1hr - 1hr 15 mins	
	1hr 15 mins – 1hr 30 mins		1hr 30 mins – 2 hours [	More than 2 hrs	
13.	When you checked in	at this airpor	t, did you use a: (more than	one answer possible)	
	Self-service klosk		Check-in desk	Internet check-in	
	Phone check-in		Bag drop-off desk	Other	
14.	What is your national	ality/country o	f citizenship?		
15.	What is your country	y of residence	? (If different from above)		
16.	Postal/Zip Code (resi	dence):			
17.	Are you	Male	Female	]	
18.	What is your age gro	up?			
	16-21	22-25	26-34	35-44	
	45-54	55-64	65-75	76 & over	
Add	ditional Comments:				
Thank	k you for completing this ques	tionnaire. Please h	and it back to the interviewer befo	re boarding your flight.	
	Questionnaire No	Airport	l or D Terminal	Gate No. Interview	

# **RETAIL, FOOD & BEVERAGE SURVEY**

## Dear Passenger

You have been randomly selected to take part in a survey which is part of this airport's continuing commitment to provide the highest levels of service in shops and restaurants.

Your opinion of your airport experience today is essential to us. Please take a few minutes to complete this questionnaire and hand it back to the interviewer before your departure.

	Write in Your Response or Place an 'X' in the Box W	here Applicable
	Flight Number Departure Date  Departure Date  DD M M	Departure Time : (24 hours e.g. 19:30)
1.	Have you just made a connection/transfer at THIS Airport?	Yes No
2.	Which airport are you flying to on the flight that you are a	bout to board?
3.	What is/was your MAIN reason for this air trip?	
	Business Leisure	Other
4.	Which part of your journey is the flight that you are about  Leaving Home Returning Home	to board?
5.	Including this trip, how many return trips by air have you r (A departing and arriving flight counts as one trip)	nade in the last 12 month
	1-2 3-5 6-10 11-20	21 or more
	Less than 30 mins 30 - 45 mins 45 - 60 mins	1hr - 1hr 15 mins
	1hr 15 mins – 1hr 30 mins	More than 2 hrs
7.	How long before the scheduled departure time of your flig the boarding gate?	nt did you arrive at
	Less than 30 mins 30 - 45 mins 45 - 60 mins	1hr - 1hr 15 mins
	1hr 15 mins – 1hr 30 mins 🗌 1hr 30 mins – 2 hours [	More than 2 hrs

	None (I am travelling on my own)	1		2		3	
	4	5		6		7 & over	
9.	Are there any children aged under	er 16 with yo	ou today?	Yes		No	
	FOO	D & BEV	ERAGE				
10.	How would you rate this airport's	Food & Be	verage of	ffering?			
		? Did not notice/use	5 Excellent	4 Very Good	3 Good	2 Fair	1 Poor
A.	Selection / choice of restaurants / bars						
В.	Menu selection						
C.	The quality of food and / or drinks						
D.	Value for money						
E.	Speed of service						
F.	Friendliness of staff						
G.	Availability of seating						
H.	Cleanliness of facilities						
l.	Atmosphere of facilities						
	rall satisfaction with <u>Food &amp;</u> erage offering at this airport						
11.	Before you came to the airport, d airport today?		nd to puro			verages at t	_
12.	How many restaurants / bars / tak	ke aways di	d you vis	it at this a	irport to	oday?	
	None 1 2	3		1 🗌	5	6+	
	Did you purchase food or bevera	ges here to	day? Y	es 🗌	No	☐ <b>■</b> GO 1	O Q.
13.	And the second of the second						
13. 14.	Did you purchase food or bevera	ges before	or after b	oarding p	ass con	itrol?	
11	Did you purchase food or beverage  Before control		or after b			trol?	

16.	Where did you purch	nase food	or beverages to	day?				
	Served restaurant		Fast Food outle	et 📃		E	Bar / Pub	
	Self-service restaurant		Café / Coffee sho	р 🗌	Quic	ck casual /	sandwich	
17.	How much time did	you spend	in restaurants /	bars at	this airpo	rt today?	GO :	ГО Q. 19
	0 - 15 minutes		15 - 30 minute	s		30 - 60	) minutes	
	60 - 90 minutes		90 - 120 minute	s	Мо	re than 120	minutes	
18.	If you did not purcha	ase any foo	od or beverages	here to	day, what	is the ma	in reaso	n?
	Not hungry / thirsty			Too	expensive			
	Meals will be provided on	board the fli	ight	The	e restaurant	/ café was	not clean	
	Queues / lines at outlets	too long		Тур	e of food / b	rands not a	appealing	
	Poor quality of food			Did	not have the	e time		
	Poor quality of service			Did	not have the	e right curre	ency	
	No seats available  (Newssta		IL (NON-DUT s, gifts stores and	Y FRE			rture gate	
19.		ands, kiosk	s, gifts stores and s's Non-Duty Fre	Y FRE	E) uty paid sto	ores)		1
19.	(Newssta	ands, kiosk	s, gifts stores and	Y FRE l other d	E) uty paid sto	ores) ng at this	airport?	1 Poor
19. A.	(Newssta	ands, kiosk	s, gifts stores and 's Non-Duty Free 'Public not	Y FRE l other d	E) uty paid sto	ores) ng at this	airport?	1
	(Newssta	ands, kiosk	s, gifts stores and 's Non-Duty Free 'Public not	Y FRE l other d	E) uty paid sto	ores) ng at this	airport?	1
А. В. С.	(Newsstate How would you rate to Selection of outlets / she Selection of products The quality of products	ands, kiosk	s, gifts stores and 's Non-Duty Free 'Public not	Y FRE l other d	E) uty paid sto	ores) ng at this	airport?	1
A. B. C.	(Newsstate the Manager of Manager	ands, kiosk	s, gifts stores and 's Non-Duty Free 'Public not	Y FRE l other d	E) uty paid sto	ores) ng at this	airport?	1
A. B. C. D.	(Newsstate to the selection of outlets / she selection of products to the quality of products to the q	ands, kiosk	s, gifts stores and 's Non-Duty Free 'Public not	Y FRE l other d	E) uty paid sto	ores) ng at this	airport?	1
A. B. C. D. F.	(Newsstate to the selection of outlets / she selection of products to the quality of service to the servi	ands, kiosk	s, gifts stores and 's Non-Duty Free 'Public not	Y FRE l other d	E) uty paid sto	ores) ng at this	airport?	1
A. B. C. D. E. F.	(Newsstate to the control of the con	his airport	s, gifts stores and 's Non-Duty Free 'Public not	Y FRE l other d	E) uty paid sto	ores) ng at this	airport?	1
A. B. C. D. F. G.	(Newsstate How would you rate to Selection of outlets / she Selection of products The quality of products Value for money Speed of service Friendliness of staff Ease of finding shops Design / layout of shops	his airport	s, gifts stores and 's Non-Duty Free 'Public not	Y FRE l other d	E) uty paid sto	ores) ng at this	airport?	1
A. B. C. D. E. F.	(Newsstate to the control of the con	his airport	s, gifts stores and 's Non-Duty Free 'Public not	Y FRE l other d	E) uty paid sto	ores) ng at this	airport?	1

20.	this airport today		ort, did you	i intena to i	nake a	retail purchase at	
	or or her here	Ye	es	No 🗌		I hadn't made a decision	
21.	How many shops	s did you vi	sit?				
	none 1		2	3	4	5 6+	
22.	Did you purchas	e any retail	item here t	oday?	Yes [	По П <b>В</b> В В В В В В В В В В В В В В В В В В	2. 28
23.	Did you make a r	etail purcha	ase before	or after boa	rding p	pass control?	
	Before control		Aff	ter control		Both before and after control	
24.	How much mone	y did you a	nd your pa	rty spend o	n Non-	Duty Free retail items toda	ay?
	Total Amount		(e.g. 12, 25 el	tc) Cur	rrency		
25.	What did you put	rchase toda	y? (more that	an one answer	possible	e)	
	Newspapers/Magazi	nes		Souvenirs		CD / DVD's	
	Books		T	Travel Goods		Electronics	
	Beauty products		Toiletrie	s / pharmacy		Toys and games	
	Clothes		Fashion	accessories		Local food	
26.	For whom did yo	u buy Non-	Duty Free i	retail items?	?		
	Myself		Spo	use / Partner		Children	
	Friend			Relative		Other	
27.	How much time of	did you spe	nd at Non-l	Duty Free re	etail sh	ops today? 🙀 GO TO G	2. 29
	0 - 15 minutes		15	- 30 minutes		30 - 45 minutes	
	45 - 60 minutes		60	- 90 minutes		More than 90 minutes	
28.	If you did not pu	rchase any	retail item	here today,	what is	s the main reason?	
	Did not find what I wa	anted	[	1	Гоо ехре	ensive	
	Queues / lines at sho	ops too long	[		Not intere	ested in buying anything	
	Poor quality of produ	icts	[		Type of p	product / brands not appealing	
	Poor quality of service	e			Did not h	ave the time	
	Didn't want to carry i	t	Γ		No trolley	/s available	

# **RETAIL** (DUTY FREE)

(Tobacco / spirits / fragrances and other items exempted from taxes when flying international)

29.	How would you rate this airport's <u>Duty Free</u> shopping offering at this airport?												
		? Did not notice/use	5 Excellent	4 Very Good	3 Good	2 Fair	1 Poor						
A.	Selection of outlets / shops												
B.	Selection of products												
C.	The quality of products												
D.	Value for money												
E.	Speed of service												
F.	Friendliness of staff												
G.	Ease of finding shops												
H.	Design / layout of shops												
J.	Atmosphere of shops												
	rall satisfaction with <u>Duty Fred</u> il offering at this airport												
30.	Before you came to the airport this airport today?	ort, did you inter				chase at	on						
31.	How many duty free shops d	lid you visit?											
	none 1	2 3		4	5	6	+ 🔲						
32.	Did you purchase any Duty F	Free item here to	oday? Ye	s No		GO T	O Q. 37						
33.	How much money did you an (Please indicate rounded amounts,						95 USD)						
	Total Amount	(e.g. 12, 25 etc)	Currenc	у		(e.g. USD, E	EUR, GBP, AED)						
34.	What did you purchase today	y? (more than one	answer pos	ssible)									
	Tobacco products	Electroni	cs		Crys	tal & China							
	Spirit and Wines	Jewelle	ery		Fashi	ion clothing							
	Fragrances	Watch	es		Fashion a	accessories							
	Cosmetics	unglasses & Eyewa	are	Confec	ctionery &	Fine Foods							

