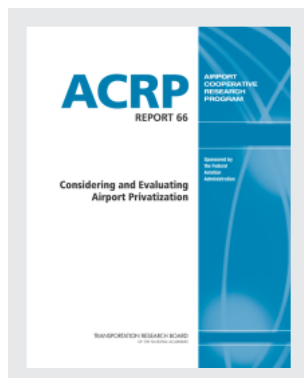


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AIRPORT COOPERATIVE RESEARCH PROGRAM

ACRP REPORT 66

**Considering and Evaluating
Airport Privatization**

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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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The members of the technical panel selected to monitor this project and to review this report were chosen for their special competencies and with regard for appropriate balance. The report was reviewed by the technical panel and accepted for publication according to procedures established and overseen by the Transportation Research Board and approved by the Governing Board of the National Research Council.

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AUTHOR ACKNOWLEDGMENTS

This guidebook (the “Guidebook”) was prepared as part of ACRP Project 01-14 by a research team of recognized experts in airport business, finance, governance, law, and privatization. LeighFisher was the primary research consultant. Sheri Ernico, Director at LeighFisher, was the Principal Investigator. The other authors were Steve Van Beek of LeighFisher/Eno Transportation Foundation for the emerging domestic issues and policy matters; Dan Reimer of Kaplan Kirsch & Rockwell LLP on the regulatory and policy framework; Simon Morris, Richard Sharp, and Jessica Dahlstrom of LeighFisher on international airport privatization; Phil Bates of LeighFisher on the non-airport privatization in the U.S. transport sector; Bruce Boudreau of LeighFisher who contributed to conceptual content; Matt Townsend of LeighFisher who assisted in the JFKIAT and Indianapolis case studies; Dave Vondle of Vondle & Associates who assisted on the Stewart International Airport case study; and Ann Graham of the University of Westminster who assisted with the literature search and reviewed the international airport privatization chapter.

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FOREWORD

By Theresia H. Schatz

Staff Officer

Transportation Research Board

ACRP Report 66: Considering and Evaluating Airport Privatization is a guidebook that assists airport operators, policy makers, and other relevant stakeholders as they consider and analyze the potential advantages and disadvantages of implementing various approaches to airport privatization. The guidebook covers a range of potential privatization options, from service contracts to private airport ownership or development. In addition, the guidebook includes case studies conducted at a variety of airports both within the United States and internationally.

Interest in airport privatization is increasing, especially as local and regional governments look for ways to make their airports as efficient, competitive, and financially viable as possible. Consideration by communities, governing boards, airport officials, and other stakeholders on whether to privatize all or part of an airport is a significant decision with long-term impacts. As such, the decision-making process must ensure that a thorough and complete review is undertaken, so financial and other implications of privatization are fully understood and, hence, an informed, transparent decision can be made. Private-sector participation in airports—through ownership, operation, management, or new investment programs—can take many forms, including outsourcing certain functions; management contracts; public-private partnership (P3) agreements; design-build-finance-operate developments; outright sale or long-term lease of assets; and other private finance initiatives. Full airport privatization has been adopted or considered in various forms at many foreign airports but only at a limited number of U.S. airports while a wide range of partial airport privatization has existed at U.S. airports for many years.

The Airport Privatization Pilot Program, under 49 U.S.C. Section 47134, provides a limited number of airports in the United States with a special vehicle for full airport privatization, including certain exceptions from existing legal disincentives, and continues to generate discussion among airport operators and owners, governing boards, and airport officials. Although there have been a number of applications for the program since it was created in 1996, only one applicant completed the process as of this publication (Stewart International Airport), which subsequently reverted back to public operation. As the discussion of these issues continues, U.S. airport stakeholders can benefit from an objective presentation of the international experience with airport privatization and the relative advantages and disadvantages of privatization for U.S. airports.

This report was developed under ACRP Project 01-14. Also contained in the guidebook are Appendices A and B; Appendices C through H, which provide additional background information as part of the research conducted in preparing the guidebook, are on the CD.

It is understood that the research was concluded as of December 2011 and there are currently some federal regulatory changes being contemplated. For example, the FAA is currently revisiting its policy on the issue of waiving the repayment of federal grants for airports privatized outside the Airport Privatization Pilot Program. Please keep in mind, there are several references in the guidebook with respect to this one issue for full privatization outside the APPP that could be impacted by the FAA's contemplated change in Order 5190.6B. It is recommended that the user of the guidebook reference the most current legislation and policy in place at the time.

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

CHAPTER 1

Summary

1.1 Purpose and Objectives of Guidebook

Local and regional governments continue to look for ways to make their airports as efficient, competitive, and financially viable as possible, as well as ways to maximize the community's return from their airport assets. Communities have and continue to promote private sector participation in airports in pursuit of these goals. Consideration by communities, governing boards, airport officials, airlines, investors, and other stakeholders on whether to enlist or expand private sector participation in an airport can be a significant decision with long-term consequences.

The objective of this research is to develop a guidebook on airport privatization that assists U.S. airport owners, policy makers, and other relevant stakeholders as they consider and analyze the potential advantages and disadvantages of implementing various approaches to airport privatization. The guidebook is intended to be a comprehensive resource that summarizes in a concise and easy-to-understand format the various options for private sector involvement in the operation, management, and financing of airports in the United States and provide the tools necessary to evaluate such options to make sound decisions about potential privatization initiatives.

Because the goals, objectives, opportunities, strategic priorities, and challenges differ from one airport sponsor to another, each situation should be evaluated on its own merits. Moreover, the decision to privatize is often made in a broader context by the policy makers or the airport owner.

Privatization does not have to be an all-or-nothing solution; the airport owner can choose to privatize portions of an airport's management and operation. The guidebook identifies and outlines realistic options and highlights a variety of successful and unsuccessful privatization initiatives through case studies examples. The decision matrix in the guidebook helps a community and an airport owner identify and evaluate

the appropriate ways to enlist the support of the private sector given its unique situation.

1.2 Privatization Motivations and Drivers

The potential benefits of airport privatization have been identified to include: (1) access private capital for development, (2) extract an upfront or ongoing payment for the airport asset (monetize the asset), (3) stimulate air service and airline competition, (4) introduce more innovation and creativity, including entrepreneurial ideas in the development of nonairline revenue, (5) secure long-term efficiencies in operation and maintenance and enhance customer service, (6) shift the risk of debt, capital development, and/or operations to the private sector, (7) accelerate project delivery and reduce construction costs, (8) reduce reliance on general tax levies, and (9) de-politicize airport decision making (Figure 1.1).

1.3 Generic Privatization Models

Privatization refers to the shifting of governmental functions, responsibilities, control, and in some cases ownership, in whole or in part, to the private sector. The term "airport privatization" is often understood to mean the transfer of an entire airport to private operation and/or ownership, but private sector involvement at airports can take many forms.

Figure 1.2 illustrates the potential range of strategies available for private sector participation in airport management, operation, and development under four generic privatization models. The range extends from the least level of private involvement to the most private sector involvement. A critical distinction is made between:

- **Partial Privatization**—Partial privatization refers to strategies where partial control and at least a portion of ownership remains with the public owner.

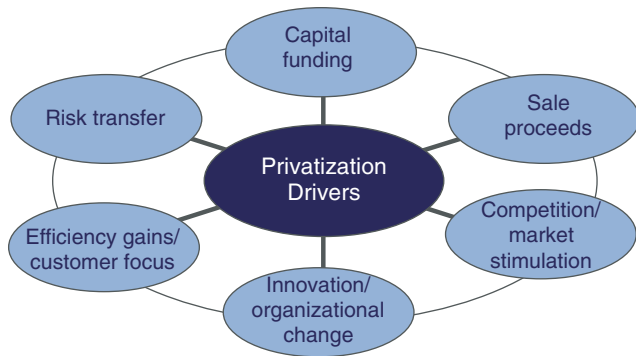


Figure 1.1. Key motives to privatize.

- Full Privatization—Full privatization refers to strategies where the complete control and/or operation of an entire airport are vested with a private entity through a long-term lease or sale (either under or outside the Airport Privatization Pilot Program or APPPP).¹

1.4 Examples of Specific Strategies

Figure 1.3 shows examples for specific strategies within each privatization model, which are presented in more detail in each respective chapter.

1.4.1 Service Contracts

Contracting services or outsourcing refers to the delegation of non-core operations from the public sector to a private entity that specializes in the operation, maintenance, or management of that activity. Although most U.S. airports outsource at least some services or functions, a number of airports have been considering more extensive opportunities for outsourcing of functions such as fire services currently provided by many municipal departments.

Examples for outsourcing services are shown in Table 1.1.

1.4.2 Management Contracts

Airport owners can contract out the management and operation of parking facilities, terminal concessions, ter-

¹The Airport Privatization Pilot Program was created to test a new method for increasing private participation, and especially private capital, in airport operations and development. Through legislation enacted in 1996 and amended in 2003 and 2012, Congress lowered several barriers to privatization that had been identified during a debate on the subject, including the prohibition on revenue diversion. Congress limited the scope of the program and imposed certain conditions on approval, and the FAA later adopted procedural requirements for applicants seeking to participate in the program. Please see Chapter 6 for a detailed description.

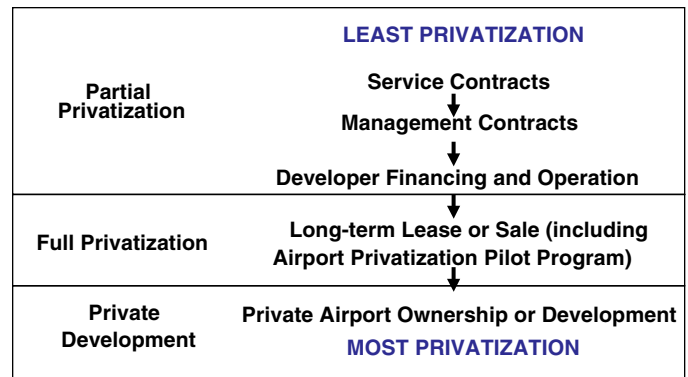


Figure 1.2. Airport privatization continuum generic models.

minal operations, reliever airports, or their entire airport system to private operators. Management contracts for parking operations are particularly prevalent. Contracts for the management of an airport or airport system exist at large and small facilities. At general aviation airports, the airport management company also may serve as the fixed-base operator, providing aeronautical products and services to airport tenants and users.

An example of the allocation of responsibilities and control for a full airport system management contract can be found in the Indianapolis Airport Authority case study (see Chapter 9 and Appendix H). The scope of services for the Indianapolis contractor was organized into three components, with functions as summarized in Table 1.2.

In Indianapolis, the contractor was charged with administering and enforcing all agreements maintained by the airport authority, subject to the policy decisions of the board. The contractor was responsible for managing the implementation of capital improvements, subject to approval by the board and any other responsible parties (e.g., the FAA) in compliance with all governmental regulations.

The airport authority retained under its control the following functions:

- Airline use agreement compliance
- Compliance with the authority's obligations under the law and under federal grant agreements
- Air service development policy
- Debt issuance policy
- Rates and charges policy
- Long-range planning
- Land acquisition and development policy and planning
- Airport industrial and economic development policy
- Environmental policy
- Capital expenditure policy and implementation of capital improvements

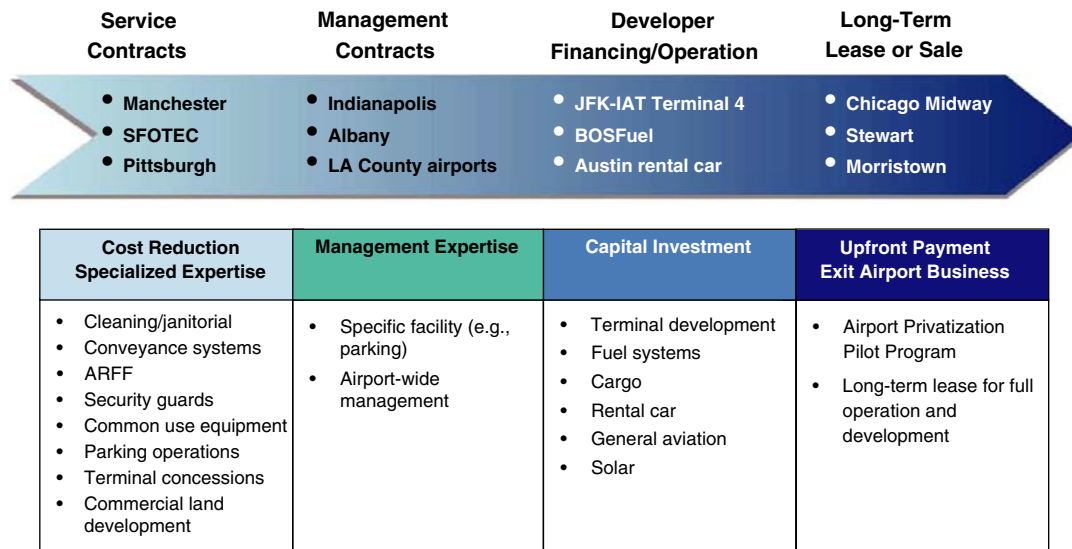


Figure 1.3. Examples of privatization strategies.

