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AIRPORT COOPERATIVE RESEARCH PROGRAM

ACRP REPORT 111

A Guidebook for Airport-Airline Consortiums

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AIRPORT COOPERATIVE RESEARCH PROGRAM

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

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

The ACRP was authorized in December 2003 as part of the Vision 100-Century of Aviation Reauthorization Act. The primary participants in the ACRP are (1) an independent governing board, the ACRP Oversight Committee (AOC), appointed by the Secretary of the U.S. Department of Transportation with representation from airport operating agencies, other stakeholders, and relevant industry organizations such as the Airports Council International-North America (ACI-NA), the American Association of Airport Executives (AAAE), the National Association of State Aviation Officials (NASAO), 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

By Theresia H. Schatz
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ACRP Report 111: A Guidebook for Airport-Airline Consortiums provides guidance for airport operators and airline representatives who are responsible for agreements related to facilities, equipment, systems, and services and who may be interested in evaluating, advocating, or forming consortiums to provide needed services. The Guidebook provides a discussion of the structure, organization, governance, membership provisions, scope, administrative and operational staffing; presents best practices for the preparation of consortium agreements and performance standards, capitalization, and cost allocation methodologies; and identifies areas that have been most challenging in the operation of consortiums from the airport's, airline's and operator's perspectives.

The Guidebook provides decision-making guidance on a variety of issues including the benefits and risks of establishing consortiums for both airports and airlines; information needed to establish a consortium; organizational and management structures; standard levels of services; financial considerations (e.g., capital and operating costs); federal, state, and local regulatory requirements; and the common problems relative to the formation and operation of consortiums.

Airports and airlines continue to work together to deliver cost-effective and quality services to passengers. Together they seek new and effective strategies to better manage airport facilities, equipment, systems, and services. Generally, the airport operator or individual airlines maintain these facilities, equipment, systems, and services. Occasionally, they are managed and maintained by airport-airline consortiums.

Airports and airlines would benefit from additional information to increase their understanding and evaluation of airport-airline consortiums. *ACRP Synthesis 31: Airline and Airport-Airline Consortiums to Manage Terminals and Equipment* recently described several current consortium arrangements and concluded that the consortium model is flexible and can be adapted to fit many circumstances and requirements.

This research was conducted under ACRP Project 01-21 by Airport & Aviation Professionals, Inc. (AvAirPros) in association with Copelan Consulting LLC, Quarles & Brady LLP and TransSolutions. As part of the research, the team conducted interviews of airport and airline staff and consortium operators and developed in depth cases studies of six consortiums.

CONTENTS

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.

SUMMARY

A Guidebook for Airport-Airline Consortiums

Airports and airlines continue to work together to deliver cost-effective and quality services to passengers and users. To achieve this, they seek new and effective strategies to better manage airport facilities, equipment, systems, and services. Usually, the airport operator or individual airlines maintain these facilities, equipment, systems, and services. However, at some airports, airline consortiums are responsible for the management and operation of certain airport facilities, equipment, systems, and services.

Airports and airlines would benefit from additional information to increase their understanding, evaluation, and participation in airport-airline consortiums. *ACRP Synthesis 31: Airline and Airport-Airline Consortiums to Manage Terminals and Equipment* recently described several current consortium arrangements and concluded that the consortium model is flexible and can be adapted to fit many circumstances and requirements.

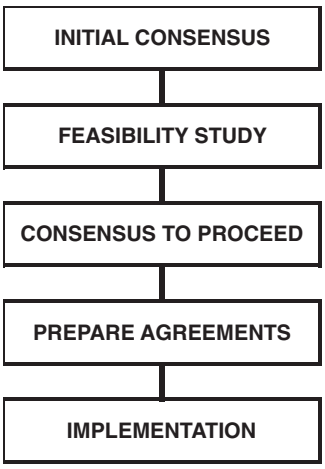
ACRP Report 111: Guidebook for Airport-Airline Consortiums (Guidebook) was prepared as an informational and decision-making guide for airport operators and airline representatives. It outlines the consortium formation process and its many variables for those who are responsible for agreements related to airport facilities, equipment, systems, and services, and who may be interested in evaluating, advocating, or forming consortiums to provide certain services.

The consortium concept is widely and generally known throughout the commercial aviation industry as a tool for managing common use facilities, equipment, systems, and services for groups of airlines. Because consortiums exist at some of the largest airports in the United States, most airlines operating in the Unites States have experience as consortium members. Additionally, many airport executives are also familiar with the consortium concept and are casually informed regarding the possible applications and utility of airline consortiums.

Consortiums at airports have been in existence since 1962. However, the overall frequency of consortium formation has increased dramatically in recent years, with 18 new consortiums (nearly 50% of the number of consortiums in existence) having been formed in the eight years since 2005.

The consortium formation process has a number of broad steps that are common for all consortiums. The details, however, may vary considerably for each consortium depending on its circumstances and the interests of the stakeholders involved.

Generally, a new consortium begins as an idea that there may be a better or more efficient way to approach issues related to facilities, equipment, systems, or services at an airport. The consortium concept may be further developed through the preparation of a feasibility study, which will identify a scope of services, preliminary operating budget, cost allocation methodology, capitalization plan, and a recommended business entity structure. It will



be necessary for the airport and the airlines to work together to confirm the consortium purpose, scope, and objectives. Issues and obstacles will have to be identified, addressed, resolved, and/or mitigated before the consortium formation can proceed.

Various agreements must be prepared to make a proposed consortium a reality. These include an agreement between the airport and the consortium to authorize the consortium's activities at the airport, a consortium member agreement to serve as the primary governing document for the consortium and its members, and a non-member access agreement which allows non-member airlines and ground handling companies to access and use the facilities, equipment, systems, and services administered by the consortium.

Financing documents will be necessary if capital financing is a component of the consortium formation. Financing documents vary widely in their scope and definition, depending on the type of financing, the source of funds, the size of the financing, the security identified and pledged for the financing, and so forth.

All stakeholders must secure approval prior to implementation of the consortium. Airline approval processes often require internal legal department review, properties department review, and officer approval. Airport approval processes vary significantly depending on the jurisdiction and the authority of the airport director.

The final activities in consortium implementation are consortium start-up and commencement of consortium operations. Consortium management staff, business systems, plans, and procedures must be in place for a successful start-up. Consortium vendors must also be engaged and prepared to provide for a successful commencement of operations.

This Guidebook is based on a review of available literature on consortiums and interviews of airport staff, airline staff, and consortium operators. The Guidebook provides information for each formation step, illustrative examples, and decision-making guidance on the consortium formation process.

This Guidebook also documents and provides basic data for the 39 consortiums operating in the United States today including 2 terminal consortiums, 9 equipment consortiums, 25 fuel consortiums and 3 other consortiums. In-depth case study examinations of 6 consortiums are included with the Guidebook in Appendix D.

The general success of terminal and equipment consortiums is often discussed and acknowledged, but it is difficult to define the measurement of success. Performance criteria have not been established for most consortiums and, as a result, a reportable volume of empirical performance data does not exist for most consortiums. However, indications are that there has been an increase in the number of new consortiums in recent years.

CHAPTER 1

Introduction

In today's competitive aviation industry, airports and airlines are always seeking innovative ways to reduce expenses while providing high levels of customer service. Airport-airline consortiums may provide an opportunity to more effectively manage resources and reduce costs, while maintaining high customer service levels. An airport-airline consortium is a special-purpose business entity that is usually owned and operated by a group of airlines, and that may be assigned the responsibility of developing and/or managing certain facilities, equipment, systems, or services at an airport. The purpose of creating a consortium and assigning it responsibilities is to capitalize on certain advantages the consortium may have over an airport or individual airlines.

Today, there are 39 airport-airline consortiums providing services at airports in the United States with responsibilities ranging from complete terminal operations to single service scope such as aircraft deicing operations. The oldest consortium has been in operation for more than 40 years and the creation of new consortiums has been increasing in frequency. Opportunities to implement new consortiums are studied when airports or airlines believe that the consortium structure may result in improvements at their airport. However, studies do not always lead to new consortiums being implemented.

Clearly, airports and airlines would benefit from additional information to increase their understanding, evaluation, and participation in consortiums. *ACRP Synthesis 31* recently described several current consortium arrangements and concluded that the consortium model is flexible and can be adapted to fit many circumstances and requirements.

Airport operators and airline representatives may use this Guidebook to investigate the application of the consortium model at their airport. Motivations may be to reduce costs, to improve efficiency; or to develop, lease, finance, and construct new facilities. This Guidebook serves as a decision-making guide for parties interested in exploring the application of the consortium model at their airport.

Objective

The objective of this project was to prepare a Guidebook for airport operators and airline representatives who are responsible for agreements related to airport facilities, equipment, systems, and services and who may be interested in evaluating, advocating, or forming consortiums to provide certain services.

The Guidebook is based on a review of available literature about consortiums along with interviews of airport, airline, and consortium operators. The Guidebook combines literature,

interview findings, and the authors' experience to document consortium key attributes and to provide decision-making guidance on the consortium formation process.

Purpose

The Guidebook will serve as a resource for airport operators and airline representatives who may be interested in evaluating, advocating, or forming consortiums to provide certain services at their airport. The target audience for the Guidebook is airport operators and airline representatives who are responsible for agreements related to airport facilities, equipment, systems, and services, and who are considering the consortium concept as an avenue to maintain the facilities and equipment and provide passenger services.

Terms, Abbreviations, and Acronyms

For the purposes of this Guidebook, an airport-airline consortium, often abbreviated herein as "consortium" or "airline consortium," is defined as a group of airlines that jointly hold responsibility for the common operation and maintenance of facilities, equipment, and/or services at an individual airport, usually as delegated by an agreement with airport management. At some locations, airport representatives also participate in the governance of the consortiums.

Further, under this definition, the consortium is always a legal entity that has been formed specifically for the purpose described. There are numerous airline committees at airports in the United States through which airlines work together toward a common goal. The majority of these committees, however, are not legal entities. Because airline committees that are not legal entities are unable to hold contracts and conduct business in a manner similar to legal entities, they are beyond the scope of this report.

A glossary of relevant terms, abbreviations, and acronyms used in the Guidebook is Appendix B.

Organization

The Guidebook has two primary sections: the main text organized by chapter and appendices. The main text is brief, providing information and guidance in an abridged format. Frequently asked questions; glossary of terms, abbreviations and acronyms; bibliography; and case study details are included as Appendices A through D, respectively.

Chapters 2 through 7 of the Guidebook present the consortium formation process.

- Chapter 2: Initial Consensus
- Chapter 3: Feasibility Study
- Chapter 4: Business Entity Selection
- Chapter 5: Consensus to Proceed
- Chapter 6: Prepare Agreements
- Chapter 7: Implementation

Chapter 8, Decision-Making Guidance and Considerations, provides guidance and options for the decisions that will be faced when working through the consortium formation process.

Chapter 9, Existing Consortiums, presents the research findings related to the consortiums that exist today in the United States.

Chapter 10, Consortium Success Metrics, discusses various techniques for determining consortium performance success.

Detailed information was gathered and compiled during the preparation of this *Guidebook* regarding the following consortiums:

- AATC Atlanta Airlines Terminal Corporation
- CICA TEC CICA Terminal Equipment Consortium
- DENCO Denver Consortium
- LAXSUL LAX Shared Use Lounge Company
- OFFC Oakland Fuel Facilities Corporation
- TOGA Terminal One Group Association, L.P.

Detailed information on each of these consortiums is presented in Appendix D.

CHAPTER 2

Initial Consensus

The consortium concept is widely and generally known throughout the commercial airport and airline industry as a tool for managing common use facilities, equipment, systems, and services for groups of airlines. Because consortiums exist at some of the largest airports in the United States, most airlines operating in the United States have experience as consortium members. Additionally, many airport executives are also familiar with the consortium concept and are casually informed regarding the possible applications and utility of airline consortiums.

Generally, a consortium begins as an idea that there may be a more economical or more operationally efficient way to manage facilities, equipment, systems, or services at an airport. Typically, this notion will only make progress toward reality if there is a sponsor who is willing to promote the concept among its colleagues. Often, the consortium sponsor is a single airline that has independently developed a preliminary, conceptual understanding of possible consortium benefits at its airport. However, there are also circumstances when the airport operator is motivated to promote a consortium and, therefore, effectively serves as the consortium sponsor.

The primary stakeholders and beneficiaries of a consortium are airlines. As such, airlines generally promote consortium development. The airport operator also has an interest in the success of a consortium venture, since a consortium will often be responsible for the operation and maintenance of airport assets and the consortium may be able to provide benefits that otherwise may not be available to the airport.

Airline motivations for proposing a consortium may include any combination of the following:

- Reducing operating costs
- Improving service levels
- Shifting the responsibility for operations and services from the airport to the airlines
- Shifting the responsibility for development from the airport to the airlines
- Raising capital for a new facility

Airport management motivations for promoting a consortium may include any combination of the following:

- Reducing operating costs
- Improving service levels
- Shifting the responsibility for operations and services from the airport to the airlines
- Shifting the responsibility for development from the airport to the airlines
- Shifting operational, legal, and environmental risk from the airport to the airlines
- Assigning expense responsibilities to the airlines to reduce the airport's cost per enplaned passenger
- Raising capital for a new facility
- Providing additional liability protection

During the early stages of consortium development, it is imperative that the purpose, scope and objectives for the consortium be identified and documented on a preliminary basis. The preliminary documentation of purpose, scope, and objective allows the concept of the consortium to be effectively described to all stakeholders, which results in ultimate support or abandonment of the consortium concept.

The consortium concept will not progress toward reality until an initial positive consensus has been developed among the stakeholders. When sufficient support has developed for the consortium opportunity, one or more of the stakeholders will authorize the expenditure of funds for a feasibility study to further examine the application of the consortium model to specific circumstances.

There are many reasons that the consortium concept may not attract sufficient support or funding for the implementation of a feasibility study during initial consensus building, when there are generally insufficient facts available related to the proposed consortium. As a result, individuals may hold negative opinions regarding a proposed consortium. From the airline perspective, these opinions may include the following:

- The consortium model will not produce sufficient savings.
- The consortium will benefit some stakeholders more than others.
- Too much effort/cost/time will be required to implement a consortium.
- It will be difficult to secure approval from headquarters.
- The current operating and financial situation is acceptable and should, therefore, not change.

From the airport perspective, negative opinions regarding a proposed consortium may include the following:

- The consortium will diminish the airport's authority.
- The airport will lose control over airport assets and operations.
- The consortium's incentive to reduce costs may negatively impact the maintenance levels for airport assets.
- The consortium model will not produce sufficient savings.
- The consortium will reduce or otherwise negatively affect jobs at the airport.
- The consortium may result in the dominance of certain airline members, which may become a barrier for new entrants.

The process of developing the consortium framework and achieving sufficient stakeholder approval to proceed may require a few weeks to several years, depending on the circumstances and the interests of the stakeholders. However, the most productive approach to building consensus is to develop, distribute, and explain documentation that accurately describes the proposed consortium's benefits.

Illustrative Examples and Observations

Provided below are illustrative examples that summarize the initial consensus process for selected consortiums. These examples indicate a broad range of purpose for these consortiums and the different formational approaches taken for each.

1. **Terminal One Group Association, L.P.** (TOGA). TOGA was formed as a New York Limited Partnership in 1994 by four partner airlines to develop, manage, and operate a new passenger terminal at John F. Kennedy International Airport (JFK). The Port Authority of New York and New Jersey (PANYNJ) was the operator of Terminal Four (the old International Arrivals Building) and was not focused on lowering costs for the airlines. TOGA was formed so the airlines could control the terminal design, development, and construction process resulting in an improved passenger experience with reduced operating costs.

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The TOGA consortium was initially conceived by a single airline that was discontented with the JFK International Arrivals Building experience and understood the opportunity for the development of an airline-sponsored unit terminal at JFK. This airline solicited other airlines to participate, and together they approached the PANYNJ. Ultimately, there was consensus among a sufficient number of the participating airlines to fund a feasibility study and to begin negotiations with the PANYNJ. The PANYNJ, however, had no participation in the development of the TOGA consortium, other than to negotiate with the airlines for the lease of the Terminal One site and the development of a new terminal facility.

2. **CICA Terminal Equipment Corporation** (CICA TEC). CICA TEC was formed as a not-for-profit corporation, organized in the state of Illinois, in 1990. CICA TEC was formed to procure and install airline equipment and facilities for a new international terminal at Chicago O'Hare International Airport (ORD), and to operate and maintain the equipment and facilities after the terminal opening.

   Prior to the formation of CICA TEC, the participating airlines formed the Chicago International Carriers Association (CICA) to work with the City of Chicago on the planning and design of the new international terminal. The participating airlines that had experience with the LAX Terminal Equity Corporation (LAXTEC) consortium in Los Angeles recommended forming an airline consortium for the international terminal at ORD. Collaboratively, the City of Chicago agreed with the consortium concept. As a result, airline responsibility for the operation and maintenance of certain equipment, facilities, and systems was incorporated into the Use and Lease Agreement negotiations as the new international terminal project progressed.
3. **Oakland Fuel Facilities Corporation** (OFFC). OFFC was formed as a nonprofit corporation, organized in the State of California, in 1989. The OFFC was formed to economically provide fuel system maintenance and operations in a unified efficient manner. This was accomplished by replacing the airport provided fueling services with an airline operated fueling consortium. A key motivating factor included the ability to secure third-party financing, rather than utilizing Port of Oakland (Port) funding. The Port conducted a financial and operational feasibility study to evaluate whether the Port should construct and operate the new fuel facility. As a result, the Port and the airlines agreed that it was in the best interest of all entities for the airlines to form a fuel consortium to address third-party project funding, to allow the airlines to manage the design and construction of the new fueling facility, and to provide for airline managed fuel operations once the facility was completed.
4. The **DEN Consortium, LLC** (DENCO). DENCO was formed as a Colorado Limited Liability Company in 2011 by nine airline members to act as the legal entity for the acquisition of deicing fluid at Denver International Airport (DEN). Continental Airlines previously held the contract with a vendor to provide deicing fluid to the airlines; however, Continental Airlines was not able to continue holding this contract. The participating airlines examined several approaches to dealing with this issue, including the formation of a consortium. The consortium concept was not necessarily promoted as the most advantageous approach. However, the participating airlines retained the consortium concept as one viable option as alternative approaches were examined. DENCO did not execute an operating agreement with the airport, since the consortium is not leasing, operating, or maintaining airport owned assets. However, DEN property and legal representatives were very supportive by providing their input along with pertinent data during the feasibility process. Airport staff supported the consortium concept as the most effective manner to ensure that the airlines were prepared to address the upcoming snow season.
5. The **LAX Shared Use Lounge Company, LLC** (LAXSUL). LAXSUL was formed as a Delaware Limited Liability Company in 2006 by nine airline members to develop, finance, manage, and operate a new premium passenger lounge in the Tom Bradley International Terminal (TBIT) at Los Angeles International Airport (LAX). Los Angeles World Airports (LAWA) initiated

a renovation program for TBIT that included a consolidation of airline lounges. Airline alliance members developed joint alliance lounges, while the airlines that did not belong to alliances were required to work together to develop a lounge for the common use of their passengers. The participating airlines requested proposals from various companies regarding cost-effective approaches to developing and operating a new lounge facility. One of the proposals focused on forming a consortium. This proposal was given due consideration and was ultimately accepted when proposals were evaluated. LAWA was not involved in any part of the LAXSUL formation process.

As described by these illustrative examples, there are many factors that could motivate airlines and airports to entertain the consortium concept. These factors include financial, operating, legal, and service level concerns. Once the airlines and airport staff achieve consensus that a consortium entity could provide benefits to address these concerns, it is necessary to devote resources to perform a feasibility study to determine the extent of these benefits. Chapter 3 outlines the purpose, tasks, and deliverables necessary to perform a meaningful feasibility study.

CHAPTER 3

Feasibility Study

Once consensus has been achieved among the stakeholders that the feasibility of an airline consortium should be examined and funds have been authorized for a feasibility study, a qualified consultant should be selected to perform a feasibility study.

Before the consultant can properly perform the feasibility study, the consortium sponsor should advise the consultant of the following:

- Purpose of the consortium
- Preliminary scope of the consortium
- Proposed membership of the consortium
- Objectives of the consortium
- Any known constraints or obstacles

The feasibility study will include a number of tasks, including the following:

- Preparation of a business plan
- Preparation of a preliminary capital budget, if applicable
- Preparation of a capital-funding plan, if applicable
- Description of the documents to be developed to implement the consortium

Depending on the specific circumstances for the proposed consortium, the feasibility study may also include data gathering and analysis regarding potential efficiencies and cost savings that may be gained by the consortium. The stakeholders may also request that the feasibility study address the practicality of forming a consortium to perform the scope of services under consideration.

During the preparation of the feasibility study, the consultant should gather information by interviewing stakeholders, by reviewing established budgets and contracts, and by becoming familiar with the facilities, equipment, systems and services the consortium will be responsible for. A completed consortium business plan should describe the following:

- Recommended business entity structure (options are described in Chapter 4)
- Scope of services and responsibilities of the consortium
- Preliminary operating budget
- Recommended methodology for allocating costs among the consortium members
- Capitalization plan including the identification of source of funds

If the consortium will be responsible for capital development, the feasibility study should describe the capital projects, include a preliminary capital budget, and describe a recommended capital-funding plan including source of funds, estimated debt service, and any applicable funding restrictions. Airport business, legal, and engineering departments should be consulted to determine any particular requirements, restrictions, or processes that would affect the development.

If bond funding is being considered, the City and/or its designated bond issuance agency or their legal counsel should also be consulted.

If it is determined that airport funds will be used for capital development, or any other purpose associated with the consortium, the financial stakeholders should be consulted very early in the process to allow sufficient time for approvals and documentation.

The feasibility study may also include a description of the following documents and agreements to be drafted to implement the consortium:

- Agreement with Airport
- Member Agreement
- Non-Member Access Agreement
- Financing Documents (if applicable)
- Articles of Incorporation

The form of these documents will vary widely from consortium to consortium depending on the circumstances, the business entity selected, the preferences of the stakeholders, the scope of the consortium, whether third-party financing is necessary, and the jurisdictional requirements.

The conclusion of the feasibility study is often a presentation to the stakeholders that explains the feasibility study findings.

Stakeholder interest in the feasibility study varies widely depending on the circumstances and the relationships between the parties.

Often, the airlines are primarily interested in the proposed scope, potential cost savings, cost allocation methodologies, and capitalization requirements for the new consortium.

Airports are also focused on consortium scope, especially when airport owned assets would be assigned to the consortium to operate and maintain. Often, airports are also interested in the key provisions of the consortium documents and agreements. Airports may also require that

- Consortium membership be open to new entrants,
- Consortium procurement practices be in compliance with airport procurement practices including local diversity goals,
- Airport defined indemnification language be included in the consortium documents,
- The consortium procure insurance that meets or exceeds airport established requirements,
- Maintenance standards for airport assets ensure the preservation of those assets,
- Airport labor standards be addressed by consortium procurement practices, and
- An airport representative be included in the governing body of the consortium.

Airports also frequently express concerns that the implementation of a consortium may negatively affect jobs at the airport. To ensure an effective and appropriate outcome, all stakeholder concerns should be identified in advance and addressed by the feasibility study.

Illustrative Examples and Observations

1. **Terminal One Group Association, L.P.** The TOGA participating airlines funded a financial feasibility study that compared the estimated costs of a newly developed Terminal One with the estimated costs of continuing operations at the old International Arrivals Building. The results of the study were favorable and supported the formation of the TOGA consortium. The PANYNJ was not involved in the TOGA financial feasibility study. Instead, the PANYNJ was focused on securing a ground lease and a commitment to develop a new passenger terminal facility. The PANYNJ left the decision to proceed with the TOGA venture to the participating airlines.

2. **Oakland Fuel Facilities Corporation.** The Port of Oakland conducted a financial and operational feasibility analysis related to the construction of a new fuel facility at OAK. Both the Port and the airlines agreed that it was in the best interest of all parties for the airlines to form a fuel consortium to provide third-party project funding and airline-managed fuel operations after the facility was completed.
3. **DEN Consortium, LLC.** Various financial and business analyses were performed for DENCO to help the airlines compare and analyze the business options available to them for jointly holding a common deicing fluid supply contract. As options were reviewed, the analyses were updated a number of times to accommodate scope revisions (equipment maintenance versus no equipment maintenance) and various methodologies for allocating consortium costs to the airlines. DEN property and legal representatives were supportive of the consortium concept because it was beneficial to the airlines, and ensured that deicing material would be available for the upcoming snow season. They assisted in the business analyses by providing data to support the analyses and committing to operate and maintain certain deicing storage and dispensing equipment that otherwise would have become the responsibility of DENCO. However, the airport was not involved in the decision to proceed with DENCO.
4. **LAX Shared Use Lounge Company, LLC.** A financial business analysis was prepared for LAXSUL to estimate the amount of capital necessary for the development of the proposed lounge facility, financing alternatives, debt service, operating costs, and costs per use. This analysis enabled the participating airlines to decide to proceed with the formation of LAXSUL. LAWA was not involved in, or a recipient of, the LAXSUL business analysis. Instead, LAWA was focused on securing a lease and a commitment to develop a new premium passenger lounge facility. LAWA left the decision to proceed with the LAXSUL venture to the participating airlines.
5. **Norman Y. Mineta San Jose International Airport** (SJC) **and Indianapolis International Airport** (IND). It should be noted that not all consortium ventures proceed after a feasibility study is prepared and presented. Consortiums were proposed by the airlines for both IND and SJC as a means to reduce operating and maintenance costs. However, in both cases, the feasibility studies indicated that the estimated cost savings produced by the consortiums could also be achieved under the current operating conditions, making the consortiums unnecessary. At SJC, the airport staff had contracted out many functions that were previously performed by local government staff, and could continue in that direction to achieve the projected savings. At the time of the feasibility study, operations at IND were being conducted in a cost-effective manner and it was determined that a consortium could not reduce costs much further.
6. **Phoenix Sky Harbor International Airport** (PHX). A consortium was also proposed for the operation and maintenance of common use facilities at PHX, and a feasibility study identified that sufficient savings were possible to make the consortium feasible. However, the airport required significant cash deposits to provide for the security of the airport-owned assets that would be assigned to the consortium. The funding of the security deposits made the consortium financially unfeasible.
7. **San Antonio Airlines Consortium.** A consortium feasibility study was recently prepared for San Antonio International Airport (SAT) with the dual focus of identifying the scope and developing a preliminary operating budget for the proposed consortium. The study did not, however, include an estimate of savings the consortium would produce because the consortium was being implemented in a new facility where there was not an existing cost history. The airport served as the project sponsor by funding the study. The SAT feasibility study is attached as an illustrative example as Appendix E. This study resulted in the formation of the San Antonio Airlines Consortium (SAAC) in 2011.
8. **Ontario International Airport Terminal & Equipment Company** (ONT-TEC). A feasibility study was also recently prepared for Ontario International Airport (ONT). This study indicated

that the consortium model would produce estimated annual savings of approximately $4.7 million or 19%, compared with the same scope of services administered by LAWA. The estimated savings resulted from the projected reduction of administrative overhead costs, the estimated reduction in labor cost rates, and recommended adjustments in staffing levels. The actual first year operating budget of the ONT-TEC was substantially smaller than what was estimated in the feasibility study as a result of competitively bidding contract services, resulting in additional savings for the airlines.

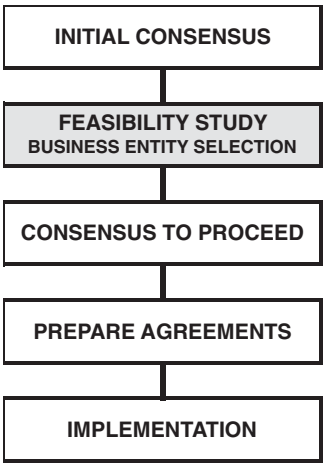
As indicated by these illustrative examples, consortium feasibility studies can be described as follows:

- They are tailored to address the requirements and concerns of the stakeholders.
- They may be updated a number of times as additional information becomes available.
- They do not always result in a decision to form consortium.

An important aspect of a feasibility study is to select an appropriate form of legal entity for the proposed consortium that will provide the most advantageous level of financial, tax, and legal protections. Chapter 4 describes the various factors involved in the appropriate selection of a business entity for a consortium.

CHAPTER 4

Business Entity Selection



It is important for a consortium to establish itself as a legal entity if the consortium intends to enter into legal contracts with third parties and otherwise engage in business activities. Historically, many consortiums were formed as a loose affiliation of airlines without the use of a legal entity. The airlines that participated in these types of affiliations could be individually liable for all of the consortium activities and the contracts entered into by the consortium. These loose affiliations, essentially unincorporated associations or general partnerships, did not take advantage of certain benefits and protections granted to legal entities, such as limited liability or a formalized structure. As a result, the current trend is for new consortiums to form a legal entity.

The following identifies various legal entities available when forming a consortium, positive and negative aspects of each entity, and the federal and state regulatory issues related to forming a legal entity. In most situations, the focus will be on how the entity and its owners will be taxed, the extent to which the entity will shield its owners from liabilities arising out of its activities, and the formalities that must be adhered to in order to comply with state law and the entity's internal governance requirements. Given that legal entities formed by consortiums are commonly treated as subchapter "C" corporations for income tax purposes (see discussion below), the nature of the activities engaged in by a consortium usually does not dictate that one type of entity be selected over another. Therefore, each of three entities described below can be used for a terminal, equipment, fuel, or other consortium activities.

The entities listed below tend to be the most appropriate and commonly used when forming consortiums:

- "C" Corporation
- Limited Partnership
- Limited Liability Company

However, as noted in Table 1 and the description of limited partnerships below, the use of a limited partnership is less common than the use of a corporation or limited liability company largely because the general partner of a limited partnership is subject to unlimited liability.

As also noted in Table 1, the use of corporations and limited liability companies is equal. Because corporations and limited liability companies both provide limited liability to all stockholders and members and can both be treated as a subchapter "C" corporation for income tax purposes, the choice between these two types of legal entities comes down to the formalities and management structure desired by the consortium. If a consortium desires a rigid statute-driven structure with formalities, such as annual meetings, notices, voting requirements, ownership transfers, books and records, and management rights, a corporation would be the appropriate choice. On the other hand, if a consortium desires fewer formalities and the ability to create a customized set of governance and management requirements, a limited liability company would be the appropriate choice.