35.	For whom did you	u buy duty free i	tems?									
	Myself		Spouse / Partner		Children							
	Friend		Relative		Other							
36.	How much time d	id you spend at	duty free outlets	s / shops too	day? 📂 GO ТО	Q. 38						
	0 - 15 minutes		15 - 30 minutes		30 - 45 minutes							
	45 - 60 minutes		60 - 90 minutes		More than 90 minutes							
37.	If you did not pur	chase any duty	free item here to	day, what is	the main reason?							
	Not taking an internat	tional flight		Too expensive								
	Queues / lines at sho	ps too long		Not interested	in buying anything							
	Poor quality of produc	ots	$\overline{\Box}$	Type of produc	et / brands not appealing							
	Poor quality of service	e		Did not have th	ne time	$\overline{\Box}$						
	Did not find what I wa	inted		Didn't want to	carry it							
	No trolleys available			Other								
		ABO	UT YOURSE	LF								
38.	What is your annual income (gross US Dollars per household)?											
	Less than 25,000 US	SD	25,000 to 50,000	USD	50,000 to 75,000 US	SD 🗌						
	75,000 to 100,000US	SD 🔲	100,000 to 150,000	USD	Over 150,000 US	SD 🔲						
39.	What is your nati	onality/country	of citizenship?									
40.	What is your cou	ntry of residence	e? (If different from	above)								
41.	Are you	Male	Fen	nale								
42.	What is your age	group?										
	16-21	22-25	26	-34	35-44							
	45-54	55-64	65	-75	76 & over							
Tha	nk you for completing th	is questionnaire. Plea	se hand it back to the	interviewer bef	ore boarding your flight.							
Inte	rviewer: Please indicate in	the boxes below the tra	affic, the terminal and th	ne gate of the inte	erview (Please write in block	capitals)						
	l or D	Quest. No	Airport	Term	ninal Gate N	o.						
					English 2	2012						

## JACKSONVILLE INTERNATIONAL ONLINE CUSTOMER SURVEY



# How Are We Doing?

		ACCES	S		
The U.S. I Village of the Con-					
Availability of Parking Facilitie	S				
Excellent	Very Good	Good	Fair	Poor	Did not notice / use
0	0	ð.	0	O.	0
Ground Transportation (Shut	tle)				
Excellent	Very Good	Good	Fair	Poor	Did not notice / use
0	0	ð	0	0	O.
Ease of finding way through a	airport				
Excellent	Very Good	Good	Fair	Poor	Did not notice / use
0	0	D	0	0	0
light information screens					
Excellent	Very Good	Good	Fair	Poor	Did not notice / use
excellent.	Very Good	5	Call	O	Old not notice / use
				-	
Walking distance inside termin Excellent		Good	Fair	Poor	Did not notice / use
Excellent	Very Good	Good	Fair	Poor	Did not notice / use
0			U	- 0	
		AIRPORT SERVICES	6 / FACILITIES		
Availability of baggage carts					
Availability of baggage carts  Excellent	Very Good	Good	Fair	Poor	Did not notice / use
	Very Good	Good	Fair ©	Poor	Did not notice / use
Excellent	0				Did not notice / use
Excellent  ©  Courtesy / helpfulness of air;	oort staff				Ø
Excellent	0	0	O	0	Ø
Excellent  Courtesy / helpfulness of airp  Excellent	Oort staff  Very Good	Good	© Fair	Poor	Did not notice / use
Excellent  Courtesy / helpfulness of airg  Excellent  O  Internet / Wi-Fi access	oort staff  Very Good	Good	© Fair ©	Poor	Did not notice / use
Excellent  Courtesy / helpfulness of airg  Excellent  O  Internet / Wi-Fi access  Excellent	oort staff  Very Good  Very Good	© Good ⊙	⊕ Fair ⊕	Poor  Poor	Did not notice / use
Excellent  Courtesy / helpfulness of air;  Excellent  Onternet / Wi-Fi access	oort staff  Very Good	Good	© Fair ©	Poor	Did not notice / use
Excellent  Courtesy / helpfulness of airp  Excellent  Internet / Wi-Fi access  Excellent	oort staff  Very Good  Very Good	© Good ⊙	⊕ Fair ⊕	Poor  Poor	Did not notice / use
Excellent  Courtesy / helpfulness of airr  Excellent  Courtesy / helpfulness of airr  Excellent  Excellent  Availability of restrooms  Excellent	Very Good  Very Good	Good Good Good	Fair Fair Fair	Poor Poor	Did not notice / use
Excellent  Courtesy / helpfulness of airp  Excellent  Internet / Wi-Fi access  Excellent  O  Availability of restrooms	Oport staff  Very Good  Very Good	Good Good	© Fair © Fair ⊙	Poor  Poor  Poor	Did not notice / use
Excellent  Courtesy / helpfulness of airp  Excellent  Excellent	Very Good  Very Good	Good Good Good	Fair Fair Fair	Poor Poor	Did not notice / use  Did not notice / use
Excellent  Courtesy / helpfulness of airp  Excellent  Excellent	Very Good  Very Good	Good Good Good	Fair Fair Fair	Poor Poor	Did not notice / use  Did not notice / use
Excellent  Courtesy / helpfulness of airp Excellent  Excellent  Availability of restrooms Excellent  Cleanliness of restrooms	oort staff  Very Good  Very Good  Very Good	Good Good Good	Fair  Fair  Fair  Fair	Poor  Poor  Poor	Did not notice / use
Excellent  Courtesy / helpfulness of airp  Excellent  Excellent  Availability of restrooms  Excellent  Cleanliness of restrooms  Excellent	Very Good  Very Good  Very Good	Good Good Good Good Good	Fair  Fair  Fair  Fair	Poor Poor Poor	Did not notice / use  Did not notice / use
Excellent  Courtesy / helpfulness of airp  Excellent  Excellent  Availability of restrooms  Excellent  Cleanliness of restrooms  Excellent	Very Good  Very Good  Very Good	Good Good Good Good Good	Fair  Fair  Fair  Fair	Poor  Poor  Poor  Poor	Did not notice / use  Did not notice / use
Excellent  Courtesy / helpfulness of airp Excellent  Internet / Wi-Fi access Excellent  Availability of restrooms Excellent  Cleanliness of restrooms Excellent  Comfort of waiting in gate are	Very Good  Very Good  Very Good	Good Good Good Good Good	Fair  Fair  Fair  Fair	Poor Poor Poor	Did not notice / use  Did not notice / use
Excellent  Courtesy / helpfulness of airg Excellent  Excellent  Availability of restrooms Excellent  Cleanliness of restrooms Excellent  Comfort of waiting in gate are Excellent	Very Good  Very Good  Very Good  Very Good  Very Good	Good Good Good Good Good Good	Fair Fair Fair Fair Fair	Poor Poor Poor Poor Poor	Did not notice / use  Did not notice / use  Did not notice / use
Courtesy / helpfulness of airg  Excellent  Internet / Wi-Fi access  Excellent  Availability of restrooms  Excellent  Cleanliness of restrooms  Excellent  Comfort of waiting in gate are  Excellent	Very Good  Very Good  Very Good  Very Good  Very Good	Good Good Good Good Good Good	Fair Fair Fair Fair Fair	Poor Poor Poor Poor Poor	Did not notice / use  Did not notice / use  Did not notice / use

			Restaurant / ea	ting facilities		
Cost						
	ellent	Very Good	Good	Fair	Poor	Did not notice / use
	5	C	O	0	0	0
h wid i						
Variety						
Exce	llent	Very Good	Good	Fair	Poor	Did not notice / use
(5)	J.	G	0	0	D	
Hours						
	illent	Very Good	Good	Fair	Poor	Did not notice / use
C	5	C	0	Ø	Ø	0
Cleanliness						
Exce	ellent	Very Good	Good	Fair	Poor	Did not notice / use
· ·	2	6	0	Ö	Đ	
Quality						
	illent	Very Good	Good	Fair	Poor	Did not notice / use
		Ø	0	0	0	0
			Shopping F	acilities		
Cont						
Cost	w		Good	Fair		
Exce	ellent	Very Good	Good	Fair	Poor	Did not notice / use
			-			
Variety						
	illent	Very Good	Good	Fair	Poor	Did not notice / use
(6	3	-6	0	0	0	6
Hours	4	10.00	12.3	2.0	2.4	24
Exce	ellent	Very Good	Good	Fair	Poor	Did not notice / use
		~	~			
			SECURITY CHE	CKPOINT		
Courtesy / helpfu						
Excelle		Very Good	Good	Fair ()	Poor	Did not notice / use
- 9			-90			0
horoughness of	security check	kpoint				
Excelle		Very Good	Good	Fair	Poor	Did not notice / use
ð		<b>9</b>	O.	0	0	0
Vaiting time at se						
Excelle	ent	Very Good	Good	Fair	Poor ©	Did not notice / use
- 2		-0-	Q.	- D		
eeling of being s	safe and secur	re				
Excelle		Very Good	Good	Fair	Poor	Did not notice / use
D		Ø	0	0	Ø	Ø.
			AIRPORT ENVI	RONMENT		
leanliness of airp						
Excelle		Very Good	Good	Fair	Poor	Did not notice / use
0		0	0	0	0	0
mbiance of the a	airnort					
Excelle		Very Good	Good	Fair	Poor	Did not notice / use
Excelle		Very Good	0000	Pair	Poor	Did not notice / use
			26	~	~	

		AIRLINE SERVICE	ES AT THIS AIRPORT			
Wait time in check-in line						
Excellent	Very Good	Good	Fair		Poor	Did not notice / use
0	0	0	0		ð	0
Efficiency of check-in staff						
Excellent	Very Good	Good	Fair		Poor	Did not notice / use
0	0	0	0		0	0
Courtesy / helpfulness of airline	o staff					
Excellent		Good	Fair			Did not notice / use
excellent (f)	Very Good	©	Patr		Poor	Did not notice / use
	9	30	~			
Baggage claim experience						
Excellent	Very Good	Good	Fair		Poor	Did not notice / use
0	6	0	0		0	0
Wait time for baggage						
wait time for baggage		10 min	20 min	30 min	40 min	1 hr/+
Rating Scale		0	20 min	(E)	60 min	0
				1-1	-	
Travel info:						
Airline used today:						
Date:						
Time:						
Additional Information						
Name:						
Address:						
Address:						
Telephone:						
E-mail:						
Additional comments?						
	-					
In our journey to become the b	est airport possible,	we would like to know	w if you selected "Goo	d", "Fair" or "Poor	" to any of the	questions above?
Yes						
⊙ No						