Table 1.1. Examples of outsourced services.

Traditional	Less Typical
<ul style="list-style-type: none"> Maintenance services (e.g., janitorial, window cleaning, landscaping) Conveyance systems (e.g., elevators, escalators, moving walkways) Mechanical systems (e.g., HVAC) Airline equipment (e.g., baggage systems, jetways, pre-conditioned air, common use equipment) People mover systems Shuttle bus operations Financial planning Financial advisory Planning studies (e.g., master plans) Architectural, engineering, design Construction inspection Construction management Program management 	<ul style="list-style-type: none"> Terminal concession management Commercial land development agents Aircraft rescue and firefighting services (ARFF) Law enforcement Security guards

Table 1.2. Airport-wide management contract responsibilities at Indianapolis.

Terminal Services	Airfield Support Services	Administrative Support Services
<ul style="list-style-type: none"> Terminal maintenance and janitorial Terminal operation Terminal concessions Parking and rental car Terminal advertising Grounds maintenance Terminal security Planning and engineering for terminal Terminal land development 	<ul style="list-style-type: none"> Airfield maintenance/snow removal Ramp operations Airfield signage/navigation Fire and rescue Reliever and general aviation airports and heliport Non-terminal buildings maintenance FBO and general aviation facilities maintenance Vehicle maintenance Intermodal and cargo support Airfield planning and engineering De-icing Airside land development Airside security Fuel farms and fill stands 	<ul style="list-style-type: none"> Finance and accounting Grant management Management information systems Public relations, including noise abatement programs Human resources management Purchasing and contracts management Administration of bond issuance Administration of PFC collection and accounting Land acquisition and relocation implementation Legal Air service marketing, including freight

Table 1.3. Alternative strategies for developer financing and operation.

Approach	Design	Build	Operate & Maintain	Finance	Transfer at End of	
					Construction	Lease
Construction Manager at Risk	♦	♦			♦	
Design-Build-Operate-Maintain	♦	♦	♦			♦
Build-Transfer-Operate		♦	♦		♦	
Build-Operate-Transfer		♦	♦	♦		♦
Design-Build-Operate-Transfer	♦	♦	♦			♦
Design-Build-Operate-Maintain and Finance	♦	♦	♦	♦		♦

1.4.3 Developer Financing and Operation

There is a wide variety of developer financing and operation employed in the United States, including passenger terminals, parking garages, rental car facilities, fuel systems, cargo facilities, general aviation facilities, and other major facilities. The private sector can provide full-scale development, operation, and maintenance services and sometimes financing under long-term leases or concessions. Table 1.3 illustrates the range of project development privatization models with different degrees of control and risk for the airport owner.

Variations and examples of the Design-Build-Operate-Maintain and Finance approach for airports include:

- Public-Private Partnership for Terminal Development (e.g., JFKIAT Terminal 4)
- Single Tenant Special Facility Terminal Lease (e.g., Terminal A at Boston)
- Multi-Tenant Special Facility Terminal Lease (e.g., Terminal 5 at Chicago O'Hare)
- Special Facility Fuel System Leases (e.g., San Francisco)
- Second Party Cargo Development (e.g., Memphis)
- Third Party Cargo Development (e.g., Pittsburgh)
- Private Development of Consolidated Rental Car Facility (e.g., Anchorage)
- Private Parking Development (e.g., Hartford)
- Private Solar Development (e.g., Austin)

1.4.4 Full Privatization—Long-Term Lease or Sale

Under the full privatization models, the airport owner enters into a long-term lease, long-term concession, or sale of an airport, which can be accomplished under the APPP or outside of the APPP. It is important to make a distinction between the main participants in this type of transaction—namely, the private entity that will be responsible for managing and operating the airport and who typically does not make an equity investment, versus the lenders and investors who do invest in the transaction but have no role in day-to-day operations. For purposes of this guidebook, the term “private

operator” is used to refer to an individual private entity or the team selected by the public airport owner to compensate the airport owner for the airport asset and to run the airport.

- Under a long-term lease (or concession agreement), the airport owner grants full management and development control to the private operator in return for the operator undertaking capital improvements and other obligations (e.g., up-front payment, responsibility for outstanding debt, capital improvements).
- Under a sale, the airport is transferred on a freehold basis with the requirement that it continue to be used for airport purposes.

The distinctions between full privatization inside and outside the APPP are described in detail in Chapter 6 and summarized in Table 1.4.

1.4.5 Private Airport Development

There are examples of private investors funding the development of an airport without the benefit of federal or state grants. These airports are operated as for-profit businesses. Virtually all of these strategies have been employed for general aviation airports. Branson Airport is the only privately owned commercial passenger airport in the United States. However, private airport development without government support is not considered to be airport privatization for purposes of the guidebook since it does not involve the *transfer* of control or ownership from the public sector to the private sector.

1.5 Evaluation of Privatization Strategies

Table 1.5 presents a high level summary of the various opportunities, advantages, and disadvantages of each privatization model, which are presented in more detail in each chapter. The reader should also refer to Tables 8.8 through 8.11 for potential ways to mitigate some of the disadvantages and risks.

Table 1.4. Comparison of full privatization under the APPP and outside the APPP.

	Full Privatization Pursuant to Pilot Program (49 USC § 47134)	Full Privatization Outside Pilot Program (FAA Order 5190.6B)
Eligible Airports	No more than 10 airports eligible to participate. Only one slot currently available for a non-large-hub airport.	No cap on number or type of airports.
Use of Sale Proceeds	Public airport sponsor can request FAA approval to use sale proceeds for non-airport purposes. For primary airports, requires consent of 65% of airlines. For nonprimary airports, requires consultation with based aircraft owners.	Sale proceeds must be used for airport purposes.
Grant Repayment	FAA <i>may</i> excuse public airport sponsor from any repayment obligation that may exist.	FAA <i>will</i> excuse public airport sponsor from any repayment obligation that may exist.
AIP – Entitlement	Private operator is eligible for grants from the Entitlement Fund.	Private operator is <i>not</i> eligible for grants from the Entitlement Fund.
Rates and Charges	Rates on airlines may not exceed inflation rate without consent of 65% of airlines. Rates on aircraft owners may not exceed percentage rate increase on airlines.	Rates and charges must be reasonable and not unjustly discriminatory, pursuant to Grant Assurances.
Private Operator's Charges on Passengers	Private operator is authorized to impose, collect and use a Passenger Facility Charge.	Private operator is authorized to impose charges on passengers, subject to reasonableness and non-discrimination requirements of the Grant Assurances.

Table 1.5. Evaluation of privatization strategies.

Opportunities and Advantages	Disadvantages
Service Contracts	
<ul style="list-style-type: none"> ▪ Accesses private sector expertise for specialized functions ▪ Applies private sector techniques to accelerate project delivery and reduce construction costs for capital improvements ▪ Provides potential to cut costs and optimize efficiency and thereby reduce costs to tenants ▪ Retains airport oversight of contracts to ensure compliance with airport goals ▪ Reduces airport costs for employee salaries and benefits as well as post retirement expenses and liability (pension, medical, etc.) ▪ Involves low implementation risk and complexity ▪ Allows airport management to focus on core and strategic issues ▪ Maintains airport owner control over land uses and facilities 	<ul style="list-style-type: none"> ▪ Could involve organizational disruption (i.e., reassignment or termination of existing employees) ▪ Could encounter labor resistance in an effort to protect and increase public sector jobs ▪ Requires careful monitoring, which can be expensive and time-consuming ▪ Presents tension in the outsourcing relationship – the contractor wants to make a profit and the airport owner wants to cut costs

(continued on next page)

Table 1.5. (Continued).

Opportunities and Advantages	Disadvantages
<p>Management Contracts</p> <ul style="list-style-type: none"> ▪ Accesses private sector expertise for specialized functions and commercial development ▪ Provides potential to cut costs and optimize efficiency and thereby reduce costs to tenants ▪ Provides opportunity for airport to be managed and operated as a business ▪ Streamlines day-to-day operational decision making ▪ Brings increased emphasis on revenue enhancement, commercial, and economic development ▪ Provides potential for new revenue/economic development initiatives ▪ Can streamline and improve certain processes (e.g., renegotiating nonairline contracts) ▪ Furnishes potential to impose contractual obligation for contractor to achieve performance targets ▪ Provides opportunity for staff to gain management expertise ▪ Reduces ongoing municipal employee compensation, including post retirement expenses (pension, medical, etc.) ▪ Provides greater incentives for management and employees to perform better ▪ Provides more commercial and operational freedom for contractor 	<ul style="list-style-type: none"> ▪ Involves considerable time and effort for the bidding process ▪ Could involve buyouts and compensation for existing public workers ▪ Could involve organizational disruption (i.e., reassignment or termination of existing employees) ▪ Difficult to truly measure efficiencies for the purpose of justifying compensation ▪ Can discriminate against government departments competing in managed competition efforts, as regulations generally prevent them from partnering with private firms or guaranteeing performance ▪ Requires careful tracking of contract compliance, which can be a time consuming and substantial undertaking for the airport owner ▪ Becomes increasingly difficult to attain further improvements and realize the full value of the management fee once initial efficiencies are attained
<p>Developer Financing and Operation</p> <ul style="list-style-type: none"> ▪ Accesses private sector expertise for specialized functions and commercial development ▪ Reduces reliance on municipal debt and conserves public capital for those areas where public funding is the only alternative ▪ Transfers risk exposure for cost overruns, delays, and debt repayment to the private sector ▪ Has potential to reduce operating expenses and increase operational efficiencies due to avoidance of public procurement processes and to private sector motivations and incentives ▪ Attains the latest technical and managerial expertise for the infrastructure project ▪ Applies private sector techniques to accelerate project delivery and reduce construction costs ▪ Can enhance commercial development revenues ▪ Creates/retains jobs for the local economy ▪ Avoids unnecessary risks for airport owner ▪ Minimizes or eliminates delays from local procurement policies that tend to delay contract awards ▪ Has potential to provide low-cost facilities to tenants (especially when tax-exempt financing is employed) ▪ Limits administrative burden of airport and staffing responsibilities for facility financing, bidding, design, construction oversight, marketing, ongoing maintenance, administration, and management ▪ Allows airport management to focus on other strategic issues and assets 	<ul style="list-style-type: none"> ▪ Involves considerable time and effort for bidding process and negotiation of complex legal documents ▪ Requires that the project have a revenue stream to repay the debt ▪ Provides airport less control over the project and facility management ▪ Loss of control over the development site and future capacity expansion ▪ Loss of flexibility to change land uses over period of lease ▪ Less control over types of activities and quality and appearance ▪ Involves considerable upfront planning, time, and expense ▪ Involves moderate implementation risk ▪ Less control of facility utilization especially under airline-financed terminals that run the risk of inefficient utilization of gates and associated terminal space ▪ Could involve organizational disruption and need to reassign or terminate existing employees ▪ Could involve buyouts and compensation for existing public workers ▪ Involves long-term risk if the project encounters financial problems, i.e., the airport may need to step in (even though it is not financially obligated to do so) to preserve the use of the facility and associated airport capacity ▪ Can expose the airport to political, legal, operational, and financial risk if the transaction is not consummated or if the private entity incurs financial difficulties ▪ Involves loss of key revenue streams under parking and cargo privatization

Table 1.5. (Continued).