Table 1. Form of business entity.

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	
	AATC	ACH	AFFC	ANCF	ATLECON	BOSFUEL	CICA TEC	DANTeC	DENCO	FLL FUEL	HFFC	HPTFUEL	IADF	IND FUEL	LASFUEL	LAX6	LAXFUEL	LAXSUL	MATCO	MCI Fuel	MCO	MEMFUEL	OFFC	ONT	ONT-TEC	PAC	PFC	PFFC	PVD FUEL	RFFC	RSW	SAAC	SEA FUEL	SFO FUEL	SFOTEC	SJFC	SNAFUEL	TBITEC	TOGA	Total
Corp	X	X	X	X	X	X	X	X			X				X		X		X				X	X				X		X		X					X	X		19
LP																																							X	1
LLC									X	X		X	X	X		X		X		X	X	X			X	X	X		X		X		X	X	X	X				19

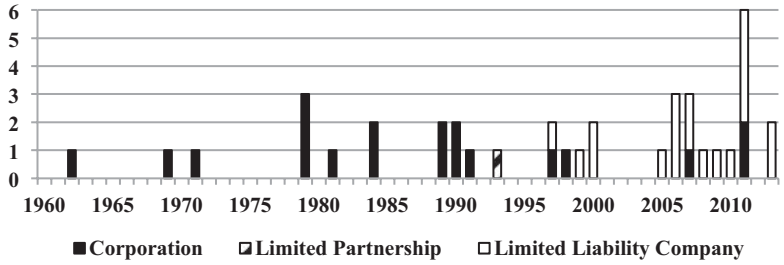


Figure 1. Business entity selections.

As illustrated by Figure 1, the overall frequency of consortium formation has increased dramatically in recent years, with 18 consortiums having been formed since 2005. Further, through 1991, all consortiums were formed as corporations. In 1999 the selection of business entity shifted primarily to limited liability companies, because this structure started to become available in more states. Since 1999, all new consortiums except three have been formed as limited liability companies.

Despite the common usage of the entities listed above, the appropriateness of such entities and the specific details regarding each legal entity may vary from state to state, depending on the governing law of the state in which the legal entity is formed or incorporated. Other business entities that tend to be considered but are not commonly used in consortiums are briefly discussed at the end of this section and include the following:

- Nonprofit Corporation
- Sole Proprietorship
- General Partnership
- Limited Liability Partnership
- "S" Corporation
- Business Trust
- Cooperative

This overview is not intended to be legal or tax advice. Prior to forming a consortium, the participants should consult with legal and tax counsel.

Common Consortium Legal Entities

"C" Corporation

A corporation is a legal entity that has one or more shareholders, officers, and directors. The shareholders are the owners of the corporation while the officers and directors manage the corporation. The board of directors provides oversight, sets policy, and directs the corporation's activities while the corporation's daily affairs are administered by its officers. Any domestic or foreign individual, trust, corporation, partnership, or other legal entity may become

a shareholder of a corporation. In general, only individuals may be officers or directors of a corporation.

A corporation is formed by filing articles of incorporation (or the equivalent for the particular state of formation) with the governing state authority, typically the secretary of state. In general, each shareholder's liability is limited to the amount of its investment in the corporation and each officer and director is not subject to any liabilities for a corporation's debts or obligations. However, under legal doctrines such as "piercing the corporate veil," the limited liability protections granted to each shareholder may be lost in certain limited circumstances if the corporation and its shareholders, directors, and officers do not comply with certain formalities. Furthermore, directors may be personally liable if they breach certain fiduciary duties owed to the corporation. A discussion of these legal doctrines is beyond the scope of this overview.

The officers and directors have the authority to manage the corporation's activities and affairs. Shareholders tend to have limited managerial rights. Management of a corporation is governed by statutory and common law as well as the corporation's bylaws and articles of incorporation. Shareholders may enter into a shareholder agreement for the purpose of addressing a variety of matters such as share transfer restrictions, shareholder stock repurchases, capital contribution obligations, and the like.

State law corporations may be referred to as "C" corporations or "S" corporations, which refer to how the state law corporation is characterized for federal income tax purposes. By default, a corporation will be treated as a "C" corporation which means that the corporation will be taxed under subchapter "C" of the Internal Revenue Code of 1986, as amended. In certain circumstances, a corporation may elect to be taxed as a subchapter "S" corporation (see discussion below regarding "S" corporations).

Additional benefits of a "C" corporation include the following:

i. "C" corporations enjoy a well developed body of interpretative law and are generally well understood by parties involved with the corporation.
ii. There are no restrictions on the number or type of shareholders.
iii. In general, shareholders, directors, and officers enjoy limited liability.
iv. "C" corporations may have centralized management whereby the directors and officers have the authority to manage the corporation's activities and affairs.
v. "C" corporations may have different classes of shareholders depending on the type or nature of investment by the various shareholders.

Additional disadvantages of a "C" corporation include the following:

i. Unlike limited partnerships and limited liability companies, corporations must adhere to additional formalities to provide the shareholders, officers, and directors with limited liability.
ii. "C" corporations pay income tax as a separate entity. When a "C" corporation distributes its after tax earnings to its shareholders as dividends, the shareholders may be taxed on their share of the dividends. If so, double taxation occurs. (Note that this disadvantage may be muted if the consortium is not expected to generate significant profit).
iii. "C" corporations must undertake the administrative burden of maintaining an accurate stock ledger and issuing and canceling stock certificates upon transfers of ownership.

With regard to a consortium, a "C" corporation provides the benefit of limited liability to each shareholder and an organizational structure that is familiar and well understood by consortium participants, lenders, and third parties such as states, counties, cities, airport authorities, and operators. However, the additional formalities, including the maintenance of stock records, required to maintain limited liability may be overly burdensome for some consortiums and can put the shareholders at risk if they fail to adhere to such formalities. Also, if a consortium intends

to generate and distribute substantial profits, the concept of double taxation will make a "C" corporation a less desirable entity choice.

Limited Partnership

A limited partnership is a legal entity that has at least one general partner and one limited partner. The partners are the owners of the limited partnership. Any domestic or foreign individual, trust, corporation, partnership, limited liability company, or other legal entity may become a partner of a limited partnership.

A limited partnership is formed by filing a certificate of limited partnership (or the equivalent for the particular state of formation) with the governing state authority, typically the secretary of state. A general partner's liability for the limited partnership's debts and obligations is unlimited while a limited partner's liability is limited to the amount of its investment in the limited partnership. However, to reduce this unlimited liability, parties forming limited partnerships commonly form another legal entity such as a corporation or limited liability company to serve as the general partner. In addition, under certain state statutes, limited partnerships may file an election to be treated as a "limited liability limited partnership" whereby the general partner's liability obligations may be limited.

Each general partner has the authority to manage the limited partnership's activities and affairs while the limited partners typically have limited management rights. In general, except for certain default rules set forth in the applicable state statutes governing limited partnerships, the rights and obligations of each partner (such as restrictions on the transfer of partnership interests or the obligation to make capital contributions to the limited partnership) will be set forth in the limited partnership agreement that is adopted by the partners.

Additional benefits of a limited partnership include the following:

i. Absent a special election that is filed with the Internal Revenue Service (and possibly with the applicable state taxing authorities) requesting that the limited partnership be treated as a corporation for applicable income tax purposes, a limited partnership is a pass-through entity, which means that the limited partnership does not pay income tax on its income or gain. Instead, the limited partnership's profits and losses are computed and allocated among the partners annually and passed through to the partners who include their respective share of those items on their income tax returns (whether or not distributed).
ii. Limited partnerships may have centralized management whereby the general partners have the authority to manage the limited partnership's activities and affairs while the limited partners have limited voting or approval rights.
iii. Limited partnerships may have different classes of limited partners depending on the type or nature of investment by the various limited partners.
iv. In general, property that has appreciated in value may be transferred into or out of a limited partnership without triggering income tax.
v. Subject to certain limits, a limited partnership may specially allocate items of income, gain or loss to certain partners or may grant a "profits" interest to partners in exchange for services without triggering current income tax.
vi. Limited partnerships have been used for many years and as a result the statutory and case law governing limited partnerships is well settled in most instances.

Additional disadvantages of a limited partnership include the following:

i. As previously mentioned, the general partner is subject to unlimited liability for the limited partnership's debts and obligations. Although using a limited liability entity may solve this problem, this solution adds greater complexity, including requiring additional record

keeping and tax returns associated with the limited liability entity serving as the general partner.

ii. Historically, a limited partner must be excluded from having any right to participate in the management of the limited partnership to realize the limited liability protection. These historic rules have been mitigated over time so that under many state limited partnership acts limited partners may have greater rights to participate in the management of the limited partnership.

iii. The rights and obligations of the partners must be addressed in a written partnership agreement which may be complex.

Unless otherwise provided in the limited partnership agreement, a partner may assign or transfer its partnership interest in whole or in part, and the assignment will not dissolve the limited partnership.

With regard to a consortium, a limited partnership may present some challenges due to the fact that one of the consortium participants must serve as the general partner, and be burdened with unlimited liability, or a limited liability entity (e.g., a corporation or limited liability company) must be formed to serve as the general partner. In the event that a limited liability entity is created to serve as the general partner, the consortium would want to diligently analyze its reasons for choosing a limited partnership and not operating the consortium as the newly formed limited liability company.

For a consortium, a limited partnership may also present challenges with regard to management rights. Often, consortiums want to have equal management or management rights that correspond to usage or financial commitments. In states that exclude limited partners from management, a limited partnership will not allow for equal or pro rata management unless a limited liability entity is formed to serve as the general partner, and each of the consortium participants manages the limited partnership through such entity.

Lastly, a limited partnership generally provides an organizational structure that is familiar and fairly well understood by consortium participants, lenders, and other third parties; however, such familiarity and understanding may be reduced by evolving laws or overly complex or sophisticated management structures adopted by the partners.

Limited Liability Company

A limited liability company is a legal entity that has one or more members and may have one or more managers. The members are the owners of the limited liability company while the managers, if any, have roles that are similar to both officers and directors of a corporation. Any domestic or foreign individual, trust, corporation, partnership, limited liability company, or other legal entity may become a member or manager of a limited liability company.

A limited liability company is formed by filing articles of organization (or the equivalent for the particular state of formation) with the governing state authority, typically the secretary of state. In general, each member's liability is limited to the amount of its investment in the limited liability company and each manager is not subject to any liabilities for a limited liability company's debts or obligations. However, liability imposing doctrines such as piercing the corporate veil or breach of fiduciary duties briefly discussed in connection with "C" corporations may in some circumstances be used to impose liability on members or managers of limited liability companies.

Either the members, in the case of a member-managed limited liability company, or the managers, in the case of a manager-managed limited liability company, have the authority to manage the limited liability company's activities and affairs. In general, except for certain default rules

set forth in the applicable state statutes governing limited liability companies, the rights and obligations of each member (such as restrictions on the transfer of membership interests or the obligation to make capital contributions to the limited liability company) will be set forth in the operating agreement that is adopted by the members and the managers, if any.

Additional benefits of a limited liability company include the following:

i. Absent a special election that is filed with the Internal Revenue Service (and possibly with the applicable state taxing authorities) requesting that the limited liability company be treated as a corporation for applicable income tax purposes, a limited liability company is a pass-through entity, which means that the limited liability company does not pay income tax on its income or gain. Instead, the limited liability company's profits and losses are computed and allocated among the members annually and passed through to the members who include their respective share of those items on their income tax returns (whether or not distributed).
ii. Limited liability companies may have centralized management whereby one or more managers or members may have the authority to manage the limited liability company's activities and affairs.
iii. A limited liability company may function similar to a corporation having officers and a board of managers. However, the limited liability company can dispense with some of the formalities required for operating a corporation, such as formal documentation of meetings or having annual meetings.
iv. Limited liability companies may have different classes of members depending on the type or nature of investment by the various members.
v. In general, for limited liability companies taxed as "pass-through entities," property that has appreciated in value may be transferred into or out of a limited liability company without triggering income tax.
vi. Subject to certain limits, limited liability companies taxed as "pass-through entities" may specially allocate items of income, gain, or loss to certain partners or may grant a "profits" interest to members in exchange for services without triggering current tax.
vii. Unlike a limited partnership, no member is subject to liability in excess of its investment in the limited liability company.

Additional disadvantages of a limited liability company include the following:

i. Unlike limited partnerships, limited liability companies are relatively new legal entities and, as a result, the statutory and case law governing limited liability companies is still developing and evolving.
ii. Unless the operating agreement provides for specific management and governance formalities, the management of the limited liability company may lack formality that certain members may desire.
iii. The rights and obligations of the members must be addressed in a written operating agreement, which may be complex.

Unless otherwise provided in the operating agreement, a member may assign or transfer its membership interest in whole or in part, and the assignment will not dissolve the limited liability company.

By default, a limited liability company with two or more members is taxed as a partnership for income tax purposes, while a single member limited liability company is disregarded for income tax purposes. If the limited liability company files the special election with the Internal Revenue Service requesting that the limited liability company be taxed as a subchapter "C" corporation, then the limited liability company will pay tax on its income and gain (which may be offset by its losses and deductions). Consortiums that do not anticipate generating significant profit or gain

during their existence or that do not anticipate transferring property into or out of the limited liability company may choose to file this election. Doing so eliminates the requirement that the members report their allocable share of the limited liability company's profits, gain, deduction, and loss on their applicable income tax returns.

For a consortium, a limited liability company provides a combination of limited liability and management flexibility. A limited liability company allows a consortium to divide voting and management rights in any way that the members deem appropriate, without sacrificing the limited liability protections for any members or managers.

Given that limited liability companies are relatively new legal entities compared with corporations and limited partnerships, a limited liability company may be an organizational structure that is less familiar and only partially understood by certain consortium participants, lenders, and third parties such as states, counties, cities, and operators. However, this concern is becoming less and less acute given the broad popularity of limited liability companies in many business ventures.

Other Legal Entities

Nonprofit Corporation

A nonprofit corporation is a corporation in which no part of the income (other than, for example, appropriate salaries) is distributable to the nonprofit's members, directors, or officers. A nonprofit corporation does not have shareholders or owners like a business corporation. A nonprofit corporation may generate surplus revenues; however, they must be retained for its expenses, plans, or other internal purposes. The two common types of nonprofit organizations are membership and board-only. A membership organization elects the board and has regular meetings and power to amend the bylaws. A board-only organization typically has a self-selected board. In either case, the nonprofit board of directors controls the nonprofit corporation.

A nonprofit corporation may be created for such purposes permitted by relevant state statutes. Nonprofit corporations are commonly, but not always, tax-exempt organizations. To become a tax-exempt organization, the nonprofit must file an application for tax-exempt status with the Internal Revenue Service. There are many different tax-exempt organization classifications. Qualification for these classifications must be carefully examined to determine if this structure is an appropriate fit for the proposed activity. In many instances, proposed consortium activities will not fall within any of the permissible tax-exempt organization classifications.

If a nonprofit corporation is granted tax-exempt status from the Internal Revenue Service, then, in general, the nonprofit's income and gain will not be subject to income tax. Furthermore, under applicable state law, the nonprofit may be exempt from state, city, or local income, property, sales, and other taxes. If a nonprofit corporation does not qualify for tax-exempt status, then the nonprofit corporation will be treated as a "C" corporation for federal income tax purposes.

With regard to a consortium, a nonprofit corporation provides the benefit of limited liability to its board of directors and members (if members are permitted under state law) and centralized management. Also, a nonprofit corporation is an organizational structure that is familiar and fairly well understood by many consortium participants, lenders, and third parties such as states, counties, cities, and operators. However, given the nature and types of activities conducted by consortiums, many consortiums will not qualify for tax-exempt status. If not, then exemption from federal and state taxes may not be available. In such cases, other forms of legal entities, such as a limited liability company, will be more appropriate for the consortium.

Additional Legal Entities

Additional legal entities that may be considered but are either not used or are less commonly used include the following:

- **Sole Proprietorship.** A sole proprietorship is an unincorporated organization typically owned by one individual. Given that consortiums by their very nature include multiple owners, a sole proprietorship is not appropriate for consortiums.
- **General Partnership.** In a general partnership, all of the partners are general partners. As such, each partner has unlimited liability for the partnership's debts and obligations. Most consortiums are formed to avail its participants with liability protection. Furthermore, each general partner has unlimited authority to manage the general partnership's affairs. Due to the unlimited liability and lack of centralized management, general partnerships tend not to be appropriate for consortiums.
- **Limited Liability Partnership.** In general, a limited liability partnership is a state law general partnership that has filed a special election to provide its general partners with certain liability protection. In some states, only certain business activities may be conducted as limited liability partnerships. Furthermore, as with general partnerships, each partner of a limited liability partnership may have unlimited authority to manage the general partnership's affairs. Due to the lack of centralized management and possible limits on the type of permissible business activities, limited liability partnerships tend not to be appropriate for consortiums.
- **"S" Corporation.** An "S" corporation is a state law corporation that has filed an election with the Internal Revenue Service to be taxed as a subchapter "S" corporation. Unlike a "C" corporation, the "S" corporation does not pay tax on its income or gain and instead all of its income, gain, loss, and deduction are "passed through" to its shareholders. However, to qualify as an "S" corporation only U.S. citizens and resident alien individuals, certain trust, and certain tax-exempt entities may be shareholders of an "S" corporation. Furthermore, "S" corporations may only have one class of stock. Due to these shareholder limitations, an "S" corporation is generally not appropriate for consortiums.
- **Business Trust.** A business trust, also called a Massachusetts trust or a common-law trust, is an unincorporated entity that is managed by one or more trustees. In some states, business trusts provide limited liability to their beneficiaries, however, other states treat a business trust like a partnership and burden each beneficiary with unlimited liability (more likely in circumstances where the beneficiaries participate in the management of the business trust). Due to the potential for unlimited liability and the requirement for a trustee to manage the trust, business trusts tend not to be appropriate for consortiums.
- **Cooperative (Co-Op).** A cooperative is often defined as a user-owned, user-controlled business. Member users, or patrons, own the cooperative and elect the board of directors, which provides oversight of the cooperative. Net earnings are distributed on the basis of proportional use, or patronage, rather than on investment. Cooperatives typically incorporate as a legal entity under state statutes, however, such state statutes are not uniform and some states do not provide for cooperatives. Some states provide limited liability to members of cooperatives. Also, a cooperative can be taxed as a corporation or elect to receive pass-through taxation like a partnership. Due to the lack of uniform laws regarding cooperatives and lack of familiarity among consortium participants, cooperatives tend not to be appropriate for consortiums.

Federal and State Regulatory Issues

With respect to forming one of the legal entities described above, there are various federal and state laws that must be followed. At the federal level, the most relevant body of law is the internal revenue code, which will dictate the tax treatment of each entity, as generally described above.

At the state level, each state has a corporation code and various bodies of law regarding the other entities listed above. As a result, when forming a legal entity, it will be important to determine in which state the entity will be formed and to locate the relevant state laws relating to such entity. In general, such state laws will describe the rights and protections granted to each entity, and the filing, payment, publication, and other formation requirements.

As a result, because there is no uniform body of law for forming a legal entity, consortium representatives should consult with legal and tax counsel in the appropriate jurisdiction to ensure that all federal and state requirements are met, and the desired tax position is achieved.

Once formed and in operation, the consortium must continue to comply with federal and state laws including the internal revenue code and the corporation code applicable in the state of formation. Additional federal and state laws may also apply to the operating environment of the consortium, depending on the consortium scope and the location of its operation.

Illustrative Examples and Observations

1. **Terminal One Group Association, L.P.** TOGA was formed as a New York limited partnership with four limited partners and one general partner. Four participating airlines are the TOGA limited partners, and own equal portions of 99% of the limited partnership. The general partner, Terminal One Management, Inc., was formed as a New York corporation, owns 1% of the limited partnership, and is equally owned by the four participating airlines. The general partner shareholders vote to make decisions, and thereby control the limited partnership.

   This fairly complicated structure was implemented to provide certain tax advantages to the participating airlines that are each foreign flag carriers that hold bilateral air service agreements with the U.S. government. As a limited partnership, TOGA passes its income tax liability to its partners based on ownership. The limited partners receive 99% of the tax liability, but are exempt from paying U.S. federal income taxes for ancillary operations under the terms of their bilateral agreements. The general partner receives 1% of TOGA's tax liability and is responsible for the payment of any taxes due based on this liability.
2. **LAX Shared Use Lounge Company, LLC**, was formed as a limited liability company. The participating airlines wanted the organizational flexibility offered by the limited liability company structure, but also wanted the company to be responsible for all income taxes. As a result, the company elected to be treated as a corporation for applicable income tax purposes. Research shows that nearly all other consortiums that were formed as limited liability companies also made a similar election.
3. The **Wayne County Airport Authority** (WCAA) required a WCAA representative be included on the **Detroit Airlines North Terminal Consortium** (DANTeC) board of directors, with veto power over any decisions that would adversely affect the terminal or the airport. As a result, the participating airlines selected a corporation business entity for DANTeC and established a board of directors under the consortium's bylaws under which the WCAA is entitled to appoint one director. The WCAA appointed director has the required right to veto decisions, however, this individual may not be elected to any consortium officer position.
4. The **City of San Antonio** (COSA) indicated that it wanted an authority representative included on the **San Antonio Airline Consortium** (SAAC) member committee in an advisory role. As a result, the participating airlines selected a corporation business entity for SAAC and established a member committee in the consortium's bylaws under which the COSA is entitled to appoint one committee member. The COSA member does not have voting rights, and this individual may not be elected to any consortium officer position. This individual acts in an advisory role, with the ability to formally provide input based on COSA's interest in SAAC business as it relates to overall airport operations.

A number of consortiums have been formed as nonprofit corporations. In some cases this structure was selected because the stakeholders understood that the consortium was not intended to make a profit, and believed that it could therefore qualify to be exempt from income taxes. However, consortium activities may not qualify for tax-exempt status and there are no consortiums that have achieved tax-exempt status with the IRS. The selection of the nonprofit corporation entity has declined in frequency in recent years, as the limited liability company structure has been the overwhelming entity of choice.

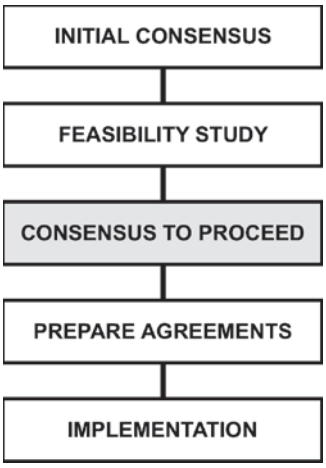
Experience indicates that airports have little or no involvement in the selection of a business entity for a new consortium. Airports have, however, demonstrated their desire to be informed regarding the business entity selection, to ensure that the consortium will be enabled to enter into agreements with the airport, fulfill all obligations, and satisfy all covenants.

As detailed in Chapters 3 and 4, a consortium feasibility study should address many issues and stakeholder concerns including financial, operational, organizational, and tax. While the issues and concerns may be broadly similar between consortiums, each study will be uniquely tailored to meet the issues and proposed scope for the particular airport and the individual concerns of the stakeholders. A consortium feasibility study may be updated several times as additional information becomes available, until all issues and concerns have been addressed to the satisfaction of the stakeholders.

The completion and approval of a feasibility study leads to a consensus to proceed, as described in Chapter 5.

CHAPTER 5

Consensus to Proceed



On the completion of the feasibility study, the stakeholders must caucus to determine if there are sufficient compelling reasons to proceed with the formation of the proposed consortium.

The airport and the airlines should work together to confirm the consortium purpose, scope, and objectives. If the stakeholders determine that the purpose, scope or objectives for the proposed consortium must change from the general agreement achieved prior to the feasibility study, they may also determine that the feasibility study should be updated to reflect the new conditions.

Issues and obstacles will have to be identified, addressed, resolved and/or mitigated before the consortium formation can proceed. This would include issues or concerns raised by the airport after consultations among the consultant, sponsor, and the airport.

If there is consensus to proceed with the formation of the consortium after the completion of the feasibility study and the resolution of all significant issues that would stop the formation process, it is possible to begin the preparation of the documents necessary to implement the consortium. It will be necessary for the stakeholders to dedicate attention and funding to the documentation process to ensure its success.

Illustrative Examples and Observations

1. **Terminal One Group Association, L.P.** The participating airlines commenced the initial TOGA financial feasibility study in 1990, and the TOGA consortium was finally formed in 1994. During that period, the feasibility of the TOGA venture was repeatedly re-evaluated as the JFK Terminal One project knowledge base was developed and refined. For example, the initial feasibility study assumed an overall project capital cost based on order of magnitude estimates. Subsequently, however, TOGA engaged an architect who developed preliminary plans for the proposed terminal. These plans provided for more definitive cost estimates, which allowed the capital cost estimate to be refined and the feasibility of the TOGA enterprise confirmed. Further, TOGA also engaged a team of banks that prepared detailed estimates of project financing and debt service costs, which also served to confirm the financial feasibility of the TOGA enterprise.

   During this process, the number of TOGA participating airlines increased and decreased as they re-evaluated the feasibility of the TOGA venture. The benefits of new terminal facilities and an airline controlled terminal operation were evaluated against the risks of a significant irrevocable debt obligation and a 25-year commitment to a single facility. Ultimately, four of the participating airlines individually decided to proceed, if there was sufficient "critical mass" in airline participation. As a result, there was not clear direction that the TOGA venture would proceed until all four participating airlines made their decisions known.

2. **CICA Terminal Equipment Corporation.** During the planning and design of the new international terminal with the City of Chicago, there was early consensus among Chicago International Carriers Association participating airlines to form the CICA TEC consortium. However, during the consensus building process, it was unclear which airlines would actually join the consortium. The individual commitments to become consortium members were not made known by the participating airlines until the consortium documents were distributed for execution.

   Non-member airlines are required to pay the CICA TEC member rates, plus a non-member surcharge. As a result, the decision to join the consortium was largely an economic decision weighing the payment of a membership fee to join the consortium versus the payment of non-member surcharges.
3. **DEN Consortium, LLC.** As reported above, various financial and business analyses were performed for DENCO to help the airlines compare and analyze the business options available to them for jointly holding a common deicing fluid supply contract. The participating airlines expressed a preference for non-consortium approaches. However, after due consideration and analysis over a 6-month period, the participating airlines agreed that the consortium approach was the most economical, and flexible, and would position them as a group to pursue additional scope with the airport in the future.
4. **LAX Shared Use Lounge Company, LLC.** The LAXSUL premium passenger lounge was conceived as a common use facility that would be developed and operated for the benefit of its member airlines. The member airlines did not belong to airline alliances. However, the strategic decision to join an alliance—which would require the airline to leave the consortium and use an alliance premium passenger lounge—was controlled by the individual airline's headquarters and was always a possibility. As a result, none of the individual participating airlines wanted to hold a long-term lease or sponsor the project financing for the benefit of the unaligned airline group. The participating airlines chose to proceed with the LAXSUL consortium because the structure served the airlines by holding the long-term lease, sponsoring the project financing, and allowing the membership to change over time.

As indicated by these illustrative examples, the consensus to proceed with a new consortium (1) is subject to many factors, (2) may be achieved early in the process, (3) may not be achieved until after the feasibility study has been revised to incorporate all stakeholder concerns, or (4) may require an extended period to achieve.

After a consensus to proceed has been achieved, documents must be prepared and approved to implement the terms agreed to by the stakeholders. Chapter 6 describes the preparation of the various agreements that are necessary to make a proposed consortium a reality.

CHAPTER 6

Prepare Agreements

A qualified consulting or law firm may be engaged by the stakeholders to prepare the consortium documents. The firm selected to produce the consortium documents should initially meet with the stakeholders to understand the context of the consortium, and to discuss the findings and recommendations of the feasibility study. During this discussion, the stakeholders may provide direction regarding their preferences for the particular provisions of the consortium documents.

An agreement between the airport and the consortium may be necessary to authorize the consortium's activities at the airport. This agreement may take the form of a lease, a license, or a maintenance agreement, depending on the circumstances and the requirements of the particular airport. In many instances the airport may require this document to be prepared by its own staff or counsel. The key provisions of this agreement will likely include the following:

- A statement indicating that the airport owns and retains title to facilities, equipment, systems, and services used by the consortium
- A statement that the airport grants the consortium the right to use, operate, and maintain the facilities, equipment, systems, and services
- A license for the consortium to operate and maintain facilities, equipment, systems, and/or to provide specific services
- A length of term defined by the airport
- A description of the rents, fees, and charges, if any, that the consortium must pay to the airport
- A statement indicating that the consortium may delegate its rights to an operator
- A description of the scope delegated to the consortium by the airport
- A statement requiring non-member users to execute a non-member access agreement with the consortium
- A limitation of surcharges or premiums that the consortium may charge non-member users
- Minimum Service Levels required by the airport providing for the preservation of airport-owned assets
- Airport labor standards addressed in consortium procurement practices
- Environmental and hazardous materials provisions
- Indemnification and insurance requirements
- Events of default
- Consequences of default
- Joint and several liability of the member for payments to the consortium's vendors and the airport
- Termination provisions

An agreement with the airport may not be necessary, if there is no scope delegated by the airport to the consortium, and if there are no facilities, equipment, or systems leased by the airport to the consortium.

The member agreement, or its equivalent, will serve as the primary governing document for the consortium and its members. Key provisions should define the following:

- Effective date and term of the consortium
- Purposes of the consortium
- Membership requirements and procedures
- Capital contribution requirements
- Member withdrawal procedures
- Events of default
- Consequences of default
- Member termination provisions
- Member access to and use of the consortium's facilities, equipment, systems, and services
- Member indemnification provisions
- Consortium governance including officers, committees, and voting
- Annual budget presentation and approval process
- Member cost allocations and invoicing
- Operating reserve specifications
- Books and records

The non-member access agreement, or its equivalent, will serve to allow non-member airlines and handling companies to access and use the facilities, equipment, systems, and services controlled by the consortium. Consortiums generally may not prevent non-consortium members from accessing or using the facilities, equipment, systems, and services controlled by the consortium. However, this agreement is necessary to ensure that, at a minimum, the following takes place:

- The consortium and its members are indemnified by the non-member users.
- The consortium and its members are protected by non-member insurance.
- User fees and payment terms are established.