## NASHVILLE AIRPORT MEETER SURVEY

Date/_	/				Location:	□-Wai	ting Area A/B	□-Waiting Area	ι
Time	: a.m. ]	p.m.							
1. Where d	lo you live? (	City			_ State _		Zip code		
2. Including	g yourself, ho	w many p	eople are	e waiting v	with you fo	or your pa	arty to arrive?		
	01 🗖 02	<b>1</b> 03	<b>1</b> 04	□ 05 or	r more (ple	ase speci	fy:)		
3. How ma	ny are in the t	ravel part	y you are	waiting f	for?				
	01 🗖 02	<b>1</b> 03	<b>1</b> 04	□ 05 or	r more (ple	ase speci	fy:)		
4. Which o	f the followin	ng best de	escribes y	our <b>relat</b>	ionship w	ith the t	ravel party yo	ou are waiting for?	CHECK
ALL THAT	Γ APPLY.								
	□- A spouse	e/partner			□- A busi	ness part	ner/colleague		
	□- A friend	l			□- Family	<b>V</b>			
	□- With a c	convention	/ confere	ence	□- With a	school,	church or other	organized group	
	☐- Other (p	lease spec	cify:		)				
5. Which o	of the following	ng best des	scribes h	ow you ar	rived at the	e airport	today?		
	□- Drove m	nyself and	parked s	hort-term	at the airp	ort			
	□- Drove m	nyself and	parked l	ong-term	at the airpo	ort			
	□- Someon	e else dro	pped me	off and is	waiting w	ith car			
	□- Arrived	on anothe	r flight a	nd waiting	g to meet p	oarty			
	☐- Other: _								

6. Which of the following best describes the primary reason you are waiting inside the airport to meet your par	ty?
☐- Drove a long drive to get here and wanted to come inside	
☐- Flight delayed for arriving party	
☐- Desire to personally greet arriving party	
☐- Arriving party needs personal assistance	
□- Other:	
7a. Are you aware of the "cell phone waiting area?"	
□- Yes	
□- No	
□- Don't Know	
<b>7b.</b> Have you ever used the "cell phone waiting area?"	
□- Yes	
□- No	
8a. Are you aware of the "10 minute parking area?"	
□- Yes	
□- No	
□- Don't Know	
<b>8b</b> . Have you ever used the "10 minute parking area?"	
□- Yes	
□- No	

9. Thinking about the Nashville Airport compared to other airports, how would you rate the overall airport experience
for those meeting arriving passengers? Would you say the Nashville Airport is () compared to
other airports?
☐- Significantly better
□- Somewhat better
☐- About the same
□- Somewhat worse
☐- Significantly worse
10. Why do you feel that way?
11. What is your favorite airport?

12. The following is a list of airport services offered at many airports for those waiting to pick up passengers. For each service, please indicate on a 1 to 9 scale with 9 meaning very important and 1 meaning not important at all, how important it is to you that an airport offers this service for those waiting to pick up passengers. *Please circle a number between 1 and 9.* 

# Airport Service <u>Importance</u> Rating

	Not At All Important				Very Important					
Access to Restaurants	1	2	3	4	5	6	7	8	9	D/K
Access to Drinking Establishments/ Bars	1	2	3	4	5	6	7	8	9	D/K
Convenient Parking Option	1	2	3	4	5	6	7	8	9	D/K
Courteous Airport Employees	1	2	3	4	5	6	7	8	9	D/K
Banking/ATM Access	1	2	3	4	5	6	7	8	9	D/K
Clear Directional Signage	1	2	3	4	5	6	7	8	9	D/K
A Clean Facility	1	2	3	4	5	6	7	8	9	D/K

Visible Flight Information Displays	1	2	3	4	5	6	7	8	9	D/K
Friendly Wait Area Accommodations	1	2	3	4	5	6	7	8	9	D/K

13. The following is a list of airport features available to those waiting to meet passengers. Thinking just about today's experience at the airport; please indicate how satisfied you are with Nashville Airport's service for the following features. On a scale of 1 to 9 with 1 meaning poor and 9 meaning excellent, please indicate how satisfied you are with the following Nashville Airport features. *Please circle a number between 1 and 9 for each feature*.

# Airport Feature Nashville Airport Satisfaction Rating

	Poor		A	verag	e		Excellent			
Restaurant Access	1	2	3	4	5	6	7	8	9	D/K
Access to Drinking Establishments/ Bar	1	2	3	4	5	6	7	8	9	D/K
Clear Driving Signage	1	2	3	4	5	6	7	8	9	D/K
Courtesy of Airport Personnel	1	2	3	4	5	6	7	8	9	D/K
Banking/ATM Access	1	2	3	4	5	6	7	8	9	D/K
Convenient Parking	1	2	3	4	5	6	7	8	9	D/K
Cleanliness of Waiting Area	1	2	3	4	5	6	7	8	9	D/K
Accessible Seating	1	2	3	4	5	6	7	8	9	D/K
Clean Restrooms	1	2	3	4	5	6	7	8	9	D/K
Visibility of Flight Information Displays	1	2	3	4	5	6	7	8	9	D/K
Clear In-terminal Signage	1	2	3	4	5	6	7	8	9	D/K
The Overall Airport Experience	1	2	3	4	5	6	7	8	9	D/K

**14**. Is there any other airport service or feature that you did not see, that you would like the airport to provide to those waiting to meet passengers?

74					
15.	In what year you were born? 19_				
16.	What was the last grade of school	l you com	oleted?		
	□- Less than high school	□- Ti	rade or technical school	□- College degree	
	□- High school diploma or GED	) 🔲 - S	ome college	☐- Graduate degree	
17.	Which of the following best desc	cribes your	primary ethnicity?		
	□- 1 Caucasian	□- 3 As:	ian or Pacific Islander	□- 4 Indian American	
	□- 2 African American	□- 4 His	spanic	□- 5 Other (	_)
18.	Your gender?				
	□- Male □- Female				
19.	Which of the following best desc	cribes your	total household income?		
	□- Less than \$20,000		□- \$50,000 but less than	n \$75,000	
	□- \$20,000 but less than	n \$30,000	□- \$75,000 but less than	1 \$100,000	
	□- \$30,000 but less than	n \$50,000	□- \$100,000 but less tha	an \$150,000	
	□- \$150,0	00 or more	2		

This concludes our interview. Thank you for your time and cooperation. Please give your completed survey to one of the interviewers.

## NASHVILLE AIRPORT PASSENGER SURVEY

Revised 9/15/11				
Date/	Location: 🖵- Con	ncourse A	□- Concourse B	□- Concourse C
Time: a.m. p.m.				
1. Where do you live? City	State	Zi	p code	
2. Which of the following best describes ho	w you initially checke	d-in for too	lay's flight?	
□- Online □- Kiosk (inside terminal)	□- Curbside □- Fu	ll-service o	counter    Other	()
3. Did you check any bags today? □- Yes	# of bags checked_		□- No	
4. Including you, how many are in your trav	rel party today?			
<b>1</b> 01 <b>1</b> 02 <b>1</b> 03 <b>1</b> 04	□ 05 or more (pleas	se specify:	)	
5. How many are children under the age of 1	18?			
<b>1</b> 01 <b>1</b> 02 <b>1</b> 03 <b>1</b> 04	□ 05 or more (pleas	se specify:	) □- N	one
<b>6</b> . Which of the following best describes yo	ur travel party on this	trip? Are	you traveling	·
CHECK ALL THAT APPLY.				
□- With your spouse/partner	□- With bus	iness partn	ers/colleagues	
□- Alone	□- With exte	ended fami	ly	
□- With friends	□- With sch	ool, church	or other organized	l group
☐- With convention/ conference	☐ Other (ple	ease specif	y:	)
7. Is the primary purpose of today's travel b	ousiness or pleasure?			
□- Business □- Pleasure □-	Military □- Combi	nation Bus	siness/Pleasure	
8. Within the <b>last year</b> , approximately how	many <b>total trips</b> have	you flowr	by commercial air	ceraft (including this trip)?
(This is from any airport, not just Nashville	e airport)			
□- One-First trip within last year	□- Three to Five	□- I	Eleven to twenty	
□- Two	□- Six to ten	<b>-</b> 1	More than twenty	

9. Within the <b>last year</b> , how many tri	ips have you flo	own into/o	out of tl	he <b>N</b> a	shvill	<b>e</b> airp	ort (in	cludin	g this trip	)?	
□- One	□- Thr	ee to Five	e		- Elev	en to	twenty	У			
□- Two	□- Six	to ten			- Mor	e than	twen	ty			
10. Within the last year, what other a	airports have yo	ou visited	? <b>CHE</b>	CK A	LL T	НАТ	APPI	LY.			
□- Atlanta, GA	☐- Chicago-Mic	dway	<b>□</b> - O	aklan	d, CA			l- Rale	igh-Durh	am, NC	
□- Austin, TX	☐- Columbus, C	ЭH	<b>□</b> - O	rland	o, FL			l- San l	Diego, C	A	
□- Baltimore, MD	- Detroit, MI		□- Pl	hilade	lphia,	PA		l- Tam	pa, FL		
☐- Charlotte, NC	<b>□</b> - Jacksonville	, FL	<b>□</b> - Pl	hoeni	x, AZ			l- Was	hington N	Nat'l-DC	2
11. Thinking about the Nashville	Airport compa	ared to o	ther ai	irports	s, hov	v woi	ıld yo	ou rate	e the ove	erall air	port
experience? Would you say the Nash	ville Airport is	(			) co	mpare	d to o	ther air	rports?		
□- Significantly better □- Som	newhat better	<b>□</b> - About	the san	ne 🗆	l-Som	ewhat	worse	e 🗆- S	Significar	itly wors	se
12. What is your favorite airport?											
13. Which of the following best desc	ribes how you a	arrived at	the air	port to	oday?						
☐- Drove myself and parket	d at the airport	□- Dro	ve mys	self an	ıd parl	ked at	off-si	te loca	tion		
□- Took a shuttle		□- Son	neone e	else br	ought	me a	nd dro	pped n	ne off		
□- Took a taxi		□- Ren	ıtal car								
□- Other											
<b>14</b> . The following is a list of airport s	services offered	at many	airports	s. For	each	servic	e, plea	se ind	icate on a	ı 1 to 9 s	scale
with 9 meaning very important and 1	meaning not in	nportant a	at all, h	ow in	nporta	nt it is	s to yo	u that	an airpor	t offers t	this
service. Please circle a number b	etween 1 and 9										
		Airpo	rt Serv	ice	Imp	ortan	ce Ra	ting			
	Not	At All I	mporta	ant					Very	Import	tant
Variety of Restaurant Options	1	2 3	4	5	6	7	8	9	D	/K	
Access to Drinking Establishments	Bars 1	2 3	4	5	6	7	8	9	D	K	
Newspaper/Magazine Stores	1	2 3	4	5	6	7	8	9	D	/K	

Efficient Parking Shuttle Buses	1	2	3	4	5	6	7	8	9	D/K
Courteous Security Personnel	1	2	3	4	5	6	7	8	9	D/K
Banking/ATM Access	1	2	3	4	5	6	7	8	9	D/K
Live Music	1	2	3	4	5	6	7	8	9	D/K
Variety of Shopping Facilities	1	2	3	4	5	6	7	8	9	D/K
Efficient Airline Check-in Line	1	2	3	4	5	6	7	8	9	D/K
Access to Electrical Outlets	1	2	3	4	5	6	7	8	9	D/K
Efficient Security Personnel	1	2	3	4	5	6	7	8	9	D/K
Free Access to Wireless Internet	1	2	3	4	5	6	7	8	9	D/K
Clear Directional Signage	1	2	3	4	5	6	7	8	9	D/K

	No	ot At	All Ir	nport	ant		Very	Imp	ortant	
A Clean Facility	1	2	3	4	5	6	7	8	9	D/K
Artwork Displays	1	2	3	4	5	6	7	8	9	D/K
Children's Play Area	1	2	3	4	5	6	7	8	9	D/K
Visible Flight Information Displays	1	2	3	4	5	6	7	8	9	D/K
Convenient On-site Parking:	1	2	3	4	5	6	7	8	9	D/K
Passenger-friendly Accommodations	1	2	3	4	5	6	7	8	9	D/K
Safe and Secure Feeling	1	2	3	4	5	6	7	8	9	D/K

**<sup>15</sup>**. The following is a list of airport features. For each feature, please indicate how satisfied you are with Nashville's Airport. On a scale of 1 to 9 with 1 meaning poor and 9 meaning excellent, please indicate how satisfied you are with the following Nashville Airport features. *Please circle a number between 1 and 9 for each feature*.