Opportunities and Advantages	Disadvantages
Long-term Sale or Lease (Full Privatization)	
<ul style="list-style-type: none"> Creates potential to promote increase in service, commerce, and economic development Secures a lump sum or ongoing lease payments by selling or leasing airport for budgetary relief (“asset monetization”) or for annual payments to government owner Obtains private capital investment for capacity expansion and modernization and reduces need for public investment and debt, particularly in light of the potential loss of tax-exempt financing, real reductions in AIP funding, and no increase in the PFC level Provides ability for the private sector to innovate, introduce operational and technological efficiencies, and create new income streams De-politicizes airport operations and insulates airport from broader public policies Provides flexibility to structure and tailor debt to meet infrastructure needs, including potential to tap foreign markets for financing 	<ul style="list-style-type: none"> Involves significant time, effort, and out-of-pocket expense to undertake (for both the public and private sector) Involves loss of control by policy makers Requires multiple layers of approvals (federal, state, local, tenants, and employees) Can be constrained by existence of airline use and lease agreements Involves limitations on aeronautical rate increases and requires airline approval to take money out of the aviation system, which can be difficult to obtain and can reduce the value of the transaction Tempts elected officials to cash-out value (“borrow against the future”) without necessarily appreciating and understanding the long-term implications to the airport enterprise Involves higher financing costs (for private capital) than public tax-exempt debt Could involve buyouts and compensation for existing public workers Can involve implementation risk in the event the bidder desires to get out of the transaction Can involve loss of control of the airport by the airport owner, which can be mitigated by including performance standards in the lease Affords limited opportunities because many of the largest U.S. airports already operate like commercial enterprises and few of the smaller ones have strong commercial potential May result in a renegotiation of the contract due to changing market conditions, which are next to impossible to foresee, because of the long-term nature of these leases (50-99 years) Creates long-term responsibility for the airport owner to continue to oversee the performance of the privatized operator, and may also require the airport owner to be ready to operate the airport, if needed, in the event of default or bankruptcy Can expose the airport owner to political, legal, operational, and financial risk if the transaction is not consummated or if the private entity incurs financial difficulties May create greater tort liability risk for a private operator than a public operator in the event of, for example, an act of terrorism or aircraft accident, since the private operator would not likely be entitled to same immunities as a public entity Presents potential for controversy in the event of foreign ownership Gives airport owner less control over customer service standards and airport pricing although performance standards can and should be included in the lease May involve less consideration of local policy issues, environmental impacts, and community interests in favor of shareholder and investor interests May receive less local support if the public owner cannot take money out of the aviation system Provides less access to federal grants

1.6 How to Decide Which Strategy Is Best

Each airport owner has different reasons for considering some form of airport privatization. Therefore, it is important to put these goals and objectives into context when consider-

ing which solution may be the most appropriate under the circumstances.

The process for considering various forms of privatization involves a multi-step process starting with identification of the owner’s goals and objectives, familiarization with the specific strategies available, comparison of those goals to



Figure 1.4. Decision tree filter.

those of other stakeholders, identification of ways to mitigate stakeholder risks, review of the transaction's complexity and risk, and valuation of the transaction (Figure 1.4). The key to achieving the highest probability of success is to be both well-informed and rigorous about the evaluation process, while accounting for the diversity of stakeholder views.

Chapter 8 provides a step-by-step process for considering and evaluating different privatization strategies starting with identifying the specific goals and/or the problems to be addressed to allow for an initial screening of the alternatives that are best suited to the situation.

As illustrated in Table 1.6, some techniques do not fit certain goals, in part due to the strictures of federal law and policy.

An important consideration in evaluating potential privatization models is the level of complexity and risk to implement the action. This is particularly important in the public sector where

officials tend to be risk averse. On a scale ranging from the least complex and risky to most complex and risky, the privatization models conceptually can be ranked as shown in Figure 1.5.

As illustrated by the matrix, the further an airport progresses along the privatization continuum, the more complicated, risky, and expensive the effort becomes, and while the stakes get higher, so do the potential rewards. The logic behind these ratings is described in detail in the chapter for each model.

1.7 What Makes the U.S. Airport Model Different?

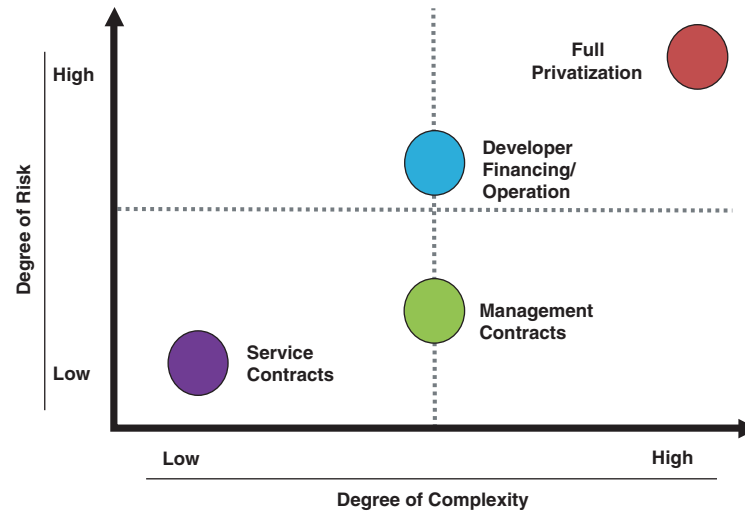
There already is a wide range of strategies employed to enlist the support of the private sector in the management and operation of U.S. airports. Nevertheless, it is often mentioned that full privatization (i.e., full control and/or opera-

Table 1.6. Owner's goals decision tree matrix.

Goals and Objectives	Partial Privatization			Full Privatization ¹	
	Service Contracts	Management Contracts	Developer Financing/Operation	Inside APPP	Outside APPP
Maintain community control of airport operation and development decisions	X	X			
Secure operating efficiencies	X	X	X	X	X
Introduce innovative revenue enhancements	X	X	X	X	X
Eliminate airport subsidies	X	X		X	X
Reduce airline costs	X				
Convert underutilized facility into economic catalyst		X	X	X	X
De-politicize airport decisions		X	X	X	X
Address identified deficiencies in airport management		X		X	X
Advance ideological interest in private sector participation		X	X	X	X
Address improper conduct, e.g., corruption		X		X	X
Access private capital			X	X	X
Accelerate project delivery			X	X	X
Reduce construction costs			X	X	X
Transfer construction risk			X	X	X
Minimize organizational disruption			X		
Use sale or lease proceeds for non-airport purposes				X*	
Repay airport debt				X	X

* Only with 65% airline approval at primary airports.

¹ "Full privatization" includes outright sale and long-term lease. For example, the proposed long-term lease of Chicago's Midway would fit in this category. Greenfield private development is not considered privatization.



Source: LeighFisher.

Figure 1.5. Conceptually assessing complexity and risk.

tion of an entire airport by a private entity) has become a worldwide trend while only one airport in the U.S. was fully privatized—Stewart in 1999—which has since reverted to public operation.

While there has been extensive use of partial privatization at U.S. airports, there has been little appetite for the long-term lease or sale of U.S. airports primarily due to unique factors as summarized below, only some of which have been addressed in the APPP.

- Control
 - The historic pattern of public ownership of airports
 - Desire of the airport owner (government) to retain control
- Financial Structure
 - The availability of federal planning and development grants and in some cases state grants and loans
 - The ability to impose and require airlines to collect passenger facility charges (PFCs), which provide a capital funding source outside of a contractual airline use and lease agreement or rate schedule imposed by ordinance
 - Ready access to low-cost, tax-exempt financing through the U.S. bond market and in some states infrastructure bank loans with low-cost borrowing
 - The exemption from property taxes for municipal owners
- Regulatory
 - The strict requirements of the grant assurances, accepted as consideration for federal grants
 - The obligation to use proceeds from the sale or lease of airport property only for airport purposes

- The prospect that public entities would be required to repay prior grants upon the sale or lease of an airport to a private operator
- Contractual Constraints
 - The influence of airlines, particularly those that carry the majority of an airport's traffic, as a result of provisions in use and lease agreements providing a significant role in major capital decisions
 - Collective bargaining agreements and public sector unions

1.8 Guidebook Organization

The guidebook begins with a discussion of the generic privatization models and the context for applying them in the United States (Chapter 2). It then describes in more detail the specific strategies, legal and regulatory conditions, and the objectives, advantages, disadvantages, and risks associated with each strategy in order from the least to most level of private sector involvement (Chapter 3 through Chapter 7). These chapters provide examples of the various ways U.S. airport owners have used private sector companies in the operation, management, financing, and development of their airports. These examples also illustrate the depth and extensive long-term experience with private operation of airport functions and activities in this country.

Chapter 8 helps the reader understand the process and considerations for identifying and evaluating realistic options for private sector involvement. Chapter 9 provides a summary of the U.S. case studies, which can be found in their entirety in Appendix H.

CHAPTER 2

The U.S. Context and Generic Privatization Models

2.1 Privatization Continuum and Generic Models

The term “airport privatization” is often understood to mean the transfer of an entire airport to private operation and/or ownership, but privatization does not have to be an all-or-nothing approach. Private sector involvement at airports can take many forms. Privatization refers to the shifting of governmental functions, responsibilities, control, and in some cases ownership, in whole or in part, to the private sector.

Figure 2.1 illustrates the potential range of strategies available for private sector participation in airport management, operation, and development. The range extends from the least level of private involvement to the most private sector involvement. A key distinction is made between:

- **Full Privatization**—Full privatization refers to strategies where the full control and/or operation of an entire airport are vested with a private entity, including the long-term lease or sale, whether through the APPP or otherwise. As noted above, APPP is a program under which a long-term lease or sale can occur with full control vested in the private operator except for certain residual powers retained by the airport owner.
- **Partial Privatization**—Partial privatization refers to all other strategies where partial control and full ownership of an airport remains vested with the public owner.

The generic models are summarized below. All but private airport development are considered to be a form of privatization.

- **Service Contracts**—Airport owners routinely contract out to the private sector certain airport services traditionally provided by government or internal employees in order to (1) achieve operating efficiencies through outsourcing

the operation of functions that readily are available through the private sector (e.g., janitorial, escalator/elevator repair, non-police security, parking operations), (2) enhance nonairline revenue (e.g., terminal concessions), or (3) provide project design and delivery (e.g., construction management and program management) for capital improvements.

- **Management Contracts**—Under a management contract, a private entity manages an airport or certain airport facilities for a specified period of time and typically provides little or no capital investment. The private manager’s objective is to improve the financial and operational efficiency of the facility for which the manager is paid a fee and is reimbursed for its expenses, subject to a budget that is usually set by the manager and approved by the airport owner. Most airports operate their public parking facilities using a management contract, and some use a management contract for the operation of individual terminals or master terminal concessions, hangars, warehouses, or, in a few cases, for their entire airport.
- **Developer Financing and Operation**—Developer financing is the most common way to channel private sector investment into public sector infrastructure. Money is borrowed (often through a tax-exempt conduit issuer of municipal bonds) for the specific purpose of financing a project, and lenders are repaid only from the cash flow generated by the project or, in the event the project fails, in some cases, from the value of the project assets. Thus, if project revenues never materialize because the project is abandoned during construction or if project revenues are disrupted because of operational problems, there is no alternative source of cash flow to meet debt service requirements. Most examples of airport project finance transactions in the United States involve special purpose facilities for single or multi-tenant use, typically an airline (e.g., unit passenger terminal, terminal equipment, or fuel storage and distribution systems), one or more cargo tenants (cargo

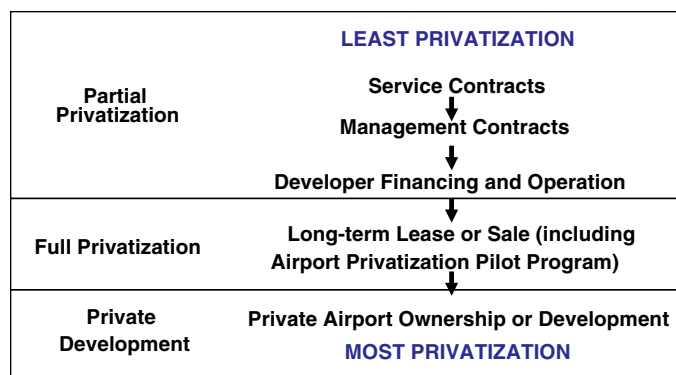


Figure 2.1. Examples in the public/private continuum.

buildings), or rental car companies (consolidated rental car facilities). Sometimes the developer is required to put its own equity capital at risk, but more frequently the project is financed with bonds that are secured solely from the revenues of the facility being financed. This type of transaction is sometimes referred to as a public-private partnership, PPP, or P3.

- **Long-term Lease or Sale**—A long-term lease, long-term concession, sale, or other transfer of an entire airport to private operation and/or ownership (e.g., Stewart).
- **Airport Privatization Pilot Program or APPP**—A program under the category of long-term lease or sale codified at 49 U.S.C. Section 47134, which was enacted by the U.S. Congress in 1996 to allow up to five airports (amended to 10 in 2012) to be leased or sold under specific conditions as approved by the Secretary of Transportation. As described later, the APPP authorizes the Secretary of Transportation to exempt these airports from certain regulations that otherwise may have discouraged airport privatization.
- **Private Airport Development**—Development of an entire airport without the aid of federal or state grants by private investors to be operated as a for-profit business. It should be noted that private airport development without government support is not considered to be airport privatization for purposes of the guidebook since it does not involve the transfer of control or ownership from the public sector to the private sector. For example, Branson Airport which was developed without the aid of federal or state grants is not considered a form of airport privatization.