Non-member access agreements often include key provisions that describe the following:

- Indemnification and insurance requirements
- Non-member use fees
- Payment requirements
- Security deposit requirements
- Events of default
- Consequences of default
- Non-Member access to and use of the consortium's facilities, equipment, systems, and services
- Priority of use and scheduling requirements for equipment consortiums

Financing documents will be necessary if capital financing is a component of the consortium formation. Financing documents vary widely in their scope and definition, depending on the type of financing, the source of funds, the size of the financing, the security identified and pledged for the financing, and so forth. If bond funding is anticipated, airports may have additional documentation requirements and added involvement in the financing transaction. A more detailed description of financing documents is not included here, as that is beyond the scope of this report.

The articles of incorporation, or their equivalent depending on the business entity structure selected, will have to be prepared and filed with the state selected to register the actual consortium entity. The articles typically state the name of the new legal entity, the type of business entity selected, and an initial mailing address. Specific requirements vary from state to state, and by the type of business entity selected.

In-progress submittals of the documents described above are provided to the stakeholders during the document drafting process. The drafting, review, and approval process for consortium documents can range from a few weeks to a few years, depending on the circumstances. If all of the stakeholders are in general agreement with the business terms of the consortium, the drafting and review process may be relatively short. However, several years may be required if significant negotiations are necessary, or if large capital financing is a component of the process. Subject to airport requirements and the potential capital funding source, the airport may require review, input, and even approval of the member agreement. Therefore, in-progress submittals to the airport at key stages in the drafting or negotiations should be anticipated.

Once the consortium documents are complete, all stakeholders must secure approval prior to implementation of the consortium. Airline approval processes often require internal legal department review, properties department review, and officer or even board approval. The approval process for domestic airlines is generally shorter than that required by foreign flag carriers, since foreign flag carriers often require translated documents and board of director approval. Airport approval processes vary significantly depending on the jurisdiction and the authority of the airport director. Once airport staff recommends approval, ultimate approval may be necessary from a board of airport commissioners, city council, regional authority, county, or state government.

Illustrative Examples and Observations

1. **Terminal One Group Association, L.P.** The TOGA consortium formation documents are unlike any other consortium documents because of the limited partnership entity chosen, which required the following:
   - Partnership Agreement
   - Shareholder Agreement
   - Facilities Use and Lease Agreement

   Further, as a result of the $434 million bond financing that was necessary to fund the development of JFK Terminal One, the following additional documents were required:
   - Site Lease with PANYNJ
   - Partnership Sublease Agreement with the New York Industrial Development Agency (IDA)
   - IDA Lease Agreement

   Finally, these agreements were accompanied by many supporting documents that memorialize the bond transaction and establish the authority for all parties to execute the documents. Together, the TOGA consortium documents fill four 4-in. bound volumes and number over 4,000 pages. The document development process required about 3 years to conclude.

   The PANYNJ was very involved in the TOGA document development process. PANYNJ staff drafted the Site Lease, and reviewed all other transaction documents to ensure that they conformed to the Site Lease.

   TOGA engaged a consultant to prepare the Facility Use and Lease Agreement and outside counsel to prepare the consortium formation documents and represent it during its formation and the closing of the bonds. During the document development process, the PANYNJ involved their legal department, the IDA engaged Bond Counsel, the bond underwriters engaged counsel, and each of the participating airlines secured outside counsel or used in-house counsel.
2. **CICA Terminal Equipment Corporation.** The CICA TEC consortium formation documents are typical of most consortiums that hold the responsibility to operate and maintain certain airport-owned facilities, equipment, and systems. Primary documents include the following:
   - Consortium Agreement. The Consortium Agreement establishes the relationship between CICA TEC and the City of Chicago. The agreement assigned to the consortium the design

and construction responsibility for $59,200,000 of facilities, equipment, and systems, and provides for the payment of the associated debt service. The agreement also delegates the responsibility for the operation and maintenance of the designated facilities, equipment, and systems.

- CICA TEC Agreement. This agreement establishes the relationship between CICA TEC and each of the participating airlines, and provides for the operation and maintenance of the facilities, equipment, systems, and services assigned to the consortium and the governance of the consortium.

An outside law firm was not used for legal representation during the CICA TEC formation process; however, the airlines relied on the advice of airline legal staff and a consultant who was also an attorney. The City of Chicago engaged the City's corporation counsel to ensure that the documents conformed to the City requirements.

3. **DEN Consortium, LLC.** The 29-page DENCO member agreement is the primary document that was created to form the DEN Consortium. There is no agreement between the airport and the consortium, since the consortium is not leasing, operating, or maintaining any airport-owned assets. A consultant was engaged to prepare the member agreement and to register the new company with the State of Colorado and the federal government.
4. **LAX Shared Use Lounge Company, LLC.** The LAXSUL member agreement was initially prepared by a consultant engaged by the participating airlines. LAWA staff and the Los Angeles City Attorney's office prepared the lease for the lounge premises.

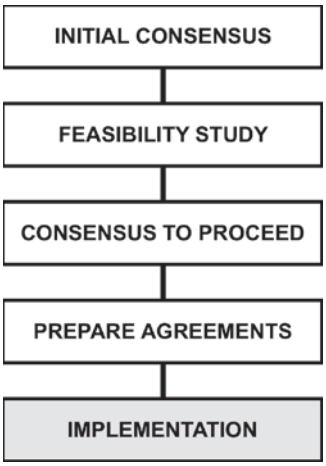
   Project financing was provided by a bank after design was complete and project costs were reliably known. The bank used outside counsel to prepare the loan documents and LAXSUL engaged legal counsel to represent it during the preparation of these documents.

As indicated by these illustrative examples, the preparation of agreements for a new consortium can take many paths depending on the complexity, financing, and number of stakeholders.

Once documents are prepared and approved by all stakeholders, the parties may move forward with the implementation of the consortium. Chapter 7 describes the consortium implementation process.

CHAPTER 7

Implementation



The consortium implementation process may include the following activities:

- Legal formation
- Agreement execution
- Capitalization
- Procurement
- Capital project funding
- Start-up

Legal Formation

The legal formation begins with the filing of the articles of incorporation, or their equivalent depending on the business entity structure selected, with the state where the consortium will be incorporated. In some states, this filing may be accomplished over the Internet with an on-line submittal and an instantaneous response. In other states, paper documents must be submitted to the state and are processed in order after all other submittals waiting in the queue. This may take several days or weeks, depending on the length of the queue. In some jurisdictions, it may be possible to pay an extra fee for expedited service. Depending on the jurisdiction, separate corporate bylaws, an LLC operating agreement, or similar documentation may be required in addition to the member agreement. Alternatively, the member agreement may serve as the bylaws, providing it meets the minimum corporate law requirements of the state of formation.

Agreement Execution

The airlines joining the consortium will execute the consortium member agreements in counterpart and submit them to the consortium sponsor. A formation meeting for the consortium may be held by its members, once a sufficient number (as determined by the participants) of member agreements are received. During this meeting, the members approve and adopt the form of the member agreement, accept the agreements submitted, and authorize them for execution by the consortium. Further, officers are elected and the chairperson/president/chief executive officer is authorized to execute the member agreements on behalf of the consortium. The consortium members may also approve other agreements during the formation meeting, and authorize the chairperson/president/chief executive officer to execute them on behalf of the consortium. These other agreements may include the agreement with the airport, non-member access agreements, documents necessary to establish a checking account, and any vendor agreements that are ready to be executed.

Capitalization

Capitalization is also usually addressed during the formation meeting. Typically a consortium requires an operating reserve, equivalent to 2 months of operating expenses, to provide the proper cash flow support for the operation. Membership fees are received from the members that submitted member agreements. These funds are accepted by the consortium and deposited in the consortium checking account and provide the initial capitalization of the consortium. If other sources of funds are to be accessed to capitalize the consortium, the members may also address these other sources during the formation meeting.

Procurement

The procurement of consortium vendors may begin at the time of the formation meeting, or may have been initiated earlier when the consortium documents were being prepared. It may be necessary to contract consortium vendors in advance of the start of consortium operations to allow them sufficient time to hire employees, secure airport badges, train their employees, and procure sufficient supplies and equipment to fulfill their contract requirements. The type and number of vendors necessary for a successful consortium operation will vary depending on the consortium's scope of services and responsibilities.

If the procurement of any of the consortium vendors has been completed by the time of the formation meeting, the consortium members may also approve these vendor agreements during the formation meeting, and authorize the consortium chairperson or other officer to execute them on behalf of the consortium.

Depending on the type of consortium and the scope of its operations, it may be advisable for the consortium to retain a consultant, engage a management firm, or hire a manager during the start-up phase of the consortium's operations. The manager may define the scope of individual services to be provided, prepare bid documents, conduct bid processes, and recommend contract awards. The manager may also oversee equipment acquisition, installation, and testing prior to opening.

Some airports may require their approval of the procurement processes used, the diversity goals included, and the agreements for key vendors. Further, airports may require their approval of the actual vendors selected for each contract, based on the vendor's qualifications to do the work.

Capital Project Funding

Similarly, if there is capital financing that is ready to be closed at the time of the formation meeting, consortium members may also approve the financing documents during the formation meeting, and authorize the consortium chairperson or other officer to execute them on behalf of the consortium.

Start-Up

The final activity in the implementation process for a new consortium is to actually begin operations. It will be necessary to contract with consortium vendors in advance of the start of consortium operations to allow the vendors sufficient time to hire employees, secure airport

badges, train their employees, and procure sufficient supplies and equipment to fulfill their contract requirements.

The consortium's accounting system, cost allocation and invoicing model, data collection and recording systems, bank accounts, and capitalization must also be in place for a successful start-up. Further, the consortium must have approved operating procedures, emergency procedures, and contingency plan manuals completed and deployed to support a successful start-up.

The manner in which consortium operations are actually started will depend on the circumstances for that consortium and its airport. Further, if the start-up of the consortium initiates a capital development, facility operations may be delayed until the development of the new facilities is complete.

As described below, an airport's involvement in consortium implementation may vary significantly, depending on the airport, the scope of the consortium, and if capital financing is involved.

Illustrative Examples and Observations

1. **Terminal One Group Association, L.P.** The TOGA general partner, Terminal One Management, Inc., was formed on March 17, 1994, by the four participating airlines. TOGA, the limited partnership, was formed on March 22, 1994, after the general partner authorized its formation. The activities associated with these formations and initial meetings were attended by the participating airlines, their counsel, and their consultant.

   The closing for the TOGA project financing bonds, which included the execution of the Site Lease and all project bond financing documents, was held July 13, 1994. The TOGA member airlines, the PANYNJ, various consultants, and counsel attended the preparation meetings and final closing.

   The execution of the Site Lease and the closing of the project financing bonds initiated the development of the new JFK Terminal One, which included demolishing the existing structures on the site, remediating the soil for hydrocarbon pollutants, and designing and constructing the new terminal. The new facilities opened for service on May 28, 1998. The TOGA member airlines actively participated in and managed the development of the new terminal facilities. The PANYNJ approved plans and inspected work as construction proceeded, ultimately issuing an occupancy permit for the new terminal.

   TOGA was initially capitalized by small member contributions made by the participating airlines. Additionally, the participating airlines paid the formation costs, which were eventually reimbursed to them when the project financing became available. Also, during the development period, TOGA was able to sublease a portion of the Terminal One site to a commuter airline. The resulting revenue also served to capitalize TOGA.

   Annual status meetings are held between the member airlines and the PANYNJ, as required by the Site Lease. TOGA documents its full and effective use of the Terminal One facilities, since the terms of the Site Lease allow the PANYNJ the right to take control of gates if they are underutilized.

   Periodically, the PANYNJ audits the financial performance of TOGA to ensure that handling, sub-rental, and concessions fees have been properly recorded and TOGA has paid all amounts due.

   The PANYNJ has not required any other measures of TOGA's performance.
2. **DEN Consortium, LLC.** DENCO was formed on September 14, 2011 and held an organizational meeting on October 19, 2011. The member airlines elected officers, approved the

member agreement, approved a number of administrative items such as the opening of a new checking account for the company, and approved a deicing fluid acquisition contract.

DENCO was capitalized with membership fees. The administrative and operational expenses of the consortium are minimal, and are funded by the membership fees. The consortium members replenish these funds through an annual usage payment.

Airport staff was not involved in the meeting since the consortium is not leasing, operating, or maintaining any airport-owned assets. The participating airlines engaged a consultant to assist them with the formation activities. No outside legal counsel was used. Neither the DENCO airline members nor the airport have established performance metrics for DENCO.

3. **LAX Shared Use Lounge Company, LLC.** LAXSUL was formed on June 15, 2005, and held its organizational meeting on June 23, 2005.

   Membership fees initially capitalized LAXSUL. Further, LAXSUL engaged a consultant to assist it with project development and reached an agreement that the consultant would be paid when project financing became available. LAXSUL also engaged an architect to develop plans for the lounge, and the member airlines provided temporary funding for the design effort, which was repaid to them when project financing became available.

   LAXSUL entered into a lease with LAWA for the lounge premises on May 16, 2006, and closed on a $5 million project financing bank loan on November 13, 2006. The new lounge facilities opened for use on August 17, 2007.

   The participating airlines engaged a consultant to assist them with the formation activities. Outside legal counsel was used to assist with bank loan documentation. Neither the LAXSUL airline members nor the airport have established performance metrics for LAXSUL.

4. **Detroit Airlines North Terminal Consortium.** DANTeC was formed on October 19, 2007, as a domestic nonprofit corporation in the State of Michigan. Its primary documents include a member agreement between the consortium and its members, and a Consortium Agreement between the consortium and the WCAA.

   The participating airlines requested that the consortium operating budget be included in rates and charges, which would eliminate significant capitalization requirements for the new consortium. The WCAA agreed to this request for the expenses related to the operation and maintenance of airport-owned assets. The WCAA collects payment from the airlines and pays DANTeC monthly for the expenses it has incurred, thereby enabling DANTeC to pay its vendors. Further, DANTeC was capitalized by membership fees. These funds support the cash flow related to service contracts held by DANTeC that are not related to the operation and maintenance of airport assets (i.e., wheelchairs, ticket checkers, etc.).

   During the early stages of consortium consideration, the WCAA expressed concerns regarding the maintenance and operation of airport-owned facilities, equipment, and systems assigned to the consortium, as a result of their experience with other airline maintained assets at the airport. A Minimum Service Levels exhibit was developed and included as a component of the Consortium Agreement. The Minimum Service Levels exhibit sets forth goals and objectives, periodic reporting and review requirements, and service level requirements. The service level definitions clearly and concisely describe maintenance responsibilities, frequencies, and performance metrics.

   DANTeC and the WCAA executed the Consortium Agreement on April 16, 2008, and the North Terminal opened on September 18, 2008. Since that time, DANTeC has been fully compliant with all the covenants and requirements of the Consortium Agreement. Further, DANTeC has met all, and exceeded most, of the Minimum Service Levels requirements. The WCAA had enough confidence in DANTeC's performance to significantly expand DANTeC's scope during 2012.

As indicated by these illustrative examples, the implementation of a new consortium must proceed through a number of steps and must fulfill all the requirements established by the

stakeholders and the consortium documents. However, the circumstances of each consortium affect all aspects of that consortium including the documents, the capitalization, and the establishment of performance metrics.

The steps described in Chapters 2 through 7 of this Guidebook provide a simplified pathway for those seeking to evaluate or form a new consortium at their airport. However, because each consortium is unique, Chapter 8 offers additional decision-making guidance and considerations for more complex circumstances.

CHAPTER 8

Decision-Making Guidance and Considerations

Where more complex circumstances exist at an airport, there are a number of additional considerations related to the application of the consortium model that stakeholders should take into account. The mechanics of forming a consortium are fairly straightforward. However, the differences between airports and airline operations at those airports result in nuances that clearly can affect the outcome of a consortium application effort. A number of these considerations and nuances are documented by the case studies in Appendix D of this Guidebook. Additional examples based on the authors' experience are presented in Chapter 8.

Stakeholder Involvement and Communication

Stakeholder involvement in the consortium formation process including clear, frequent communication among the stakeholders is of paramount importance. Airlines that desire a consortium should document their positions and communicate with the highest possible levels of airport management to ensure there is conceptual agreement and support at that level, before initiating efforts with airport staff. Similarly, airlines that desire a consortium should also communicate their positions at the highest levels necessary within their companies to ensure that there is conceptual agreement and support at those levels as well. Airports that desire a consortium may also find it necessary to document their positions and communicate to the airlines that would be involved in such an undertaking.

Sponsorship

Sponsorship of the consortium concept is necessary to create sufficient momentum for the consortium enterprise. Without a sponsor and sufficient momentum, it may be difficult to convince the stakeholders to prioritize the feasibility study, obtain approval, and proceed with the implementation of a proposed consortium.

Experience shows that although there may be sound business reasons to implement a consortium and general support for a consortium among stakeholders, there may be a lack of leadership among the airlines that prevents progress from being made. There may be a variety of reasons for this including the following:

- The lead airline at that airport may be committed to other higher priority activities.
- There may be an opinion within the airline community that the consortium will not produce sufficient cost savings or operational efficiencies for the efforts to be worthwhile.
- The airline station managers might not want to release contractual management to a consortium.
- Airline staff might not thoroughly understand the consortium model, making them hesitant to present it to their internal airline management.

Similarly, experience shows that although there may be sound business reasons to implement a consortium and support for a consortium among the airlines at a given airport, there may be reluctance among airport management that prevents progress from being made. There may be a variety of reasons for this including the following:

- Airport management may be committed to other higher priority activities.
- Airport management may believe that the consortium will not produce sufficient cost savings for the effort to be worthwhile.
- Airport management might not want to release contractual management to a consortium.
- Airport staff might not thoroughly understand the consortium model, making them hesitant to present it to senior management.
- Airport management may believe that the airline community cannot effectively manage contracts and deliver sufficiently high service levels, resulting in equipment and systems not being properly maintained.
- Airport management may believe that the airline community will not commit sufficient resources to properly maintain airport-owned equipment.
- Airport management may believe that a consortium will increase risks related to damages and cost recovery.
- Airport management may believe that the implementation of a consortium will result in organized labor issues at the airport.

Committed sponsorship, combined with stakeholder involvement and communications, can often overcome these obstacles. The early production of a feasibility study can help provide the information necessary to gain support and build momentum at all necessary levels.

Business Entity Selection

The selection of a business entity will affect the manner in which a new consortium is structured and managed. Table 1 indicates that the 39 airport-airline consortiums have been organized as follows:

- Corporations 19
- Limited Partnerships 1
- Limited Liability Companies 19

It should be noted that the limited liability company structure was not available in many states in the 1990s, but became more widely available and generally accepted during the following decade. The limited liability company structure has fewer formalized requirements compared with the "C" corporation, making the limited liability company structure more flexible and adaptable to the consortium requirements.

A number of consortiums have been formed as nonprofit corporations. However, as discussed in Chapter 4 of this Guidebook, consortium activities may not qualify for tax-exempt status. In such cases, other forms of legal entities, such as a limited liability company, may be more appropriate for a new consortium.

Airport Involvement

Historically, the airports' primary role with consortiums has been that of landlord. In that capacity airports seek to ensure compliance with the consortiums' purpose; compliance with the terms of the lease, license, or other enabling agreement; payment of all fees and charges; access by non-member airlines; high quality service delivery; and professional maintenance of

key airport assets. Airports also represent the public trust by ensuring the smooth and efficient operation of the airport, and protecting and promoting the interests of the traveling public and the local community.

Airports usually adopt an oversight role with respect to consortiums, to exercise their rights and protect their interests. Clearly defined performance standards and reporting requirements are of primary importance to the relationship between the airport and the consortium. Performance standards and reporting requirements that were established during consortium formation often lead to better communications and relationships between the parties. However, if the airport requires particular performance standards and reporting from the consortium, the airport must have sufficient dedicated staff to review, analyze, and provide feedback.

Occasionally, airport management indicates a desire to include one of their staff as a representative on the consortium Board of Directors or Member Committee. This approach has worked well for DANTeC and SAAC, which include an airport representative on their respective Boards of Directors and Member Committee. However, the 37 other known consortiums do not include an airport representative on their Boards of Directors, and these consortiums have been able to communicate effectively with airport staff and have satisfied all airport requirements. Additionally, these consortiums have avoided making business decisions that would negatively affect their airports.

Experience indicates that it is usually possible to initially satisfy airport management concerns through agreements that include appropriate provisions to ensure that those concerns are addressed. Examples include limiting the decisions the consortium is empowered to make, requiring specific procurement practices, requiring the consortium to report specific decisions, and requiring the consortium to report operating activity on a periodic basis. The relationship between the airport and consortium is better if clear performance standards and reporting requirements are established upon formation. In most cases, therefore, it becomes unnecessary to include an airport management representative on the consortium Board of Directors. Key airport concerns addressed in the agreements for consortiums without participating airport representation include the following:

- Proper maintenance of airport assets
- Safety of operations
- Continuity of daily operations
- Timely payment of debt service, rents, fees, employees, vendors, and others
- Customer convenience
- Environmental and hazardous materials considerations
- Compliance with laws, ordinances, policies, and procedures
- Limited liability of the airport
- Compliance with purchasing procedures
- Professionalism of the operator and the operations

Scope Definition

Reaching a definitive agreement between airport management and the airlines regarding the scope of responsibilities that will be assigned to a consortium is often a difficult, time-consuming process.

The issues that generally result in an extended scope negotiation include organized labor concerns, entrenched incumbent management, and airport-wide employment practices. Usually, these issues can be overcome if an effective financial plan and management approach for the proposed consortium have been prepared.

It should also be noted that it is challenging to prepare an effective feasibility study without a definitive scope assignment for the consortium.

Feasibility Study

As is documented in Chapter 3, a financial feasibility study is almost always included as a component of the consortium formation process. One component of a financial feasibility study may be a comparison to current operating costs. However, if a new consortium is being implemented for a new facility, there may be no current costs for a comparison. In this case, it may not be possible to quantify cost savings that would result from implementing a consortium.

Further, consortiums may be used to improve service levels, which may not necessarily reduce costs. In this case, stakeholder expectations and objectives must be clearly understood, so they are properly addressed in the feasibility study.

Cost Allocation Methodologies

Consortium airline and operator consensus is that simpler cost allocation methodologies are easier to understand, are more transparent, and are therefore preferred.

Bookend examples include the following:

- LAXSUL uses a single cost center and all costs are allocated to users based on the number of each airline's passengers using the lounge.
- TOGA has more than 20 cost centers to which costs and revenues are allocated, and which are then allocated to the TOGA partner airlines based on a number of formulas for enplanements, deplanements, gallons of fuel used, leased areas, aircraft size, number of aircraft movements, and more.

Capitalization

Capitalization of the consortium is one of the more challenging aspects of consortium formation. Capitalization is intended to provide sufficient cash in an operating reserve to pay contractors and vendors, until the reserve is replenished by monthly airline payments.

Historically, consortium capitalization funding has been provided by airline contributions, loans (from the airport, an airline, or a bank), or advance invoicing of the consortium's airline participants.

Generally, airlines are not in favor of making substantial paid-in capital contributions to consortiums to create sufficient operating reserves. Airlines usually support small consortium membership fees, and an alternate source for the majority of capitalization funding. Alternate sources have worked well in the past, however, they are dependent on availability and approval requirements.

Loans will require an undetermined amount of time to implement, because of the necessity to reach a loan agreement between the consortium and a third party. Further, loans may require collateral as security or pledges from the airline members. Unsecured loans typically carry higher interest rates.

The advance invoicing of airlines that will use the consortium's services involves an agreement among the airlines to pay for future services on an estimated basis, with the costs being

reconciled after the estimated invoice period has passed. If this approach is used for capitalization, it is important for the airline parties to communicate frequently with their home offices to ensure that initial payments are processed in a timely manner.

Project Financing

Consortiums associated with capital projects will require a source for capital funding. Funding sources are diverse and vary widely in their scope and definition, depending on the type of financing (bonds, bank loan, airport loan, etc.), the size of the financing, the security pledged for the financing, and so forth. The duration necessary to secure funding cannot reliably be estimated until a particular source is identified and its requirements understood. Examples of capital funding include the following:

- **Midway Airlines' Terminal Consortium** (MATCO) and **CICA TEC** have provisions in their respective Airline Use and Lease Agreements under which the airlines approved the capital program of the airport, and the airport assigned to the airlines and their consortium the responsibility and funding for the development of the airline equipment (baggage handling systems, passenger boarding bridges, gate systems, etc.) associated with the project.
- **SFO Terminal Equipment Company** (SFOTEC) had a letter agreement with the City of San Francisco under which the City loaned the consortium several million dollars that the consortium could use for the capitalization of the consortium and to procure equipment necessary for the start-up of the new international terminal.
- **LAX Shared Use Lounge Company** (LAXSUL) secured a loan with a private bank that provided project funding for the development of new lounge facilities. The loan documents were several hundred pages long and included a mortgage-like facility that was registered with the county.
- **Terminal One Group Association, L.P.** (TOGA) engaged the New York City IDA to issue revenue bonds to finance the development of JFK Terminal One. The financing documents number several thousand pages because of the complexities, disclosures, and guarantees required of the bond process.

Depending on the size of the financing, municipal revenue bonds may be an attractive alternative for project financing because of their comparatively low interest rates, high leverage, and long amortization periods. If bonds are being considered then significant coordination with the airport and local government will be necessary, since it is likely that the bonds will be issued through a local government agency and may rely on the local government's tax-exempt status when the bonds are issued.

Preparation of Agreements

There are a number of approaches to preparing the various agreements that will be necessary to implement a consortium. However, the following are the most common:

- The airport management staff, in consultation with the airlines, is usually responsible for the preparation of the agreement that delegates authority for the consortium to operate and maintain facilities, equipment, systems, and services at the airport. This agreement may take the form of a lease, a license, or an operating agreement, depending on the airport.
- The airlines, their consultants, or legal counsel, are usually responsible for the production of the consortium legal entity documents that provide for the ownership, governance, and operation of the consortium. These documents typically require airport approval to ensure that they are not discriminatory and will not prevent new entrants from accessing and using the airport facilities.

- The airlines, their consultants, or legal counsel are usually responsible for the production of the access agreements that provide non-member airlines and ground handling companies access to the consortium controlled facilities, equipment, systems, and services and serve to protect the consortium by requiring insurance coverage, indemnification, and security deposits. Access agreements typically require airport approval to ensure that they are not discriminatory and will not prevent new entrants from accessing and using the airport facilities.
- The lenders and their counsel, in consultation with the airlines, usually prepare project-financing documents. Airport management staff may be involved as well, depending on the project and the size and type of the financing.

Indemnification and Insurance

In general, consortiums engage with airport authorities, fuel system operators, and member airlines, among others. Some level of risk is inherent in each relationship. Because of such risk, questions can arise as to whether a consortium should be liable for the acts of other entities, such as the fuel operator, or whether the consortium's members should be liable for the acts of the consortium.

To address these questions and risks, various consortium agreements typically contain indemnities that insulate one or more parties from the actions of another. And to further shift these risks, such agreements often require indemnifying parties to purchase insurance.

Airlines that operate outside of a consortium will also shift their risks in a similar fashion. However, the transaction costs to airlines operating outside of a consortium will likely be greater. For example, the share of insurance premiums paid by a member of a consortium is generally less than the premium paid by an airline for a policy covering only itself. As discussed in Chapter 5, legal entities such as corporations and limited liability companies also insulate member airlines from liabilities that might otherwise be incurred by an airline that is not a consortium member.

Typically, a consortium will indemnify the entity that owns and operates an airport (e.g., a municipal airport authority) from liabilities arising from the operations of the consortium. Such an indemnity will often be part of a lease for the ground, infrastructure, and other improvements associated with the facilities, equipment, or systems controlled by the consortium. From the perspective of the member airlines, such an indemnity should not, and usually does not, extend to the member airlines. Rather, if the landlord is concerned with the consortium's ability to pay for an indemnified loss, some form of financial assurance is usually required. Often, a landlord will accept insurance, including environmental insurance, in lieu of more classic forms of financial assurance. Agreeing on documented baseline environmental conditions of the airport property can protect a consortium from claims that its operations caused environmental damage that may have existed prior to the consortium's operations.

A consortium, via an operating agreement, will usually pass on the risks associated with fueling and related operations to the operator. The consortium will also require the operator to obtain insurance with limits sufficient to cover a realistic, yet significant loss. Often the consortium also requires that the insurance name the consortium and its members as insureds. Typically, an operator will pass the costs of premiums and deductibles directly to the consortium. As a result, it is in the consortium's interest to require a reasonable and appropriate amount of insurance. Since the insurance will usually protect the consortium and its members as well, the consortium will benefit from policing the insurance policy's terms, and negotiating the coverage when possible, such as with environmental remediation and liability coverage.

Sometimes, a party other than the operator may want to access the consortium controlled facilities, equipment, and systems. In such a case, the other party should similarly indemnify the consortium for any damage that it might cause, and obtain insurance with appropriate terms.

The agreements governing the formation and operation of a consortium will usually expressly state that the obligations and liabilities of the consortium will not pass to the member airlines. The consortium will also indemnify the member airlines for any liability alleged against the airlines arising out of the consortium's activities, including the activities of directors and officers of the consortiums. Since any indemnity is only as good as the money backing it up, it is important for a consortium to properly insure itself and its directors and officers, and to see that, to the extent possible, the member airlines are insureds under the policies.

The relationship between consortium members is usually more complicated. On the one hand, consortium agreements often require that all member airlines waive any claims they might have against another member airline arising from such other airline's good faith activities performed on behalf of the consortium. On the other hand, a member may be required to defend and indemnify other members from claims and liabilities arising from that member's use of the consortium's facilities, equipment, or systems.

However, all indemnities and waivers usually exclude from their scope claims and liabilities arising from an indemnitee's willful misconduct or gross negligence.

Environmental Concerns

Underground and aboveground storage tanks, underground and aboveground pipelines, tanker trucks, and the movement of jet fuel through these systems lead inexorably to the potential release of jet fuel into the environment. Because releases may result in significant environmental damage, investigation, and cleanup costs, the parties associated with the operation of jet fuel systems contractually specify and allocate environmental responsibilities and liabilities.