# **Airport Feature**

# Nashville Airport Satisfaction Rating

	Poo	r		Av	erage	•		Excel	lent	
Restaurant Variety	1	2	3	4	5	6	7	8	9	D/K
Access to Drinking Establishments/ Bars	1	2	3	4	5	6	7	8	9	D/K
Clear Driving Signage	1	2	3	4	5	6	7	8	9	D/K
Access to Newspaper/ Magazine Stores	1	2	3	4	5	6	7	8	9	D/K
Courtesy of Shuttle Bus Drivers	1	2	3	4	5	6	7	8	9	D/K
Timeliness of Shuttle Buses	1	2	3	4	5	6	7	8	9	D/K
Banking/ATM Access	1	2	3	4	5	6	7	8	9	D/K
Live Music	1	2	3	4	5	6	7	8	9	D/K
Convenient On-site Parking Facilities	1	2	3	4	5	6	7	8	9	D/K
Cleanliness of Gate/Waiting Area	1	2	3	4	5	6	7	8	9	D/K
Variety of Shopping Facilities:	1	2	3	4	5	6	7	8	9	D/K
Access to Children's Play Area	1	2	3	4	5	6	7	8	9	D/K
Waiting Time in Airline Check-in Line	1	2	3	4	5	6	7	8	9	D/K
Shopping Facilities Value for the Money	1	2	3	4	5	6	7	8	9	D/K
Accessible Seating	1	2	3	4	5	6	7	8	9	D/K
Access to Electrical Outlets	1	2	3	4	5	6	7	8	9	D/K
Clean Restrooms	1	2	3	4	5	6	7	8	9	D/K
Artwork Displays	1	2	3	4	5	6	7	8	9	D/K
Courtesy at Security Area	1	2	3	4	5	6	7	8	9	D/K
Walking Distance Inside Terminal	1	2	3	4	5	6	7	8	9	D/K
Overall Cleanliness of Terminal	1	2	3	4	5	6	7	8	9	D/K
Safe and Secure Feeling	1	2	3	4	5	6	7	8	9	D/K

Access to Wireless Internet	1	2	3	4	5	6	7	8	9	D/K
Efficiency of Security Screening Area	1	2	3	4	5	6	7	8	9	D/K
Visibility of Flight Information Displays	1	2	3	4	5	6	7	8	9	D/K
Clear In-terminal Signage	1	2	3	4	5	6	7	8	9	D/K
The Overall Airport Experience:	1	2	3	4	5	6	7	8	9	D/K
16. Is there any other airport service or feat	ture that	t you	did no	t see,	that y	ou wo	uld lil	ke the	airport (	to provide?
<b>17</b> . And, what is your final destination for t	this trip	? City	у					State		
18. In what year you were born? 19	_									
19. What was the last grade of school you o	complet	ed?								
☐- Less than high school	□- Tı	rade c	or tech	nical s	school	l			<b>□</b> - Colle	ge degree
☐- High school diploma or GED	□- S	ome c	ollege	:			<b>-</b>	Gradu	ate degr	ee
20. Which of the following best describes y	our pri	mary	ethnic	eity?						
□- 1 Caucasian	□- 3 A	Asian	or Pac	ific Is	landei	r	<b>-</b> 4	4 India	an Amer	ican
□- 2 African American	□- 4 I	Hispai	nic				<b>-</b>	5 Oth	er (	
<b>21</b> . Your gender?										
□- Male □- Female										
<b>22</b> . Which of the following best describes	your tot	tal ho	usehol	d inco	ome?					
□- Less than \$20,000	□- \$5	50,000	) but 1	ess tha	an \$75	5,000				
□- \$20,000 but less than \$30,000	<b>□</b> - \$7	75,000	) but 1	ess tha	an \$10	00,000	)			
□- \$30,000 but less than \$50,000	<b>□</b> - \$1	100,00	00 but	less th	nan \$1	50,00	00			
□- \$15	50,000 c	or moi	e							

## OTTAWA INTERNATIONAL—DEPARTING PASSENGER SURVEY

	l		
Date survey taken:	Month, Day, Year		
Please tell us about your airport visit.			
A1. Are you	Connecting (chang International Airport  Starting your trave		the Ottawa
A2 Counting yourself how many adults and how m	today (not connecting)		·
A2. Counting yourself, how many adults and how motoday?	any children under 18	are in your i	raveling party
Number of adults:	Adults		
Number of children:	Children unde	er 18	
A3. Today are you flying primarily for	Business		
A4a. How many airline round trips have you taken	Non-business		
in the past 12 months?  A4b. How many of these trips involved travel to or	Trips		
from this airport?	Trips		
A5a. Approximately how long before your flight departs did you <u>arrive at this airport</u> today? (Time from entering the airport until your scheduled flight departure.)	hr min		
A5b. Approximately how long before your flight departs did you <u>ao through security</u> ? (Time from passing through security until your scheduled flight departure).	hr min		
Please tell us about your experience at the R	Food and Beverage	Outlets.	
B1. Which of the airport's food & b If visited, did you	everage outlets did yo purchase anything?	ou visit today	1?
		Visited	Purchased
Tim Horton's (3rd Level)		<u>Kil</u>	
Harvey's serving Swiss Chalet (3rd L	evel)	M	
Rideau Bar & Grill (3rd level)		M	
Second Cup Cafe (3rd Level)			Rain .
Byward Taps (2nd Level)			
Sbarros (2nd Level)		100	
Second Cup (2nd Level)		No.	
Tim Horton's (2nd Level)			
Senate Chambers (US Departure	s)		
Tim Horton's (Arrivals)	ĺ		
D'Arcy McGees (2nd level)	İ		Ref.
Tim Horton's (US Departures)	İ		
None of the above visited. Go to question B4.			
Please contin	ue to next page		