2.2 Extensive Privatization Exists Today at U.S. Airports

There already is a wide range of strategies employed to enlist the support of the private sector in the management and operation of U.S. airports. For example:

- Private companies often perform maintenance on loading bridges, baggage devices, escalators, elevators, moving walkways, etc.
- Private companies (including airlines) provide ground handling of aircraft.
- Cleaning companies frequently provide janitorial services.
- Private parking operators routinely manage public and employee parking lots and associated shuttle bus operations and sometimes finance and develop the parking facilities.
- Food and retail specialists develop and operate terminal concessions.
- Airlines typically design and operate their own passenger processing and baggage handling services.
- Fuel service companies normally operate and maintain fuel systems and fuel aircraft.
- Consultants often perform planning, design, and construction management activities.
- Investment and commercial banks underwrite a large share of the financing for capital improvements.
- Fixed-base operators develop and operate facilities to service general aviation aircraft (including hangars, fueling, terminals, maintenance and avionics services, aircraft sales, charter services, aircraft training and flight support, and ramp) under long-term leases.

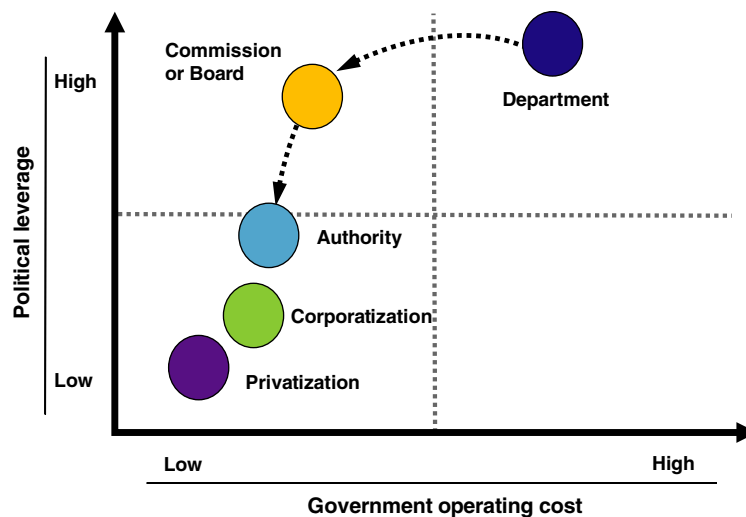
As a result, commercial airports in the United States tend to be run through a form of partnership among the federal government, state government, and local government and the private sector with varying forms of private sector participation.

In fact, a study by the U.S. General Accounting Office (now the Government Accountability Office) in 1996 found that 90% of the people working at the top 69 airports in the United States (in terms of passenger traffic) were employed by private companies. The remaining 10% were employed by local and state governments (performing administrative or public safety duties) or the federal government (e.g., FAA air traffic controllers, military personnel).² Private company employees work for airlines, terminal concessionaires, rental car companies, ground parking operators, transportation providers, fixed-base operators, and providers of contract services.

2.3 Evolution of Airport Ownership and Governance in the United States

Since the advent of commercial airline service in the 1920s, U.S. airports have largely been owned and operated by local

²U.S. Government Accounting Office, *Airport Privatization: Issues Related to the Sale or Lease of U.S. Commercial Airports*, Report to the Subcommittee on Aviation, Committee on Transportation and Infrastructure, House of Representatives, GAO/RCED-97-3, November 1996.



Source: LeighFisher.

Figure 2.2. The airport governance continuum.

governments. Airlines and aircraft companies participated in the early development of airports (such as Pan American Field in Miami; United Airport, now Bob Hope Airport, in Burbank; and Grand Central Airport in Glendale). However, few private sources of capital stepped forward to invest in owning and operating airports, given the immature nature of the industry (measured by traffic levels, facility use, or revenue generation), the lack of comprehensive federal regulations, and macro-economic conditions of the era (including the Great Depression). In the 1940s, the federal government solidified local public ownership and operation of commercial service airports by (1) enacting the first federal grant program for airports, and (2) transferring excess military bases and related properties no longer needed after World War II to state and local governments under the Surplus Property Act of 1944 under the condition that they be used as public airports.

For decades, the typical owners of commercial service airports have been municipal governments (cities and counties), single-purpose airport authorities, multi-purpose port authorities, and state governments. Single-purpose airport authorities became more common as the industry continued to mature and communities recognized that many airports generated enough revenue to be financially self-sufficient. Airport authorities generally have a more autonomous governance structure that helps insulate management from local politics and gives them relatively more control over salary, procurement, and budgeting systems, resembling the private sector more than local governments. A number of airport authorities were also developed to recognize the regional role of airports in the local community by including representatives from multiple jurisdictions, sometimes sharing the cost to fund airport improvements and giving them more autonomy to respond quickly to changing conditions. Although

public authorities often operate with a degree of independence from state and local government, they typically are influenced by the government through the appointment of board members, the obligation to satisfy at least some of the same requirements as other local agencies, and other factors.

Privatization can be viewed as another form of governance that could be used to address challenges or other structural issues that are facing U.S. airports as illustrated in Figure 2.2. The figure conceptually highlights the general relationship between operating cost and degree of local political control under alternative forms of governance.

2.4 Forms of Airport Governance

Airports are often characterized by their ownership, but it is the governance structure that largely determines how an airport is managed, operated, and developed.³ The consideration of opportunities for increased privatization must begin with an understanding of the ways in which the public and private sectors participate in the governance of commercial service airports currently. As illustrated in Table 2.1, there are four generic models of governance for airports (ranging from least to most private sector control):

- Public ownership and operation
- Public ownership with some form of private operation
- Mixed public/private ownership with private operation
- Private ownership and operation

³Daniel S. Reimer, John E. Putnam, James B. McDaniel, *Airport Governance and Ownership*, ACRP Project 11-01, "Legal Aspects of Airport Programs," Transportation Research Board, August 2009.

Table 2.1. Airport governance models.

Level of Airport Privatization (from Least to Most)				
Ownership	Public	Public	Public/ Private	Private
Investment	Public	Public/ Private	Private	Private
Management	Public	Private	Private	Private
Types of Private Sector Involvement	<ul style="list-style-type: none"> ▪ Retail/service concessions 	<ul style="list-style-type: none"> ▪ Management contract ▪ Project Finance/ Build-Operate-Transfer (BOT) 	<ul style="list-style-type: none"> ▪ Airport-wide concession ▪ Airport-wide Build-Operate-Transfer (BOT) 	<ul style="list-style-type: none"> ▪ Trade sales ▪ Flotation/IPO

Virtually all commercial service airports in the United States are publicly owned and/or operated either by a state, county, city, single-purpose airport authority, or multi-purpose authority with various forms of private sector participation in their operation and investment. By contrast, international airports tend to have far more private ownership, investment, and operation. Some U.S. airports are owned by a government entity (state, county, or city) but are operated by a single- or multi-purpose authority under a long-term lease.

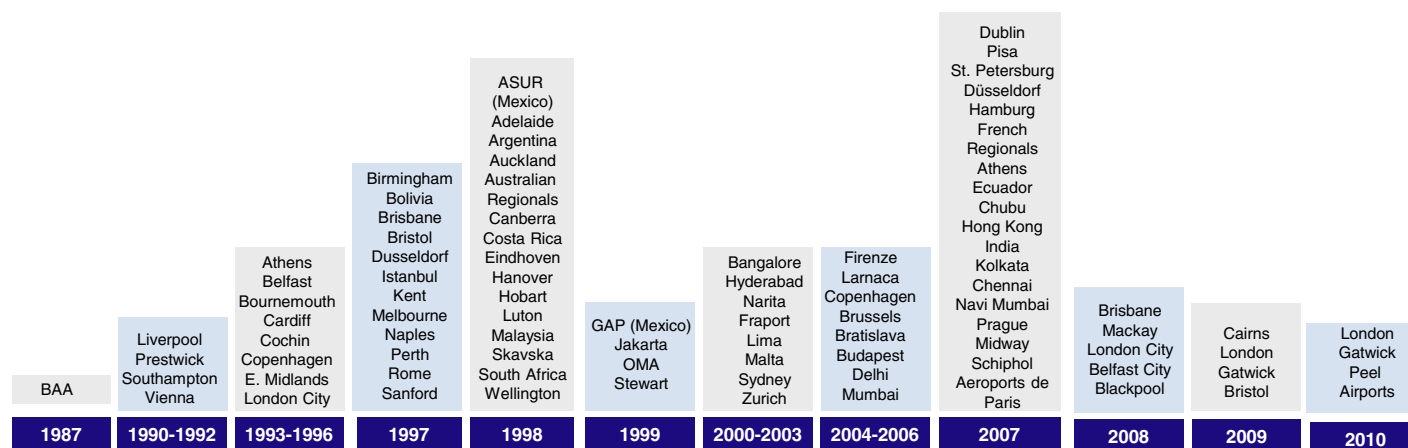
Internationally, many governments have taken steps towards commercialization and/or corporatization as an alternative to, or as interim step towards, airport privatization where this process can generate sufficient revenue for operations and capital funding. Commercialization of airports refers to the application of business-like approaches to the management and operation of airports by shifting aviation management and operations from a government department to a business-focused entity to allow market forces, incentives, and mechanisms to drive the delivery of services. It is a shift in management not ownership of the airport and can include different degrees of private-sector involvement, such as retail development, commercial development, contracting for airport management, or allowing private companies to develop and lease terminals. Commercialization is often the first step

towards full privatization and transferring control of the airport to the private sector, but full privatization does not have to follow.

2.5 What Makes the U.S. Airport Model Different?

With the notable exception of the United States, airport ownership and governance have undergone significant change for much of the world since 1987 when the United Kingdom became the first country to privatize some of its major airports as shown in Figure 2.3. Full privatization (i.e., full control and/or operation of an entire airport by a private entity) has become a worldwide trend while partial privatization remains the primary organizational model in the United States. Only one airport in the United States was fully privatized—Stewart in 1999—which has since reverted to public operation.

There has been little appetite for the long-term lease or sale of U.S. airports (full privatization) primarily due to three unique factors: (1) the financial structure for building and improving airports, (2) the U.S. regulatory environment, and (3) the special relationship between airport owners and airline tenants.

**Figure 2.3. 24-year history of worldwide airport privatization.**

2.5.1 U.S. Airport Financial Structure

Unlike international airports that often turn to privatization for capital funding, the “three pillars” of airport capital funding in the United States are unique and make full privatization less necessary and desirable:

1. **Airport Improvement Program (AIP)**—The federal government contributes significant federal funding for airport planning and development through the Airport Improvement Program (AIP). The AIP provides grants to public agencies—and, in some cases, to private owners and entities—for the planning and development of public-use airports that are included in the National Plan of Integrated Airport Systems (NPIAS).
2. **Passenger Facility Charges (PFCs)**—PFCs are a source of local capital independent of use and lease agreements and a key instrument to promote competition and capacity. PFCs are an important source of funding for airport infrastructure and a frequent vehicle used to leverage capital. Privatization under the APPP permits the imposition of PFCs. Outside the APPP, a private operator is authorized to impose charges on passengers, subject to reasonableness and non-discrimination requirements of the grant assurances, but is not authorized to impose a PFC, which is separately identified on the passenger ticket.
3. **Tax-Exempt Debt**—The availability of tax-exempt debt provides public airports a cost of capital advantage over private entities. Airport financing under full privatization models would not be eligible for tax-exempt debt. Instruments such as governmental bonds, private activity bonds, and Build America Bonds have been the major financing mechanism for capital improvements at large, medium, and some small hub airports and as a result promote capital investment by state and local governments.

2.5.2 U.S. Regulatory Regime

The legal framework for operating public-use airports in the United States is also unique and has significantly influenced the experience and evolution of airport privatization. The U.S. legal structure provides abundant opportunities for airport owners and operators to enlist private participation in certain airport functions and facilities while retaining primary responsibility and control over the airport (partial privatization).

Conditions tied to the acceptance of AIP grants provide a disincentive for full privatization as a result of (1) the constraints imposed by the grant conditions, known as “sponsor assurances” or “grant assurances,” particularly including the requirement to use airport revenue only for airport purposes and (2) the prospect that public entities would be required

to repay prior grants upon the sale or lease of an airport to a private operator.

Both federal law and the grant assurances strictly limit the use of airport revenue for non-airport purposes. Airport revenue is defined broadly to include the proceeds from the sale or lease of airport property. There are some narrow exceptions, such as for so-called “grandfathered” airports and for repayment of loans issued by sponsoring governments. However, Congress has expressed serious concern with revenue diversion and has prescribed onerous penalties for violations. The prohibition on revenue diversion applies only to the airport sponsor, not the air carriers, FBOs, concessions, private airport managers, or any other private entities that conduct business on an airport. This has incentivized private ventures on airports but has dis-incentivized full privatization. It historically presented a particularly high barrier to full privatization because, outside the APPP, the public airport owner is required to use the sale proceeds for airport purposes, and because the private operator, upon assuming responsibility for the grant assurances, must use revenue that it generates in connection with the airport for airport purposes.

Public airport operators enjoy exemptions from property taxation pursuant to the U.S. Constitution and/or laws of most states. These exemptions typically would not apply to a private operator of a public-use airport.