Where airport land and infrastructure are being leased, the landlord (often a municipal airport authority) will insist that the consortium comply with, and cause its contractors to comply with, all environmental statutes and regulations. The landlord will also likely require that the consortium use state of the art leak prevention and detection systems, and implement best practices to avoid releases into the environment. The landlord will also require that the consortium defend and indemnify the landlord from all claims and liabilities arising from environmental releases associated with the operation of the jet fuel system, and require the consortium to obtain environmental remediation and liability insurance. A consortium should consider conducting an environmental assessment to determine the baseline environmental conditions before entering into a lease. By conducting an environmental assessment, the parties will have a simpler way of determining whether environmental conditions post-date the lease, and are therefore likely the responsibility of the consortium, or pre-date the lease, and are therefore the responsibility of another party.

Implementation

Consortium implementation includes many activities that range from the filing of entity documents with the state, to participating in the start-up of a new facility. Key considerations to the implementation of a consortium include the following:

- The filing of articles of incorporation, or similar documents based on the business entity chosen, with the state to incorporate the new consortium should be carefully timed. The filing is instantaneous with some states and requires weeks with others. The filing and registration should be completed early enough that the consortium is officially able to conduct business as necessary. However, the filing begins a requirement for tax filing and therefore should not be accomplished in a calendar year prior to the start of actual consortium operations.

- The initial meeting of the consortium requires significant preparation. A draft agenda should be provided to the participants in advance of the meeting, listing all business that will be conducted. Contracts and agreements that are to be approved should be circulated in advance and questions answered. Officer duties and authority should be discussed in advance and ratified at the initial meeting. Officer candidates should be identified in advance.
- It may be a prerequisite to procure major contracts in advance of the initial meeting, depending on the timing of the consortium's first meeting and schedule for the initiation of the consortium's scope of responsibilities.
- If consortium start-up coincides with facility start-up, then consortium contractors must have been procured early enough to provide them with sufficient commitment, direction, and authority in advance to allow them to become licensed at the airport, hire their employees, badge their employees, train their employees, and procure equipment and supplies before their actual operational duties begin.
- Key members of the consortium management staff should be secured in advance of consortium start-up to provide them enough lead time to procure contractor and vendor services required by the consortium, establish consortium bank accounts, initiate consortium business systems, secure required registrations, licenses, and so forth.

Consortium Staffing

The case studies presented in Appendix D indicate that the AATC has direct employees, while the other consortiums use management companies to provide consortium management staffing. Both approaches work well; however, there are pros and cons including the following:

Pros

- When a consortium sources its staff through a management company, the consortium can rely on the management company's senior management to provide expertise and guidance during consortium start-up and operation.
- When a consortium sources its staff through a management company, and a key employee departs, the consortium can rely on the management company to provide a temporary replacement and locate a permanent replacement.
- When a consortium sources its staff through a management company, the airlines approve a staffing budget and approve key individuals in leadership positions.
- When a consortium sources its staff through a management company, the management company, as an independent contractor, is responsible for all of its own employment responsibilities.
- When a consortium directly hires employees, it avoids paying a contractor's overhead and profit margin for those employees.

Cons

- When a consortium directly hires employees, the airlines become responsible for direct employees hired by the consortium including all employment matters such as the definition and administration of wage rates, the definition and administration of benefits, employee screening, hiring, disciplining, firing, and so forth.
- When a consortium directly hires employees, and a key employee departs, the consortium must rely on its internal resources to backfill for that employee and the airlines must conduct a key employee procurement process until a replacement is found.
- When a consortium sources its staff through a management company, the consortium will pay a profit margin and a portion of the contractor's overhead.

Operations

Once the consortium is established and the facility, equipment, system, or service is operational, the consortium's activities should settle into a normal rhythm. A learning curve will exist during the first year of operation to assess the equipment, procedures, policies, and personnel involved with the operation. Some equipment may experience breakdowns during the first year. However, contractor and manufacturer warranties will likely provide for repairs or replacements. Internal policies, procedures and budgets will be tested and revised as necessary. Members, employees, and vendors will experience a new working environment. The commencement of any new operation brings with it a new set of challenges. However, by opening day, the parties have already been working together for some time and have established working relationships. This is also a very exciting and rewarding period for those involved in the consortium as they see tangible results and begin to reap the benefits of their efforts.

CHAPTER 9

Existing Consortiums

Research was conducted to develop basic data for all existing consortiums in the United States including acronym, name, location, size of airport by number of enplanements, consortium management structure, consortium scope of services, annual operating budget, and form of business entity.

Research methodology included a review of internal records, secretary of state databases and existing literature. Information gathering was also conducted through interviews and exchanges with representatives of various airlines, consortium operators, and the Airlines for America (A4A) (formerly Air Transport Association) trade organization. The number of enplaned passengers reported for each airport was acquired from a Federal Aviation Administration (FAA) website titled "Passenger Boarding (Enplanements) and All-Cargo Data for U.S. Airports." Calendar year 2012 enplanements were used.

ACRP Synthesis 31 found that consortiums may be categorized based upon their primary scope of responsibilities. The categories applied in that synthesis were Terminal Consortiums, Equipment Consortiums, Fuel Consortiums, and Other Consortiums. This report considers these same categories.

Thirty-nine consortiums were found to be active in the United States. These consortiums are categorized in Table 2.

Terminal Consortiums

Terminal Consortiums are those that have significant operation and maintenance responsibility for an airport terminal or a large portion of an airport terminal facility.

The basic data for the two terminal consortiums is provided in Table 3.

The LAX TWO consortium was included in prior analyses as a Terminal Consortium. However, since the departure of Northwest Airlines from the LAX TWO consortium (as a result of its merger with Delta Air Lines), the responsibility of terminal operations has been taken over by the City of Los Angeles. Further, the functional responsibilities of LAX TWO were re-assigned by the City of Los Angeles to the Tom Bradley International Terminal Equipment Company (TBITEC) consortium effective July 1, 2013. As a result, the LAX TWO consortium is no longer operating and is not included in this report.

The South Terminal Corporation (STC) consortium was previously identified in some reports as an airline consortium at Logan International Airport (BOS). The STC was implemented at BOS to maintain a portion of Terminal B. However, the airport received complaints regarding the performance of the STC in public areas of the airport. As a result, the scope assigned to the

Table 2. Number of consortiums by category.

Terminal Consortiums	2
Equipment Consortiums	9
Fuel Consortiums	25
Other Consortiums	3
Total	39

STC was greatly reduced and the STC now provides limited functions to a single airline. Therefore, the STC is not included in this report.

Equipment Consortiums

Equipment Consortiums generally have maintenance and operations responsibility for equipment that is directly related to the operations of the airlines jointly using a particular airport terminal facility. Primary examples of airline equipment include inbound and outbound baggage handling systems, checked baggage inspection systems, passenger boarding bridges, and ancillary gate systems such as ground power, potable water, and pre-conditioned air. However, Equipment Consortiums may also have other maintenance responsibilities including custodial, common use electronic equipment, ramp cleaning, maintenance, and so forth.

The basic data for the nine equipment consortiums is provided in Table 4.

The LAX TWO consortium was included in prior lists as an Equipment Consortium. However, the functional responsibilities of LAX TWO were re-assigned by the City of Los Angeles to the Tom Bradley International Terminal Equipment Company (TBITEC) consortium effective July 1, 2013. As a result, the LAX TWO consortium is no longer operating and is not included in this report.

Table 3. Terminal consortiums: basic data.

	TERMINAL CONSORTIUMS							
	Acronym	**Name**	**Location**	**Airport Enplanements (Millions)**	**Scope of Services**	**Annual Budget (millions)**	**Consortium Management Structure**	**Form of Operating Entity**
1	AATC	Atlanta Airlines Terminal Corporation	ATL	45.2	Maintenance and operation of the Central Passenger Terminal Complex including custodial, maintenance and engineering services for the terminal, concourses and ramp areas. Maintenance and operation of baggage handling system, passenger boarding bridges, GSE equipment, deicing storage facilities, employee parking and utilities.	$65.1	Consortium Employees	Corporation
2	TOGA	Terminal One Group Association, L.P.	JFK	17.1	Maintenance and operation of JFK Terminal One facilities including custodial, maintenance and engineering services for the terminal, concourses and ramp areas. Maintenance and operation of baggage handling system, passenger boarding bridges, GSE equipment, hydrant fueling storage & hydrant distribution, deicing storage facilities, and electronic systems infrastructure. Management of wheelchair and skycap services, retail concessions, food & beverage and advertising.	$115.0	Operator	Limited Partnership

Table 4. Equipment consortiums: basic data.

	EQUIPMENT CONSORTIUMS							
	Acronym	**Name**	**Location**	**Airport Enplanements (Millions)**	**Scope of Services**	**Annual Budget (millions)**	**Consortium Management Structure**	**Form of Operating Entity**
1	CICA TEC	CICA Terminal Equipment Consortium	ORD	30.0	Maintenance and operation of International Terminal airline equipment, including baggage handling system, passenger boarding bridges, GSE equipment, hydrant fueling system, MUFIDS and CUTE equipment. Management of wheelchairs, skycap, baggage handling and common gate assignment services.	$26.3	Operator	Corporation
2	DANTeC	Detroit Airlines North Terminal Consortium	DTW	15.4	Maintenance and operation of North Terminal airline equipment including baggage handling system, passenger boarding bridges, GSE equipment, LAN network, CUTE, MUFIDS, building automation and elevator/escalator systems. Management of wheelchair, common gate management, ramp control and custodial services.	$6.6	Operator	Corporation
3	LAX6	LAX6 Consortium, LLC	LAX	25.0	Maintenance and operation of LAX 6 airline equipment, including baggage handling system, passenger boarding bridges, CUTE and GSE equipment. Management of common gate assignment, custodial and exit hall security services.	$4.9	Operator	Limited Liability Company
4	MATCO	Midway Airlines' Terminal Consortium	MDW	9.3	Maintenance and operation of airline equipment, including baggage handling system, passenger boarding bridges, GSE equipment, fuel storage & hydrant distribution and FIDS/BIDS systems. Management of wheelchair, common gate management and FIS facility services.	$9.4	Operator	Corporation
5	ONT-TEC	Ontario International Airport Terminal & Equipment Company, LLC	ONT	2.1	Maintenance and operation of airline equipment, including baggage handling system, passenger boarding bridges and GSE equipment systems. Management of public and airline premise custodial services.	$4.7	Operator	Limited Liability Company
6	PAC	Portland Airlines' Consortium, LLC	PDX	7.1	Operation of baggage handling system, and management of airline premise custodial services.	$2.0	Operator	Limited Liability Company
7	SAAC	San Antonio Airlines Consortium	SAT	3.9	Maintenance and operation of airline equipment, including baggage handling system, passenger boarding bridges and GSE equipment systems. Management of public and airline premise custodial services.	$3.0	Operator	Corporation
8	SFOTEC	San Francisco Terminal Equipment Company, LLC	SFO	18.6	Maintenance and operation of International Terminal airline equipment including baggage handling system, passenger boarding bridges, GSE equipment, CUTE and MUFIDS systems. Management of wheelchair, common gate management and ramp control services.	$10.0	Operator	Limited Liability Company
9	TBITEC	Tom Bradley International Terminal Equipment Company	LAX	25.0	Maintenance and operation of LAX Tom Bradley International Terminal airline equipment, including baggage handling system, passenger boarding bridges, and GSE equipment. Management of wheelchair and public custodial services.	$28.7	Operator	Corporation

Ontario International Airport Terminal & Equipment Company, LLC (ONT-TEC) is a new consortium that began operations at ONT on July 1, 2013.

The LAX Terminal Equity Corporation (LAXTEC) consortium was formerly included in prior reports as an Equipment Consortium. During 2011, LAXTEC changed its name to the Tom Bradley International Terminal Equipment Company (TBITEC). Also, on July 1, 2013, TBITEC expanded its functional responsibilities from the Tom Bradley International Terminal to include Terminal 2 at LAX.

It can be noted that the Detroit Airlines North Terminal Consortium (DANTeC) and the San Antonio Airlines Consortium (SAAC) are the only consortiums known to have direct, although limited, airport involvement in the governance of the consortium and could, therefore, be defined as "airport-airline consortiums." Please see Chapter 4, Business Entity Selection, for additional details of this arrangement.

Fuel Consortiums

Fuel Consortiums are those that have the primary responsibility of operating and maintaining aviation fuel systems. Primary examples of aviation fuel systems include fuel receiving equipment and facilities, fuel storage equipment and facilities, fuel distribution equipment and facilities, and fuel dispensing equipment and facilities. Aviation fuel control and monitoring systems may also be included.

The basic data for the 25 fuel consortiums is provided in Table 5.

Other Consortiums

Other Consortiums are those that cannot be included in any of the other consortium categories, since their scope is unrelated to responsibilities for the operation and maintenance of an airport terminal, airline equipment, or an aviation fuel system.

The basic data for the three other consortiums is provided in Table 6.

The Airlines Committee of Hawaii (ACH) consortium was originally formed to provide consolidated and common representation for the airlines operating in Hawaii. Recently, the State allowed the ACH to commonly manage the state selected operation and maintenance contractor for the outbound baggage handling systems located at Honolulu and Kahului airports. However, documents that will serve to formalize these responsibilities are currently under negotiation. When these documents are complete, the ACH may be considered an Equipment Consortium.

Table 5. Fuel consortiums: basic data.

	FUEL CONSORTIUMS							
	Acronym	**Name**	**Location**	**Airport Enplanements (Millions)**	**Scope of Services**	**Annual Budget (millions)**	**Consortium Management Structure**	**Form of Operating Entity**
1	ANCF	Anchorage Fueling and Service Company	ANC	2.2	Fuel system operation & maintenance	$31.0	Operator	Corporation
2	ATLECON	ATLECON Fuel Corporation	ATL	45.2	Fuel system operation & maintenance	$2.9	Operator	Corporation
3	BOSFUEL	BOSFUEL Corporation	BOS	12.9	Fuel system operation & maintenance	$23.2	Operator	Corporation
4	N/A	Ft. Lauderdale Fuel Facilities LLC	FLL	10.6	Fuel system operation & maintenance	$2.9	Operator	Limited Liability Company
5	HFFC	Hawaii Fueling Facilities Corporation	HNL ITO KOA	8.0 0.6 1.3	Fuel system operation & maintenance	$12.9	Operator	Corporation
6	N/A	Hookers Point Fuel Facilities LLC	HPT	N/A	Marine terminal aviation fuel receiving and storage	$10.7	Operator	Limited Liability Company
7	IADF	IAD Fuels LLC	IAD	9.1	Fuel system operation & maintenance	$14.8	Operator	Limited Liability Company
8	N/A	Indianapolis Fuel Facilities LLC	IND	3.6	Fuel system operation & maintenance	$3.8	Operator	Limited Liability Company
9	LASFUEL	LASFUEL Corporation	LAS	18.5	Fuel system operation & maintenance	$10.0	Operator	Corporation
10	LAXFUEL	LAXFUEL Corporation	LAX	25.0	Fuel system operation & maintenance	$41.0	Operator	Corporation
11	MEMFUEL	MEMFUEL LLC	MEM	3.4	Fuel system operation & maintenance	To Be Determined	Operator	Limited Liability Company
12	N/A	MCI Fuel Company LLC	MCI	4.9	Fuel system operation & maintenance	$1.6	Operator	Limited Liability Company
13	OFFC	Oakland Fuel Facilities Corporation	OAK	4.9	Fuel system operation & maintenance	$9.0	Operator	Corporation
14	ONT	ONTFUEL Corporation	ONT	2.1	Fuel system operation & maintenance	$2.0	Operator	Corporation
15	MCO	Orlando Fuel Facilities LLC	MCO	15.6	Fuel system operation & maintenance	$4.9	Operator	Limited Liability Company
16	PFFC	Portland Fueling Facilities Corporation	PDX	7.1	Fuel system operation & maintenance	$1.9	Operator	Corporation
17	PFC	PHL Fuel Facilities, LLC	PHL	14.4	Fuel system operation & maintenance	$3.9	Operator	Limited Liability Company
18	AFFC	Arizona Fueling Facilities Corporation	PHX	19.2	Fuel system operation & maintenance	$9.2	Operator	Corporation
19	N/A	PVD Fuel Facilities LLC	PVD	1.8	Fuel system operation & maintenance	$1.3	Operator	Limited Liability Company
20	RFFC	Reno Fueling Facilities Corporation	RNO	1.7	Fuel system operation & maintenance	$2.8	Operator	Corporation
21	RSW	RSW Fuel Company, LLC	RSW	3.5	Fuel system operation & maintenance	$3.2	Operator	Limited Liability Company
22	SEA FUEL	SeaTac Fuel Facilities, LLC	SEA	15.5	Fuel system operation & maintenance	$12.7	Operator	Limited Liability Company
23	SFO FUEL	SFO Fuel Company LLC	SFO	18.6	Fuel system operation & maintenance	$8.0	Operator	Limited Liability Company
24	SJFC	SJC Fuel Company LLC	SJC	4.0	Fuel system operation & maintenance	$7.3	Operator	Limited Liability Company
25	N/A	SNAFUEL Inc.	SNA	4.3	Fuel system operation & maintenance	$2.1	Operator	Corporation

Table 6. Other consortiums: basic data.

	OTHER CONSORTIUMS							
	Acronym	**Name**	**Location**	**Airport Enplanements (Millions)**	**Scope of Services**	**Annual Budget (millions)**	**Consortium Management Structure**	**Form of Operating Entity**
1	ACH	Airlines Committee of Hawaii	HNL	8.0	Airline Representation, Management of baggage handling systems operations and maintenance in HNL and OGG, SITA	$3.0	Operator	Corporation
2	DENCO	Denver Consortium, LLC	DEN	25.5	De-Icing material procurement	>$0.1	Operator	Limited Liability Company
3	LAXSUL	LAX Shared Use Lounge Company, LLC	LAX	25.0	Shared Use VIP Lounge development, operation & maintenance at LAX TBIT	$5.0	Operator	Limited Liability Company

CHAPTER 10

Consortium Success Metrics

Terminal and Equipment Consortiums

The general success of terminal and equipment consortiums is often discussed, but the measure of success is difficult to define. As indicated in the Illustrative Examples and Observations section in Chapter 7, performance criteria have not been established for most terminal and equipment consortiums.

An example of a consortium subject to defined performance criteria is Detroit Airlines North Terminal Consortium (DANTeC). The DANTeC Consortium Agreement with the WCAA includes Minimum Service Levels that clearly and concisely describe maintenance responsibilities, frequencies, and performance metrics. It has been reported that DANTeC has met all, and exceeded most, of the Minimum Service Levels requirements. The WCAA had enough confidence in DANTeC's performance to significantly expand DANTeC's scope during 2012, and extended the Consortium Agreement for another 5-year period. To illustrate defined performance criteria, the DANTeC Consortium Agreement Exhibit D Minimum Service Levels is included as Appendix F of this Guidebook.

While empirical performance data does not exist for most consortiums, other observable indicators of consortium success are available.

One visible indicator of the lack of consortium success is that a consortium may cease to exist if it is not performing to expectations. An example of this is the South Terminal Corporation (STC), which formerly operated at BOS to maintain a portion of Terminal B. The airport received complaints regarding STC's maintenance performance in public areas of the airport. As a result, the scope assigned to the STC was greatly reduced and the STC now provides limited functions to a single airline.

Another visible indicator of the lack of consortium success may be when a consortium changes its name. LAX Terminal Equity Corporation (LAXTEC) had operated at the TBIT at LAX since 1982. LAWA indicated in 2009 that it would not issue a new lease and license agreement to LAXTEC. LAWA continued to be in favor of an airline consortium for operation and maintenance responsibilities at TBIT, but would no longer do business with LAXTEC because of LAXTEC's involvement in a rates and charges action against LAWA and the City of Los Angeles. As a result, the LAXTEC member airlines changed the consortium's name to the TBITEC and adopted a new member agreement. LAWA approved the TBITEC member agreement and issued a new 5-year lease and license agreement to TBITEC in 2011. LAWA had enough confidence in the reconstituted consortium to amend the lease and license agreement in 2013 to increase the term to 10 years and expand TBITEC's scope of operations and maintenance responsibilities to include LAX Terminal 2. This scope expansion is an indicator of TBITEC's success.

ACRP Synthesis 31 included a survey of airports, airlines, and consortium operators regarding consortium requirements and expectation achievement. The data shows 90% of the airport respondents, 100% of the airline respondents, and 100% of the consortium operator respondents indicated that the consortiums they are involved with met or exceeded expectations from a contract compliance perspective, overall performance perspective, and an airport-airline relationship perspective.

Also, the following quotations were reported at the Airport Planning Design & Construction Symposium that was hosted by the American Association of Airport Executives and the Airport Consultants Council in February 2009:

- **Midway Airlines' Terminal Consortium:** "The MATCO consortium has allowed for flexibility to address operational issues in our ever-changing aviation environment and helped Midway Airport achieve the 2008 JD Powers award for customer service excellence in a mid-sized airport." by the City of Chicago, Department of Aviation.
- **Terminal One Group Association, L.P.** "We have maintained an excellent working relationship with TOGA these last 15 years. It is a successful business model that has met both airline and airport needs." by the PANYNJ Aviation Department.
- **SFO Terminal Equipment Company:** "SFOTEC has proven itself to be a strong and effective organization in both representing the interests of the international airlines and in maintaining the airport-owned common use baggage and passenger processing systems at SFO." by the San Francisco International Airport.

The following quotations were collected as part of the research for this Guidebook:

- **Atlanta Airlines Terminal Corporation:** "AATC is a significantly efficient consortium that keeps ATL costs low." by Delta Airlines
- **CICA Terminal Equipment Consortium:** "CICA TEC has provided reduced operating costs, more efficient operations, and better control of airline support equipment." by Consortium Operator
- **Oakland Fuel Facility:** "OFFC has been diligent in meeting the terms and conditions of the Lease, including investing in the capital improvements necessary and cooperating fully with environmental remediation on the leasehold." by the Port of Oakland

In spite of the lack of empirical performance data for most terminal and equipment consortiums, observable indicators show that airports and airlines actively evaluate the performance of their consortiums. Consortiums that are not performing well are dissolved or modified, while those that are meeting or exceeding expectations have satisfied customers and may be provided opportunities to expand their scope and responsibilities.

Fuel Consortiums

The most common use of a consortium at an airport location is the typical fuel consortium. Fuel consortiums have been around for a number of years and, to a large degree, have enjoyed substantial success.

The typical fuel consortium at an airport consists of a legal entity, the members of which are the major airlines operating at that airport. The assets that the fuel consortium operates consist of the jet fuel storage and distribution system at the airport. These fuel systems typically consist of a so-called "tank farm"—an area of land containing above ground storage tanks for fuel at the airport. The tank farm also includes underground pipelines connecting the storage tanks, as

well as pumps to pump the fuel to the various terminals and concourses. Tank farms typically contain a bank of fuel filters to ensure the fuel is at the prescribed quality before it is pumped for use in aircraft. In addition to the tank farm, fuel distribution pipelines are employed to transport the fuel from the tank farm to the terminals and concourses. At most major airports, a hydrant system is in operation, which provides access to fuel at each gate at the airport, thus eliminating an operational requirement for fueling trucks. At each gate, there is a hydrant pit, which is accessed through a manhole cover. The hydrant cart or hydrant truck connects to the hydrant pit to access the fuel and another hose from the hydrant cart is inserted into the wing of the aircraft.

There are several reasons for the general success of fuel consortiums. From an economic viewpoint, if each airline were to own and operate its own fuel storage tanks and fuel system, the resulting overall fueling cost at the airport would be significantly higher than the cost of a joint use consortium facility. Also, from the viewpoint of the airport and the traveling public, a single fuel system provides greater assurances with respect to fuel quality and safety. If there were multiple fuel systems at the airport, the chances for fuel quality concerns would likely increase compared with a single system that is subject to daily fuel quality monitoring and checks. In addition, each member airline typically inspects the fuel consortium system on an annual or semi-annual basis.

Another reason that fuel consortiums have enjoyed success is that, at most airports, there typically is not significant fuel expertise within the airport staff. Many airport directors and airport staff have come to rely on the services provided by the fuel system operator who manages and operates the fuel system on behalf of the airline fuel consortium. In addition, some airports that previously operated fuel systems were required to conduct environmental remediation efforts that were very time-consuming and costly. By delegating the fuel system operation to the airline fuel consortium, the airport can avoid the environmental liability and pass that on to the fuel consortium members.

The airlines' primary trade organization, A4A, has for many years promoted the use of fuel consortiums and has published a fuel committee handbook for use by those airports and airlines that implement a fuel consortium. The position of the airlines' trade organization favoring fuel consortiums has facilitated the widespread use of the consortium model for operating jet fuel storage and distribution systems at airports in the United States and is therefore also a factor in their success.

The use of fuel consortiums at major airports in the United States has a long tradition. Generally, these fuel consortiums have been very successful in providing adequate fuel at the requisite quality. To summarize, the principal reasons for the success of fuel consortiums include the following:

- Fuel consortiums promote economic efficiency by consolidating all fuel storage and distribution systems in one unified system and location.
- Fuel consortiums promote safety by promoting fuel quality through the elimination of multiple, smaller fuel systems.
- Airport staffs often lack substantial expertise in fuel management issues and the fuel consortium provides a service to the airport by managing the fuel systems using qualified operators.
- Fuel consortiums provide a benefit to the airports by shifting responsibility and liability for environmental issues that may be associated with airport fuel storage, distribution, and hydrant systems.
- The long history of fuel consortiums and their success have been promoted by the airlines' principal trade organization.

APPENDIX A

Frequently Asked Questions

Formation

1. Q How many participating airlines are necessary to form an airline consortium?

A There is no minimum number, however, because consortiums usually serve common use facilities or services that serve multiple airlines, it is probably best if the initial consortium membership includes a majority of the airlines using the common facilities or services.

2. Q What are the primary benefits of an airline consortium?

A An airline consortium can provide the following:

- A legal contracting entity to enter into construction, purchasing, and services agreements.
- Quality management of resources to increase operational efficiency.
- A reduction in operating and maintenance costs.
- An additional layer of indemnity and insurance protection.

3. Q How long does it take to implement an airline consortium?

A The answer very much depends on the proposed scope of work and the parties involved. Eight to twelve weeks is probably a minimum requirement for a situation where the scope is simple, the airline parties are in agreement, no capital funding is needed, and no authorization from the Airport is necessary. Prior experience shows that the implementation period can extend up to three years for complicated situations requiring capital funding and several layers of approval.

4. Q What are the primary issues when forming an airline consortium?

A The primary issues in forming a consortium are:

- Negotiating a defined scope of services.
- Determining the appropriate form of legal entity.
- Determining and addressing capitalization requirements.
- Voting rights and cost sharing formulas among members.
- Preparing, negotiating, and executing the consortium agreements in a timely manner.

5. Q Who must approve the formation of an airline consortium?

A Typically, approvals must be secured for all stakeholders including the participating airlines and the airport at the appropriate and authorized level.

6. Q Is airport approval necessary to form an airline consortium?

A Strictly speaking, no. Anyone can form a new company and register it to do business with the state where it will be located. However, airport approval is certainly necessary for the consortium to conduct business at the airport, and a higher level of airport approval is needed if the consortium will be involved with airport owned assets such as facilities, equipment, or systems.

Legal

1. **Q** Why is the consortium corporate structure important?
   A The appropriate corporate structure is important to properly address liability and taxation issues.
2. **Q** What are the corporate structures that could be used for an airline consortium?
   A The following are examples of consortium legal entities:
   - For-Profit Corporation
   - Not-For Profit Corporation
   - Limited Liability Company
   - Limited Partnership.
3. **Q** What legal documents are necessary to form a consortium?
   A The following documents are necessary to form a consortium:
   - An agreement with the airport authorizing the scope of work assigned to the consortium
   - An agreement among the participating airlines that documents the consortium's purpose, governance, membership criteria, cost sharing principals, etc.
   - An agreement that provides access to the consortium's facilities, equipment, and services to third parties that are not consortium members.
   - Formation Articles that are filed with the State.

Financial

1. **Q** Are airline consortiums exempt from taxes?
   A Consortiums generally do not qualify for an exemption from federal income taxes. This issue should be studied during the consortium formation process with a focus on:
   - Federal Income Taxes.
   - State Income Taxes.
   - Sales Taxes.
   - Leasehold Taxes.
   - Property Taxes.
2. **Q** What is the purpose of capitalizing an airline consortium?
   A Consortiums are capitalized to generate working capital that serves as an operating reserve to ensure all of its financial obligations are met in a timely manner.
3. **Q** What are the methods of capitalizing an airline consortium?
   A Typical methods of capitalization include:
   - Membership Fees.
   - Security Deposits.
   - Advance Invoicing.
   - Airport Loans.
   - Bank Loans.
   - Lines of Credit.
   - Airline Loans.
4. **Q** How does an airline consortium allocate its costs to its members?
   A Cost allocation differs based on the consortium scope. Typical allocations are based on some combination of landed weight, total passengers, enplaned passengers, deplaned passengers, number of bags, square footage, or fuel gallons.
5. **Q** What are the financial reporting requirements of a consortium?
   A The financial reporting requirements differ for each consortium, but, at a minimum, annual financial statements should be prepared and distributed to the Members.

Operational

1. Q What is the typical scope of work for an airline consortium?

A There is a wide range of scope of service options but generally consortiums fit into three major categories:

- Terminal Consortiums are responsible for operating and maintaining all aspects of a unit terminal
- Equipment Consortiums are primarily responsible for the airline equipment that directly affects airline operations, including baggage handling systems and passenger boarding bridges.
- Fuel Consortiums are responsible for airline fuel storage, distribution, and into-plane systems.

2. Q How do airline consortiums govern themselves?

A An agreement among the participating airlines outlines the consortium governance processes. Typically, each participating airline has a vote that is often related to a majority in interest formula, based on usage or costs incurred. Officers are usually elected to fulfill the corporate duties and responsibilities, and various committees are created and assigned levels of responsibility by the participating airline members. Often, an independent consortium manager or management firm is engaged to manage and fulfill the day-to-day obligations of the consortium.

3. Q How can the Airport participate in the management of an airline consortium?

A The airport can participate either as a voting Member of the consortium or as an advisory member without voting rights. Alternatively, the airport can simply monitor the consortium's activities and require periodic reports.