Speed of service   Cleanliness of the food court seating area   Availability of seating   Courtesy and helpfulness of staff   Courtesy a	Please use the following ratings - a " is the lowest rating you may give. Yo					nd a "1" (very o	dissatisfied)
F&B Outlet #1 Ratings    Very-Poor   Poor   Avorage   Good   Outstanding   Opinion	B2. For each of the food and beverage	je outlets tha	t you vi	sited today		ıld you rate you	r experience
1-   2-   2-   3-   4-   5-   0-   0-   0-   0-   0-   0-   0	F&B Outlet #1 Name:						
Very-Poor   Noverage   Good   Outstanding   Opinion   Variety of menu items		F&B Out	let #1 R	atings			
Quality of food & beverage  Speed of service  Cleanliness inside the restaurant  Cleanliness inside the restaurant  Cleanliness of the food court soating area  Availability of seating  Courtesy and helpfulness of staff  Overall value for your money  Paped of service  Cleanliness inside the restaurant  Cleanliness of the food court speed of service  Cleanliness of the food court speed of service  Cleanliness of the food court speed of service  F&B Outlet #3 Ratings  Courtesy and helpfulness of staff  Overall value for your money  Cleanliness inside the restaurant  Cleanliness of the food court speed of service  Durited #3 Name:  F&B Outlet #3 Ratings  Courtesy and helpfulness of staff  Overall value for your money  Cleanliness inside the restaurant  Cleanliness inside the restaurant  Durited #3 Name:   Did not visit food that I like.  Did not have time.  Prices are too high. Not hungry. Restaurant/outlet closed  Other Did not visit f&B Outlets.				-			
Speed of service  Cleanliness inside the restaurant  Cleanliness of the food court seating area  Availability of seating  Courtesy and helpfulness of staff  Overall value for your money  F&B Outlet #2 Ratings   F&B Outlet #2 Ratings   Table Outlet #2 Ratings  F&B Outlet #2 Ratings  F&B Outlet #2 Ratings  Overall value for your money  Outlety of food & beverage  Cleanliness inside the restaurant  Cleanliness of the food court seating area  Availability of seating  Courtesy and helpfulness of staff  Overall value for your money  F&B Outlet #3 Ratings  F&B Outlet #3 Ratings  F&B Outlet #3 Ratings  Courtesy and helpfulness of staff  Overall value for your money  Outlety of menu items  Outlety of food & beverage  Cleanliness inside the restaurant  Cleanliness of the food court seating area  Availability of seating  Courtesy and helpfulness of staff  Outlet #3 Ratings  F&B Outlet #3 Ratings  F&B Outlet #3 Ratings  Delta Type outlet #3 Ratings  F&B Outlet #3 Ratings  Delta Type outlet #3 Ratings  Delta Type outlet #3 Ratings  Delta Type outlet #3 Ratings  Delta Type outlet #3 Ratings  Delta Type outlet #3 Ratings  Delta Type outlet #4 Ratings  Delta Type outlet #4 Ratings  Delta Type outlet #4 Ratings  Delta Type outlets Type Outlets  Did not have the food that I like.  Did not have the food that I like.  Did not have time.  Delta Type outlets to be to high.  Not hungry.  Restaurant/outlet closed  Other  Did not visit F&B Outlets.	Variety of menu items		<b>®</b>	*			
Cleanliness inside the restaurant  Cleanliness of the food court seating area  Availability of seating  Courtesy and helpfulness of staff  Coverall value for your money  TEAB Outlet #2 Ratings  FAB Outlet #2 Ratings  FAB Outlet #2 Ratings  FAB Outlet #2 Ratings  FAB Outlet #2 Ratings  Variety of menu items  Cleanliness of the food court seating area  Availability of seating  Courtesy and helpfulness of staff  Courtesy and helpfulness of staff  Overall value for your money  FAB Outlet #3 Ratings  FAB Outlet #3 Ratings  FAB Outlet #3 Ratings  FAB Outlet #3 Ratings  Courtesy and helpfulness of staff  Overall value for your money  Cleanliness of the food & beverage  Courtesy and helpfulness of staff  Overall value for your money  Cleanliness of the food & beverage  Courtesy and helpfulness of staff  Courtesy and helpfulness of staff  Overall value for your money  Cleanliness inside the restaurant  Cleanliness of the food & beverage  Cleanliness of the food over seaturant  Did not have the food that I like.  Did not have the food that I like.  Did not have time.  Prices are too high.  Not hungry.  Restaurant/outlet closed  Other  Did not visit FAB Outlets.	Quality of food & beverage		ě	•	Ö		•
Cleanliness of the food court seating area  Availability of seating  F&B Outlet #2 Name:  F&B Outlet #2 Ratings  F&B Outlet #2 Ratings  Very.Poor Poor Average Good Outstanding Opinion  Variety of menu items  Quality of food & beverage  Speed of service  Cleanliness inside the restaurant  Cleanliness of the food court Seating Availability of seating  Very.Poor Poor Average  Availability of seating  Courtesy and helpfulness of staff  Overall value for your money  F&B Outlet #3 Ratings  F&B Outlet #3 Name:  F&B Outlet #3 Name:	Speed of service		*	*	<b>®</b>		•
seating area  Availability of seating  Courtesy and helpfulness of staff  Overall value for your money  F&B Outlet #2 Ratings  F&B Outlet #2 Ratings  F&B Outlet #2 Ratings  Very.Poor Poor Average Good Outstanding Opinion  Variety of menu items  Quality of food & beverage  Speed of service  Cleanliness of the food court seating area  Availability of seating  Very.Poor Poor Average Good Outstanding Opinion  Courtesy and helpfulness of staff  Very.Poor Poor Average Good Outstanding Opinion  F&B Outlet #3 Name:  F&B Outlet #3 Ratings  F&B Outlet #3 Ratings  Courtesy and helpfulness of staff  Overall value for your money  F&B Outlet #3 Ratings  Courtesy and helpfulness of staff  Overall value for your money  Outlety of menu items  Quality of food & beverage  Speed of service  Cleanliness inside the restaurant  Cleanliness inside the restaurant  Cleanliness of the food court seating area  Availability of seating  Courtesy and helpfulness of staff  Outlety of menu items  Did not have the food that I like.  Did not have the food that I like.  Did not have time.  Prices are too high.  Not hungry.  Restaurant/outlet closed  Other  Did not visit F&B Outlets.	Cleanliness inside the restaurant		*	ě.	•		ě
Courtesy and helpfulness of staff Overall value for your money			Ø	<b>*</b>			
Overall value for your money	Availability of seating		<b>*</b>	*			*
F&B Outlet #2 Name:    F&B Outlet #2 Ratings	Courtesy and helpfulness of staff		è	Ö			*
F&B Outlet #2 Ratings	Overall value for your money		ě	Ö			
1-   2-   3-   4-   5-   No   Opinion	F&B Outlet #2 Name:						
Very-Poor   Poor   Average   Good   Outstanding   Opinion		F&B Out	let #2 R	atings			
Quality of food & beverage  Speed of service  Cleanliness inside the restaurant  Cleanliness of the food court seating area  Availability of seating  Courtesy and helpfulness of staff  Overall value for your money  F&B Outlet #3 Ratings  F&B Outlet #3 Ratings  F&B Outlet #3 Ratings  Very.Poor Poor Average Good Outstanding Opinion  Variety of menu items  Quality of food & beverage  Speed of service  Cleanliness inside the restaurant  Cleanliness inside the restaurant  Cleanliness of the food court seating area  Availability of seating  Courtesy and helpfulness of staff  Overall value for your money  Did not have the food that I like.  Did not have time.  Prices are too high.  Not hungry.  Restaurant/outlet closed  Other  Did not visit F&B Outlets.							
Speed of service  Cleanliness inside the restaurant  Cleanliness of the food court seating area  Availability of seating  Courtesy and helpfulness of staff  Overall value for your money  F&B Outlet #3 Ratings  F&B Outlet #3 Ratings  1-	Variety of menu items	<b>*</b>		0			Ď.
Cleanliness inside the restaurant  Cleanliness of the food court seating area  Availability of seating  Courtesy and helpfulness of staff  Overall value for your money  F&B Outlet #3 Ratings  F&B Outlet #3 Ratings  Very.Poor Poor Average Good Outstanding Opinion  Variety of menu items  Ouality of food & beverage  Speed of service  Cleanliness inside the restaurant  Cleanliness inside the restaurant  Cleanliness of the food court seating area  Availability of seating  Courtesy and helpfulness of staff  Overall value for your money  B3. If you visited the food or beverage outlets but didn't buy anything, why not?  Did not have the food that I like.  Did not have the food that I like.  Did not have time.  Prices are too high.  Not hungry.  Restaurant/outlet closed  Other  Did not visit F&B Outlets.	Quality of food & beverage		<b>*</b>				
Cleanliness of the food court seating area  Availability of seating  Courtesy and helpfulness of staff  Overall value for your money  F&B Outlet #3 Ratings  F&B Outlet #3 Ratings  1- Very.Poor Poor Average Good Outstanding Opinion  Variety of menu items  Quality of food & beverage  Speed of service  Cleanliness inside the restaurant  Cleanliness of the food court seating area  Availability of seating  Courtesy and helpfulness of staff  Overall value for your money  B3. If you visited the food or beverage outlets but didn't buy anything, why not?  Did not have the food that I like.  Did not have the food that I like.  Did not have the food that I like.  Did not have time.  Prices are too high.  Not hungry.  Restaurant/outlet closed  Other  Did not visit F&B Outlets.	Speed of service	•	*		*		•
Availability of seating  Courtesy and helpfulness of staff Overall value for your money  F&B Outlet #3 Ratings  F&B Outlet #3 Ratings  Very.Poor Poor Average Good Outstanding Opinion  Variety of menu items  Quality of food & beverage  Speed of service  Cleanliness inside the restaurant  Cleanliness of the food court seating area  Availability of seating  Courtesy and helpfulness of staff  Overall value for your money  Did not have the food that I like.  Did not have time.  Prices are too high.  Not hungry.  Restaurant/outlet closed  Other  Did not visit F&B Outlets.	Cleanliness inside the restaurant	•		Ö		•	•
Courtesy and helpfulness of staff  Overall value for your money  F&B Outlet #3 Ratings  F&B Outlet #3 Ratings  F&B Outlet #3 Ratings  Very.Poor Poor Average Good Outstanding Opinion  Variety of menu items  Quality of food & beverage  Speed of service  Cleanliness inside the restaurant  Cleanliness of the food court seating area  Availability of seating  Courtesy and helpfulness of staff  Overall value for your money  Did not have the food that I like.  Did not have time.  Prices are too high.  Not hungry.  Restaurant/outlet closed  Other  Did not visit F&B Outlets.		Ď	•		*		
Overall value for your money  F&B Outlet #3 Name:  F&B Outlet #3 Ratings  1- 2- Average Good Outstanding Opinion  Variety of menu items  Ouality of food & beverage  Speed of service  Cleanliness inside the restaurant  Cleanliness of the food court seating area  Availability of seating  Courtesy and helpfulness of staff  Overall value for your money  B3. If you visited the food or beverage outlets but didn't buy anything, why not?  Did not have time.  Prices are too high.  Not hungry.  Restaurant/outlet closed  Other  Did not visit F&B Outlets.	Availability of seating	Ð	•	*	*	*	•
F&B Outlet #3 Name:    Table   Courtesy and helpfulness of staff		*	<b>*</b>		*		
Speed of service   Cleanliness of the food court seating area   Availability of seating   Courtesy and helpfulness of staff   Courtesy a	Overall value for your money	100	*		*	*	•
1-   Very.Poor   Poor   Average   Good   Outstanding   Opinion	F&B Outlet #3 Name:	-					
Very.Poor Poor Average Good Outstanding Opinion  Variety of menu items  Quality of food & beverage  Speed of service  Cleanliness inside the restaurant  Cleanliness of the food court seating area  Availability of seating  Courtesy and helpfulness of staff  Overall value for your money  B3. If you visited the food or beverage outlets but didn't buy anything, why not?  Did not have the food that I like.  Did not have time.  Prices are too high.  Not hungry.  Restaurant/outlet closed  Other  Did not visit F&B Outlets.		F&B Out	let #3 R	atings			
Quality of food & beverage  Speed of service  Cleanliness inside the restaurant  Cleanliness of the food court seating area  Availability of seating  Courtesy and helpfulness of staff  Overall value for your money  B3. If you visited the food or beverage outlets but didn't buy anything, why not?  Did not have the food that I like.  Did not have time.  Prices are too high.  Not hungry.  Restaurant/outlet closed  Other  Did not visit F&B Outlets.							
Speed of service  Cleanliness inside the restaurant  Cleanliness of the food court seating area  Availability of seating  Courtesy and helpfulness of staff  Overall value for your money  B3. If you visited the food or beverage outlets but didn't buy anything, why not?  Did not have the food that I like.  Did not have time.  Prices are too high.  Not hungry.  Restaurant/outlet closed  Other  Did not visit F&B Outlets.	Variety of menu items					•	
Cleanliness of the food court seating area  Availability of seating  Courtesy and helpfulness of staff  Overall value for your money  B3. If you visited the food or beverage outlets but didn't buy anything, why not?  Did not have the food that I like. Did not have time. Prices are too high. Not hungry. Restaurant/outlet closed Other Did not visit F&B Outlets.	Quality of food & beverage						
Cleanliness of the food court seating area  Availability of seating  Courtesy and helpfulness of staff  Overall value for your money  Did not have the food that I like. Did not have time. Prices are too high. Not hungry. Restaurant/outlet closed Other Did not visit F&B Outlets.	Speed of service	•	100	0	**	•	•
Availability of seating  Courtesy and helpfulness of staff  Overall value for your money  B3. If you visited the food or beverage outlets but didn't buy anything, why not?  Did not have the food that I like.  Did not have time.  Prices are too high.  Not hungry.  Restaurant/outlet closed  Other  Did not visit F&B Outlets.	Cleanliness inside the restaurant	•	100	100	*	•	•
Courtesy and helpfulness of staff  Overall value for your money  Did not have the food that I like. Did not have time. Prices are too high. Not hungry. Restaurant/outlet closed Other Did not visit F&B Outlets.			*				*
Overall value for your money  B3. If you visited the food or beverage outlets but didn't buy anything, why not?  Did not have the food that I like.  Did not have time.  Prices are too high.  Not hungry.  Restaurant/outlet closed  Other  Did not visit F&B Outlets.	Availability of seating	*	•	*	*		<b>*</b>
B3. If you visited the food or beverage outlets but didn't buy anything, why not?  Did not have the food that I like.  Did not have time.  Prices are too high.  Not hungry.  Restaurant/outlet closed  Other  Did not visit F&B Outlets.	Courtesy and helpfulness of staff				*	•	•
Did not have the food that I like.  Did not have time.  Prices are too high.  Not hungry.  Restaurant/outlet closed  Other  Did not visit F&B Outlets.	Overall value for your money	<b>*</b>	•	•	*		•
п отгот, ровае варият.		ge outlets bu		Did not have Prices are too Not hungry. Restaurant/o	time. o high. utlet close	ed	