2.5.3 Airline-Airport Use and Lease Agreements

Another important distinction is the degree to which airports in other countries tend to be seen more as independent entities and businesses in their own right, with a far lower degree of airline control (contractual or statutory). In the United States, most airport owners enter into use and lease agreements with the airlines serving their airports. Among other things, these agreements set forth the terms and conditions for establishing airline rates and charges and investing in capital improvements. In particular, for airports operating under residual airline agreements—where the airlines guarantee to pick up, through their rates and charges, any airport costs not otherwise covered by non-airline revenues of either a particular cost center or the entire airport—airlines have substantial input into and control of capital investment decisions through “majority-in-interest” approval procedures. In other instances, the airlines have been permitted to form consortia that operate terminals or equipment.

In other parts of the world, airline rates and charges are more likely to be defined by external-economic regulations and less by bilateral contractual agreements, although bilateral agreements can reduce or eliminate the role of the regulator. Those

U.S. airports that do not have airline use and lease agreements must set rates that comply with federal laws and regulations.

Several factors affecting airlines rates and charges in the United States in relation to the privatization models are summarized in Table 2.2.

As a result, airlines generally exert more political influence over U.S. airport owners than they do for international airport owners. Indeed, with their access to public decision makers, some airlines believe they have more leverage with public operators than they could with shareholders and executives of privately owned airports.

In sum, the following features of the U.S. regime have limited the interest in and opportunities for full privatization:

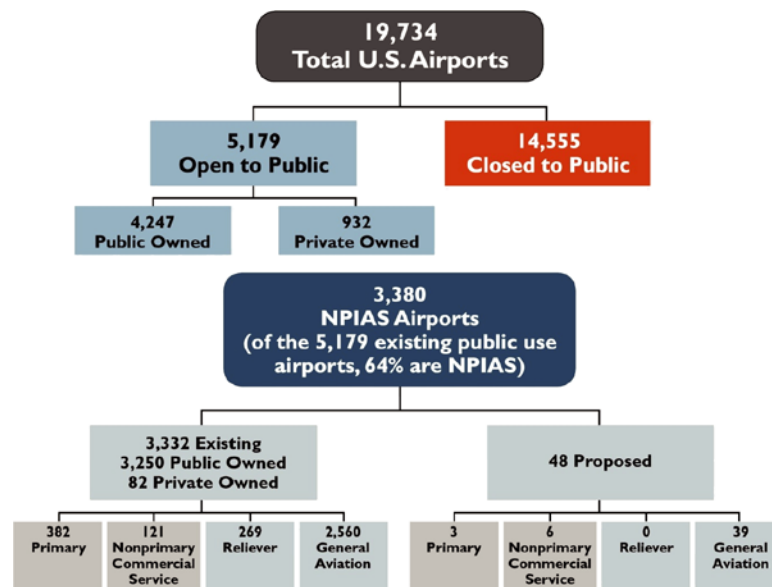
- The historic pattern of public ownership of airports
- Community desires to control their economic engines (airports) and community gateways
- The availability of federal planning and development grants and in some cases state grants and loans
- The ability to impose and require airlines to collect PFCs, which provide a capital funding source outside of a contractual airline use and lease agreement or rate policy imposed by ordinance
- Ready access to low-cost, tax-exempt financing through the U.S. bond market and in some states infrastructure bank loans with low-cost borrowing
- The strict requirements of the grant assurances, accepted as consideration for federal grants
- The obligation to use proceeds from the sale or lease of airport property only for airport purposes
- The prospect that public entities would be required to repay prior grants upon the sale or lease of an airport to a private operator
- The exemption from property taxes for municipal owners

Table 2.2. Summary of U.S. economic rules under partial and full privatization.

Factor	Partial Privatization	Full Privatization Under APPP	Full Privatization Outside APPP (per FAA Order 5190.6B)
Eligibility for AIP grants	Public entity is eligible	Private entity may be eligible, but with lower discretionary federal share (70%)	Private entity is not eligible
Eligibility for tax-exempt debt	Same terms as government	No*	No*
Property tax exemption	Not applicable	Not unless special legislation	Not unless special legislation
Ability to impose a PFC	Public entity is eligible	Public entity is eligible	Private operator can impose a charge on passengers, but not require the airlines to collect a PFC
Prohibition on revenue diversion	<ul style="list-style-type: none"> ▪ Government must comply ▪ Operator exempt 	<ul style="list-style-type: none"> ▪ Government must comply unless 65% airline approval at primary airports ▪ FAA is authorized to grant an exemption to permit the private operator to “earn compensation from the operations of the airport” 	<ul style="list-style-type: none"> ▪ Government must comply ▪ Operator permitted to be paid reasonable compensation for providing airport management services and reasonable return on capital investment**
Reasonable terms, no unjust discrimination (subject to rates & charges policy)	Government and operator must comply	Operator cannot increase aeronautical rates by more than inflation without airline approval	Operator must comply

* To qualify for federal tax exemption, the assets being financed must satisfy the government ownership requirement that the lease term does not exceed 80% of the economic life of the asset. Also, to use tax-exempt debt to acquire an existing asset, at least 15% of the debt must be used to pay for a new asset and the proceeds must be spent within three years of the issuance.

** As stated in the FAA's revenue use policy, “The FAA expects private owners to be subject to the same requirements governing . . . the recovery of unreimbursed capital contributions and operating expenses from airport revenue as public sponsors. Under section 47107(l)(5), private sponsors—like public sponsors—may recover their original investment within the six-year statute of limitation. In addition, they are entitled to claim interest from the date the FAA determines that the sponsor is entitled to reimbursement under section 47107(p). Any other profits generated by a privately owned airport subject to section 47133 (after compensating the owner for reasonable costs of providing management services) must be applied to the capital and operating costs of the airport.” 64 Fed. Reg. 7696, 7700 (1999).



Source: Federal Aviation Administration, *National Plan of Integrated Airport Systems (2009-2013)*
Report of the Secretary of Transportation to the United States Congress, September 27, 2010.

Figure 2.4. Number of existing and proposed airports by ownership and use.

- Other regulatory factors outlined in more detail in Chapter 6
- The influence of airlines, particularly those that carry the majority of an airport's traffic, as a result of provisions in use and lease agreements providing a significant role in major capital decisions

A combination of access to AIP grants, PFCs, and tax-exempt debt make partial privatization strategies more attractive to U.S. airport owners. Conversely, limitations in AIP participation, inability to charge PFCs, and limited or no access to tax-exempt debt under full privatization schemes limit the ability of the private operator to attract capital relative to a public owner.

2.6 Focus of Research

The guidebook is focused on the relatively small number of airports that contribute disproportionately to air transportation and mobility in the United States and to economic output and impact. Virtually all of these airports are owned by government agencies.

In the United States, there are 19,734 airports; however, 14,555 of these (74% of the total) are privately owned, privately-used facilities as shown in Figure 2.4. An additional 932 airports are privately owned publicly-used facilities.

Only 4,247 airports (21% of the total) are publicly owned, publicly-used facilities. Yet these airports account for virtually all scheduled commercial passenger boardings in

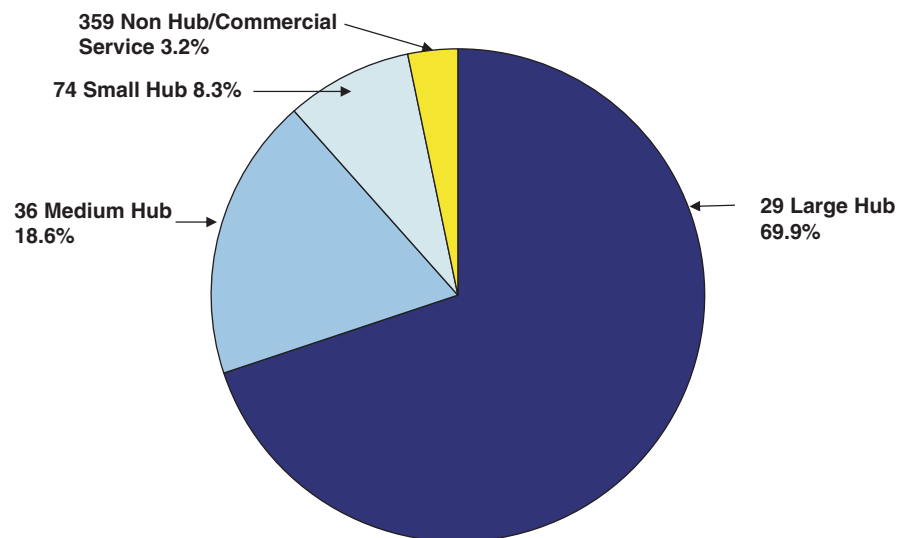
this country, as there is only one privately developed, commercial service airport currently operating (in Branson, Missouri). Similarly, these airports account for the vast majority of general aviation and cargo activity, as virtually all of the busiest general aviation and cargo airports are publicly owned.

Federal law and policy both reflect and support this fact. Almost all of the airports in the NPIAS are publicly owned. This includes commercial service airports, reliever airports, and select general aviation airports. Indeed, a commercial service airport, for which the majority of federal funding is reserved, is defined in federal law to include *only* airports owned by public agencies.⁴ The consequence of these and related laws and policies is that federal financial assistance largely has been limited to publicly owned airports.

Further, passenger activity in the United States is highly concentrated in a relatively small number of the commercial service airports. As shown in Figure 2.5, the top 65 airports (representing the large and medium hubs) accounted for nearly 89% of enplaned passengers in the United States during 2010.

The guidebook focuses on the role of the private sector in publicly owned, publicly-used airports, with particular attention to large commercial service airports that account for the vast majority of scheduled passenger traffic and cargo.

⁴See 49 U.S.C. § 47102.



Source: Federal Aviation Administration, *CY 2010 Revenue Passenger Enplanements for primary and nonprimary commercial service airports (by rank)*, October 2011.

Figure 2.5. Passenger shares at U.S. commercial airports.

CHAPTER 3

Service Contracts

3.1 Specific Strategies

Contracting of services or outsourcing refers to the delegation of operations from the public sector to a private entity that specializes in the operation, maintenance, or management of that activity. Most U.S. airport owners outsource at least some services or functions.

Findings from a 2004 airport survey indicate:

- Concession management and custodial services are the most common services outsourced.
- Outsourcing is more common in large airports, although smaller airports tend to outsource more specialized services such as legal and accounting.
- Airport directors use outsourcing primarily to achieve predictable reductions in the costs of non-core activities and to obtain on-demand specialists and lower level support personnel at lower costs.⁵

Examples include:

Traditional

- Maintenance services (e.g., terminal cleaning and janitorial, window cleaning, landscaping)
- Conveyance systems (e.g., elevators, escalators, moving walkways)
- Mechanical systems (e.g., HVAC)
- Airline equipment (e.g., baggage systems, jetways, pre-conditioned air, common use equipment)
- People mover systems
- Parking operations
- Shuttle bus operations
- Financial planning
- Financial advisory

⁵J. Gonzalez, *Outsourcing and Airport Services*, Airport Magazine, Volume: 16, American Association of Airport Executives, May/June, 2004.

Less Typical

- Development agents for commercial land development
- ARFF
- Security guards
- Law enforcement
- Terminal concession development and management

Project Development and Delivery Services

Many airports have adopted frameworks for construction and/or program management to allow the airport owner to economically and efficiently administer airport development projects. Construction management services tend to be used for single projects while program management services are employed to deal with a multitude of integrated, concurrent construction projects whereby the program manager provides the technical expertise to oversee all the projects within a large capital program on the airport owner's behalf. Examples include:

- Planning studies (e.g., master plans)
- Architectural, engineering, design
- Construction inspection
- Construction management (e.g., procurement assistance, contractor oversight, inspection and testing, project close out, external coordination)
- Program management (e.g., scheduling, design oversight, project controls, accounting/finance, construction bid evaluation, construction manager oversight, comprehensive status and progress reports, administrative support)

In general, airport owners pursue these strategies to realize cost savings and to enlist specialized expertise from the private sector.

3.2 Examples of Service Contracts

There has been a wide variety of service contracting employed in the United States as illustrated by the following examples.

3.2.1 Maintenance Contracts

Subcontracting with private companies for all types of services is routine for U.S. airports, including maintenance services (e.g., terminal cleaning, window cleaning), conveyance systems (e.g., elevators, escalators, moving walkways), mechanical systems (e.g., HVAC), people mover systems, shuttle bus operations, airline equipment (e.g., baggage systems, jetways, pre-conditioned air, common use equipment). For example, the City of Manchester, New Hampshire, which owns and operates Manchester Airport, outsources a significant number of services through contractual arrangements, including terminal cleaning and mechanical systems. The city also contracts out HVAC, elevator, escalator, and jetway maintenance services.⁶ The city has used this approach for many years so it appears to be working well for them.