4. Q Is it necessary to establish performance standards for the consortium?

A It is not necessary to establish performance standards for the consortium, but many airport authorities prefer to document preventive maintenance and operating requirements when delegating scope to the consortium.

APPENDIX B

Glossary of Terms, Abbreviations, and Acronyms

The following is a glossary of terminology, abbreviations, and acronyms used in this Guidebook.

AFFC:	Arizona Fueling Facilities Corporation
Airline Consortium:	An abbreviation of Airport-Airline Consortium
Airport-Airline Consortium:	A special-purpose business entity that is usually owned and operated by a group of airlines, and that may be assigned the responsibility of developing and/or managing certain facilities, equipment, systems, or services at an airport
ANCF:	Anchorage Fueling and Service Company
ATLECON:	ATLECON Fuel Corporation
BOSFUEL:	BOSFUEL Corporation
Consortium:	An abbreviation of Airport-Airline Consortium
CUTE:	Common Use Terminal Equipment
FAA:	The Federal Aviation Administration is the national aviation authority of the United States of America. An agency of the U.S. Department of Transportation, it has authority to regulate and oversee all aspects of American civil aviation.
FIDS/BIDS:	Flight Information Display System/Baggage Information Display System
FIS:	Federal Inspection System
FLL FUEL:	Fort Lauderdale Fuel Facilities LLC
GSE:	Ground Support Equipment
HFFC:	Hawaii Fueling Facilities Corporation
HPTFUEL:	Hookers Point Fuel Facilities LLC
IADF:	IAD Fuels LLC
Indemnify:	To protect against damage, loss, or injury; insure
INDFUEL:	Indianapolis Fuel Facilities LLC
LAWA:	Los Angeles World Airports is the Department of Airports for the City of Los Angeles that acts through its Board of Airport Commissioners and is responsible for Los Angeles International Airport (LAX), Ontario International Airport (ONT) and Van Nuys Airport (VNY).

LAX 6:	LAX6 Consortium LLC
LAXFUEL:	LAXFUEL Corporation
MCI Fuel:	MCI Fuel Company LLC
MCO:	Orlando Fuel Facilities LLC
MEMFUEL:	MEMFUEL LLC
MUFIDS:	Multi-User Flight Information Display System
PAC:	Portland Airlines Consortium LLC
PANYNJ:	The Port Authority of New York & New Jersey is a joint venture between the States of New York and New Jersey and is responsible for Newark Liberty International Airport (EWR), John F. Kennedy International Airport (JFK), LaGuardia Airport (LGA), Stewart International Airport (SWF), Teterboro Airport (TEB), and Atlantic City International Airport (ACY).
PFC:	PHL Fuel Facilities LLC
PFFC:	Portland Fueling Facilities Corporation
PVD FUEL:	PVD Fuel Facilities LLC
RFFC:	Reno Fueling Facilities Corporation
RSW:	RSW Fuel Company LLC
SEA FUEL:	SeaTac Fuel Facilities LLC
SFO FUEL:	SFO Fuel Company LLC
SJFC:	SJC Fuel Company LLC
SNAFUEL:	SNAFUEL Inc.
WCAA:	The Wayne County Airport Authority, which is responsible for Detroit Metropolitan Airport (DTW) and Willow Run Airport (YIP)

APPENDIX C

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APPENDIX D

Case Studies

Detailed information was gathered and compiled during the preparation of this Guidebook for the following consortiums:

- AATC Atlanta Airlines Terminal Corporation
- CICA TEC CICA Terminal Equipment Consortium
- DENCO Denver Consortium
- LAXSUL LAX Shared Use Lounge Company
- OFFC Oakland Fuel Facilities Corporation
- TOGA Terminal One Group Association, L.P.

Information related to these consortiums appears throughout this Guidebook, and is highlighted by the Illustrative Examples and Observations included at the end of Chapters 2 through 7.

Case studies were prepared to present the detailed information compiled for each consortium and are included in this Appendix D.

AATC—Atlanta Airlines Terminal Corporation Atlanta Hartsfield International Airport

The AATC was formed in 1979 with a 2017 expiration date, which coincides with the expiration of the lease agreement.

Motivation for Consortium Formation

AATC was formed to manage and operate the new Central Passenger Terminal Complex (CPTC) that was completed in 1980. The 1977 New Use & Lease Agreement addressed the construction of the new terminal building, but also allowed for an airline consortium. This consortium concept was based on the airport and airlines belief that the facility would be better maintained by a third party. The CPTC Lease provides that the contracting airlines would be solely responsible for all the maintenance, operations and financial aspects of the terminal building area. Later this scope was increased to include employee parking lots and the North Terminal baggage system.

Consortium Type

AATC is a non-profit corporation organized in the State of Delaware. As one of the oldest airline consortiums, its formation in 1979 predates the involvement of anyone who is currently

involved in its operation resulting in a lack of specifics on the consortium formation. The law firm of Trotter, Smith and Jacobs represented the airlines in the formation process and it is assumed that they recommended this structure. At the time most current structures were not yet available including LLCs, so under their options they chose a "closed" corporation model which allows the consortium to operate more informally than most corporations including a decision-making process without the requirement of full Board of Directors meetings.

Consortium Feasibility

Since the consortium formation predates anyone currently associated with AATC, it is unknown if a financial feasibility study was prepared or by whom.

Formation and Governing Documents

The law firm of Trotter, Smith and Jacobs provided legal representation throughout the formation of AATC, and the following provides a summary of the relationship among the governing documents:

Central Passenger Terminal Complex (CPTC) Lease establishes the consortium's scope of services as a Contracting Airline entity.

AATC Stockholder Agreement establishes the role of each member airline, including voting rights.

Maintenance and Operations (M&O) Services Agreement allows Airlines that are not AATC shareholders to use the facilities if they execute an M&O services agreement.

Organization and Management Structure

The business activities of AATC are governed by the AATC Board of Directors, which comprises seven member airlines: AirTran Airways, American Airlines, Delta Air Lines, Express Jet, Frontier Airlines, United Airlines, and US Airways with each Member designating its director and having one vote per director. The airport does not have a voting or advisory role on the AATC Board of Directors. There are also Executive and Personnel Committees which review, evaluate, and make specific recommendations to the Board of Directors.

Day-to-day Operations Management is provided by 45 full-time management professionals, who are employed directly by the consortium.

Scope of Services

The CPTC lease agreement with the City of Atlanta outlines the scope of services as the maintenance and operations of the Central Passenger Terminal Complex including the terminal concourses and ramp areas. Later this scope was increased to include employee parking lots and the North Terminal baggage system.

The following are included in AATC's scope of services:

- Passenger Boarding Bridges
- Inline Explosive Detection System
- Potable Water
- Public Area Custodial
- Deicing Storage Facilities
- Snow Removal

- Electronic Systems Facility Infrastructure
- Employee Parking
- Baggage Handling System
- Pre-Conditioned Air
- Terminal Facilities Maintenance
- GSE Maintenance
- Ramp Sweeping
- Way-Finding
- Utilities

Service Level

There are no performance standards included in the CPTC lease. The airport and City of Atlanta do not require or receive performance reports for AATC. AATC conducts monthly and quarterly meetings with their contractors to review their performance, and AATC's overall performance is reported to the shareholders on a bi-monthly basis. The AATC Board of Directors determines specific performance standards necessary, and includes the appropriate performance levels in their contracts.

Risk Management

The main benefits of establishing AATC are as follows:

Financial. AATC is able to manage the terminal maintenance operations at a lower cost than the airport could facilitate.

Procurement. Because AATC is governed by the airlines and not a department of the City, it has much quicker, more efficient procurement procedures.

Project Management. AATC intimately understands the operations of the airport, so it has a competitive advantage in managing projects.

The main risk to AATC member airlines involves the possible bankruptcy of members or non-members, resulting in outstanding invoices owed to AATC. As a safety net, AATC has a line of credit in place in the event that an airline had financial hardship and was unable to make its payments to AATC. The AATC has weathered various airline bankruptcies, including that of its largest member.

Financial Considerations

Capitalization Requirements. The Stockholders loaned working capital to the AATC at the start of the consortium, which has been paid back in full. The AATC Stockholder Airlines are not required to provide a security deposit to the AATC, nor is there any current material member equity in the AATC. The airport provides no funding and is not involved in the AATC invoicing process. While the AATC has no outstanding loans, it has established a line of credit (LOC) equal to 3 months of operating expenses. The LOC was established to address financial exposure to possible airline bankruptcies.

Cash flow is addressed by an invoice prepayment and reconciliation process. Each month the airlines make advance payments to AATC for the next month's estimated M&O expenses. The monthly estimates are determined by the budget approved by the Stockholders. The prepayments are reconciled to actual expenses the following month.

AATC is currently in the process of re-engineering their Accounting department to address gaps in the Computerized Maintenance Management System (CMMS). The CMMS system was upgraded prior to addressing the needs of its financial system.

The AATC does not have capital funding requirements. The City of Atlanta funds all capital projects, and the AATC performs or manages the capital work on behalf of the city.

Annual Operating Budget. AATC has an operating budget in excess of $65,000,000 annually to provide services to the 85 million passengers who utilize the airport annually. The budget is prepared in August, presented to the Board of Directors no later than 2 weeks prior to the end of the fiscal year on September 30, and approved by the Stockholders at the October meeting.

Some major components of the annual operating budget include the following:

- $23 million utilities maintenance expenses
- $21 million custodial services expenses
- $8 million general building maintenance expenses
- $5 million systems maintenance administrative expenses

Budget performance reports are submitted monthly and annually to the Stockholders.

Rates and Charges. AATC rates and charges are defined in the CPTC Lease. There are multiple Joint Lease allocation formulas that include combinations of enplanements and pro-rata allocations of rented square footage by terminal or concourse, and further defined by space type including Preferential, Shared, and Joint Lease space. The City has 13 Joint Lease formulas and 20 major cost allocations.

AATC's major cost centers and the method of allocation are listed below.

a. The following costs are allocated by square footage:
   - Pest Control
   - Electricity
   - Custodial
b. The following costs are allocated by Joint Lease Formulas defined by the Terminal Lease Agreement:
   - Pedestrian Mall
   - AGTS
   - Mechanical Buildings
   - Elevators and Escalators
   - Non-Concessions Joint Lease Premises
   - Unallocable Costs (ex. Water/Sewer)
c. Parking Lot Expenses are allocated by the number of medallions issued for a parking spot.
d. North Terminal Baggage costs are allocated by domestic originating revenue enplaned passengers.

AATC's cash flow analysis is conducted by the Manager of Finance & Administration. The operating funding source comes from the prepayments made by the airlines. For Domestic Carriers, this is calculated by the airline's percentage of exclusive costs to the total exclusive costs for the month. For International Carriers, this is calculated by the airline's percentage of square footage to the total square footage.

There is an annual independent certified public account (CPA) audit of AATC's financial statements. The auditors also engage in a monthly review of invoicing, including agreed-upon processes and procedures. There are no other outside AATC auditing requirements.

Regulatory Requirements

AATC is subject to all federal, state, county, and local taxes.

The airport requires the consortium to carry insurance and indemnify the airport, and the consortium requires each member airline to carry insurance and indemnify the consortium.

Performance Metrics

Performance standards are not in effect between the consortium and airport.

The AATC Board of Directors establishes performance metrics for vendor contracts based on aviation industry standards and proven methods. AATC meets monthly and quarterly with their contractors to review their performance, and AATC's overall performance is reported to the shareholders on a bi-monthly basis.

Consortium Formation Issues and Lessons Learned

The following comments were received for lessons learned:

- Add additional language to the lease that further clarifies AATC scope of responsibility and eliminates the "hand-shake agreements" of the past.
- Expand services to everything in the terminal, specifically M&O of the Automated People Mover system.
- The main challenge to the consortium is balancing the trade offs between increased cost and the appropriate service level.
- It is important to increase the level of carrier participation to decrease absentee management.

CICA TEC—CICA Terminal Equipment Corporation O'Hare International Airport Terminal 5

CICA TEC was formed in 1990 with a 2018 expiration date, which coincides with the term of the International Terminal Use and Lease Agreement.

Motivation for Consortium Formation

CICA TEC was formed to operate and maintain the New International Terminal 5 in a more effective and cost efficient manner. The O'Hare international airlines were previously operating out of Terminal 4, which was located on the 1st floor of the parking garage with difficult operating conditions. The airlines formed the Chicago International Carriers Association (CICA) to evaluate and determine a long-term operating solution. They worked with the City of Chicago on the planning and design of the new International Terminal 5. CICA TEC was formed to procure and install airline equipment and facilities for the terminal, and to operate and maintain the equipment and facilities after the terminal opening.

Consortium Type

CICA TEC is a non-profit corporation organized in the State of Illinois. Airlines that had experience with LAXTEC recommended forming a consortium as a non-profit corporation, similar to LAXTEC. An outside law firm was not used for legal representation during the CICA TEC formation process, however, the airlines relied upon the advice of airline legal staff and a consultant who was also an attorney. Various business entities were evaluated to address all legal and financial factors. The airlines approved the recommended entity.

Consortium Feasibility

International Terminal Associates prepared financial and operating feasibility studies which determined the positive aspects of forming a consortium to operate and manage the new terminal facility.

Formation and Governing Documents

An outside law firm was not used for legal representation during the CICA TEC formation process, however, the airlines relied upon the advice of airline legal staff and a consultant who was also an attorney.

The following provides a summary of the relationship among the governing documents:

International Terminal Lease Agreement establishes the relationship between the individual tenant airlines and the City of Chicago, provides for airline-leased areas in the terminal, rental payments to the City, and has a 25-year term that will expire in 2018.

Consortium Agreement establishes the relationship between CICA TEC and the City of Chicago. The agreement assigned the consortium design and construction responsibility for $59,200,000 of facilities, equipment, and systems, and provides for the payment of the associated debt service. The agreement also delegates the responsibility for the operation and maintenance of the designated facilities, equipment, and systems.

CICA Terminal Equipment Corporation Agreement establishes the relationship between CICA TEC and each of the participating airlines, and provides for the operation and maintenance of the facilities, equipment, systems, and services assigned to the consortium and the governance of the consortium.

System Access Agreement provides for the use of the CICA TEC facilities, equipment, systems, and services by non-member airlines and ground handlers.

Operating Agreement establishes the scope of services of a professional management company to provide for the day-to-day operation of the CICA TEC facilities, equipment, systems, and services.

Organization and Management Structure

The business activities of CICA TEC are governed by the CICA TEC Board of Directors, which comprises 26 member airlines: Aer Lingus, Aeromexico, Air France, Air India, Alitalia Airlines, All Nippon, American Airlines, Asiana Airlines, British Airways, Cathay Pacific, Copa Airlines, Etihad Airlines, Iberia, Japan Airlines, KLM Dutch Airlines, Korean Air, Lot Polish, Lufthansa Airlines, Mexicana Airlines, Royal Jordanian, SAS Airlines, Swiss Airlines, Turkish Airlines, United Airlines, Virgin Atlantic and USA 3000 with each Member designating its director and voting is based on a majority-in-interest basis. The airport does not have a voting or advisory role on the CICA TEC Board of Directors. There are also an Executive Committee, Management Committee and Technical Working Group which review, evaluate, and make specific recommendations to the Board of Directors.

Day-to-day Operations Management is provided by an aviation management firm, Aviation Management Services, with 3 full-time management professionals.

Scope of Services

The International Terminal Lease agreement with the City of Chicago outlines the scope of services as the maintenance and operations of the International Terminal 5 airline equipment and systems.

The following are included in CICA TEC's scope of services:

- Passenger Boarding Bridges
- Inline Explosive Detection System
- Potable Water
- Aircraft Hydrant Fueling

- Gate Scheduling and Assignment
- Baggage Handling System
- Pre-Conditioned Air
- Airline Passenger Services
- FIDS/BIDS
- IATA Schedule Coordination

Service Level

The Consortium Agreement with the City of Chicago outlines performance requirements for CICA TEC including standards of care and the submission of preventative maintenance records. CICA TEC imposes preventative maintenance frequencies on its equipment maintenance contractor, which maintains a computerized maintenance tracking system and provides monthly activity reports to CICA TEC. CICA TEC submits these activity reports to the City on a monthly, quarterly, and annual basis to comply with the Consortium Agreement requirements.

Risk Management

The following are the main benefits of establishing CICA TEC:

Financial. CICA TEC is able to manage the equipment maintenance operations at a lower cost than the airport could facilitate.

Procurement. Because CICA TEC is governed by the airlines and not a department of the City, it has much quicker, more efficient procurement procedures.

Project Management. CICA TEC intimately understands the operations of the terminal, so it has a competitive advantage in managing airline equipment projects.

The following were the main risks of establishing CICA TEC:

Foreign flag carriers were reluctant to commit to long-term leases, although they eventually did accept the long-term commitment.

At the time of terminal design, there was minimal international activity by the largest O'Hare carriers, and it was difficult to determine future international activity to properly size the facility.

Also it was not certain that there would be a single FIS facility serving the airport. Once that determination was made, it ensured that international passengers would pass through the terminal.

CICA TEC is different from the other airline consortiums because it is located at an airport where many airlines use other terminals for departing flights. As a result, the enplanements handled by CICA TEC are lower than expected, and consortium cost per enplaned passenger may be higher than expected.

The CICA TEC representatives recalled that the original business deal for CICA TEC allowed domestic hub carriers (UA and AA) to enplane departing international passengers out of their domestic facilities, while all other carriers were required to enplane departing international passengers out of the new international terminal. However, over time, many other airlines have also been allowed (through code-share agreements) to enplane departing international passengers from the domestic terminals, resulting in decreased enplaned passenger levels at the international terminal, and increased costs for the remaining carriers.

Financial Considerations

Capitalization Requirements. CICA TEC was originally capitalized with a total of $5,000,000. $2,500,000 was funded by a bank loan and $2,500,000 was provided by the stockholder airlines

as paid-in working capital. The bank loan has been paid in full. The airport provides no funding and is not involved in the CICA TEC invoicing process.

Cash flow is addressed by an invoice prepayment and reconciliation process. Each month the airlines make advance payments to CICA TEC for the next month's estimated M&O expenses. The monthly estimates are determined by the budget approved by the Stockholders. The prepayments are reconciled to actual expenses the following month.

Annual Operating Budget. CICA TEC has an operating budget in excess of $30,000,000 annually to provide services to the almost 6 million passengers who utilize the airport annually. The budget is prepared in August, presented to the Board of Directors no later than 2 weeks prior to the end of the fiscal year on September 30, and approved by the Stockholders at the October meeting.

Some major components of the annual operating budget include the following:

- $11 million terminal rent expense
- $4.9 million skycap and passenger service expenses
- $4.7 million debt service expenses
- $1 million office space rent expense

Budget performance reports are submitted monthly and annually to the Stockholders.

Rates and Charges. CICA TEC rates and charges are defined in the CICA Terminal Equipment Corporation Agreement, and are based on four cost centers: gate equipment, baggage, deicing and fueling equipment. Costs are allocated based on usage within each cost center. Member costs are allocated based on activity in each cost center, and non-members pay premiums over the member rates.

There is an annual independent CPA audit of CICA TEC's financial statements. The auditors also engage in a monthly review of invoicing, including agreed-upon processes and procedures. There are no other outside CICA TEC auditing requirements.

Regulatory Requirements

CICA TEC is subject to all federal, state, county, and local taxes.

Shortly after the terminal opened for operations, CICA TEC received a substantial leasehold tax bill, which repeats annually. The CICA TEC representatives have noted that this tax expense may have been largely avoided if the 110,000 square foot bag room, the largest of the areas leased by CICA TEC, had been instead assigned to the consortium as an easement.

While CICA TEC was formed as a non-profit corporation, it pays federal income taxes. The CICA TEC representatives indicated that the IRS has determined that the rates and charges premiums assessed to non-members by the consortium is classed as taxable income.

The airport requires the consortium to carry insurance and indemnify the airport, and the consortium requires each member airline to carry insurance and indemnify the consortium.

Performance Metrics

The Consortium Agreement with the City of Chicago outlines performance requirements for CICA TEC including standards of care and the submission of preventative maintenance records. CICA TEC imposes preventative maintenance frequencies on its equipment maintenance contractor, which maintains a computerized maintenance tracking system and provides monthly activity reports to CICA TEC. CICA TEC submits these activity reports to the City on a monthly, quarterly, and annual basis to comply with the Consortium Agreement requirements.

Consortium Formation Issues and Lessons Learned

The following comments were received for lessons learned:

The CICA TEC representatives reported that benefits of the consortium included operating and maintaining equipment under a legal entity structure. Previously, contracts were managed by groups of airline station managers without an over-arching legal entity that did not have contracting authority.

- The consortium has proven to be a very efficient entity for operational and financial management functions. Cost is a driving factor in all decisions, and the consortium has been able to keep expenses to a minimum.
- Would consider an easement alternative instead of lease of premises to avoid being charged the leasehold tax.
- Would make a distinction between airlines enplaning and deplaning out of Terminal 5. Currently airlines who enplane an international passenger out of a domestic terminal receive a financial benefit from retail/food and beverage sales in Terminal 5.

DENCO—DEN Consortium Denver International Airport

DENCO was formed in 2011 and does not have a defined expiration date.

Motivation for Consortium Formation

The DEN Consortium, LLC (DENCO) was formed as a Colorado Limited Liability Company in 2011 by nine airline members to act as the legal entity for the airlines to enter into a contract for the acquisition of deicing fluid at Denver International Airport (DEN). Continental Airlines previously held the contract with a vendor to provide deicing fluid to the airlines, however, Continental Airlines was not able to continue holding this contract.

Consortium Type

DENCO is a Colorado Limited Liability Company. This legal structure was recommended to the airlines by the consultant that prepared the financial and operating feasibility study. Legal, financial, and operating factors were all addressed by the LLC structure. The airlines wanted the consortium's income tax liability to remain with the consortium and not pass to them, and this concern was also addressed by using the LLC structure.

Consortium Feasibility

AvAirPros prepared a financial and operating feasibility study. The scope of services was narrowed to include only contract execution with the deicing fluid provider to ensure glycol is available for the airlines during the winter season.

Formation and Governing Documents

A law firm was not used for legal representation during the formation process, however, the airport assisted in the document review process, and the following provides a summary of the relationship among the governing documents:

Member Agreement. This establishes the organizational, financial and operational processes of the consortium and also serves as the bylaws of the company.

Non-Member Release. Non-Member airlines must execute a Non-Member Release to waive liability and hold the consortium and its members harmless.

Organization and Management Structure

The business activities of DENCO are governed by the DENCO Member Committee, which comprises nine member airlines: Alaska Airways, American Airlines, British Airways, Delta Air Lines, Frontier Airlines, JetBlue Airways, Skywest Airlines, UPS, and Southwest Airlines with each DENCO airline member designating its Member Representative, who participates on the DENCO Member Committee. The DENCO Member Committee is responsible for making all policy decisions for the consortium. Authority is delegated to an Executive Committee that comprises five Member Representatives including the Chairperson and the Vice Chairperson of the Member Committee. The Executive Committee expenditure authority is $25,000. Authority is also delegated to an Operating Committee that comprises two Member Representatives. The Operating Committee has no expenditure authority. The airport does not participate in DENCO as a member or in an advisory role.

The consortium does not have dedicated operations or administrative staff. Operations and Financial Management is provided by AvAirPros on a consulting basis to provide the operational and financial support necessary to support the DENCO operations.

Scope of Services

The current sole purpose of DENCO is to hold a contract with a vendor for the supply of anti-icing and deicing fluid. DENCO representatives have expressed an interest in expanding the scope of DENCO's responsibilities.

Service Level

There are no performance standards imposed by the airport on the consortium. Further, the consortium has not imposed performance standards on its deicing fluid provider, although the supplier must test the deicing fluid, equipment, and tanks to ensure specifications are met for each usage season.

Risk Management

The main benefit of establishing DENCO was to form an operating entity to legally contract with a deicing fluid provider in time to meet the winter season. There was limited risk involved in forming the DENCO consortium, because the consortium's scope is very limited and having no access to deicing fluid was an overriding driving force. Liability placed on glycol provider to perform maintenance on tanks and facilities in preparation for the winter season, along with maintaining appropriate glycol inventory.

DENCO recently issued an RFP for its deicing fluid services. The Operating Committee will review submittals and prepare a recommendation for the Member Committee, which will vote to determine the contract award.

Financial Considerations

Capitalization Requirements. Upon formation, the DENCO member airlines each paid a discounted membership fee of $5,000 to capitalize the company. No other funding has been needed, since the deicing fluid provider invoices the member airlines directly for their use of deicing fluid.

Annual Operating Budget. DENCO's operating budget is approximately $10,000 annually. The operating budget provides primarily for the administration of the consortium.

Budget performance reports are submitted annually to the Stockholders.

Rates and Charges. Annual operating costs are prorated by glycol usage among members and non-members, with non-members paying a 25% premium.

There is an annual compilation of the consortium's financial operations prepared by a CPA. The compilation relies on data provided by management, and an audit is not performed.

Regulatory Requirements

DENCO must address environmental issues since the location of the deicing operations allows for reclamation and recycling of the product, which could impact storm water.

Recently, DENCO has been asked to assume responsibility for a storage tank, which will require DENCO to procure general liability insurance and indemnify the airport.

Performance Metrics

Performance standards are not in effect between the consortium and the airport.

Consortium Formation Issues and Lessons Learned

The following comments were received for lessons learned:

The consortium was formed very quickly and efficiently to address an immediate airline need.

- Denver Airport is unique in that all parties are fairly collegial, making it easier to form a consortium. Forming a consortium has not changed this relationship between the airport and airlines.
- The airlines would like to see an increase in the scope of services under the consortium.

LAXSUL—LAX Shared Use Lounge Company Los Angeles Airport Tom Bradley International Terminal

LAXSUL was formed in 2006 without a defined expiration date.

Motivation for Consortium Formation

The LAX Shared Use Lounge Company, LLC (LAXSUL) was formed by nine original airline members to develop, finance, manage, and operate a new premium passenger lounge in the Tom Bradley International Terminal (TBIT) at Los Angeles International Airport (LAX). The Los Angeles World Airports (LAWA) initiated a renovation program for TBIT that included a consolidation of airline lounges. The airlines that did not belong to alliances needed to work together to develop a lounge for the common use of their passengers. LAXSUL was formed to provide these airlines an organizational structure to make decisions in common, and hold a lease and other contracts that would allow them to develop a new lounge.

Prior to the creation of the LAXSUL lounge, there were 16 lounges in operation at TBIT, and LAWA decided to consolidate the 16 lounges into four new lounges that were to be developed by (1) the Sky Team airlines, (2) the Star Alliance airlines, (3) the One World airlines, and (4) the remaining airlines that were not members of alliances.

The non-alliance airlines prepared and issued an RFP for the development of the lounge, including financing options. There were two replies to the RFP. AvAirPros proposed a consortium concept and the other company proposed a developer concept. AvAirPros was the only company to make a presentation. The airlines were in favor of the consortium concept under which they would each have an equal voice in the development and would share operating costs based on usage. AvAirPros was awarded the assignment to form the airline consortium, secure financing, and develop the new lounge.

Consortium Type

LAXSUL is a Limited Liability Company (LLC) organized in the State of Delaware. This legal structure was recommended to the airlines by the consultant that prepared the financial feasibility study because it was the most flexible and easily formed. The airlines did not want to provide up-front capital toward the development of the new lounge facility, making third-party financing necessary. The formation of the consortium allowed the airlines to jointly apply for, secure, and service the project financing loan. A law firm was not used for legal representation during the formation process, however, an attorney was engaged during the project financing process to ensure the financing documents were in order. The airlines submitted the consortium documents to their internal law departments for review.

Consortium Feasibility

AvAirPros prepared a financial feasibility study to estimate the operating costs of the new facility and to determine the amount of capital necessary for its development.

Formation and Governing Documents

An outside law firm was not used for legal representation during the formation process; however, an attorney was engaged during the project financing process to ensure the financing documents were in order.

The following provides a summary of the relationship among the governing documents:

LAWA Lease Agreement is an agreement with the airport that provides for the space where the lounge is located. During the negotiation of the lounge lease with LAWA, a provision was included in the Lease that required LAWA to pay LAXSUL the unamortized value of the lounge improvements, if LAWA were to cancel the Lease before the end of its term. In 2011 LAWA announced that the lounge lease would be terminated to make way for a new security-screening checkpoint. As a result, LAWA has paid approximately $2 million to LAXSUL, which will provide funds for the development of a replacement lounge.

Member Agreement sets forth the organizational, financial, and operational processes of the consortium and also serves as the bylaws of the company, including the cost allocation formulas.

Non-Member Agreement provides for the use of the LAXSUL facilities, equipment, systems, and services by non-member airlines.

Bank loan documents were in effect from the time the project financing was secured until the loan was paid off during 2012.

Organization and Management Structure

The business activities of LAXSUL are governed by the LAXSUL Member Committee, which currently comprises five member airlines: Air Tahiti Nui, China Airlines, El Al Israel Airlines, Fiji

Airways, and Philippines Airlines with each Member designating a Member Representative and voting is based on a majority-in-interest basis. The LAXSUL Member Committee is responsible for making all policy decisions for the consortium and is also responsible for providing direction to the contracted lounge manager and operators. The airport does not have a voting or advisory role on the LAXSUL Member Committee. There is also a New Lounge Development Committee, which reviews, evaluates, and makes specific recommendations to the Member Committee.

Day-to-day Operations Management is provided by a local management firm, ATM with a total of 27 full-time employees. ATM was chosen over five companies responding to an RFP process to staff the lounge and procure all supplies. ATM had already been operating some lounges in the airport and they had demonstrated an efficient operation.

AvAirPros provides the administrative and financial functions for the consortium on a part-time basis remotely to reduce costs.

Scope of Services

The consortium scope was to develop, operate, and maintain a new common use lounge, which became an airport mandate when LAWA decided that there would be four premium passenger lounges. The scope of the lounge was established through a consensus of the participating airlines during lounge development meetings.

Service Level

There are no performance standards imposed by the airport on the consortium.

The airlines established operating standards for the lounge as it was being developed, including lounge staffing levels, decor, amenities, and food and beverage selections. The operating standards have been refined over time to ensure that service levels meet or exceed member airlines' expectations.