B4. Select the three most imp shopping at the food & bever		s when	10.5	riety of		items & bever	age			
			10.5	eed of			-			
			10.7				court seating ar	rea .		
			Av	ailabilit	y of se	ating				
			Co	urtesy	and he	elpfulne	ss of staff			
			Ov	erall va	alue fo	r your r	noney			
B5. Are you aware that you ca packaged food to take onboa	rd the flight?		Yes No							
B5b. Are you aware that resta food ready to take onboard?	aurants sell p	ackaged	Yes No							
B6. Have you purchased any airport to take onboard the air		at this	☐ Ye	s - for t	this flig	ıht.				
·			Yes - for this flight. Yes - for previous flights							
			No							
If Yes, u	using the 1-5	ratings, h	ow sati	sfied v	vere y	ou witl	n the:			
	1- Very.Poo			erage		od 5-	Outstanding	No opinion		
Variety of menu items		*	100				<u> </u>	9		
Prices of food & beverage	*		*				Ø.	*		
Quality of food & beverage	ě	*								
If no, why not?			Pla Bro		uy food	ooard fli onboai	-			
B7. If you made a purchase in airline tickets, parking & grou Round to the nearest dollar v.	und transpor	tation), ap	oday at proxim	the foo				xcluding		
Round to the nearest donar v										
At food & beverage outlets and r		ng spent,	Г	0.						
At food & beverage outlets and r	estaurants		Cdn\$		vs-sta	ınds.				
Please tell us about your	shopping e	xperienc	e at thation(s)	ne nev	ou visi	t today	17			
Please tell us about your	shopping e	xperienc	e at thation(s)	ne nev	ou visi	t today		rchased		
Please tell us about your	shopping e	xperienc stand loca d, did you	e at thation(s)	ne nev	ou visi	t today		rchased		
Please tell us about your C1. Relay/Virgir	shopping e Which news If visite	xperienc stand loca d, did you Check in)	e at thation(s)	ne nev	ou visi	t today	d Pu	rchased		
Please tell us about your C1. Relay/Virgir Relay-2nd L	shopping e Which news If visite n-3rd Level (Omes	xperienc stand loca d, did you Check in) tic Dep.)	e at thation(s)	ne nev	ou visi	t today	d Pu			
Please tell us about your  C1.  Relay/Virgir  Relay-2nd L  Relay	shopping e Which news If visite	xperienc stand loca d, did you Check in) tic Dep.)	e at thation(s)	ne nev	ou visi	t today	d Pu			
Please tell us about your C1.  Relay/Virgir Relay-2nd L  Relay Bytowne M	shopping e Which news If visite n-3rd Level (I evel (Domes	xperienc stand loca d, did you Check in) tic Dep.) es	e at thation(s)	ne nev	ou visi	Visited	d Pu			
Please tell us about your C1.  Relay/Virgir Relay-2nd L  Relay Bytowne M	shopping e Which news- If visite 1-3rd Level (I evel (Domes -US Departur Marche-Arriva	xperienc stand loca d, did you Check in) tic Dep.) res Is Area	e at thation(s)	ne nev	ou visi	Visited	d Pu			
Please tell us about your C1.  Relay/Virgir Relay-2nd L  Relay Bytowne N  Relay Klosk	shopping e Which news- If visite  1-3rd Level (I evel (Domes -US Departur Marche-Arriva -2 <sup>rd</sup> Level (D	xperienc stand loca d, did you  Check in) tic Dep.) es Is Area omestic)	e at thation(s)	did yo	ou visi	Visited	d Pui			
Please tell us about your C1.  Relay/Virgir Relay-2nd L  Relay Bytowne N  Relay Klosk  None of the above visited, go	shopping e Which news- If visite  1-3rd Level (  evel (Domes -US Departur  darche-Arriva -2 <sup>rd</sup> Level (D  the question ds that you v to 5 ratings s	xperienc stand loca d, did you  Check in) tic Dep.) es Is Area omestic)	e at thation(s)	did yo	ou visi	Visited	d Pui			
Please tell us about your  C1.  Relay/Virgir  Relay-2nd L  Relay  Bytowne N  Relay Kiosk  None of the above visited, go  C2. For each of the newsstant following factors using the 1	shopping e Which news- If visite n-3rd Level (I evel (Domes -US Departur flarche-Arriva -2 <sup>nd</sup> Level (D the question ds that you v to 5 ratings s	xperienc stand loca d, did you  Check in) tic Dep.) es Is Area omestic)	e at the	did yc	ou visi	Visited	d Pui			
Please tell us about your  C1.  Relay/Virgir  Relay-2nd L  Relay  Bytowne N  Relay Kiosk  None of the above visited, go  C2. For each of the newsstant following factors using the 1	shopping e Which news. If visite n-3rd Level (Inc.) evel (Domes -US Departur Marche-Arriva -2 <sup>rd</sup> Level (Domes the question ds that you very to 5 ratings s	xperienc stand loca d, did you check in) tic Dep.) es Is Area omestic) 	e at the	did yc	ou visithing?	Visited	d Pui	on each of the		
Please tell us about your  C1.  Relay/Virgir  Relay-2nd L  Relay  Bytowne N  Relay Kiosk  None of the above visited, go  C2. For each of the newsstant following factors using the 1	shopping e Which news If visite n-3rd Level (0 evel (Domes -US Departur flarche-Arriva -2 <sup>nd</sup> Level (D	xperienc stand loca d, did you check in) tic Dep.) res Is Area comestic) c4. isited toda cale?	e at thrition(s) purchased double 2-	would	ou visithing?	t today Visited	r experience o	on each of the		
Please tell us about your  C1.  Relay/Virgir  Relay-2nd L  Relay  Bytowne N  Relay Kiosk  None of the above visited, go  C2. For each of the newsstant following factors using the 1  News-stand Outlet #1 Name:	shopping e Which news- If visite n-3rd Level (I evel (Domes -US Departur flarche-Arriva -2 <sup>nd</sup> Level (D the question ds that you v to 5 ratings s	xperienc stand loca d, did you  Check in) tic Dep.) es Is Area omestic) C4. isited toda cale?  News-stan	e at this ee  would	ou visithing?	Visited	r experience of	on each of the			
Please tell us about your  C1.  Relay/Virgin  Relay-2nd L  Relay Bytowne N  Relay Kiosk  None of the above visited, go  C2. For each of the newsstam following factors using the 1  News-stand Outlet #1 Name:	shopping e Which news If visite n-3rd Level (0 evel (Domes -US Departur Marche-Arriva -2 <sup>nd</sup> Level (D the question ds that you v to 5 ratings s	xperienc stand loca d, did you check in) tic Dep.) es ls Area omestic)	e at the e a	would y	ou visithing?	Visited	r experience o	on each of the		
Please tell us about your  C1.  Relay/Virgin  Relay-2nd L  Relay  Bytowne M  Relay Kiosk  None of the above visited, go  C2. For each of the newsstant following factors using the 1  News-stand Outlet #1 Name:  Selection of merchand  Value for your mone;  Overall appearance and clea	shopping e Which news If visite n-3rd Level (0 evel (Domes -US Departur Marche-Arriva -2 <sup>nd</sup> Level (D the question ds that you v to 5 ratings s	xperienc stand loca d, did you check in) tic Dep.) es Is Area pmestic) c4. isited toda cale?	e at the attorious purchase	would	u visihing?	Visited  Language A-Good	r experience of	on each of the		

ews-stand Outlet #2 Name:		<u> </u>				
	News-star	nd Outle	et #2	4-	5-	No
	Very.Poor	Poor	Average	Good	Outstanding	Opinion
Selection of merchandise	*	•	***	•	•	•
Value for your money	Ö	<b>*</b>	*			0
Overall appearance and cleanliness of news-stand				*		
Speed of service			*	*		
Courtesy and helpfulness of staff	•	*	*		•	
3. If you visited the news-stands but nything, why not?	didn't buy	Die Pri	dn't have the dn't have tin ices are too l on't need any ews-stand clo ther	ne high /thing, ju		
f other, please explain:						
rour shopping experience at the news- Please check the <u>THREE</u> most importan C5. If you made a purchase in the airpo parking & ground transportation), app	et factors.	Va Ov Sp Co	peed of service ourtesy and he the news-s	money ance and ce nelpfulne	cleanliness of ne	
	othing spent,		0.			
	othing spent,	enter \$	0.			
t news-stands Please tell us about your experier	nce today s	Cdn\$	ng at the r		·	
it news-stands	nce today s	Cdn\$	ng at the r	d you pu	rchase anythin	
it news-stands Please tell us about your experier	nce today s id you visit t	Cdn\$	ng at the r		rchase anythin	g?
rt news-stands Please tell us about your experier D1. Which retail/gift shops d	nce today s id you visit t d Level)	Cdn\$	ng at the r	d you pu Visi	rchase anythin	g? chased
Please tell us about your experied  D1. Which retail/gift shops d  Brookstone (3r	nce today s id you visit t d Level) rd Level)	Cdn\$	ng at the r	d you pu Visi	rchase anythin	g? chased
Please tell us about your experied D1. Which retail/gift shops d Brookstone (3r Virgin Music (3	nce today s id you visit t d Level) rd Level) cs (2nd Level	Cdn\$	ng at the r	d you pu Visi	rchase anythin	g? chased
Please tell us about your experier D1. Which retail/gift shops d Brookstone (3r Virgin Music (3) Great Canadian Book Bentley's (2nd	nce today s id you visit t rd Level) rd Level) cs (2nd Level)	hoppin oday? If	ng at the r	d you pu Visi	rchase anything ted Pur	g? chased
Please tell us about your experier D1. Which retail/gift shops d Brookstone (3r Virgin Music (3) Great Canadian Book Bentley's (2nc	nce today s id you visit t rd Level) rd Level) ss (2nd Level I Level) sion (2nd Le	hoppin oday? If	ng at the r	Visi	rchase anythin	g?
Please tell us about your experied D1. Which retail/gift shops d Brookstone (3r Virgin Music (3) Great Canadian Book Bentley's (2nd Artizan/Fruits and Pas	nce today s id you visit t rd Level) rd Level) ss (2nd Level) sli Level) sion (2nd Le	hoppin oday? If	ng at the r	you pu	rchase anythin ted Pur	g? rchased
Please tell us about your experier D1. Which retail/gift shops d Brookstone (3r Virgin Music (3) Great Canadian Book Bentley's (2nd Artizan/Fruits and Pas Discover Ottawa (	nce today s id you visit to d Level) rd Level) ss (2nd Level) sion (2nd Le (2nd Level) cer (2nd Level)	hoppin oday? If	ng at the r	you pu	rchase anythin ted Pur	g? cchased
Please tell us about your experier D1. Which retail/gift shops d Brookstone (3r Virgin Music (3) Great Canadian Book Bentley's (2nd Artizan/Fruits and Pas Discover Ottawa (19)	nce today s id you visit t rd Level) rd Level) ss (2nd Level) sion (2nd Le (2nd Level) rer (2nd Level)	hoppin oday? If	ng at the r	you pu	rchase anythin ted Pur	g? rchased
Brookstone (3r Virgin Music (3 Great Canadian Book Bentley's (2nd Artizan/Fruits and Pas Discover Ottawa ( Rideau Business Cent	nce today s id you visit t rd Level) rd Level) ss (2nd Level) sion (2nd Le (2nd Level) rer (2nd Level)	hoppin oday? If	ng at the r	you pu	rchase anythin ted Pur	g? cchased
Please tell us about your experier D1. Which retail/gift shops d Brookstone (3r Virgin Music (3) Great Canadian Book Bentley's (2nd Artizan/Fruits and Pas Discover Ottawa (19)	nce today s id you visit t rd Level) rd Level) ss (2nd Level) sion (2nd Le (2nd Level) rer (2nd Level)	hoppinoday? If	ng at the r	you pu	rchase anythin ted Pur	g? cchased
Please tell us about your experier D1. Which retail/gift shops d Brookstone (3r Virgin Music (3) Great Canadian Book Bentley's (2nd Artizan/Fruits and Pas Discover Ottawa (19)	nce today s id you visit t rd Level) rd Level) ss (2nd Level) sion (2nd Le (2nd Level) rer (2nd Level)	hoppinoday? If	ng at the r	you pu	rchase anythin ted Pur	g? rchased