3.2.2 ARFF and Law Enforcement Service Contracts

Less typical is the contracting of services for ARFF and law enforcement. The City of Manchester also outsources its law enforcement and ARFF functions. The Rockingham County Sheriff's Department provides law enforcement, security services, and central communication services under a publicly bid, fixed-price contract. Centurion Protection, Inc. provides ARFF services under a fixed price contract whereby the airport provides all of the equipment and facilities and Centurion provides the services to comply with FAA standards and requirements.⁷

3.2.3 Fuel System Operation

A number of U.S. airport operators own the airport jet fuel storage and distribution system and contract out the maintenance, operation, and management to qualified and experienced airport fuel system operators (e.g., Oakland, Guam).

3.2.4 Contract to Operate Common Use Equipment

Airline consortia operate and manage common use equipment and systems at several airports, including Chicago O'Hare's Terminal 5, the Tom Bradley International Terminal at Los Angeles International Airport, and the International Terminal at San Francisco International Airport.

At San Francisco, the airlines operating in the International Terminal Complex (ITC) formed the San Francisco Terminal

Equipment Company, LLC (SFOTEC) to use, operate, and maintain certain airport-owned common use equipment and systems related to handling flights and passengers.⁸ The equipment includes computer check-in systems with baggage and boarding pass printers, flight information systems, baggage handling systems, passenger loading bridges, and systems for delivering pre-conditioned air to aircraft and ground power for aircraft. The airport financed the cost of the equipment with airport bond proceeds while SFOTEC manages the daily assignment of the ITC joint use gates, holdrooms, ticket counters, and baggage systems to the airlines operating in the ITC in accordance with airport approved protocols.

Under the services contract between the airport and SFOTEC, SFOTEC is obligated to (1) maintain, operate, repair, and schedule the common use of such equipment, (2) pay the associated utility and custodial costs, and (3) provide non-discriminatory access to such equipment for all ITC carriers, whether or not they are members of SFOTEC. The costs of operating and maintaining the equipment are shared by all airline users of the equipment. The user fees for airlines that are members of SFOTEC are determined under the terms of the SFOTEC Members Agreement, while the user fees of non-member airlines are negotiated between SFOTEC and the non-member airlines (charter airlines).

3.3 Legal and Regulatory Considerations

Although service contracts are common at U.S. airports, the FAA has not promulgated specific rules or published detailed policies or guidance on them. Service contracts must however follow standard local, state, and federal procurement rules. In some cases, such as contracting for ARFF services, other federal regulations (i.e., FAR Part 139) must be followed. When considering contracts for law enforcement services, federal law (i.e., TSR Part 1542) may be relevant and state laws often define the parties that are permitted to provide such services.

3.4 Evaluation of Service Contracts

3.4.1 Opportunities

The main opportunities provided by service contracts include:

- May reduce operating expenses due to lower private sector employment and overhead costs, and thereby reduce costs to tenants

⁶City of Manchester, New Hampshire, *Official Statement, General Airport Revenue Bonds*, June 23, 2005.

⁷Ibid.

⁸City and County of San Francisco, *Official Statement, San Francisco International Airport Second Series Revenue Bonds, Series 2009E*, November 5, 2009.

- Accesses private sector expertise for specialized functions
- Applies private sector techniques to accelerate project delivery and reduce construction costs for capital improvements
- If applicable, uses private agents for commercial development

3.4.2 Advantages

The main advantages provided by service contracts include:

- Provides potential to cut costs and optimize efficiency
- Retains airport oversight of contracts to ensure compliance with airport goals
- Reduces airport costs for employee salaries and benefits as well as post retirement expenses and liability (pension, medical, etc.)
- Involves low implementation risk and complexity
- Allows airport management to focus on core and strategic issues
- Maintains airport owner control over land uses and facilities

Airlines view contracting of services as a viable option towards a broader goal, such as lower costs or more efficiency at an airport. Because airport costs play an increasing role in airline service decisions, there is added impetus for airport owners to consider outsourcing services. Airlines have also embraced the concept of the airline terminal equipment maintenance consortium as a means of achieving cost savings.

Some international airport operators believe their cost structure is lower than U.S. airports because most of their services are contracted out.

3.4.3 Disadvantages and Risks

The main disadvantages and risks under service contracts involve relations with public employees:

- Could involve organizational disruption (i.e., reassignment or termination of existing employees)
- Could encounter labor resistance in an effort to protect and increase public sector jobs
- Requires careful monitoring, which can be expensive and time-consuming
- Presents tension in the outsourcing relationship—the contractor wants to make a profit and the airport owner wants to cut costs

Organized labor in the United States wants to be involved in all parts of the airport industry from design, construction, and maintenance of infrastructure to its operation with unionized employees. Privatization is an issue unions track closely to ensure the interests of their members (both public and private sector) are protected. This includes concern that abrogating union contracts, limiting the collective bargaining rights of labor, and cutting wages and benefits might become attractive cost-saving strategies for potential private owners of airports. Any privatization policies that enable either the direct abrogation of union contracts, the contracting out of existing airport employees' work, or have the clear effect of reducing wages and benefits will be measures labor strongly opposes. In some cases, this reality may dissuade airport owners from privatizing work.

Outsourcing can save money if airport owners are careful about what they buy and if they set up performance-based contracts that hold contractors accountable for meeting quality service standards. Outsourcing a service that invites risk, and failing to manage that risk through active contract monitoring, can produce unfavorable results.

While some U.S. airport managers cited several examples of successful service contracts (e.g., airline equipment consortia), others were more critical of them. In fact, several airport managers pointed to examples of certain functions that had been privatized, but reverted to public control or ownership, including janitorial services, baggage handling systems, jetway maintenance, and ramp control services. See Chapter 7 for further discussion.

In March 2011, New York City's deputy mayor, Stephen Goldsmith, who had been known as "the prince of privatization" when he was mayor of Indianapolis in the 1990s, announced plans to "in-source" services that the city had previously privatized to save money. He claimed to find \$41 million in immediate savings by taking the work of the city's data center and wireless network back in-house.⁹

In sum, tasks that are well-defined, easy to monitor, and available from competing contractors—sometimes called commodity tasks—are prime candidates for outsourcing. Conversely, tasks that are complex, changeable, lack clear benchmarks, or have little or no competition—custom tasks—are often kept in-house.¹⁰

⁹*Is Privatization a Bad Deal for Cities and States?* New York Times (Opinion Pages), April 3, 2011.

¹⁰John Donahue, *Outsourcing the Wrong Jobs*, New York Times, April 4, 2011.

CHAPTER 4

Management Contracts

4.1 Specific Strategies

Numerous airports have contracted out the management and operation of parking facilities, concession operations, or entire terminals where the operator manages the facility on behalf of the airport owner for a specified period of time and in return receives a management fee.

A number of airport owners in the United States have contracted the day-to-day operation of their entire airport to private operators. Under an airport-wide management contract, an operator manages the airport (or airport system) under policies and direction from the airport owner for a specified period of time. The operator's objective is to improve the financial and operational efficiency of the airport, and the operator is typically paid an annual fixed management fee. Sometimes the operator is paid a variable fee based on performance.¹¹

The airport owner retains a considerable degree of control over the quality of service provided by the contractor by setting policy and also retains the obligation, control over, and risks for making capital investments. (The contractor does not bear any of the risks for capital improvements.) The operating budget is usually set and managed by the operator, but approved by the airport owner. Frequently, these types of arrangements are introduced when the airport owner feels the transition can introduce a more efficient operation of the airport where the objective of the operator would be to reduce costs and increase revenues. Another reason might be to improve customer service. This type of arrangement has also been used when an airport transitions from a municipal or state-run operation to an independent airport authority (e.g., Albany, Harrisburg).

Sometimes the airport owner contracts separately for (1) general airport management, operation, and maintenance, (2) ARFF services, and (3) parking services.

Even in cases where the airport owner contracts out most of the day-to-day operation of its airport, it may retain control

over certain functions. For example, the Burbank-Glendale Pasadena Airport Authority maintains its own police department. Sometimes the airport owner retains the responsibility for supervising and providing airport police services (e.g., Harrisburg International Airport).

Functions that the airport owner typically retains under its control include:

- Airline use agreement compliance
- Rates and charges policy
- Air service development policy
- Assurances and compliance for federal and state grant programs
- Long-range planning
- Capital expenditure policy and implementation
- Debt issuance policy
- Land acquisition and development policy and planning
- Airport industrial and economic development policy (and sometimes management)
- Environmental policy

Often the management fee is fixed with little or no incentive component, which effectively means the arrangement is one large service contract. By comparison, in Indianapolis the initial fee structure was based almost entirely on incentive compensation where the airport authority's main objective in contracting with BAA was to reduce airline payments per enplaned passenger. The community felt that this would induce the airlines to provide more air service, which in turn was expected to stimulate regional economic development.

4.2 Examples of Management Contracts

There has been a wide variety of management contracting employed in the United States as illustrated by the following examples.

¹¹See for example the Indianapolis case study where BAA was paid on the basis of savings generated.

4.2.1 Terminal Management Contracts

Some airports have contracted out the management and operation of entire terminals.

Atlanta Hartsfield International Airport. At Atlanta Hartsfield International Airport, the central passenger terminal complex (CPTC) is operated and maintained on behalf of the airlines by the Atlanta Airlines Terminal Corporation (AATC), a corporation established by the airlines for that purpose. The City of Atlanta (the airport owner and operator) has also contracted management, operation, and maintenance of the international terminal facilities to TBI Airport Management, Inc. The city recovers from TBI its allocable operating and maintenance expenses according to the guidelines of the CPTC leases. TBI pays all other operating and maintenance expenses and, in turn, recovers all the costs and expenses, plus a management fee, from the airlines through quarterly use charges.

Orlando Sanford International Airport. The Sanford Airport Authority contracts with TBI Airport Management, Inc. to manage the international and domestic terminals, develop additional air service, and provide ground handling and cargo services at Orlando Sanford International Airport. The airport authority manages and operates the rest of the airport with a staff of 50, which provide ARFF, police, administration, and other services.

4.2.2 Parking Management Contract or Concession Agreement

Although some airports continue to operate their parking facilities using airport employees (e.g., Dallas/Fort Worth, Norfolk, and Seattle), most U.S. airports retain private companies to operate their parking facilities and shuttle buses using either concession agreements or management contracts. Management contracts are the more frequently used model. Under the terms of a concession agreement, the private operator is typically responsible for all aspects of day-to-day parking operations, including facility maintenance and fee collections. As payment for their services, the concessionaires receive a percentage of the gross revenues from parking operations but are required to pay the airport owner the greater of this percentage amount or a minimum annual guaranteed amount. In this manner, the concessionaire assumes most of the risk for potential downturns in parking revenues, but also receives greater rewards if there is an unexpected increase in airline passenger traffic. Examples include the airports serving Baltimore/Washington, Dayton, Cleveland, Erie, Honolulu, and Houston (Intercontinental).

With a parking management contract, the airport provides the parking facilities (including the revenue control equipment and buses), establishes minimum customer service standards,

reserves the rights to adjust parking rates, and then retains a private operator to manage the operation under a budget that is approved by the airport. The private operator is reimbursed for their authorized expenses and is also paid a management fee. With a management contract, the airport operator assumes most of the risk for a downturn in parking revenues, receives most of the reward for increased parking business, and, compared to a concession contract, has greater latitude to control and modify customer service standards. Examples include airports serving Burbank, Orange County (California), Nashville, Orlando, Pittsburgh, San Francisco, and Tulsa.

Some airports use combinations of concession contracts and management agreements. For example, they may use concession contracts for economy parking and management agreements for valet parking or shuttle bus operations.

4.2.3 Master Terminal Concessionaire or Developer Agreement

Airport owners have entered into master concessionaire agreements for their terminal food, beverage, and retail operations at numerous airports.

BAA USA was retained as the master developer and manager of the retail, food, and beverage operations at the AIRMALL® at Pittsburgh International Airport in 1992.¹² When the Midfield Terminal opened in 1992, Pittsburgh became the first airport in the United States to offer a shopping mall-type approach for retail activities for its passengers. According to the Allegheny County Airport Authority, as of June 1, 2010, there were 40 operators in 70 locations in the Midfield Terminal, including 23 food and beverage locations, 34 retail locations, four service locations and nine news and gift locations. AIRMALL® USA manages the food, beverage, and retail activities in the Midfield Terminal under a Master Lease Development and Concession Agreement with the airport authority. AIRMALL® USA acts as the authority's master lessee and is responsible for developing concession and retail activities at the Midfield Terminal for the authority. AIRMALL® USA has the exclusive rights to manage all terminal concessions (except public pay telephones), including retail, food and beverage, and advertising services. The authority receives 100% of revenues from electronic media, such as the Internet, flight information systems, and the wireless airport system. AIRMALL® USA is not authorized to operate terminal concessions except in the case of a vacancy. The authority receives 59% of the revenues received by AIRMALL® USA from the various concessionaires, and AIRMALL® USA receives 41%.