Risk Management

The main benefits of establishing LAXSUL are the following:

Financial. LAXSUL is able to secure group financing for a common use lounge and to control the costs of that facility.

Operations. LAXSUL was able to establish a common facility with sufficient capacity so all member airlines could send their passengers and was able to improve service levels.

The main risks of establishing LAXSUL were:

One of the primary risks related to the formation of LAXSUL was the ability to secure capital funding for the new lounge. Also, because an extended period was required to secure the capital financing, the member airlines had to temporarily contribute capital to fund project start-up costs and design, with the aim of being reimbursed when the capital financing was in place. The $10,000 membership fee was insufficient to fund the project start-up and design costs. Therefore, the Members also each temporarily contributed $20,000 that was to be reimbursed to them when capital financing became available. If capital financing could not be secured, then the airlines would have to find another means of capitalization or walk away from their $30,000 investment.

LAXSUL Members agreed to pay a withdrawal fee when leaving the consortium, to help insulate the remaining participants from increased rates related to fixed cost obligations such as rent and project loan financing. To date four airlines have left the consortium: Japan Airlines (JAL), Air India, China Eastern, and Mexicana. JAL, Air India, and China Eastern withdrew on good

standing with LAXSUL and paid their membership withdrawal fee. Mexicana's departure was a result of its bankruptcy.

The loan documents that were implemented for the project financing included default provisions that also created a risk for the consortium. One of the default provisions required a minimum of seven LAXSUL members and a minimum of 150,000 lounge guests annually. Falling below these levels would place LAXSUL in technical default of its project financing loan, which could cause the loan to be called.

Financial Considerations

Capitalization Requirements. Upon formation, the LAXSUL member airlines each paid a membership fee of $10,000. Also, the Members each temporarily contributed $20,000 that was ultimately reimbursed to them when capital financing became available. The LAXSUL development project was initially funded with a $5 million bank loan issued for the project by 1st Century Bank of Los Angeles. The loan was funded in 2007 with a 7-year term, however, it was paid off in 2012. Capital reserves are collected from the member airlines using a per passenger surcharge. The airport provides no funding and is not involved in the LAXSUL invoicing process.

Cash flow is addressed by an invoice prepayment and reconciliation process. Each month the Airlines make advance payments to LAXSUL 2 months in advance for estimated M&O expenses. The budget is updated monthly based on actual operating costs, and the prepayments are reconciled based on actual activity.

Members are invoiced 2 months in advance based on estimated activity and charges are then reconciled based on actual activity. This advance invoicing methodology provides the consortium with its capitalization funding.

Annual Operating Budget. LAXSUL has an operating budget of approximately $4,000,000 annually to provide services to the passengers who utilize the shared use lounge.

Some major components of the annual operating budget include the following:

- $2,400,000 staffing and supply expense
- $600,000 rent expense
- $40,000 administrative expenses

Budget performance reports are submitted monthly to the member airlines.

Rates and Charges. LAXSUL has a single cost center. Costs are allocated to the member airlines on a per-use basis using the actual number of guests that use the lounge each month. The airlines are invoiced 2 months in advance, based on an estimated per guest usage rate and an estimated number of lounge guests, and this is reconciled to the actual costs and the actual number of lounge guests once the estimated month has been completed. Non-member airlines pay a surcharge to use the facilities.

There is an annual compilation of the consortium's financial operations prepared by a CPA. The compilation relies on data provided by management, and an audit is not performed. The bank loan documents required an annual audit, however, after the stability and reliability of LAXSUL was demonstrated, the audit requirement was waived as a cost saving measure. AvAirPros provides monthly financial reports with each invoice to the member airlines.

Regulatory Requirements

LAXSUL is required to pay city, state, and federal taxes as well as a possessory interest property tax paid to the County of Los Angeles. The State of California does not allow the

depreciation of capital assets as a deductible expense, which increases the amount LAXSUL is taxed in California.

LAWA requires LAXSUL to provide a letter of credit to provide security for the Lease, along with the appropriate level of general liability insurance and indemnification.

LAWA also requires the consortium to be compliant with its MBE/WBE participation goals.

LAXSUL must maintain proper health code programs, and has passed all food safety inspections. LAXSUL secured a liquor license that would allow it to serve alcoholic beverages in the lounge. This license has been maintained since the lounge opened in 2007 without any issues.

Performance Metrics

LAXSUL has no established performance metrics.

Consortium Formation Issues Lessons Learned

The LAXSUL representatives indicated that the consortium has functioned well and has fulfilled its objectives. The LLC structure has been flexible and allowed the Airline Members to work together successfully. It would be helpful in a small organization, however, if voting was done on a per capita basis instead of a majority in interest basis.

The LAXSUL representatives recommended early involvement of the consortium manager and the continuous involvement of the Member Airline representatives. They also recommended identifying a funding source prior to consortium formation, if possible, in the event that the consortium is being formed to develop a capital asset and capital funding is necessary.

Some of the most challenging areas include getting input from all of the airline members and building airline member consensus.

The consortium manager needs to be involved with all portions of the life cycle of the consortium.

The LAXSUL airlines started the process of forming the consortium, securing financing, designing and building their new lounge more than 2 years before the new lounge opened. This proved to be enough time to fit their circumstances.

OFFC—Oakland Fuel Facilities Corporation Oakland International Airport

OFFC was formed in 1989, and renegotiated in 2008 with a 2027 expiration date.

Motivation for Consortium Formation

OFFC was formed to economically use the airline member resources to provide fuel system maintenance and operations in a unified efficient manner. This was accomplished by replacing the airport-provided fueling services with an airline-operated fueling consortium. The consortium formation process was difficult due to a number of unresolved significant issues including necessary capital upgrades, project financing, lease negotiation term sufficient to amortize the facility improvement costs, and environmental issues.

A key motivating factor included the ability to secure third-party financing rather than utilizing Port funding, which allowed the airlines to manage the design and construction of the new fueling facility.

Consortium Type

OFFC is a non-profit corporation organized in the State of California. The law firm of Sherman and Howard represented the airlines in the formation process, and it is a fuel industry standard to utilize the non-profit corporation as the consortium business entity.

Consortium Feasibility

The Port Authority of Oakland (the Port) conducted a financial and operational feasibility as it pertained to the construction of the new fuel facility. Both the Port and the airline agreed that it was in the best interest of all entities to form a fuel consortium to address third-party project funding along with airline-managed fuel operations once the facility was completed.

Formation and Governing Documents

The law firm of Sherman and Howard provided legal representation throughout the negotiations with the Port and formation of OFFC. Sherman and Howard represents many fuel consortiums around the country, and is quite knowledgeable of the fuel issues including environmental concerns. The following provides a summary of the relationship among the governing documents:

Ground Lease Agreement establishes the consortium's scope of services as a Contracting Airline entity.

Interline Fuel Agreement establishes the role of each member airline, including voting rights.

Non-Contracting Users Agreement allows airlines that are not OFFC members access to the fuel facility to provide fuel to aircraft operations.

Organization and Management Structure

The business activities of OFFC are governed by the OFFC Fuel Committee, which comprises 12 member airlines: Alaska Airlines, Allegiant Air, Delta Air Lines, Federal Express, Hawaiian Airlines, JetBlue, Kaiserair, SkyWest, Southwest Airlines, United Airlines, United Parcel Service, and US Airways with each Member designating their director and having one vote per director. The airport does not have a voting or advisory role on the OFFC Board of Directors. There is also a Technical Committee which reviews, evaluates, and makes specific recommendations to the Board of Directors.

Day-to-day Operations Management is provided by a fueling management firm, Swissport, with a total of 13 fueling professionals including 4 Administration and 9 Operations positions.

Scope of Services

The Ground Lease Agreement with the Port of Oakland City outlines the scope of services as the management, maintenance, and operations of the Fuel Storage Facility and Distribution system.

The following are included in OFFC's scope of services:

- Aircraft Hydrant Fueling Systems
- Aviation Storage Facilities
- Fuel Ground Equipment

Service Level

There are no performance standards included in the Ground Lease Agreement, but it does require OFFC to provide certain permits, reports and system certifications to the Port. OFFC also provides Preventive Maintenance frequencies, system outages and reporting frequencies on an annual basis. Port staff monitors compliance on these issues.

The M&O Operator performs and records all preventive maintenance tasks at the facility, including ATA 103 standards to ensure fuel quality.

Risk Management

The main benefits of establishing OFFC are the following:

Financial. OFFC is able to secure third-party funding of the capital project necessary to upgrade the fuel facility, and manage the fuel facility maintenance operations more efficiently than the airport could facilitate.

Procurement. Because OFFC secured its own funding, it could design/build the fuel facility based upon its expertise, and provide much quicker, more efficient procurement procedures.

Project Management. OFFC provides proper airline fuel project management professionals, resulting in a more cost-effective quality fuel system. In the case of the Oakland Fuel Facility project, the OFFC members were able to complete the project $1 million under budget.

The main risk to OFFC member airlines involves the payment of the third-party loan secured by the Fuel Committee. But as is the case with possible airline bankruptcies, fuel is such an important piece of the operation that all members/nonmembers ensure payment of their invoices because they cannot operate without this commodity.

Financial Considerations

Capitalization Requirements. OFFC members pay a $25,000 membership fee, along with $1,000 capital contribution. Members and non-members must submit a security deposit based on 2 months of operating expenses.

Cash flow is addressed by an invoice prepayment and reconciliation process. Each month the Airlines make advance payments to OFFC for the next month's estimated M&O expenses. The monthly estimates are determined by the budget approved by the Members. The prepayments are reconciled to actual expenses the following month.

OFFC funded the $60 million fuel facility upgrade project through a bank loan with John Hancock. John Hancock conducts business with many fuel consortiums, and is comfortable with the concept.

Annual Operating Budget. OFFC has an annual operating budget of almost $9,000,000 to provide fuel system M&O services and make debt service payments. The budget is prepared in October, presented to the Board of Directors prior to the end of the fiscal year on December 31, and approved by the Fuel Committee at the January meeting.

Some major components of the annual operating budget include the following:

- $5.6 million debt service expenses
- $1.9 million ground lease expenses
- $0.8 taxes, legal, and audit expenses
- $0.7 million administrative and management expenses

Budget performance reports are submitted monthly as part of the invoicing process, and formally to the Members at the Annual Meeting.

Rates and Charges. OFFC rates and charges are defined in the Interline Agreement, whereby costs are allocated equally among the members based upon gallons uplifted, with a not-to-exceed 200% surcharge to non-members.

There is an annual independent CPA audit of OFFC's financial statements. There is also an ATA 103 financial audit conducted every 3 years.

Regulatory Requirements

OFFC is subject to all federal, state, county, and local taxes including property taxes on the ground lease.

The airport requires the consortium to carry $300 million general liability insurance and indemnify the airport.

Performance Metrics

OFFC provides Preventive Maintenance frequencies, system outages, and reporting frequencies on an annual basis.

The M&O Operator performs and records all preventive maintenance tasks at the facility, including ATA 103 standards to ensure fuel quality.

Consortium Formation Issues and Lessons Learned

The largest consortium formation issue was the lengthy negotiation process between the airport and the airlines. It was difficult due to a number of significant unresolved issues including necessary capital upgrades, project financing, lease negotiation term sufficient to amortize the facility improvement costs, and environmental issues.

The following comments were received for lessons learned:

- Both parties (airport and consortium) should figure out what terms and conditions are in their mutual best interests in the arrangement before getting the lawyers involved and running up legal expenses.
- Hire a competent operator. Have them complete an AIA Qualification Statement. Make sure the General Manager has sufficient experience to run the operation.

TOGA—Terminal One Group Association, L.P. John F. Kennedy International Airport—Terminal 1

TOGA was formed in 1994 with a 2028 expiration date, which coincides with the term of the project financing bonds and lease agreement with the PANYNJ, including optional extensions.

Motivation for Consortium Formation

TOGA was formed to develop, manage, and operate Terminal One at JFK Airport. The main benefit of the consortium was to manage and control costs, and for the partner airlines to influence their operations at the airport. The PANYNJ was the operator of Terminal Four and it was

not focused on lowering costs for the airlines. TOGA was formed so the airlines would control the terminal design, development, and construction process resulting in an improved passenger experience at reduced operating costs.

Consortium Type

TOGA is a Limited Partnership (LP) of four airline partners (Air France, Japan Airlines, Korean Airlines, and Lufthansa German Airlines) and a general partner, Terminal One Management, Inc. (TOMI) that is a New York Corporation owned by the four airlines. The general partner controls the LP. This structure was recommended by the law firm Rogers and Wells, based on their study of the various formation options. They suggested the LP as a method of assigning the majority of the income tax liability to the limited partners, who would not be liable for the tax as a result of their bilateral agreements with the U.S. Government. The airlines approved this structure after internal legal and financial reviews.

The general partner is a corporation with shareholders who vote to make the management decisions for TOGA. The shareholders are the four airlines who appoint shareholder representatives for voting purposes and TOMI officers who are responsible for the day-to-day operations of TOGA.

TOGA is differentiated from other airline consortiums because it is an LP with a controlling general partner corporation that is also made up of its member airlines. TOGA is also unique in that it controls the only international terminal in the United States developed, financed, and operated entirely by foreign flag carriers. TOGA has the largest operating budget of all the consortiums and the broadest scope of responsibilities including concessions management and subletting the facilities to non-member airlines.

Consortium Feasibility

AvAirPros prepared a financial feasibility study that compared the costs of a newly developed Terminal One with the cost of continuing operations at the old international arrivals building. The results of the study were favorable and supported the formation of TOGA.

Formation and Governing Documents

The law firm of Rogers and Wells provided legal representation throughout the formation of TOGA, and the following provides a summary of the relationship among the governing documents: The TOMI Shareholder Agreement created the General Partner, and the TOGA LP agreement created the Limited Partnership. Each airline executed a Facilities Use and Lease Agreement with TOGA to authorize the Terminal One development, to allow the airlines to use the terminal facilities and to provide for the allocation of costs to the airlines. The PANYNJ leased the site to TOGA through a site lease agreement and TOGA subleased the facilities to the New York City Industrial Development Agency (NYC IDA) for $1 in rent, to give them a leasehold interest. The leasehold interest allowed the NYC IDA to sub-sub-lease the facilities back to TOGA and provide $435 million in project financing.

TOMI Shareholder Agreement establishes each of the four airlines as a shareholder with equal ownership and voting rights and the ability to appoint an officer to be responsible for the day-to-day operations of TOGA.

TOGA Limited Partnership Agreement establishes each of the four airlines as a limited partner of TOGA and TOMI as the general partner with 1% ownership.

Terminal One Facilities Use and Lease Agreement authorizes TOGA to fund, develop, and operate JFK Terminal One, defining the rights of each of the airline partners to use the facilities including the cost allocation methodology.

Site Lease between the PANYNJ and TOGA leases the Terminal 1 site to TOGA and it requires TOGA to develop and operate a terminal facility. The lease also defines PANYNJ fees and rents.

IDA Lease Agreement between the NYC IDA and TOGA provides an arrangement under which the IDA agreed to provide bond funding for the development of the JFK Terminal One facilities and TOGA agreed to pay rent to the IDA equivalent to the principal and interest debt service on the bonds.

Contract Carrier Agreement allows Airlines that are not TOGA partners to use the facilities if they execute a contract carrier agreement.

Organization and Management Structure

The business activities of TOGA are governed by the TOMI Board of Directors, which comprises four member airlines: Air France, Japan Airlines, Korean Airlines, and Lufthansa German Airlines, with each Member designating its director and having one vote per director. The airport does not have a voting or advisory role on the TOMI Board of Directors.

TOGA is unique because each of the four members is financially obligated to the bonds that were issued to develop the terminal facility. Therefore, TOGA is the known exception to open membership for consortiums, because the original four TOGA member airlines are bound to remain owing to a project bond financing. As a result, additional airlines may be granted membership in TOGA only under special circumstances. It should be noted, however, that in addition to the four TOGA partner airlines, many other airlines use the TOGA facilities on a contract, non-partner basis.

Day-to-day Operations Management is provided by an aviation management firm, AvAirPros Services, with a total of 17 management professionals including 4 Administration and 13 Operations positions.

Scope of Services

The site lease agreement with the PANYNJ establishes the TOGA facility as a unit terminal. As a result, TOGA is a responsible for all aspects of the terminal, including all JFK Terminal One facilities, which includes airline equipment operations and maintenance, and passenger services.

The following are included in TOGA's scope of services:

- Passenger Boarding Bridges
- Inline Explosive Detection System
- Potable Water
- Public Area Custodial
- Aircraft Custodial
- Hydrant Fueling
- Ground Equipment Fuel Dispensing
- Deicing Storage Facilities
- Snow Removal
- Electronic Systems Facility Infrastructure
- Food & Beverage Concessions

- Public Advertising
- Baggage Handling System
- Pre-Conditioned Air
- Terminal Facilities Maintenance
- Airline Area Custodial
- Wheelchairs, Skycaps
- Fuel Storage
- GSE Maintenance
- Ramp Sweeping
- FIDS/BIDS
- Retail Concessions
- Vending Machines
- Way-Finding

Service Level

Service Level Agreements (SLAs) are included in all vendor service contracts held by TOGA. Construction contracts include milestone dates and specifications. Contract carriers are provided with 3 to 5 year contracts that include a 90-day cancellation provision. This provides the partner airlines the flexibility to modify their flight schedules. The contract carriers are provided a slot for usage of a gate at the terminal. Every airline contract requires the carrier to notify TOGA of a request for a slot time change that must then be approved by TOGA.

TOGA vendors must provide performance reports for the Baggage Handling System, Passenger Boarding Bridge maintenance, and all the various responsibilities under their scope of services. As part of the contract negotiations, the vendors include a PM schedule that TOGA approves and then uses to measure their performance. Each of TOGA's contractors and vendors are required to provide periodic performance reports. In some cases TOGA has access to contractors' online systems, so no formal reporting is required.

There is an annual meeting between TOGA and the PANYNJ to discuss TOGA's terminal performance.

Risk Management

The TOGA airlines (Air France, Japan Airlines, Korean Air, and Lufthansa German Airlines) took on a major risk in creating a new entity to develop an international terminal. This had never been done before by foreign flag airlines in the United States. These four airlines took on $435 million in debt, along with the schedule and cost risks associated with clearing the site and building a new terminal building.

The financial commitment which the partner airlines agreed to in the financing documents includes joint and step-up liability. If one of the TOGA airlines fall out, the other 3 airlines will step-up to the liabilities. The partner airlines all accepted this concept as part of the risk.

Financial Considerations

Capitalization Requirements. Upon formation the airlines each paid a membership fee of $2,500 to purchase shares in TOMI (total $10,000). Additionally the airlines each submitted to TOGA a promissory note equal to $247,500 (total $990,000). The promissory notes have never been drawn upon and are still outstanding. The airline partners have never paid a security deposit to TOMI or TOGA.

The Terminal One project was initially funded with $435 million of IDA revenue bonds that were issued in 1994 with a term through 2024. The bonds were re-financed in 2005 to take advantage of a lower interest rate and to provide an additional $30 million funding for an A380 gate modification project.

Near the end of the terminal development project, TOGA took two bank loans to provide capital project funding for necessary facilities that could not be funded by the IDA revenue bonds. These loans have since been paid off.

TOGA has established a line of credit of $8 million to hedge against shortfalls in funding for a current BHS project that relies on third-party funding sources, but has not had to draw on this LOC.

Annual Operating Budget. TOGA has an operating budget that is in excess of $100,000,000 annually. The budget is prepared in October and must be presented and approved by the partnership no later than 30 days prior to the end of the fiscal year on December 31.

Some major components of the annual operating budget include the following:

- $41 million IDA Bond debt service and other financial expenses
- $53 million operating expenses
- $19 million facility maintenance expenses
- $2 million administrative and management expenses

Budget performance reports are submitted monthly, quarterly, and annually to the partners.

Rates and Charges. TOGA has a very complex cost allocation model, with over 25 cost centers. The cost allocations and cost centers are defined by rules included in the Facilities Use and Lease Agreement. Due to the complexity of the model, it is difficult for the partner airlines to understand. The results of the model have been simplified and reduced to a cost per enplaned passenger rate to improve the airlines' understanding. The airlines are invoiced monthly based on this enplaned passenger rate and an estimated number of passengers, which is reconciled the next month to the actual number of passengers.

TOGA enters into contract carrier agreements with non-members and negotiates rates based on a number of factors, rather than charging the partner rate plus a percentage surcharge.

The cash flow is managed by TOGA's Executive Director and the TOGA Finance Manager.

There is an annual CPA audit of TOGA's financial statements. The airport also audits the PANYNJ fees from time to time. The last PANYNJ audit was 3 years ago. TOGA is also subject to trustee audits, but one has never been conducted.

Regulatory Requirements

TOGA is a taxable entity that passes 99% of its income tax liabilities to its limited partners and 1% to its general partner. As foreign flag airlines the limited partners are exempt from U.S. income taxes as a result of their bilateral agreements with the U.S. government. The general partner is allocated 1% of the partnership's tax liability, based on its ownership of the partnership.

The airport requires the consortium to carry insurance and indemnify the airport, and the consortium requires each member airline to carry insurance and indemnify the consortium. Withdrawn members (there are none) retain liability after departure.

Performance Metrics

Performance standards are not in effect between the consortium and airport other than default of lease if TOGA is not in compliance with the provisions of the site lease. There are also

gate usage "use it or lose it" provisions in the updated site lease that give the airport the ability to access underutilized assets. The utilization test is at the PANYNJ's discretion and there are no certain percentages that are used.

TOGA has established performance standards for vendor contracts but there were none identified for the first 7 years. TOGA has implemented SLAs for all vendor contracts.

Consortium Formation Issues and Lessons Learned

- The TOGA deal was difficult to close because the four partner airlines were from different countries, with different languages, cultures, and governance structures. It is important to bring the senior airline officers into the process early, keep them informed of progress, and consolidate approval processes at the local level to allow for expeditious decision making.
- The formation process was a lengthy one and various airline parties joined, withdrew and considered being part of the TOGA partnership up until the formation date. This created stress on the formation process and the airline parties.
- Needed to seek more involvement from Port executives early in the formation process so they understood and approved the importance of the consortium concept and the terminal development. This would create leverage during the financing and lease document negotiations.
- From a financial perspective a simpler cost allocation model would be easier for the airline partners to understand. The existing model needs to be explained frequently.
- It is important for airline decision makers to think on behalf of the consortium business, rather than the individual airline interests. It is difficult to bring all of the consortium elements into focus, focusing on what is best for the consortium.

APPENDIX E

Feasibility Study—Illustrative Example

AvAirPros

MEMORANDUM

Date: April 26, 2010

To: [redacted]

From: [redacted]

cc: [redacted]

Subject: San Antonio International Airport (SAT) Airline Consortium Study

The Terminal B Development Project at San Antonio International Airport (Airport) is nearing conclusion with completion scheduled for October 2010 and first operations in November 2010. The current Terminal 2 operations will be transferred to the new Terminal B, and Terminal 2 will be decommissioned and demolished in early 2011. The Airport and Airlines have requested a study to determine the financial feasibility of using an Airline Consortium to manage, maintain and operate certain assets and functions at the Airport including airline equipment, specific portions of the terminal facilities, and airline passenger services in both Terminals A (1) and B.

The airline consortium model has been successfully applied at a number of airports in the United States where a group of airlines have assumed responsibility for the operation and maintenance of equipment, systems and facilities. In each of these applications, the consortium was able to increase efficiencies, reduce costs, improve and standardize service levels.

Properly applied, the airline consortium structure provides:

- A layer of insurance and legal indemnification to the Airlines and Airport
- The appropriate level of contract administration and management of all subcontracted services
- A competitive bidding and selection of subcontracted services
- The flexibility to address the changing operational needs of the Airport.

The Airport and the Airlines are interested in applying the airline consortium model at the Airport with the consortium assuming responsibility for the management, maintenance and operation of designated equipment, systems and facilities…if it makes financial sense to do so. Prior to implementing an airline consortium at SAT, it is necessary to understand, document and analyze the conditions and opportunities unique to the Airport to demonstrate to all parties that the formation of an airline consortium is an appropriate and cost-effective means to manage, maintain and operate the designated equipment, systems and facilities.

The purpose of this report is to demonstrate the financial feasibility of an airline consortium at the Airport. To do so, the following tasks were undertaken:

- Conduct interviews of airline personnel, airport staff and Concourse B project personnel
- Perform site review and examine current operations
- Perform site review and examine new systems in new facilities
- Review airline and airport operating and maintenance budgets
- Review existing operations and maintenance contracts
- Document and quantify the designated airline consortium scope and desired service levels
- Evaluate the designated airline consortium scope and document findings
- Estimate the recommended consortium administrative and operations support staffing and budget requirements
- Estimate operations and maintenance budgets for the consortium, including start-up costs
- Evaluate alternatives and recommend a viable method for the capitalization of the consortium
- Build a financial model to demonstrate the estimated costs of an airline consortium and, where possible, compare the results with existing efficiencies, costs and service levels
- Prepare, distribute and present a report that documents the airline consortium scope, service levels and demonstrates the financial feasibility of the consortium

This report summarizes findings of this research and analysis effort. The report includes the following sections:

- Airline Consortium Organization and Staffing
- Airline Consortium Finances
- Site Review of Terminal B and Terminal 1
- Interviews with Airport and Airline Personnel
- Airline Consortium Preliminary Scope of Services
- Financial Feasibility and Budget Estimate
- Recommendation
- Next Steps

Airline Consortium Organization and Staffing

It is assumed for the purposes of this study that the new airline consortium will be organized as a Texas non-profit corporation to manage, maintain and operate certain Airport and Airline equipment, systems and facilities. Using this approach, it is also assumed that the new airline consortium will qualify and will be exempt from federal and state taxes.

The airline consortium governance will be determined by the airlines as the consortium is being implemented and will comply with any state laws affecting such organizations. It is expected that the consortium will have a board of directors with one representative appointed by each airline member, officers and an executive committee. Other committees may be formed as necessary and as determined by the members. The actual governance structure adopted should not affect the annual operating cost of the airline consortium.

It is also assumed for the purposes of this study that the new airline consortium will have no direct employees. Instead, it is assumed that the airline consortium will select independent vendors using a competitive bidding process for all necessary consortium services. It is anticipated that the airline consortium will comply with all necessary San Antonio procurement requirements including local MBE/WBE participation. It is also anticipated that the form of each service agreement will be approved in advance by the Airport, including all necessary provisions for insurance, indemnification, MBE/WBE participation and local ordinances.

It is expected that each service agreement entered into by the airline consortium will include a provision for conditional assignment of the agreement to the Airport, should it become necessary. The airline consortium structure will also have the ability to procure and manage capital projects should the Airport administration determine that this is an effective means to accomplish this work.

The day-to-day management of the contract oversight, financial and administrative functions will be administered by the airline consortium's General Manager's Office (GMO). The GMO will have two distinct areas of responsibility: Administrative and Operational Functions.

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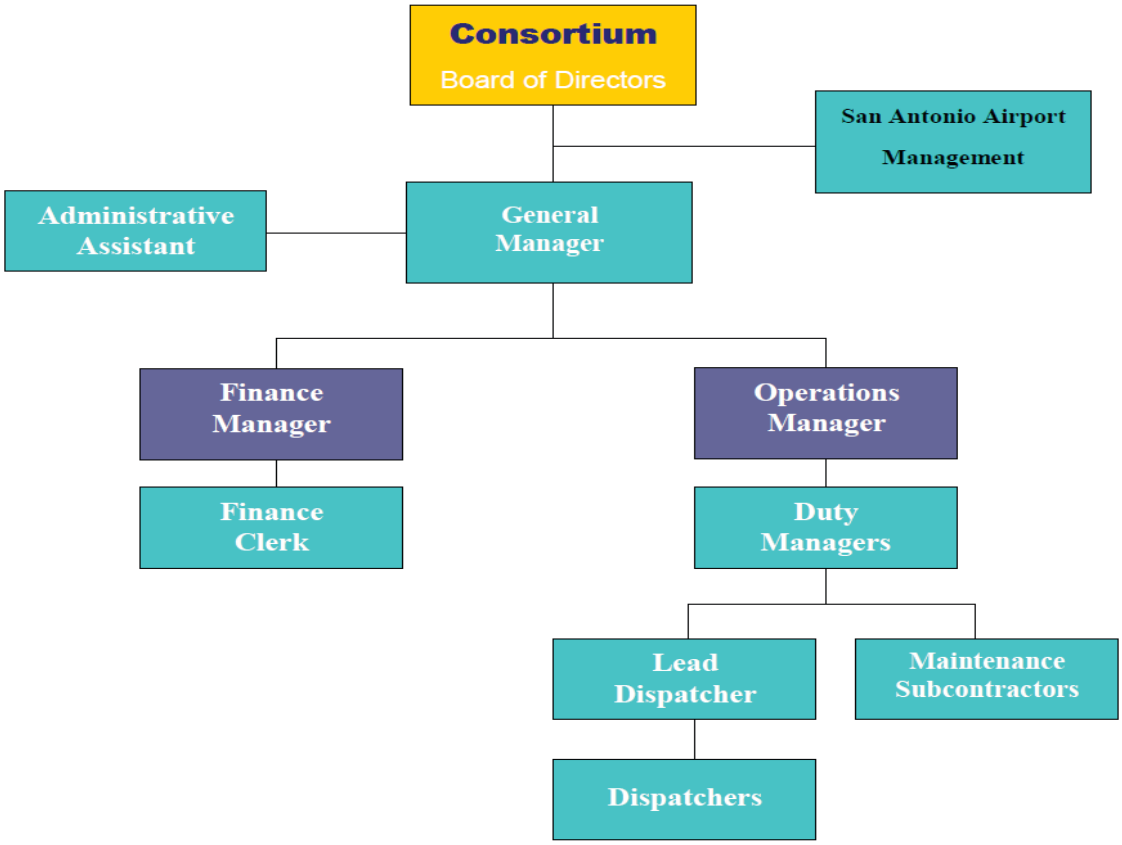
The following organizational chart outlines the GMO staffing and reporting structure:



The GMO Administrative Function will be accomplished by the General Manager, Operations Manager, Finance Manager, Finance Clerk and Administrative Assistant. They will be responsible for the following:

- Administer all agreements and contracts, monitoring timely and effective performance of responsibilities there under.
- Preparation of all Requests for Proposals ("RFPs"), issuing RFPs; receiving bids; tabulating bids; recommending the award of contracts; reviewing, commenting on and recommending the execution of contractor agreements for the operation and maintenance of all equipment and facilities
- Monitor, oversee and advise the airline consortium in connection with all financial matters relating to invoices, payments, expenses, billings, financial agreements, record keeping, and management of accounts.
- Collect operational data and calculate expense shares for all equipment and facilities.
- Maintain the General Managers office and perform all supervisory and managerial functions as required by the airline consortium.
- Study, analyze and recommend actions and present proposals, as required, on any issues affecting the airline consortium.
- Act as liaison between the airline consortium and Airport staff, airline groups, organizations, and other persons, as necessary.