D2. For each of the retail/gift shops t of the following factors using the 1 to			how would	l you rat	e your experien	ce on each
Retail Outlet #1 Name:						
	Retail	Outlet	#1			
	1- Very.Poor	2- Poor	3- Average	4- Good	5- Outstanding	No Opinion
Selection of merchandise in shops				0		
Quality of retail merchandise	•	100	•	100		•
Ease of finding items						
Overall value for money						
Appearance/cleanliness of						
stores/shops						
Speed of service				_		_
Courtesy and helpfulness of staff	***		*			
Retail Outlet # 2 Name:						
		Outlet			-	
	1- Very.Poor	2- Poor	3- Average	4- Good	5- Outstanding	No Opinion
Selection of merchandise in shops	<b>1</b>	9	•	*		<b>1</b>
Quality of retail merchandise		*		*	*	
Ease of finding items	•					*
Overall value for money		•		*		
Appearance/cleanliness of stores/shops						
Speed of service	•	0	•	0	•	•
Courtesy and helpfulness of staff	•				-	
Retail Outlet #3 Name:	ı					
	Retail	l Outlet	#3			
	1-	2- Poor	3- Average	4- Good	5- Outstanding	No Opinion
Selection of merchandise in shops	Very.Poor	Poor	Average	Good	Outstanding	Opinion
Quality of retail merchandise						<u> </u>
Ease of finding items						
Overall value for money  Appearance/cleanliness of	<u> </u>					
stores/shops	•					
Speed of service			•		-	•
Courtesy and helpfulness of staff	*		<b>*</b>		<b>*</b>	*
03. If you visited the retail shops or s didn't buy anything, why not?	ervices but		idn't have the didn't have tild idn't have tild idness are too don't need and hops closed wither	me high		
If other, please explain:						
D4. How important are each of these your shopping experience at the retai Please check the <u>THREE</u> most importa	I outlets?		peed of servi	ill mercha g items for mone leanliness	indise	

Page 5

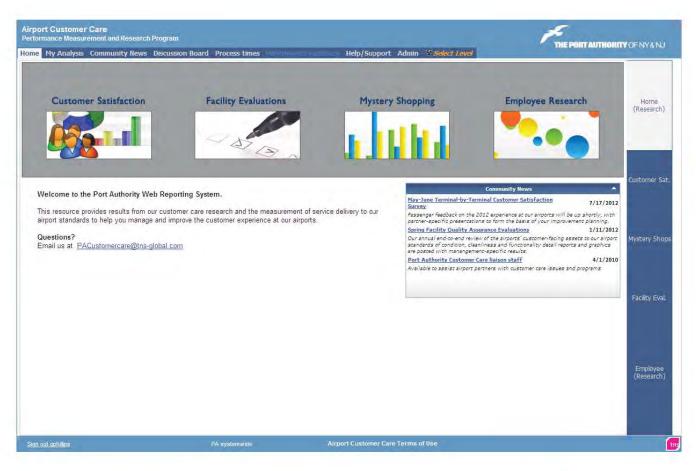
touria to the fical est denai t	alue. If nothing	spent, e	enter \$0.				
At retail/gift shops			Cdn\$				
Satisfaction							
E1. How do you rate the ov	erall variety of	shops/c ratings		e followin	ig categories usir	ng the 1 to 5	
	1- Very.Poor	2- Poor	3- Average	4- Good	5- Outstanding	No Opinior	
Food and beverage outlets		*	•		ø	•	
News-stands			<b>*</b>	<b>1</b>	Ö	Ď	
Retail and gift shops		*	*	*		•	
2. On your next trip, do you he same or less at the Ottaw	va airport?		More The same Less his airport? F		er here:		
E4. NEGATIVE COMMENTS ab	out the concess	sions at t	his airport?	Please en	ter here:		
E4. NEGATIVE COMMENTS ab	out the concess	sions at t	his airport?	Please en	ter here:		
			his airport?	Please en	ter here:		
Please tell us something				Please en	ter here:		
Please tell us something			Male	Please en	ter here:		
Please tell us something . F1. Your gender:			Male Female		ter here:		
Please tell us something . 1. Your gender:			Male Female		ter here:		
Please tell us something . 1. Your gender:			Male Female Under 18		ter here:		
Please tell us something . 1. Your gender:			Male Female  Under 18  18-25		ter here:		
Please tell us something . 1. Your gender:		if.	Male Female Under 18 18-25 26-30 31-40 41-50		ter here:		
Please tell us something . F1. Your gender:		if.	Male Female Under 18 18-25 26-30 31-40 41-50		ter here:		
Please tell us something . F1. Your gender:		if.	Male Female Under 18 18-25 26-30 31-40		ter here:		
Please tell us something .		if.	Male Female Under 18 18-25 26-30 31-40 41-50 51-60		ter here:		
Please tell us something for the second seco	about yoursel	if.	Male Female Under 18 18-25 26-30 31-40 41-50 51-60 61-65 Over 65		ter here:		
Please tell us something .  71. Your gender:  72. Your age:  73. Your approximate house	about yoursel	if.	Male Female Under 18 18-25 26-30 31-40 41-50 51-60 61-65 Over 65 Under \$2	:5,000	ter here:		
Please tell us something for the second seco	about yoursel	if.	Male Female Under 18 18-25 26-30 31-40 41-50 51-60 61-65 Over 65 Under \$2 \$25,000	25,000 \$49,999	ter here:		
Please tell us something .  71. Your gender:  F2. Your age:  F3. Your approximate house	about yoursel	if.	Male Female  Under 18  18-25  26-30  31-40  41-50  51-60  61-65  Over 65  Under \$2  \$25,000	25,000 \$49,999 \$74,999	ter here:		
Please tell us something .  71. Your gender:  F2. Your age:  F3. Your approximate house	about yoursel	if.	Male Female  Under 18 18-25 26-30 31-40 41-50 51-60 61-65 Over 65  Under \$2 \$25,000 \$50,000 \$75,000	:5,000 :\$49,999 :\$74,999 :\$99,999			
Please tell us something .  71. Your gender:  F2. Your age:  F3. Your approximate house	about yoursel	if.	Male Female  Under 18 18-25 26-30 31-40 41-50 51-60 61-65 Over 65  Under \$2 \$25,000 \$50,000 \$75,000	:5,000 :\$49,999 :\$74,999 :\$99,999 0-\$150,000			
Please tell us something  1. Your gender:  2. Your age:  3. Your approximate housel canadian dollars):	about yoursel	f.	Male Female Under 18 18-25 26-30 31-40 41-50 51-60 61-65 Over 65 Under \$2 \$25,000 \$50,000 \$75,000 \$100,000	25,000 -\$49,999 -\$74,999 -\$99,999 -\$150,000			
Please tell us something  1. Your gender:  2. Your age:  3. Your approximate housel canadian dollars):  4a. If Canadian resident, where	about yoursel	f.	Male Female  Under 18  18-25  26-30  31-40  41-50  51-60  01-65  Over 65  Under \$2  \$25,000  \$50,000  \$75,000  \$75,000  0 Over \$15	\$5,000 \$49,999 \$74,999 \$99,999 0-\$150,000 Gatineau			
Please tell us something. F1. Your gender: F2. Your age: F3. Your approximate houselt Canadian dollars): F4a. If Canadian resident, where the control of the	about yoursel	f.	Male Female  Under 18  18-25  26-30  31-40  41-50  51-60  61-65  Over 65  Under \$2  \$25,000  \$50,000  \$75,000  \$100,000  Over \$15	\$5,000 \$49,999 \$74,999 \$99,999 0-\$150,000 Gatineau			

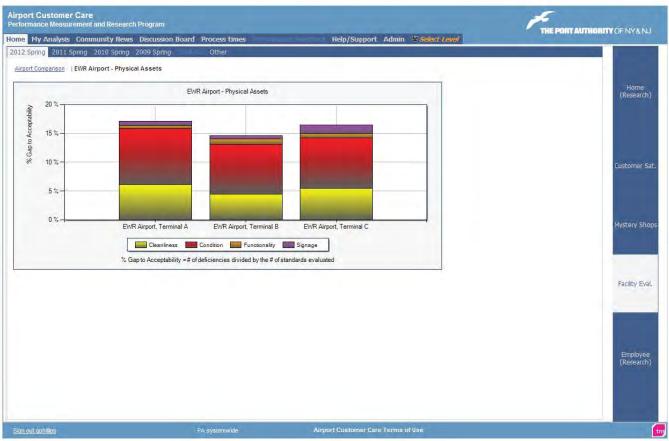
Thank you for taking the time to complete this survey! Your time and input are very much appreciated!!