¹²BAA USA was acquired by the Prospect Capital Corporation, an investment company based in New York City, from its previous owners, BAA Ltd., in a transaction that was completed on July 30, 2010. As part of the transaction, BAA USA is now known as AIRMALL® USA, Inc.

Table 4.1. Examples of airport-wide management contracts.

Airport	Owner	Operator
Commercial Service Airports		
Albany International Airport (ALB)	Albany County Airport Authority	AvPorts and Go-Albany, Inc.
Atlantic City International Airport (ACY)	South Jersey Transportation Authority	AvPorts
Bob Hope Airport (BUR)	Burbank-Glendale-Pasadena Airport Authority	TBI Airport Management, Inc.
Lehigh Valley Airport (ABE)	Lehigh-Northampton Airport Authority	AvPorts
Rochester Airport, Minnesota (RST)	City of Rochester, MN	Rochester Airport Company
Stewart International Airport (SWF), Newburgh, New York	Port Authority of New York and New Jersey	AvPorts
Westchester County Airport (HPN), White Plains, New York	Westchester County, NY	AvPorts
General Aviation Airports		
Addison Airport, TX	Town of Addison, TX	Washington Infrastructure Services, Inc. and Staubach Airport Management, Inc.
Brackett Field Airport	Los Angeles County, CA	American Airports
Compton/Woodley Airport	Los Angeles County, CA	American Airports
El Monte Airport	Los Angeles County, CA	American Airports
Republic Airport (FRG), Farmingdale, New York	New York Department of Transportation	AvPorts
Rhode Island – Providence (PVD) and 5 GA airports (PVD, UUU, WST, BID, SFZ, OQU)	Airports owned by State of RI, but RI Airport Corp (a subsidiary public corp. of the RI Economic Dev. Corp.) is airport sponsor	RIAC operates TF Green, but leases out operation and day-to-day management of 5 GA airports to Landmark Aviation (formerly Hawthorne Aviation)
Teterboro Airport (TEB), New Jersey	Port Authority of New York and New Jersey	AvPorts
Tweed New Haven Regional Airport, New Haven, Connecticut	City of New Haven, CT	AvPorts
Whiteman Airport	Los Angeles County, CA	American Airports
William J Fox Airfield	Los Angeles County, CA	American Airports

AIRMALL® USA also contributes to a repair and replacement fund to cover certain repair and replacement costs.¹³

Westfield Concession Management (Westfield) manages the food and beverage programs at Reagan National and Dulles International on behalf of the Metropolitan Washington Airports Authority. Under these agreements, Westfield develops and manages the food and beverage programs at the airports, but does not operate any of the concession facilities. Westfield negotiates contracts with each concessionaire using a standard lease that has been approved by the Airports Authority. These contracts generally obligate the concessionaire to pay the higher of a minimum annual guarantee or a percentage of gross revenues. Westfield collects all rents and fees from the concessionaires and retains a portion of gross rental payments as its fee for the management services.

Other examples of master developers and managers of retail, food, and beverage operations include:

- AIRMALL® USA at Boston Logan International Airport (Terminals B and E) in July 2000

- AIRMALL® USA at Baltimore/Washington International Thurgood Marshall Airport in March 2004
- AIRMALL® USA at Cleveland Hopkins International Airport in February 2008
- Marketplace Development at Philadelphia International Airport
- Marketplace Development at LaGuardia Airport

4.2.4 Airport-wide Management Contracts

As shown in Table 4.1, a number of airport owners in the United States have contracted for the operation of their entire airports by private operators. These types of agreements are more commonly found at general aviation airports.

A description of some of these arrangements and others follows.

Bob Hope Airport. Bob Hope Airport is owned by the Burbank-Glendale-Pasadena Airport Authority, which contracts with TBI Airport Management, Inc. for general airport management, operation, and maintenance; Pro-tech Fire Services, Limited for ARFF services; a joint venture of Central Parking Systems and Valet Parking Services for parking

¹³Allegheny County Airport Authority, *Official Statement, Airport Revenue Refunding Bonds, Series 2010A*, August 3, 2010.

services; and Wyle Laboratories for services in connection with noise abatement. The airport maintains its own police department (Burbank-Glendale-Pasadena Airport Authority Police) that is separate from the Burbank Police Department. This airport has been under private operation its entire existence having been developed in 1928 by Boeing Aircraft and Transport (BA&T), which was a holding company that included Boeing Aircraft and United Air Lines. The airport was initially named United Airport. Lockheed Air Terminal, Inc. owned and operated the airport from 1940 until it was sold to the Authority in 1978.

Albany International Airport. The Albany County Airport Authority was created by the State of New York in 1993 with a 40-year lease to operate the airport. The Authority has contracted with AvPorts, Inc., a subsidiary of AFSCO, to manage the daily operations of the airport and with Go-Albany, Inc., d/b/a Million Air—Albany, a subsidiary of Million Air Interlink, to manage the daily operations of the airport's fixed-based operations.

AvPorts has the daily responsibility, under policies and direction from the authority, for airport operations, airside security, ARFF, terminal and vehicle maintenance, and the parking facilities. TBI Airport Management, Inc. operated the airport on behalf of the Authority from 1993 through September 2005.

Go-Albany has the daily responsibility, under policies and direction from the authority, for the fixed-based operations, including commercial into plane fueling, fuel farm management, and general aviation handling and fueling. In 2005, the authority purchased the fixed assets and fuel inventory located on the airport from Aircraft Services International Group (ASIG) with the goal to enhance fueling services for the general and corporate aviation community by offering competitive rates and charges for users of the airport and to provide the airlines at the airport with efficient and quality plane fueling services and fuel inventory management. Go-Albany is reimbursed for its actual expenditures based on an employment level approved by the Authority plus a fixed fee with added incentives based on the growth of fixed-based operation revenues.

All expenditures incurred by AvPorts and Go-Albany are subject to the approval of the authority.

Indianapolis International Airport. In 1994, the Indianapolis Airport Authority solicited bids to manage its airport system that included Indianapolis International Airport and five general aviation airports. The winning bidder, BAA Indianapolis LLC, won a 10-year management contract extending from October 1, 1995 through September 30, 2005. The contract was extended to the end of 2008 but was later terminated (effective July 16, 2007) under mutual agreement by

both parties to provide for (1) an early transition of personnel and operations back to the Authority and (2) a smooth transition in advance of the opening of the new \$1.07 billion Midfield Terminal in late 2008. There was no significant change in the operation and management of the airport facilities in connection with the transition. BAA was paid a performance fee, monthly fixed fee, and transition incentive fee under the terms of the June 14, 2007 amendment.

The airlines felt that while there were benefits at the front end of the contract, toward the end of the lease the airport and airlines were questioning the value of the payments to BAA relative to the benefits derived.

Harrisburg International Airport. In January 1998, the Commonwealth of Pennsylvania transferred the ownership and operation of Harrisburg International and Capital City Airports to the Susquehanna Area Regional Airport Authority (SARAA), which is a joint municipal authority created to own, develop, and operate the two airports. Simultaneously, SARAA entered into a 10-year management agreement with BAA Harrisburg, Inc. (BAAH) for the operation and maintenance of the airport system. The scope of BAAH's services included the operation, maintenance, and development of the terminal, airfield, landside, water, and sewer facilities of the airport system, as well as administrative management. SARAA retained responsibility for supervising and providing airport police services and for managing the industrial park at Harrisburg International Airport. SARAA attempted to renegotiate the terms of BAAH's management contract in November 2000 due to concerns about declines in passenger traffic and BAAH's administration of the airport system. The authority was unsuccessful in renegotiating the terms of the contract to allow it to have more day-to-day responsibilities in the management of the system. Therefore, SARAA terminated the contract in July 2001. The airport system is now managed and operated by SARAA.¹⁴

Los Angeles County Airports. American Airports manages and operates the five general aviation airports owned by Los Angeles County. In 1991, Comarco was awarded a 20-year management contract (with two 5-year renewal options at the county's option) to effectively operate as airport management: collecting rents, conducting day-to-day operations, and running the airport's capital program. Comarco subsequently sold the contract to American Airports in 2000. American Airports also acts as leasing manager for the airports, negotiating and setting rates with tenants. When Comarco was awarded the management contract for the airports, the system

¹⁴Official Statement, *Susquehanna Area Regional Airport Authority, Airport System Revenue Bonds, Series 2004*, July 30, 2004.

generated a \$1 million annual loss, but subsequently turned the enterprise around to generate a \$2 million annual profit. As leases expired, American Airports was able to re-set to market rates and escalated them at the CPI. Los Angeles County retains staff for contract administration (the county still reviews and approves leases of more than one month's duration), capital planning, grants administration, master planning, strategic planning, construction, and inspection, but reduced airport staff from 90 to 9. In addition, American Airports assumed all liability as airport operator and is responsible for carrying out airport maintenance to a set standard. Based on the revenue share approach, American Airports bears the risk of managing airport costs. The first 5-year option was exercised in 2011, extending the contract through April 2016.

4.2.5 Expressions of Interest for Ontario International Airport

In January 2011, Los Angeles World Airports (LAWA) released a request for expressions of interest from the private sector and other interested parties to possibly contract out the operation of LA/Ontario International Airport. The airport is owned by LAWA, which also owns Los Angeles International Airport and Van Nuys Airport, a general aviation facility. The expressions of interest packets ask parties how they might be able to (1) return the airport to pre-2008 passenger traffic trends and increase its share of air traffic in the Los Angeles region, (2) effectively market the airport to airlines, passengers, and air cargo companies, (3) operate the airport more efficiently, and (4) balance the short-term improvement initiatives currently underway at the airport while maintaining its long-term capacity for growth. LAWA received 10 responses to the expressions of interest, including private operators of local and national GA airports, international airport operators, and infrastructure investors.

LAWA operates Ontario International Airport under a long-term joint powers agreement with the city of Ontario. Officials from the city of Ontario have been in negotiations with the city of Los Angeles and LAWA to return control to Ontario. City officials in Ontario believe local control would better address the steep decline in passenger traffic experienced at the airport since 2007 and mitigate LAWA's high costs of operating the airport, which contribute to relatively high airline charges. (The main factor in increasing airline charges was the 30% decline in passengers between 2007 and 2009). As of December 2011, no action has been taken on the expressions of interest and there has been no movement on the city of Ontario's request to take back control of the airport.

4.3 Legal and Regulatory Considerations

The FAA has provided guidance on management contracts. Grant Assurance 5(f) provides as follows:

If an arrangement is made for management and operation of the airport by any agency or person other than the sponsor or an employee of the sponsor, the sponsor will reserve sufficient rights and authority to ensure that the airport will be operated and maintained in accordance with Title 49, United States Code, the regulations and the terms, conditions and assurances in the grant agreement and shall ensure that such arrangement also requires compliance therewith.

The FAA's *Airport Compliance Manual* contains the following additional details on management contracts.¹⁵

1. A public airport owner may contract with an agent to perform airport management or other administrative and supervisory functions. This arrangement may be defined in a management contract, lease or both.
2. The public airport owner remains the airport sponsor, and therefore is responsible for compliance with all grant assurances and other federal obligations. (Note that the difference between full and partial privatization in the instance of a lease of an entire airport is whether the public airport owner continues to be the airport sponsor.)
3. The public airport owner can permit the private airport manager to conduct aeronautical activities, such as serving as a FBO, in addition to providing management functions. The airport owner will have different obligations and requirements, pursuant to the grant assurances, in its treatment of the private entity acting as an FBO than acting as the airport manager. FAA encourages public airport owners to execute separate agreements for airport management functions and aeronautical activities to reflect these different requirements.
4. Consistent with Grant Assurance 5(f), the FAA recommends that a management agreement include particular terms requiring that the private entity conduct its activities consistent with the grant assurances and other federal obligations imposed on the public airport operator and that the management agreement itself be subordinate to the grant assurances.

Management contracts must also follow standard local, state, and federal procurement rules.

Another consideration is the impact of the management contract on the tax status of outstanding debt.

- Under management contracts of facilities financed with tax-exempt bonds, it must be determined if the contract

¹⁵FAA Order 5190.6B, § 6.13 (Airport Management Agreements).

meets the “qualified management contract” test under Internal Revenue Service (IRS) regulations. Failure to meet the requirements of a qualified management contract could result in a judgment that a “private business use” is being made of the facilities financed with tax-exempt bonds.

- At the same time, the term of the management contract needs to be long enough for a private company to realize savings from operational efficiencies. IRS regulations governing qualified management contracts establish compensation requirements and limit the term to 10 or 15 years depending on the nature of the compensation arrangement. Only certain “public utility properties” (i.e., electric energy, water, or sewage disposal services) can qualify for a term as long as 20 years. As a result, management contracts of entire airports tend to be no longer than 10 years.