- Attend meetings, conferences and other related industry functions as required by the airline consortium.
- Handle correspondence and administrative matters as required.
- Interact with legal counsel, accounting/auditor personnel, and others engaged by the airline consortium.

The Operational Function will be accomplished by the General Manager, Operations Manager, 4 Duty Managers, and a control room Dispatching staff. The Operations staff will provide 24/7 coverage for facility/equipment management and an onsite call center to address all operational requests. They will be responsible for the following:

- Define and draft training and operating procedures for airline, TSA and contractor personnel for the operation of the equipment, including the execution of contingency procedures.
- Recommend and coordinate the preparation and upkeep of a parts inventory list along with appropriate tracking and accountability requirements. Track and control equipment OEM warranty process.
- Assist in the preparation and review of all maintenance-related contracts and oversee and evaluate all maintenance-related contractual performance.
- Review daily service and equipment report logs and assist with all maintenance-related issues.
- Oversee and monitor the equipment operational performance for all equipment and support services.
- Coordinate with airlines, TSA, vendors and contractors, as required, to ensure that each airline receives the desired level of service.
- Specify, evaluate, recommend and/or administer policies, practices and programs necessary to ensure a safe and efficient operating environment.
- Maintain quality control standards for performance, reliability, serviceability and safety.
- Prepare and distribute quarterly/monthly/weekly/daily management reports.

It is planned that the GMO will utilize a Computerized Maintenance Management System (CMMS) which will allow for efficient use of resources. The CMMS will track labor allocation to specific equipment, produce preventive maintenance work orders and track for completion, and maintain stock inventory to ensure the appropriate levels of spare parts and materials. Our experience is that other airline consortiums have successfully utilized CMMS software provided by Datastream/MP2, which is purchased off-the-shelf and tailored to each application.

Airline Consortium Finances

It is anticipated that the airline consortium will prepare an annual budget that will be submitted to the Airport for inclusion in Airport rates and charges. The Airport will collect terminal rentals, equipment and passenger processing fees from the airlines and provide the necessary funding to the airline consortium.

Each month, the airline consortium will submit an invoice to the Airport containing an estimate of operating and maintenance costs for the upcoming month, excluding passenger processing services costs, if any. The Airport will pay this estimated amount to the airline consortium, which will then be responsible for direct payments to its vendors after actual costs are incurred. The airline consortium will reconcile the monthly payment received from the Airport for estimated costs to actual costs incurred, after the close of each month, and will provide the reconciliation to the Airport.

Additionally, the airline consortium will prepare its own internal budget for passenger processing services including skycaps, wheelchairs, ticket verification agents, etc., if applicable. The airline consortium membership will determine an appropriate cost allocation methodology for any such services provided by the airline consortium. The airline consortium will then invoice any user for services provided, receive payment directly from these users and pay its vendors on a monthly basis.

As a result of these processes, it is anticipated that the airline consortium will need very little direct capitalization and membership fees can be minimal.

It is planned that the airline consortium will provide full financial transparency to the Airport and Airlines, including budget preparation, administration, and documentation of contracts and invoices, supported by an annual year-end audit of revenues and expenses by an independent third-party accounting firm.

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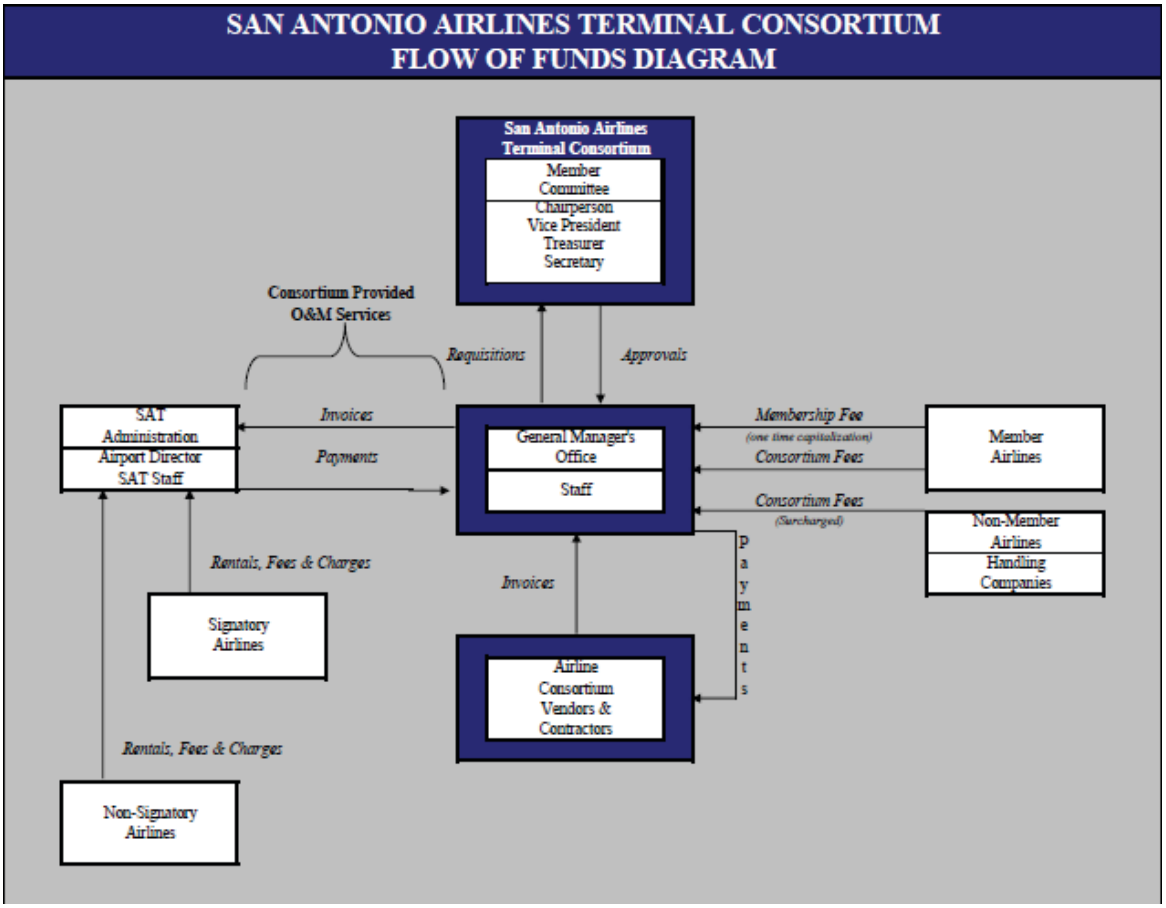
The following diagram illustrates the anticipated flow of funds if the airline consortium model is implemented as described above:



The impacts to the financial analysis included with this report as a result of the assumptions stated above in the Airline Consortium Organization, Staffing and Finances sections above may be summarized as:

- Texas non-profit corporation – No tax expenses included in analysis
- No airline consortium employees – No employee expenses included in analysis
- Independent Vendors provide all services – Estimated costs of service providers under contracts with the airline consortium included in analysis
- Funding – Airport rates and charges provide primary funding, therefore:
    - Capitalization – No capitalization costs included in the analysis
    - Membership Fees – Minimal membership fees required

Site Review of Terminal B and Terminal 1

AvAirPros made two field visits to the Airport to collect data and produced detailed site meeting notes at the conclusion of each visit. The field visits, which are summarized below, served to define the preliminary scope for the new airline consortium. The detailed site meeting notes from both site visits are included as attachments.

On the morning of Tuesday March 23, 2010, AvAirPros personnel [redacted] and Mr. [redacted] met with Terminal B Project Managers [redacted] and [redacted].

[redacted] provided a full construction status overview and a tour of the Terminal B Project. The overview included a review of plans for the Operations Premises, Arrivals Level, Departures Level and Bridge/Mechanical areas. Terminal B will be a 245,331 sq ft facility that will provide more efficient operations to the airport, airlines and the travelling public. The Terminal B facility will consist of 8 gates, with 6 gates available on the Date of Beneficial Occupancy (DBO). Gate B 3 will be available 6 months after terminal opening, and Gate B1 after the completion of Terminal 2 demolition.

[redacted] provided a full overview and tour of the new Terminal B Baggage Handling System including a review of the system layout and initial phasing plan. The Inline Explosive Detection System (IEDS) Project was procured under a design/build contract with Vanderlande Industries to manufacture and install a new conveyor system to efficiently process passenger baggage in accordance with TSA protocols. The IEDS includes 5 L3 Examiner 6300 units to screen baggage, a Checked Bag Resolution Area (CBRA), an OnScreen Resolution (OSR) room, and an Operations Control Room. The CBRA and OSR rooms will be staffed by TSA personnel to clear any suspect bags, and the Control Room will be staffed by airline consortium personnel to monitor system functionality.

Each L3 unit is manufactured to process 490 bags per hour, equating to a system processing capability of 2,450 bags per hour, which provides almost 20% additional capacity for future growth. System testing will occur in June and July of 2010, and the system will be fully commissioned for the opening of Terminal B.

[redacted] and [redacted] also met with [redacted] of the City of San Antonio and Central Utility Plant (CUP) Project Manager [redacted].

[redacted] and [redacted] provided a facility tour and overview of the CUP. The CUP is equipped with three 1,400 ton chillers that provide cooling supply to Terminal B, Terminal 1 and the FAA complex. A 4th chiller is planned to provide for future cooling needs. Heating is supplied by boilers in Terminal 1, and will be supplied by boilers in Terminal B. The CUP facility has been fully tested and is scheduled to open within 30 days. The original equipment manufacturer has provided training and suggested preventive maintenance schedules.

On the afternoon of March 23, 2010, [redacted] and [redacted] met with Airport Managers [redacted] and [redacted].

[redacted] and [redacted] provided a tour of Terminal 1, outlining current operations, equipment and systems. The temporary baggage handling system, which is currently maintained by Vanderlande Industries under a time and materials contract, was also toured. The contract is effective through December 2010, with a month-to-month option thereafter, and includes the 2 flat plate claim devices in the Federal Inspection Services (FIS) facility. The Airport owns a $50,000 spare parts inventory for these systems. Terminal 1 has 16 gates equipped with older model passenger loading bridges from various manufacturers. A project is currently under consideration to replace all Terminal 1 passenger loading bridges with new equipment from the manufacturer of the Terminal B bridges, since this would provide for more efficient maintenance and spare parts management. Custodial and maintenance issues related to public space, airline holdrooms, airline operations space, and concessions areas were also discussed.

Interviews with Airport and Airline Personnel

On the morning of Wednesday March 24, 2010, [redacted] and [redacted] met with Airport Vice President [redacted] and Director [redacted] in the Airport Administrative offices in Terminal 1. During this meeting, [redacted] summarized the previous day's activities and findings.

The main focus of the discussion was scope review and clarification for the proposed airline consortium. [redacted] suggested that in addition to the airline equipment and passenger services, the study should include the review of airline consortium management for all aspects of facility maintenance for Terminal B, Terminal 1 and the CUP: mechanical, electrical, plumbing, painting, custodial, trash removal, elevator/escalator, and automatic doors. The purpose of the increased scope review was to achieve operational and financial efficiencies.

[redacted] indicated that a 24/7 management and maintenance presence is essential in achieving these efficiencies. This can be accomplished through a central dispatch center utilizing a Computerized Maintenance Management System (CMMS) which will receive and track work requests, prepare preventive maintenance work orders, maintain appropriate inventory levels, and produce management reports necessary to ensure that superior service levels are achieved and maintained.

The City of San Antonio currently uses SAP software as its CMMS, but discussions are ongoing related to changing to a Maximo system. [redacted] stated that an off-the-shelf MP2/DataStream software system has proven successful in other airport applications.

[redacted] also outlined various areas to improve Airport and Airline operations and passenger experience:

- Dockmaster Operation to review the logistics of efficient concession deliveries
- Jet Fuel Storage Tank review based on capacity issues of the current 2 tank system
- Hydrant Fueling System review because current activity levels might support the financial feasibility of system installation
- Terminal 1 Passenger Loading Bridge Replacement Project
- Terminal 1 Facility Upgrade Project including lights, toilets, HVAC system, elevator/escalator rehab, and painting
- Consolidated Wheelchair Services to provide consistent passenger service from a single vendor, rather than the current split operations
- Passenger Assistance Agents at the Checkpoint during peak time periods

[redacted] requested that the Aviation department's Attorney join the discussion to outline the legal procurement requirements. Assistant City Attorney [redacted] joined the meeting and provided an overview on public bidding and MBE/WBE/Local Participation requirements. [redacted] stated she would provide Airport/City insurance and indemnification, current MBE/WBE, and full procurement procedure requirements.

Possible consortium funding mechanisms, rate and charges calculations, consortium invoicing and airline payment processing were also discussed.

The meeting concluded with the understanding that all information, document requests and meeting scheduling would be coordinated through [redacted] as point of contact.

On Wednesday April 14 and Thursday April 15, 2010, [redacted] and [redacted] conducted a second site visit to secure the balance of the required data. They met with the following individuals: [redacted].

With the assistance of the airport staff, a good deal of additional information was gathered, including hard copies and electronic versions of various drawings and documents, as well as verbal answers to nearly all outstanding questions.

An airline meeting is scheduled for May 4, 2010 to present the consortium feasibility report and receive the necessary wheelchair information regarding historical passenger assist activity from the current service providers.

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Airline Consortium Preliminary Scope of Services

The following preliminary airline consortium scope of services has been identified based on discussions and meetings with the Airport and the Airlines:

	Service Responsibilities		
	Airlines	Airport	Consortium
Consortium Management & Administration			
General Manager			✓
Operations Manager			✓
Financial/Clerical			✓
Duty Managers			✓
Administrative Assistant			✓
Dispatchers			✓
Ramp Services			
Snow Removal			
Airside		✓	
Landside Curb		✓	
Arrival/Departure/GTC Roadways		✓	
Ground Transportation Center (GTC) Curb		✓	
Striping			
Airline Ground Service Equipment			✓
Aircraft Safety Envelope			✓
Bagroom roadways			✓
Vehicle Service Road		✓	
Movement Areas (Taxiways & Taxilanes)		✓	
Gate Scheduling	✓	✓	
Gate Control	✓	✓	
Remote Aircraft Remain Overnight (RON) Scheduling		✓	
Deicing	✓		
Into Plane Fueling	✓		
Ground Handling (pushback/marshaling/Lav)	✓		
Provisioning/catering	✓		
Baggage Handling	✓		
Cabin Services	✓		
Overnight Aircraft Cleaning	✓		
Facility O&M Services			
Janitorial			
Holdroom			✓
Concourse			✓
Lobby			✓
Baggage Claim			✓
Airline Space			✓
Facility Inspection Service (FIS)			✓
Restrooms			✓
SAT Space			✓
Ground Transportation Center (GTC)			✓
Curbside			✓
TSA Checkpoint			✓
Parking Garage			✓
Airline Lounges (If applicable)			✓
Building Maintenance			
Airline Operations Spaces			✓
Public Spaces			✓
SAT Spaces			✓
Ground Transportation Center			✓
Window Washing			✓
Preventative Maintenance		✓	✓

	Service Responsibilities		
	Airlines	Airport	Consortium
Facility O&M Services - Continued			
Conveying Systems *(including GTC)*			
Elevators- Garage			✓
Escalators- Garage			✓
Elevators- Terminal			✓
Escalators- Terminal			✓
Waste Removal and Recycling			✓
Building Management System		✓	✓
Utilities (Electrical, Water, Gas, Sewer)		✓	
Light Bulb Replacements			
Apron		✓	
Holdroom			✓
Concourse			✓
Lobby			✓
Baggage Claim			✓
Airline Space			✓
FIS			✓
SAT Space			✓
GTC			✓
Heating, Ventilating, Air Conditioning System & Controls			✓
Security Systems		✓	
Closed Circuit Television (CCTV)		✓	
Paging System		✓	
Premise Distribution System*/Local Area Network*		✓	
Distributed Antenna System (n/a)			
Telephone System	✓	✓	
Airline Systems			
Passenger Boarding Bridges (PBBs)			✓
Aircraft Ground Power			✓
Aircraft Preconditioned Air			✓
Potable Water			✓
Multi User Flight Information Display System			✓
Common Use Passenger Processing System			✓
Baggage Handling System			✓
Hydrant Fueling	✓		
Battery Chargers	✓		
Dockmaster			✓
Diesel Load Rack (n/a)			
Triturator			✓
Fire System Testing & Inspections			✓
Keying System		✓	
Signage		✓	
Central Utility Plant (CUP)			✓
Automatic Doors			✓
Passenger Processing Services			
Ticket Verification Agents			✓
Skycap Services			✓
Ticket Agents/ Baggage Service Agents	✓		
Gate Agents	✓		
Wheelchairs			✓

The following is a description of consortium operations and maintenance contracts and other major components of an estimated budget for the first operating year of a new airline consortium at the Airport. Included with each description is a brief synopsis of the scope of work of that contract.

General Managers Office (GMO) - The GMO is the consortium's administration and operations staff at the Airport. The GMO will be responsible for enforcing the policies as set forth by the Consortium and its Agreements. The GMO acts as the interface between the Airlines and the Airport for all operations and maintenance activities performed by the consortium.

Because the GMO prepares all service vendor RFPs and implements the operational and financial policies and procedures of the consortium, it is important that this function be established as early as possible.

Airline Systems – The airline equipment operation and maintenance vendor will be responsible for the Inline Explosive Detection (IEDS) baggage handling system, all inbound and outbound baggage handling systems, including the FIS Facility. The scope of this contract will include the Passenger Loading Bridges, Preconditioned Air, Ground Power, Potable Water and Triturator systems.

As part of their preopening activities, the airline equipment operation and maintenance vendor will procure spare parts needed for maintenance of the BHS, passenger boarding bridges, preconditioned air system, ground power system, and potable water cabinets.

Janitorial - The janitorial vendor will be responsible for the public spaces of the Terminal facilities. These areas include landside, airside terminal, public restrooms, SAT offices and holdrooms. The budget includes all supplies, and window washing services.

Central Utility Plant/HVAC – The CUP/HVAC operation and maintenance vendor will provide all management, personnel, tools, equipment and spare parts to operate and maintain the CUP facility and HVAC systems in the terminal facility.

Building Maintenance - The building maintenance vendor will be responsible for all facility equipment and systems. These areas include airline operations spaces, restrooms, and other public operational areas of the terminal. The scope includes mechanical, electrical, plumbing, carpentry and painting services.

As part of their preopening activities, the building maintenance vendor will procure spare parts and special tools needed for performance of their duties.

Conveying Systems - The conveying system vendor will be responsible for maintenance of all elevators and escalators located in the Terminal facility and parking garage. This includes preventive and reactive maintenance, tools, equipment and spare parts.

Ramp Striping - The ramp striping contractor will be responsible for restriping aircraft safety envelopes, GSE equipment areas and bagroom on an annual basis.

Waste Removal - The waste removal vendor will be responsible for providing and emptying dumpsters and trash compactors within the Terminal facility.

Pest Control - The pest control vendor will be responsible for monthly treatments required in the Terminal facility.

Fire/Life Safety Systems – The vendor will provide testing and inspection of fire system, sprinkler system and fire extinguishers throughout the facility.

Automatic Doors – The vendor will provide monthly preventive maintenance, and reactive maintenance on an on-call basis. This contract will include all tools, equipment, parts and materials to service the automatic doors throughout the facility.

Dockmaster/Delivery Logistics – Additional information and scope definition is necessary for this responsibility. As a result, no cost estimate for this scope has been included in the analysis.

Contingency - A contingency amount equal to 10% of the estimated operation and maintenance services has been included in the analysis for unforeseen needs.

Utilities - Additional information and scope definition is necessary for this responsibility. As a result, no cost estimate for this scope has been included in the analysis.

Insurance - The consortium will secure general liability insurance covering all aspects of the facility and equipment in its scope of services.

Leased Premises – The leased area for the airline consortium has been identified to include administrative, operations, locker room, maintenance shop, and parts storage space at the anticipated rental rate of $117.49/sf/year.

Wheelchair Services - This vendor will provide personnel to push disabled passengers in wheelchairs in accordance with ADA standards. Vendor will provide uniforms and radios. Consortium will purchase wheelchair inventory.

Oversize Transport/Tub Runners - This vendor will provide personnel to move oversize baggage for TSA screening, deliver to airline bag makeup device, and place tubs at ticket counter for efficient use of the baggage handling system.

Passenger Assistants/Line Queuing - This vendor will provide personnel to assist in line queuing/escorting at security checkpoint during peak periods.

Capital Acquisitions – This scope includes the proposed capital acquisition of spare parts, tools, equipment, and service vehicles.

Financial Feasibility and Budget Estimate

Based upon the assumptions described earlier in this report, site visits, data collected, interviews with airport personnel, and AvAirPros' industry knowledge, we have analyzed the airline consortium proposed scope requirements and prepared an Estimated Airline Consortium Annual Operations and Maintenance Costs including passenger processing services and first year capital acquisitions. A summary of this estimate is presented on the next page and Attachment 1 provides additional detail.

The Total Annual O&M estimate includes all labor, material, supplies, tools and equipment to provide the services described in the Airline Consortium Preliminary Scope of Services for a full year. Staffing levels are based on aviation industry standards for terminal facility operations found in other airports. Wages are based on current economic and employment conditions in the San Antonio metropolitan area.

The Capital Acquisition estimate is based on estimated requirements for attic stock levels, spare parts, tools, equipment, and service vehicles necessary to support the consortium operation. This estimate assumes that current equipment, tools and attic stock owned by the airport is not available for use by the airline consortium. The estimate can be reduced if the airport's current inventory of parts, supplies and equipment were made available to the consortium operation. The inventory would need to be evaluated for appropriate levels of stock inventory, and the availability of useful existing janitorial and maintenance equipment.

Some areas of the estimate which require further refinement include the airline consortium leased premises rental payments, utility payments, general liability insurance requirements and payments, and dockmaster/delivery logistics operation.

Also, a meeting is scheduled with the SAT Airlines on May 4 to further discuss all aspects of passenger processing service levels, and review the proposed consortium organization, scope of services, and budget. The results of that meeting may impact the estimates presented below.

Estimated Airline Consortium Annual Operations & Maintenance Costs
San Antonio International Airport
April 30, 2010

		Total
Building/Equipment O&M Services		
General Manager's Office	$	1,245,743
Janitorial (Includes Supplies & Window Washing)		2,476,593
Central Utility Plant (CUP)/HVAC		363,000
Building Maintenance (Mech, Elect, Supplies)		1,426,200
Conveying Systems		193,243
Airline Equipment (BHS/PBB/400Hz/PCA/PWC)		2,172,250
Ramp Operation & Services - Ramp Striping		34,700
Waste Removal		100,000
Pest Control		21,920
Automatic Doors		45,000
Fire/Life Safety Systems		36,700
Dockmaster/Delivery Logistics		TBD
Subtotal	$	8,115,349
Contingency 10%	$	811,535
Utilities		TBD
Insurance		474,000
Non-Operating Expenses (Leases Premises)		546,329
Subtotal	$	1,020,329
Total Annual O&M/Utilities/Insurance	**$**	**9,947,213**
Passenger Processing Services		
Wheelchairs	$	1,066,803
OS Transport/Tub Runners		270,000
Passenger Assistants/Line Queuing		616,764
Passenger Processing Services	**$**	**1,953,567**
Total O&M Annual Costs w/Consortium	**$**	**11,900,780**
Total First Year Capital Acquisitions	**$**	**1,333,940**
Total First Year Costs - O & M plus Capital	**$**	**13,234,720**

These estimated costs were prepared based on the assumptions previously stated and will appropriate staffing and service levels to meet the Airport and Airline high service level expectations.

Recommendation

The report and analysis presented above were prepared based on a number of assumptions. It is recommended that these assumptions be evaluated for accuracy and that the report and analysis be adjusted if assumptions revisions are made.

Also, it is recommended that the airline consortium preliminary scope of services presented herein be evaluated for reasonableness and acceptance by the Airport and Airlines to ensure that all parties are in agreement with the scope that has been identified for the new airline consortium.

Additionally, it is recommended that the estimates presented herein be compared to Airport budget estimates for similar scope for the 12-month period that will begin with the opening of the new Terminal B to determine if a consensus can be reached on the feasibility of the application at the Airport of the airline consortium model as defined.

Next Steps

If it is determined that the airline consortium model is feasible and should be implemented at the Airport, the following next steps are recommended:

- Prepare a draft Consortium Agreement to document the agreement between the airline consortium and the Airport for the operations and maintenance of the airline consortium equipment, systems and facilities
- Prepare a draft Airline Consortium Members Agreement to document the agreement among the consortium member airlines related to the administration, management and operation of the consortium
- Prepare a draft Facility Access Agreement to document the rules that will apply to non-members of the airline consortium who desire access to and the use of the equipment, systems and facilities operated and maintained by the airline consortium
- Circulate the draft agreements for review, incorporate comments, and finalize
- Secure outside counsel and coordinate a due diligence review of the draft agreements
- Create the airline consortium and register it with the necessary governmental entities

Because the new Terminal B facilities are scheduled for first operations in November, time is of the essence if a new airline consortium is to be implemented. To meet this schedule requirement, the new airline consortium will need its primary vendors contracted and mobilized by approximately September 1.

AvAirPros

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To: SAT Airline Affairs Committee

From: [redacted]

Date: October 13, 2010

Subject: San Antonio Airline Consortium
Business Structure Review

As part of the ongoing discussions regarding the formation of an airline consortium to operate and maintain certain equipment and provide certain services at San Antonio International Airport (SAT), it is necessary to review and select one of the business structure options available for operations in the State of Texas. The business structure of the airline consortium needs to have the formal means to approve and implement long-term strategy, while remaining flexible to address day-to-day operations. The selected business structure must provide liability protection to its members. Additionally, each available structure has federal and state tax implications which also must be considered.

The intent of the airline consortium is to operate and maintain certain equipment and provide certain services. As such, the consortium should not own significant assets or generate profits (other than interest income).

This memorandum has been prepared to outline the options, provide a recommended business structure, and review the steps necessary to establish this business entity in the State of Texas.

It must be noted that AvAirPros is not an accounting or tax firm and is not qualified to provide tax advice. However, the following information is based on our research and is offered for your consideration.

Business Structure

Possible business structures available in Texas to the San Antonio Airline Consortium include:

- General Partnership
- Limited Liability Partnership
- Limited Partnership
- Limited Liability Company
- "C" Corporation
- "S" Corporation
- Nonprofit Corporation

To operate in Texas, a business entity must file a certificate of formation with the Texas Secretary of State's office. The Texas Secretary of State has published the Texas Business Organizations Code (BOC), which codifies the requirements for entities operating in Texas. The BOC applies to all new Texas corporations, partnerships, limited liability companies and other domestic filing entities created January 1, 2006 or later.

Additionally, the following Texas statues are applicable to the airline consortium structure research, and have been utilized in this study:

- Texas Business Corporation Act
- Texas Nonprofit Corporation Act
- Texas Limited Liability Company Act

Based upon the BOC and these Acts, we have outlined the description, characteristics and recommendation for each business structure option.

Limited Liability Partnership, Limited Partnership and "S" Corporation - The Limited Liability Partnership, Limited Partnership and "S" Corporation structures are "pass-through" entities that require income tax liability be passed on to their owners. Therefore, no further consideration will be given to these options.

"C" Corporation - A corporation is a separate legal entity with the characteristics of limited liability, centralization of management, perpetual duration, and ease of transferability of ownership assets. Shareholders are the owners of a corporation, while directors manage its day-to-day affairs.

The "C" Corporation is a separate taxable entity that files it's own tax returns and pays income taxes on any revenues in excess of expenses. Although this option provides limited liability protection to its shareholders, the lack of a profit motive in the consortium would better be served by the Limited Liability Company or a Nonprofit Corporation. Therefore, the research will focus on these business structures.

Limited Liability Company – The Limited Liability Company (LLC) is a hybrid entity that has the attributes of both a corporation and a partnership. The owners of an LLC are called "members." A member can be an individual, partnership, corporation, trust, or any other legal or commercial entity. Generally, the liability of the members is limited to their investment and they may enjoy the pass-through tax treatment afforded to partners in a partnership.

All LLC members have the right to participate in the management of the LLC, however, the members may adopt operating agreements to change this rule. When members choose to centralize management, it is referred to as "manager managed."

The limited liability feature of an LLC is an essential feature for an airline consortium, however, taxation as a partnership is a disadvantage. At the members' discretion, an

LLC may elect to be taxed as a Corporation, which transfers the tax liability from the members to the LLC.

Nonprofit Corporation - A Nonprofit Corporation is a corporation in which no part of the income is distributable to members, directors, or officers [BOC, Section 22.001(5)]. A nonprofit corporation may be created for any lawful purpose, or purposes permitted by the BOC. Not all nonprofit corporations are entitled to exemption from state or federal taxes.

The Nonprofit Corporation provides the limited liability protection that a "C" Corporation offers, but also allows for a tax savings providing the consortium meets the income requirements discussed below.

Tax Implications

Federal Income Tax – It is intended that the airline consortium will balance its revenues and expenses resulting in little or no annual excess revenues over expenses. Since the airline consortium will not produce an annual profit (or loss), it should not be subject to federal income tax. If the airline consortium has no profit or loss and interest income is less than $25,000 annually, it may be categorized as a nonprofit organization. When the airline consortium is categorized as nonprofit, it must file IRS Form 990 - Return of Organization exempt from Income Tax.

Further, to achieve tax-exempt status as a business entity, the entity must either apply for an IRS federal tax exemption as a charitable organization, or be a governmental entity. Because an airline consortium is not a charitable organization or a governmental entity, it would not qualify for tax-exempt status.