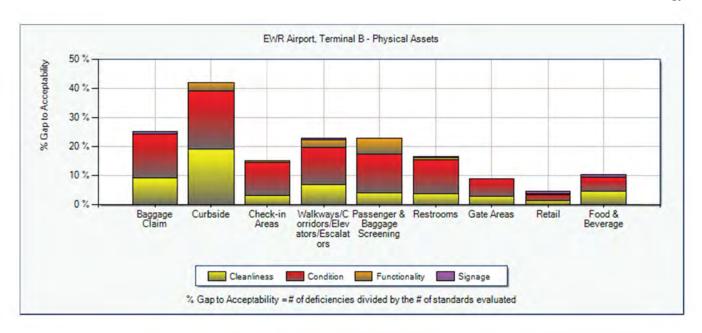
	Date shop performed
Ç	Speed of Service
-	Time In
-	Time placed order
-	Time Complete (Received change, receipt, and product)
1	Number of registers open?
1	Number of people ahead of you in line?
1	Number of customers in the shop in addition to you?
_	Associate Information
1	Associate's name(#1)
_	Age Range(#1)
ŀ	Hair Color(#1)
ŀ	Hair Length(#1)
ŀ	Height(#1)
(	Gender(#1)
,	Job Duty (#1)
1	Miscellaneous Description(#1)
,	Associate's Name(#2)
_	Age Range(#2)
ŀ	Hair Color(#2)
ŀ	Hair Length(#2)
ŀ	Height(#2)
(	Gender(#2)
,	Job Duty (#2)
ı	Miscellaneous Description(#2)
	Evaluation
_	Appearance/Ambiance
/	Acknowledged and/or greeted upon entry to the store?
-	Associate smiled when greeting/acknowledging customer? (Answer no if not greeted or acknowledge
I	Exterior sign is visible from each side of the hallway and from both directions?
ı	List up to 6 items immediately visible when you enter the location:
I	tem #1
I	tem #2
I	tem #3
ı	tem #4
I	tem #5
ı	tem #6
١	What was your first impression upon entering the shop? Rate on a scale of 1 to 5
ı	Rate the cleanliness of this location.
I	Rate the lighting in this location.
I	Rate the ambiance in this location.

**Comments on Appearance/Ambiance:** Staff Rate the friendliness of your greeting/acknowledgement. Did the staff greet you in both official languages? Was the associate who greeted you wearing a nametag? Was the associate who greeted you in uniform? Number of staff visibly present. Was the staff able to serve you in French? Was an associate immediately available to assist you? If not available, why? Was the associate who assisted you helpful? Rate the overall assistance you received. Rate the associate's knowledge of the store's products and services. Rate the associate's knowledge of the airport amenities. Rate the associate's courteousness. Rate the associate's appearance. Did the associate suggest additional merchandise? Comments on staff interaction: **Product Selection** Rate the selection of products. Rate the quality of the products. Rate the ease of finding products. Were all products available for purchase? Were prices clearly marked? Were products neatly displayed? Comments on Product Selection: Purchase/Checkout Was the checkout associate wearing a nametag? Rate the overall courteousness, politeness and friendliness of the cashier. Did the cashier thank you? Were you offered a bag? Was your purchase rung-up correctly? Were you told the total of your purchase? Was your change counted out to you? Were you given a receipt? Comments on Purchase/Checkout: **Items Purchased** Item #1 Item #1 Price: Item #2 Item #2 Price: Item #3 Item #3 Price: Receipt amount: Receipt number:

#### PANYNJ—SAMPLES OF PERFORMANCE REPORTS AND WEB PORTAL







		C THE PORT AUTHOR	TO OF NIVE ALL			
Port Authority	Facility Evaluation Sur		III OF NY SINJ			
Torradions	Shop Date: April, 2012	The state of				
	Airport: EWR					
	Terminal: Terminal B					
Convert To Excel	15000000					
Convert to Excel						
	Legend					
n/a -	Not Applicable					
	Standards	Standards	Gap to			
	Missed	Evaluated	Acceptabilit			
TERMINAL	494	2876	17%			
Curbside	57	149	38%			
General Requirements	0	13	0%			
Standards of Cleanliness	26	43	60%			
Standards of Condition	27	48	56%			
Standards of Functionality	4	20	20%			
Signs, Directions, and Information	0	25	0%			
Concourse B1 Departure Curbside	10	31	32%			
General Requirements	0	3	0%			
Standards of Cleanliness	5	9	56%			
Standards of Condition	4	10	40%			
Standards of Functionality	1	4	25%			
Signs, Directions, and Information	0	5	0%			
Concourse B2 Departure Curbside	12	31	39%			
General Requirements	0	3	0%			
Standards of Cleanliness	5	9	56%			
Standards of Condition	6	10	60%			
Standards of Functionality	1	4	25%			
Signs, Directions, and Information	0	5	0%			
Concourse B3 Departure Curbside	10	31	32%			
General Requirements	0	3	0%			
Standards of Cleanliness	5	9	56%			

#### THE PORT AUTHORITY OF NY& NJ Port Authority Facility Evaluation Shop Date: April, 2012 Airport: EWR Terminal: Terminal B Convert To Excel Legend R Routine Item н **Requires Immediate Attention** Issue Photo **Functional** Question/Standard Comment Area Number Type Arrivals Curbside Terminal B, Lower Level 4:20 PM Occupancy Slow Weather Sunny Were entrance and exit doors Standards of 2.1.2 clean and free of smudges, dirt Smudges are noted on the glass door. R Cleanliness and grime? Were trash receptacles clean Standards of 2.1.4 and emptied to prevent overflow The trash receptacle lids are soiled with cigarette ashes. R Cleanliness of debris? Were awnings or canopies, Standards of 2.1.5 The overhead beams are heavily soiled with dust. R where present, clean at all Cleanliness times? Were light fixtures and Standards of assemblies clean and free of 2.1.8 Dust is observed on the light fixtures. R Cleanliness dust? Were all frontages, As noted in the previous evaluation, cracks, pitting sidewalks and crosswalks Standards of 2.2.1 smooth and free of large and permanent stains are noted on the walkway. H Condition The metal barriers are oxidized cracks and missing surface areas? Were entrance and exit doors Standards of 2.2.2 The door frames are scarred. R maintained in good working Condition Standards of Was all glass in good condition 2.2.3 Scratches are noted on some of the terminal windows. R Condition with no visible damage? Were trash receptacles in good Standards of As noted in the previous evaluation, the trash receptacles 2.2.4 condition, without dents, marks R Condition

or peeling paint?

#### TUCSON INTERNATIONAL—BUSINESS TRAVEL SURVEY

Company name:

Company address:

Number of employees:

Approximate number of business trips taken by employees in CY2011?

(Regardless of origin Airport)

Estimate your annual expenditures for airline travel

(for either calendar year 2011 or your most recent fiscal year)

In this section, please list the top cities traveled to by employees of your company for calendar year 2011 or your most recent fiscal year. Please also indicate the frequency of travel to these cities on the chart below. Each employee should be counted as a separate trip when estimating the frequency, even if the employees traveled together.

City Destination Number of Trips Annually

City #1:(1-5) (6-10) (11-20) (21-50) (50-100) (100+)

City #2(1-5) (6-10) (11-20) (21-50) (50-100) (100+)

City #3(1-5) (6-10) (11-20) (21-50) (50-100) (100+)

City #4(1-5) (6-10) (11-20) (21-50) (50-100) (100+)

City #5(1-5) (6-10) (11-20) (21-50) (50-100) (100+)

City #6(1-5) (6-10) (11-20) (21-50) (50-100) (100+)

City #7(1-5) (6-10) (11-20) (21-50) (50-100) (100+)

Please estimate what percentage of your company's trips use each of the following airports:

- Tucson International Airport (TUS)
- Phoenix Sky Harbor International Airport (PHX)
- Phoenix-Mesa Gateway Airport (AZA)
- Other (Military, etc.)

Please select any airlines with which your company has a contract or preferred status with for business travel:

Alaska

American

Delta

Southwest

United

**US** Airways

Other Domestic \_\_\_\_\_

Other International

How does your company book airline tickets? Please check all that apply.

- In-house travel managers
- Company designated travel agency
- Employees make their own individual travel arrangements
- Do not track individual employee travel arrangements

What are the most important factors for the company's choice of travel arrangements? Please rank the following from 1 to 5, with 1 being the most important:

- Cost of travel/fares
- Schedule/convenience of flight times
- Preference for Nonstop Flights
- Preference for Departure Airport
- Preference for Arrival Airport at Destination
- Ability for Same-Day Travel
- Company has contract with airline:
- Ability to accrue frequent flyer miles

### Other (please list)

Does your company's travel policy require booking the lowest available fare?

Yes No

Is the total cost of travel, including gasoline, parking, time away from work, and similar factors considered in your company's travel policy?

Yes No

#### Please explain:

Over the next year, the number of your company's business-related trips is expected to:

- Increase %
- Decrease %
- Stay the Same

Which of the following amenities are likely to increase your company's interest in selecting an airport?

Very Likely Somewhat Likely Neutral Somewhat Unlikely Unlikely

- Discounted Parking
- Discounts in Airport Shops/Concessions
- Frequent Flyer Rewards
- Business Club/Lounge
- Internet Connectivity
- Airport Loyalty Program
- Other (please list)
- Airport factors do not determine the company's decision in airport selection.

The following questions pertain to the economic development within Southern Arizona. These questions are the most frequently asked by airlines considering service to the Tucson International Airport.

Within the last three years, how much capital investment has your company made toward growth and improvement in this region?

(This may include company expansion, changes to infrastructure, risk investment.)

Please estimate the capital investment in this region your company plans over the next three years.

Should an airline begin new service to the Tucson International Airport, would your company commit to using the service provided it meets your company's travel requirements? Yes No

Please explain.

Any other comments that you have regarding existing and/or future air service at TIA are appreciated.

In reviewing your answers to the survey, may we contact you in the future?

Yes No

Contact name:

Phone number:

Thank you for your feedback. It will help us to serve you better!

Abbreviations used without definitions in TRB publications:

A4A Airlines for America

AAAE American Association of Airport Executives
AASHO American Association of State Highway Officials

AASHTO American Association of State Highway and Transportation Officials

ACI–NA Airports Council International–North America

ACRP Airport Cooperative Research Program

ADA Americans with Disabilities Act
APTA American Public Transportation Association
ASCE American Society of Civil Engineers
ASME American Society of Mechanical Engineers
ASTM American Society for Testing and Materials

ATA American Trucking Associations

CTAA Community Transportation Association of America
CTBSSP Commercial Truck and Bus Safety Synthesis Program

DHS Department of Homeland Security

DOE Department of Energy

EPA Environmental Protection Agency
FAA Federal Aviation Administration
FHWA Federal Highway Administration

FMCSA Federal Motor Carrier Safety Administration

FRA Federal Railroad Administration FTA Federal Transit Administration

HMCRP Hazardous Materials Cooperative Research Program
IEEE Institute of Electrical and Electronics Engineers
ISTEA Intermodal Surface Transportation Efficiency Act of 1991

ITE Institute of Transportation Engineers

MAP-21 Moving Ahead for Progress in the 21st Century Act (2012)

NASA
National Aeronautics and Space Administration
NASAO
National Association of State Aviation Officials
NCFRP
NCHRP
NAtional Cooperative Freight Research Program
NHTSA
National Highway Traffic Safety Administration

NTSB National Transportation Safety Board

PHMSA Pipeline and Hazardous Matérials Safety Administration RITA Research and Innovative Technology Administration

SAE Society of Automotive Engineers

SAFETEA-LU Safe, Accountable, Flexible, Efficient Transportation Equity Act:

A Legacy for Users (2005)

TCRP Transit Cooperative Research Program

TEA-21 Transportation Equity Act for the 21st Century (1998)

TRB Transportation Research Board
TSA Transportation Security Administration
U.S.DOT United States Department of Transportation