Sales Tax –Since an airline consortium will not be able to achieve tax-exempt status, San Antonio City Tax and Texas State Sales Tax will apply. The current total tax rate is 8.125%. Texas state law limits the overall tax rate to 8.25%.

Texas Franchise Tax – Corporations with a Texas charter and non-Texas corporations doing business in Texas must file a Texas franchise tax return.

The Texas Franchise Tax for corporations is calculated on the greater of the net taxable capital or net taxable earned surplus. Taxable capital is a corporation's stated capital (capital stock) plus surplus. Surplus means the net assets of the company minus its stated capital. Earned surplus includes the corporation's federal net taxable income, plus compensation to officers and directors of the company. For a limited liability company, surplus means the net assets of the company minus its member's contributions.

The Texas Franchise Tax tax rate on taxable capital is 0.25 percent per year. Corporations that owe less than $100 do not pay any tax.

Recommendation

The LLC provides the desired limited liability for the consortium and the airlines, however its tax implications would unneccesarily complicate the organizational structure of the consortium, From a tax perspective, there are two options available to an LLC. It can be taxed as a "flow-through" entity, whereby any income tax liability would be passed onto its owners (members). This was a major disadvantage with the Partnership and "S" Corporation structures. The other option is for the LLC to be taxed as a "C" Corporation. In this case the LLC itself would file and pay taxes, which was a major disadvantage with the "C" Corporation.

Based upon our research, the Nonprofit Corporation is the recommended business structure for the SAT airline consortium. As a corporation, this structure offers the limited liability desired to protect the consortium as well as the individual airlines. It also provides for a perpetual duration that is not offered in a partnership. Therefore, member airlines can change without the business structure itself changing. Because the consortium meets the qualifications of a Nonprofit Corporation, any potential federal income tax issues can also be avoided in this business structure.

Organizing a Corporation in Texas

The following steps are necessary for organizing a Corporation in the State of Texas:

- Select a business name for the corporation and check for availability
- Identify Registered Agent
- Elect and/or appoint a director or directors for the corporation
- Submit a certificate of formation ("articles of incorporation"), with a filing fee of $300
- Set corporation bylaws for governance
- Hold organizational meeting
- Request Employer Identification Number (EIN) from the IRS
- Open bank account

These steps can be easily achieved in a timely manner, which will allow for a functioning SAT airline consortium once the form of Member Agreement is finalized.

Please let me know any questions or comments.

APPENDIX F

Minimum Service Levels—Illustrative Example

AGREEMENT BY AND BETWEEN THE

DETROIT AIRLINES NORTH TERMINAL CONSORTIUM

AND THE

WAYNE COUNTY AIRPORT AUTHORITY

Exhibit D
Minimum Service Levels

Section 1.0 Overview

These Minimum Service Levels ("MSL") establish the minimum requirements to be maintained by the Detroit Airlines North Terminal Consortium ("DANTeC") for the DANTeC Facilities, Systems, and Equipment. Provisions of the MSL must be met or exceeded by DANTeC and DANTeC vendors. Failure to maintain the levels specified herein may constitute a default in accordance with the Agreement by and between the Detroit Airlines North Terminal Consortium and the Wayne County Airport Authority ("Consortium Agreement") Section 10.01 O and could result in a termination of the Consortium Agreement.

This Exhibit D may, from time to time, be amended in accordance with the Consortium Agreement Section 2.02 B.

Section 2.0 Goals and Objectives

The purpose of the MSL is to establish the minimum service requirements and quality standards to be maintained by DANTeC for DANTeC Facilities, Systems, Equipment, and Services to extend their useful life.

The goal of the MSL is to ensure excellent service levels for the WCAA and the North Terminal tenants.

The objectives of the MSL are to:

- Provide clear delineation of service ownership, accountability, roles and/or responsibilities.
- Present a clear, concise and measurable description of service provision to the WCAA.
- Match perceptions of expected service provision with actual service support and delivery.
- Provide the WCAA with transparent and accessible maintenance records.

Section 3.0 Stakeholders

For purposes of the MSL, the primary stakeholders shall be the provider, DANTeC, and the owner, WCAA. DANTeC will be responsible for implementing and maintaining the procedures and methods to achieve the objectives of the MSL. Other stakeholders include:

- WCAA Board
- WCAA CEO
- North Terminal Airlines

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- North Terminal Concessionaires
- North Terminal Customers

Section 4.0 Service Environment

The service environment for the MSL shall be the DANTeC Equipment, Systems, and Facilities as depicted in Exhibit A and described in Exhibit C.

In addition to the DANTeC Facilities, Systems, and Equipment, the following services to be performed by DANTeC are included as part of the MSL Service Environment:

DANTeC Services

- North Terminal Ramp Control
- North Terminal Waste Removal
- North Terminal Pest Control

Section 5.0 Periodic Review

DANTeC shall be solely responsible for ensuring the objectives of this MSL are met. The requirements of this MSL shall be reviewed upon request by the WCAA, or, at a minimum, once per fiscal year by the primary stakeholders with the first review on December 1, 2008. However, in lieu of a review during any period specified, the then current approved MSL will remain in effect.

DANTeC is responsible for facilitating regular reviews and updates of the MSL requirements. DANTeC will collect and compile comments to the MSL between review dates, incorporate all approved revisions, and implement any service level changes included in the revised MSL as soon as practical.

The MSL will be maintained and kept in the DANTeC General Manager's Office.

Section 6.0 Service Levels

The following detailed service parameters are to be implemented by DANTeC to achieve the objectives of the MSL.

6.1. Service Scope

The following services are covered by the MSL:

- DANTeC Facility Maintenance
- DANTeC System Maintenance
- DANTeC Equipment Maintenance

- DANTeC Ramp Control
- DANTeC Waste Removal
- DANTeC Pest Control

Although DANTeC will be performing these services, the WCAA and other tenants will also perform maintenance tasks that are separate from this MSL. Table 6-1 provides a clarification of responsibility for those services being performed in the North Terminal complex.

	North Terminal		
	Airline	**WCAA**	**DANTeC**
Management & Administration			
General Manager			✓
Operations Manager			✓
Financial/Clerical			✓
Duty Managers			✓
Administrative Assistant			✓
Dispatchers			✓
Ramp Services			
Snow Removal			
Airside		✓	
Landside Curb		✓	
Arrival/Departure		✓	
Striping			
Airline Ground Service Equipment			✓
Aircraft Safety Envelope			✓
Bagroom roadways			✓
Vehicle Service Road		✓	
Movement Areas (Taxiways & Taxilanes)		✓	
Gate Scheduling	✓		✓
Gate Control	✓		✓
Remote Aircraft Remain Overnight (RON) Scheduling		✓	
Deicing	✓		
Into Plane Fueling	✓		
Ground Handling (pushback/marshaling/Lav)	✓		
Provisioning/catering	✓		
Baggage Handling	✓		
Cabin Services	✓		
Overnight Aircraft Cleaning	✓		
Ramp Control			✓
Facilit y O&M Services			
Janitorial			
Holdroom		✓	
Concourse		✓	
Lobby		✓	

	North Terminal		
	Airline	WCAA	DANTeC
Facility O&M Services (continued)			
Baggage Claim		✓	
Airline/DANTeC Space			✓
Facility Inspection Service (FIS)		✓	
Restrooms		✓	
WCAA Space		✓	
Building Maintenance			
Airline Operations/DANTeC Spaces			✓
Public Spaces		✓	
WCAA Spaces		✓	
Window Washing		✓	
Preventative Maintenance		✓	✓
Conveying Systems			
Moving Walkways			✓
Escalators			✓
Elevators			✓
Building Management System			✓
Utilities (Electrical, Water, Gas, Sewer)		✓	
Light Bulb Replacements			
Apron		✓	
Holdroom		✓	
Concourse		✓	
Lobby		✓	
Baggage Claim		✓	
Airline/DANTeC Space			✓
FIS		✓	
WCAA Space		✓	
Heating, Ventilating, Air Conditioning System & Controls		✓	
Security Systems		✓	
Closed Circuit Television (CCTV)		✓	
Paging System			✓
Premise Distribution System/Local Area Network			✓
Distributed Antenna System/Master Clock System			✓
Telephone System	✓	✓	
Airline Systems			
Passenger Boarding Bridges (PBBs)			✓
Aircraft Ground Power			✓
Aircraft Preconditioned Air			✓
Potable Water			✓
Multi User Flight Information Display System			✓
Common Use Passenger Processing System			✓
Baggage Handling System			✓
Hydrant Fueling	✓		
Battery Chargers	✓		
Dock Master		✓	
Diesel Load Rack			✓

	North Terminal		
	Airline	WCAA	DANTeC
Facility O&M Services (continued)			
Triturator			✓
Fire System Testing & Inspections			✓
Keying System		✓	✓
Signage		✓	
Automatic Doors			✓
Waste Removal (Dumpsters)			✓
Pest Control			✓

Table 6-1 - Service Responsibilities

6.2. WCAA Requirements

WCAA responsibilities related to the MSL include:

- Providing DANTeC, Member Airlines, DANTeC vendors, contractors, agents and employees access to DANTeC Operations Area.
- Badging for DANTeC personnel
- Providing and maintaining the computerized maintenance management system (CMMS) to be used by DANTeC.
- Coordinating WCAA North Terminal maintenance and operation activities with DANTeC.
- Providing access to appropriate WCAA representative(s) when resolving a service related issue or request.
- Notifying DANTeC of MSL deficiencies.

6.3. DANTeC Requirements

DANTeC responsibilities related to this MSL include:

- Meeting response times associated with service related incidents.
- Generating reports on service levels for the WCAA (see Service Management).
- Training required staff on equipment and associated service support tools.
- Maintaining, storing, and procuring spare parts, tools, and accessories for DANTeC Facilities, Systems, and Equipment.
- Logging all DANTeC resource hours associated with services provided.

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- Providing appropriate notification to WCAA and North Terminal users for all scheduled maintenance (see Service Management).
- Facilitating all service support activities involving incidents, problems, changes, releases, and configuration management.
- Providing personnel with the appropriate qualifications and security credentials to perform their work.
- Performing all manufacturer-recommended preventative maintenance in accordance with the manufacturer's recommended schedule and specifications.
- Performing maintenance in the public circulation areas between the hours of 2100 and 0500 when practical to minimize passenger inconvenience and disruptions.
- Maintaining and repairing equipment in proper working order in accordance with manufacturer recommendations, specifications or standard industry practice, whichever is most stringent.
- Maintaining all life safety and code-required devices, lights, mechanisms, signage, placards, covers, strobes, bells and warning labels in good working condition. Repair or replacement of such items will be categorized as Critical as defined in Section 7.10 below.
- Maintaining a complete set of all records and making them available to the WCAA upon request, including preventative maintenance, reactive maintenance, corrective maintenance records, and inventory levels.
- Maintaining records of all user and maintenance training activities including trainer and trainees.
- Immediately logging maintenance activity in the WCAA-provided computerized maintenance management system (CMMS).
- Coordinating DANTeC maintenance activity that affects Airport operations or extends beyond the DANTeC Facilities with the WCAA and affected parties.
- Notifying the WCAA of any outages that (a) affect the public, or (b) are categorized as Critical as defined in Section 7.5 below.
- Staffing and maintaining a 24/7/365 dispatch office located in the North Terminal Operations Center (room 1480) to provide support to North Terminal users and maintenance activities.
- Providing a Duty Manager 24/7/365 who is responsible for all DANTeC activities.

Section 7.0 Service Management

The effective provision of in-scope services will result in consistent service levels. The following sections provide relevant details defining MSL requirements for service availability, monitoring, measurement, reporting, and other related components of in-scope services.

7.1. Primary System Availability Time Definition

The Primary System Availability Time ("PSAT") is defined as:

- 0500 to 2100 US Eastern Time
- Sunday – Saturday, 365 days per year

7.2. Service Maintenance Window Definition

All systems, equipment, and/or related components require regularly scheduled maintenance ("Service Maintenance Window", or "SMW") in order to meet established service levels. These activities will render systems and/or applications unavailable for normal use. DANTeC will coordinate all scheduled maintenance with the affected parties to minimize disruptions. Maintenance that impacts the public will be performed between the hours of 2100 and 0500 when practical.

7.3. Outage Definition

An Outage is defined as a temporary suspension of operation due to the failure of the equipment or system component or system software, rendering the system unusable for its intended purpose. An outage begins once it is reported to DANTeC dispatch, and will be deemed over once the equipment or system has been returned to service, or once a temporary solution has been implemented by DANTeC.

7.4. Availability Restrictions

Scheduled maintenance must be coordinated with North Terminal tenants and accommodate regular and irregular operations. Tenants and the WCAA must be provided the opportunity to make a proceed/abort decision prior to the start of scheduled maintenance.

7.5. DANTeC Facilities Service Standards

North Terminal

Janitorial services will be performed by DANTeC in the non-public areas of the North Terminal as well as the Passenger Boarding Bridges (PBBs). The services and the frequency with which janitorial services are to be provided are listed in table 7-1.

Janitorial Service Standards

Task	PBBs	Inbound/ Outbound Bagroom	Non-Public Restrooms	Non-public Circulation corridors/stairs	Airline/ DANTeC/ CBP Offices	Operational Support Areas
Empty trash containers	Daily	Daily	Daily	Daily	Daily	Daily
Clean trash containers	Weekly	Weekly	Weekly	Weekly	Weekly	Weekly
Vacuum and mop Floors	Daily	Weekly	Weekly	Weekly	Weekly	Weekly
Re-finish floors		Semi-Annually	Semi-Annually	Semi-Annually	Semi-Annually	Semi-Annually
Clean walls, partitions, and doors	Daily		Daily	Quarterly	Monthly	Monthly
Spot clean walls, partitions, and doors				Monthly	Weekly	Weekly
Clean and disinfect restroom fixtures			Daily			
Clean drinking fountains				Daily		
Clean sinks			Daily		Daily	Daily
Replenish supplies			Daily		Daily	Daily
Clean mirrors and partitions			Daily			
Power wash walls and floors		Annually	Monthly	Annually		

Task	PBBs	Inbound/ Outbound Bagroom	Non-Public Restrooms	Non-public Circulation corridors/stairs	Airline/ DANTeC/ CBP Offices	Operational Support Areas
Dust surfaces and vents	Daily	Monthly	Daily	Monthly	Daily	Daily
Relamp and clean fixtures	As needed	As needed	As needed	As needed	As needed	As needed
Remove graffiti	As needed	As needed	As needed	As needed	As needed	As needed
Replace light bulbs	As needed	As needed	As needed	As needed	As needed	As needed
Spot carpet care	As needed				As needed	As needed
Clean windows	Semi-annually	Semi-annually		Semi-annually	Semi-annually	Semi-annually
Steam clean/extraction carpets	Monthly				Semi-annually	Semi-annually

Table 7-1 : North Terminal Janitorial Service Standards

Definition of Janitorial Services

Empty trash containers - Carry container to cart and empty. Replace liner if necessary.

Clean trash containers - Spray inside of container with approved cleaner. Wipe out and replace liner.

Vacuum and mop floors. - Vacuum entire floor including edge vacuuming corners, baseboards, around furniture. Mop entire floor including edge mopping, around furniture.

Re-finish floors - Hard surface floors will be scrubbed and assessed for the amount of finish that will be applied to deliver a polished appearance.

Clean walls, partitions and doors - Wipe partitions, walls and doors clean with approved cleaning solution.

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Spot-clean walls, partitions and doors - Remove finger smudges, spots, or graffiti from walls and doors as required with appropriate cleaning materials.

Clean and disinfect restroom fixtures - Clean and disinfect restroom fixtures with an approved chemical.

Clean drinking fountains - Wipe all surfaces of fixtures with approved cleaner; polish bright work.

Clean sinks - Wipe all surfaces of fixtures with approved cleaner; polish bright work.

Replenish supplies:

Restroom supplies - Refill soap, towel, and toilet paper dispensers, making sure they are operational.

Break room and ready room – Refill soap and towel dispensers, making sure they are operational.

Clean mirrors and partitions - Wipe all surfaces of fixtures with approved cleaner.

Power wash walls and floors - Use pressure washer machine following manufacturer's direction and thoroughly clean the walls and floors of a hard surface area.

Dust surfaces and vents - Wipe down surfaces and dust surfaces which are free of objects, including vents, ledges, window sills, and cubicle partitions.

Relamp and clean fixtures - Set up ladder securely, remove or lower light cover and replace all bulbs in fixture. Using damp cloth with glass cleaner, wipe light cover and frame. Replace light cover and remove ladder.

Remove graffiti – Remove graffiti with an appropriate cleaning chemical/solution.

Replace light bulbs – Replace light bulbs in fixtures that are less than 12 feet above the finished floor.

Spot carpet care - Use carpet steam cleaner to appropriately clean the area that has been stained.

Clean windows – Use an approved cleaning solution to clean the interiors sides of windows and door vision panels.

Carpet steam/extraction clean - Clean entire carpet with steam cleaning machine according to manufacturer's instructions. Allow to dry overnight. Furniture moving is not included.

Building Maintenance

DANTeC will perform building maintenance services in the non-public areas of the North Terminal. This will include emergency, corrective, and preventative maintenance services. The areas in which DANTeC will perform building maintenance services are depicted in the DANTeC Facilities exhibit. DANTeC services for these areas are as follows.

- Wall repair for all non-public spaces. In areas where a wall divides public and non-public, the interior of the wall will be maintained by DANTeC, and the door and public side of the wall will be maintained by WCAA.
- Millwork in non-public spaces, airline baggage service offices, and common use system inserts will be maintained by DANTeC. Gate, ticket counter, curbside, and FIS recheck inserts will be maintained by the airline. All other millwork, including baggage wells, will be maintained by the WCAA.
- Electrical maintenance from and including the circuit breaker in the electrical panel to the wall outlet.
- Mechanical maintenance from and including the Variable Air Valve (VAV) and its controls to the vent.
- Ceiling/ceiling tile and grid repair.
- Plumbing repairs from and including the fixture to the plumbing main riser/main supply line valve or connection fitting.
- Floor repairs such as replacement of carpet, VCT, repair sealing of concrete in accordance with manufacturer recommendations and specifications.
- Testing of fire suppression system in accordance with the direction of the Authority Having Jurisdiction (AHJ).
- Annual touch-up painting of interior spaces
- Repair of doors and windows as required.
- Annual restriping of all North Terminal aircraft and GSE striping

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North Terminal Triturator

The North Terminal Triturator is a separate facility that is part of the North Terminal complex. The triturator is provided for the air carriers operating from the North Terminal. DANTeC will be responsible for maintaining the entire triturator building and its associated systems and equipment contained therein.

DANTeC will provide all building, systems, and equipment maintenance services for the triturator in accordance with manufacture-recommended specifications. A more detailed responsibility matrix is to be developed by DANTeC and the WCAA once the design of the Triturator facility is completed.

North Terminal GSE Fuel Load Rack

The North Terminal GSE fuel load rack is a separate facility that is part of the North Terminal complex. The GSE fuel load rack provides a common GSE refueling facility for air carriers operating in the North Terminal. DANTeC will maintain and operate the GSE fuel load rack and its associated systems and equipment in accordance with manufacturer recommended specifications.

7.6. DANTeC Systems Service Measurement

DANTeC will record and report the performance of the DANTeC Systems as a measurement of the service levels DANTeC is responsible for under this MSL, in accordance with the following table. DANTeC will strive at all times to meet or exceed these performance targets. Reporting requirements are defined in Section 7.9.

Measurement	Definition	Performance Target (Annual)
Baggage Handling System Availability (excluding EDS)	Percentage of time System is available outside of SMW.	95.00%
Common Use Passenger Processing System Availability	Percentage of time System is available outside of SMW.	90.00%
Multi-User Flight Information Display System Availability	Percentage of time System is available outside of SMW.	95.00%
Local Area Network/Premise Distribution System Availability	Percentage of time System is available outside of SMW.	99.00%
Distributed Antenna System Availability	Percentage of time System is available outside of SMW.	90.00%
Building Management System Availability	Percentage of time System is available outside of SMW.	95.00%

Measurement	Definition	Performance Target (Annual)
Paging System Availability	Percentage of time System is available outside of SMW.	98.00%
# of outages - Baggage Handling System	Number of outages lasting more than 30 minutes during the PSAT	No more than 12 per year or 6 per quarter
# of outages - Common Use Passenger Processing System	Number of outages lasting more than 15 minutes during the PSAT	No more than 12 per year or 6 per quarter
# of outages - Multi-User Flight Information Display System	Number of outages lasting more than 15 minutes during the PSAT	No more than 24 per year or 12 per quarter
# of outages – Local Area Network/Premise Distribution System	Number of outages lasting more than 10 minutes during the PSAT	No more than 4 per year or 2 per quarter
# of outages - Distributed Antenna System	Number of outages lasting more than 30 minutes during the PSAT	No more than 24 per year or 12 per quarter
# of outages - Building Management System	Number of outages lasting more than 15 minutes during the PSAT	No more than 24 per year or 12 per quarter
# of outages - Paging System	Number of outages lasting more than 30 minutes during the PSAT	No more than 12 per year or 6 per quarter
DANTeC Response Time - Critical	DANTeC response time for incidents categorized as 'Critical.'	95% in less than 15 minutes
DANTeC Response Time - High	DANTeC response time for incidents categorized as 'High.'	90% in less than 1 hour
DANTeC Response Time - Medium	DANTeC response time for incidents categorized as 'Medium.'	80% in less than 8 hours
DANTeC Response Time - Low	DANTeC response time for incidents categorized as 'Low.'	75% in less than 24 hours
DANTeC Response Time - General	DANTeC response time for incidents categorized as 'General Request.'	75% in less than 1 week

Table 7-2 DANTeC Systems Performance Targets

7.7. DANTeC Equipment Service Management

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DANTeC will record and report the performance of the DANTeC Equipment as a measurement of the service levels DANTeC is responsible for under this MSL, in accordance with the following table. DANTeC will strive at all times to meet or exceed these performance targets. Reporting requirements are defined in Section 7.9.

Measurement	Definition	Performance Target (Annual)
Passenger Boarding Bridges/Preconditioned Air/Ground Power Units	Percentage of time Equipment is available outside of SMW.	95.00%
Potable Water Cabinets	Percentage of time Equipment is available outside of SMW.	90.00%
Hydrant Fueling Carts/Trucks	Percentage of time Equipment is available outside of SMW.	95.00%
Moving Walkways	Percentage of time Equipment is available outside of SMW.	95.00%
Elevators	Percentage of time Equipment is available outside of SMW.	90.00%
Escalators	Percentage of time Equipment is available outside of SMW.	95.00%
Automatic Doors	Percentage of time Equipment is available outside of SMW.	95.00%

Table 7-3 DANTeC Equipment Performance Targets

7.8. DANTeC Services Management

Ramp Control

DANTeC will perform the ramp control services for the North Terminal. This includes ramp control and implementation of the North Terminal Gate Access Procedures. The service standards to be maintained by DANTeC are as follows.

- Staff ramp control tower 24/7/365
- Maintain constant radio communications with North Terminal airlines, FAA, and WCAA during aircraft operations and movements
- Coordinate, facilitate, and document Gate Planning Review Committee meetings
- Perform Gate Coordinator function
- Implement Gate Access Procedures
- Manage gate activity on the North Terminal Common Use Gates

Waste Removal

DANTeC is responsible for emptying five trash compactors located within the North Terminal. DANTeC will perform this service a minimum of once per day except Sunday, or as needed to prevent overfill of the compactors and deter rodent infestation. DANTeC will also adopt the WCAA's recycling program requirements.

Pest Control

DANTeC is responsible for performing pest control services in the North Terminal and Triturator facilities. DANTeC will perform bi-weekly inspections and apply monthly pest control treatments. Extermination and bird control services must be available for use on an as needed basis as determined by the WCAA or DANTeC.

7.9. Reporting

As part of this MSL, DANTeC will be responsible to provide the WCAA with reports related to the DANTeC Facilities, Systems, Equipment, and Services, each containing the information below. The reporting calendar will be the same as the WCAA's fiscal calendar (October 1 to September 30).

Monthly Report

DANTeC will submit to the WCAA a Monthly Status Report for DANTeC Facilities, Systems, Equipment, and Ramp Control. The Monthly Status Report will be provided within 14 days of the end of each month, and will include, at a minimum, the following information:

Facility Status Report

- Number of service requests by category
- Number of open service requests by category
- Number of closed service requests by category
- Schedule of major maintenance activities for the next two months

Systems and Equipment Status Report

- Overall availability for each DANTeC System and Equipment
- Number of outages for each DANTeC System and Equipment
- Number of service requests by system/equipment by category
- Number of open and closed service requests by system/equipment by category
- Schedule of major maintenance activities for the next two months

Ramp Control Report

- Average aircraft wait times from request to authorization for clearance to push
- Volume during peak periods
- Common Use Gate Activity
    - Air Carrier
    - Aircraft type
    - Activity type (turnaround, terminator, originator)
    - Time on gate
- Common Use Overnight Gate Rentals
- Common Use Gate Activity schedule for the next two months
- Common Use Overnight Gate Rentals for the next two months

Quarterly Report

DANTeC will submit to the WCAA a Quarterly Report for DANTeC Facilities, Systems, Equipment, and Ramp Control. The Quarterly Report will be provided within 30 days of the end of each quarter, and will include, at a minimum, a summary of the monthly status reports for each month in the quarter and the following information:

Facility Status Report

- Recurring issues and mitigation plan(s)
- Training activities
- Inventory levels

Systems and Equipment Status Report

- Recurring issues and mitigation plan(s)
- Training activities
- Inventory levels

Ramp Control Report

- Gate Planning Review Committee Reports
- Pushback congestion mitigation recommendations

Management Report

- Budgeted vs. actual expenses for each DANTeC vendor or contractor
- Projected expenses for the next quarter
- Issues related to the business processes established for DANTeC (e.g. payment processing, communications, reporting, etc.) and recommendation(s) for improvement
- Contractual issues related to DANTeC vendors and contractors

Annual Report

DANTeC will submit to the WCAA an Annual Report for DANTeC Facilities, Systems, Equipment, and Ramp Control. The Annual Report will be provided within 30 days of the end of year, and will include, at a minimum, a summary of the Quarterly Reports for each quarter in the year and the following information:

Service Level Report

- Systems and Equipment availability target
  - Percentage each system and equipment are available outside of the SMW compared to the targets in Section 7.6 and 7.7 above.
- Facilities, Systems, and Equipment response time
  - Amount of service requests received for systems and equipment by category.
  - Average DANTeC response time for each request category for all service requests compared to the targets in Section 7.6 and 7.7 above.
- System outages
  - Number of outages for systems and equipment compared to the targets in Section 7.6 and 7.7 above.
  - Time and duration of each outage
  - Cause of each outage
  - Effect or impact of each outage
  - Mitigation plan(s) to prevent future similar outages

Ramp control report

- Common Use Gate turns
- Common Use Gate activity projection

Ad Hoc Reports

The following Ad Hoc Reports will be provided at a specific time or on an as needed basis as indicated in the report description below.

DANTeC Budget Report

The DANTeC Budget Report will provide an estimated budget for all services of this MSL related to the DANTeC Facilities, Systems, and Equipment for the upcoming fiscal year. The DANTeC Budget report will be provided to the WCAA on or before June 1 of each year. The Budget Report will provide a breakdown of all DANTeC contract budgets included in this MSL as follows:

- Executive Summary
- Fiscal Year Budget Summary
- Budget Detail
  - Vendor/contractor name

- Vendor/contract number
- Vendor/contract description
- Vendor/contract duration
- Vendor/contract estimated budget

Incident Report

The Incident Report will be provided for any service request categorized as 'Critical' as defined in Section 7.10. The incident report will provide a copy of the service request and will include, at a minimum, the following information:

- Service request number
- Date of incident
- Time of incident
- Duration of incident
- Location of incident
- Description of incident
  - Cause of incident
  - Effect of incident
  - Resolution of incident
- Actions to be taken against offending party
- Mitigation plan to prevent future similar incident

7.10. Service Requests

In support of minimum service requirements outlined in the MSL, DANTeC will respond to service related incidents and/or requests submitted by users within the following time frames:

- Fifteen (15) minutes for issues classified as Critical.
- One (1) hour for issues classified as High priority.
- Eight (8) hours for issues classified as Medium priority.
- Twenty-Four (24) hours for issues classified as Low priority.
- Seven (7) days for a general service request.

7.10.1 Service Request Categorization

The DANTeC dispatcher will be responsible for assigning the appropriate category to each service request received. However, the following Service Requests will be categorized as 'Critical' regardless of the system, time, or location:

- Life safety
- Security
- Local Area Network
- Incidents of any kind that render a system completely unusable or prohibits the processes required to enplane or deplane passengers.

The following Service Requests will be categorized as 'High' regardless of the system, time, or location:

- Code violations
- Incidents of any kind that affect two or more parties (i.e., two airlines, two dependent systems, etc.).

As part of this MSL, DANTeC must develop an Incident Management Plan to fully describe all service request categories.

7.11. Service Exceptions

DANTeC will meet or exceed all service levels and standards contained herein. However, certain events are outside of the control of DANTeC and will affect the level of service that DANTeC is able to provide.

Unless caused by a DANTeC vendor or contractor, the following issues will be deemed outside the control of DANTeC and will not be factored in determining DANTeC's achievement of service levels:

- An act of negligence by tenants using or operating the DANTeC Facilities, Systems, or Equipment
- Loss of a North Terminal utility that affects DANTeC Facilities, Systems, or Equipment (i.e., electricity, water, gas, sewer, telephone)
- Fire or security event requiring the shutdown of DANTeC Facilities, Systems, or Equipment
- Force Majeure event as defined in Section 12.02 of the Consortium Agreement

Although DANTeC cannot control or eliminate these types of issues, DANTeC will mitigate them by providing refresher training to the responsible parties, or take alternative actions to mitigate future similar incidents. DANTeC will be responsible for notifying the responsible parties and providing backcharge support information to the WCAA as needed.

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Abbreviations and acronyms 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	National Cooperative Freight Research Program
NCHRP	National Cooperative Highway Research Program
NHTSA	National Highway Traffic Safety Administration
NTSB	National Transportation Safety Board
PHMSA	Pipeline and Hazardous Materials 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