4.4 Evaluation of Management Contracts

4.4.1 Opportunities

The main opportunities provided by management contracts include:

- May reduce operating expenses due to lower private sector employment and overhead costs, and thereby reduces costs to tenants
- May or may not release contractor from local procurement regulations
- Can streamline and improve certain processes, especially with regard to renegotiating nonairline contracts
- Accesses private sector expertise for specialized functions and commercial development
- Provides potential for new revenue/economic development initiatives on airport
- Furnishes potential to impose contractual obligation for contractor to achieve performance targets
- Provides opportunity for staff to gain management expertise

For example, in Indianapolis, BAA’s operation was beneficial for staff as a whole because employees gained broader airport management expertise and had the opportunity to interact with colleagues in the United Kingdom. This interaction was valuable, as it brought to staff the private sector airport management perspective.

Typically, under an airport-wide management contract, the airport owner’s objective is to improve the financial and operational efficiency of the airport. The operator’s objective is to fulfill the desires of the airport owner as expressed in the management contract in order to get paid a fee. The operating budget is usually set and managed by the operator

and approved by the airport owner. Frequently, these types of arrangements are introduced when the airport is unprofitable, and the objective of the operator would be to reduce costs and increase revenues.

As an example of cost savings, in December 2010 the Kent County Aeronautics Board, which oversees Gerald R. Ford International Airport in Grand Rapids, Michigan, decided to enter into a management contract for its parking operations at the airport to save the airport between \$1.5 million and \$1.9 million over five years.¹⁶ The savings were attributable to the fact that pay and benefits for county employees were higher than market costs and the employees’ union negotiated contracts on behalf of general employees based on seniority and not specific job descriptions.

Some policy makers have considered privatizing the day-to-day management of their airports due to an ideological conviction and belief that the private sector can do a better job of managing airports by improving the efficiency of operations, establishing new retail and restaurant operations, introducing creativity and innovation, and realizing lower construction costs. However, others argue that airport owners and their tenants would be better served if cost and quality were the criteria used in deciding to privatize, rather than ideology.

Regarding procurement regulations, in some cases the contractor must follow the airport owner’s procedures. For example, in Indianapolis, BAA was not released from the requirements of the Authority’s procurement ordinances when acquiring services on behalf of the airport authority. Release from these procurement regulations is often a large motivation in privatization efforts. In contrast, BAA’s procurement of goods with their own operating funds was not considered ‘public’ dollars in the same way as the authority’s funds.

4.4.2 Advantages

The main advantages provided by management contracts include:

- Provides opportunity for airport to be managed and operated as a business
- Streamlines day-to-day operational decision making
- Affords potentially lower operating expenses from private sector employment practices and efficiency initiatives
- Brings increased emphasis on revenue enhancement, commercial, and economic development
- Reduces ongoing municipal employee compensation, including post retirement expenses (pension, medical, etc.)

¹⁶Kyla King, *The Grand Rapids Press Board votes to outsource parking operations at Grand Rapids airport*, Grand Rapids Press, December 15, 2010.

- Provides greater incentives for management and employees to perform better
- Provides more commercial and operational freedom for contractor

4.4.3 Disadvantages

The main disadvantages provided by management contracts include:

- Involves considerable time and effort for the bidding process
- Could involve buyouts and compensation for existing public workers
- Could involve organizational disruption (i.e., reassignment or termination of existing employees)
- Difficult to truly measure efficiencies for the purpose of justifying compensation
- Can discriminate against government departments competing in managed competition efforts, as regulations generally prevent them from partnering with private firms or guaranteeing performance
- Requires careful tracking of contract compliance, which can be a time consuming and substantial undertaking for the airport owner
- Becomes increasingly difficult to attain further improvements and realize the full value of the management fee once initial efficiencies are attained

Regarding the Indianapolis management contract, the airlines felt that while there were benefits at the front end of the contract, toward the end of the lease, the airport and airlines were questioning the significant payments to the contractor with diminishing or no additional benefits.

4.4.4 Complexity, Risk, and Implementation Issues

Implementing airport-wide management contracts for the first time can be complicated endeavors, but if structured properly, they usually entail relatively low risk. For airports that have operated under management contracts for many years (e.g., Burbank, Albany), the renewal and rebidding of the service is not very complicated, but for airports that consider this form of privatization for the first time, the level of effort can be quite significant, as described in the Indianapolis case study. Among other things, the airport owner needs to:

- Identify what functions it wants to retain and control
- Identify the service quality and performance standards it wants to achieve

- Determine whether a concession or management agreement best advances the airport owner's goals for risk allocation and compensation
- Develop a strong, performance-based contract that holds the contractor accountable for meeting the quality and performance standards
- Address labor issues (i.e., develop strategies to help public employees find other jobs or make the transition to a private-sector environment)
- Develop and issue a request for proposals
- Evaluate proposals and select the winning operator
- Negotiate the terms of the contract
- Secure FAA approvals for the contract, if required
- Oversee the transition from public to private operation
- Monitor the contractor's performance
- Negotiate the annual fee (if the fee is performance-based)

The metrics used to gauge performance need to be transparent and easily measurable. For example, as found in the Indianapolis case study (Chapter 9), improvements made by the contractor (BAA) as measured by airline payments per enplaned passenger were difficult to track because they required estimates of a hypothetical baseline comparison. The baseline became increasingly difficult to measure, especially after the operational changes due to increased security measures following the September 11, 2001 terrorist attacks. As a result, the annual management fee became an annual negotiation between the airport authority and BAA, which was frequently contentious. In addition, tracking contract compliance became a substantial undertaking for the airport authority, which eventually hired professionals with airport and public management expertise to oversee the contract.

Also, the compensation needs to be tied to each goal the airport owner is trying to achieve (e.g., lower costs, enhanced nonairline revenues, improved customer service, new air service). For example, in Indianapolis, the structure of the initial compensation calculation dis-incentivized BAA from implementing any customer service initiative that resulted in increased operating expenses, even though improved customer service was cited as a goal during the competitive bidding process and was supported by the spirit of the management contract. Therefore, there needs to be reliable and accurate cost data to assess the overall performance of the activities and the owner needs to monitor and evaluate performance of the operator to ensure that its expectations are met.

As found in Indianapolis and implemented in Albany and Burbank, to achieve the full benefits of privatization, it may be more effective and economical to contract with multiple firms specializing in each area in which improvement is targeted (e.g., ARFF, parking, fueling, fixed-based operations).

CHAPTER 5

Developer Financing and Operation

5.1 Specific Strategies

Traditional Approach

U.S. airports have traditionally financed airport improvements with a combination of federal and state grants, PFC revenues, customer facility charge (CFC) revenues, internal capital funds, and the proceeds of bonds. Under this traditional approach, airports are able to maintain control of investments, set standards and perform maintenance, and pursue ongoing capital investments that are consistent with community needs, goals, and objectives. Airports are able to access capital markets efficiently at relatively reasonable prices and implement fees on tenants to recover costs of investments in airport infrastructure that help secure funding when required. Issuing bonds may require management actions to increase revenues, reduce expenses, and minimize other capital investments with an overall goal to avoid material impacts on the credit fundamentals of the airport through the period of investment.

Publicly operated airports in the United States also have typically used a design-bid-build process, which gives the airport owner more control over the project, but more exposure to cost overruns and delays as well as increased debt.

Project Finance Approach

A number of airports have utilized the private sector for full-scale development, operation and maintenance services, and sometimes financed facilities under long-term leases or concessions. This type of arrangement tends to be used when relatively large investments are needed for passenger terminals, parking garages, rental car facilities, fuel systems, cargo facilities, general aviation facilities, and other major facilities. At the end of the lease, the ownership and control reverts to the airport owner. Project financing is the most common way to introduce private sector capital while also transferring the

risk of repayment. The developer could be entirely private or part of a PPP. Under variants of each model, the developer takes the full economic risk for the investment and operations of the facility. This structure requires that the project have a revenue stream to repay the debt.

There are a number of project development privatization models with different degrees of control and risk for the airport owner, which are summarized in Table 5.1 and described below.

- **Construction Manager at Risk (CM at risk)** is a project delivery method in which a construction manager commits to deliver the project within a guaranteed maximum price (GMP). The construction manager acts as consultant to the airport owner in the development and design phases and as a general contractor during the construction phase. Due to the financial commitment, the CM at risk has an incentive to manage and control construction costs to not exceed the GMP.
- **Master Terminal Concession Developer** is a program management approach in which a developer acts as the airport owner's master lessee and is responsible for developing and managing terminal concession and retail activities, including merchandising, retail, food and beverage, and sometimes advertising services. Typically, the developer is not authorized to operate terminal concessions except in the case of a vacancy. The airport owner and developer share in the revenues under various formulas. Often the developer is required to contribute to a repair and replacement fund to cover certain repair and replacement costs. Examples include Pittsburgh International Airport, Boston Logan International Airport (Terminals B and E), Baltimore/Washington International Thurgood Marshall Airport, and Cleveland Hopkins International Airport.
- **Parking Concession Agreements** are a program management approach in which a private contractor is typically

Table 5.1. Project finance approaches.

Approach	Design	Build	Operate & Maintain	Finance	Transfer at End of	
					Construction	Lease
Construction Manager at Risk	♦	♦			♦	
Terminal Concession Developer	♦	♦	♦	♦		♦
Parking Concession Agreements	♦	♦	♦	♦		♦
Design-Build-Operate-Maintain	♦	♦	♦			♦
Build-Transfer-Operate		♦	♦		♦	
Build-Operate-Transfer		♦	♦	♦		♦
Design-Build-Operate-Transfer	♦	♦	♦			♦
Design-Build-Operate-Maintain and Finance	♦	♦	♦	♦		♦

responsible for all aspects of day-to-day parking operations, including shuttle buses, facility maintenance, and fee collections. As payment for their services, the contractor receives a percentage of the gross revenues from parking operations, but is required to pay the greater of this percentage amount or a minimum annual guaranteed amount to the airport owner. Therefore, the contractor assumes most of the risk for potential downturns in parking revenues, but also receives greater rewards if there is an unexpected increase in airline passenger traffic. Examples include the airports serving Baltimore/Washington, Dayton, Cleveland, Erie, Honolulu, and Houston (Intercontinental).

- **Design-Build-Operate-Maintain (DBOM)** is a project delivery method in which a single contractor is responsible for designing, constructing, operating, and maintaining a facility with financing secured by the airport owner. The airport owner maintains ownership and retains a significant level of oversight of the operations (as set forth in the contract). Under this model, the risk for construction cost overruns and responsibility for annual operating expenses belongs to the contractor.
- **Build-Operate-Transfer (BOT)** is a project delivery method in which a contractor builds a facility to the specifications set by the airport owner, operates the facility for a specified time period, and then transfers the facility to the airport owner at the end of the contract. In most cases, the contractor will also provide some, or all, of the financing for the facility. Therefore, the term of the contract must be sufficient to enable the private partner to realize a reasonable return on its investment through user fees.
- **Build-Transfer-Operate (BTO)** is a project delivery system similar to the BOT model except that the transfer to the airport owner takes place at the time construction is completed, rather than at the end of the lease period.
- **Design-Build-Operate-Transfer (DBOT)** is a project delivery method in which a contractor partner designs, constructs, and operates a facility and hands over ownership of the facility to the airport owner after operating it for a

specified period of time. Under this model the responsibility for construction cost overruns and annual operating expenses belongs to the contractor.

- **Design-Build-Operate-Maintain and Finance (DBOM/F)** is a project delivery method in which a contractor also is responsible for financing the project. Most examples of airport project finance transactions in the United States involve special purpose facilities for single or multi-tenant use, typically an airline, one or more cargo tenants, or rental car companies. The revenues from such special purpose facilities are pledged to pay debt service on the obligations incurred for such special purpose facilities and are not included in general airport revenues. Project finance is also used on behalf of private, third parties that are not tenants of the facilities. Variations and examples of the DBOM/F approach for airports include:

- **Public-Private Partnership for Terminal Development** is a project delivery method in which a special purpose limited liability corporation (LLC) is formed to build, operate, develop, and manage a terminal under a long-term lease. The developer is obligated to pay operation and maintenance expenses and ground rent to the airport, make facility rental payments sufficient to pay debt service on the bonds, and share distributions from remaining revenues with the airport owner. An example is the \$1.4 billion Terminal 4 at John F. Kennedy International Airport.
- **Single Tenant Special Facility Terminal Lease** is a project delivery method in which an individual airline finances the construction of portions of or entire terminals. Typically, these improvements are financed under special facility bonds arrangements to allow the airline to access tax-exempt private activity debt to lower the financing costs. Under special facility bonds, the debt is issued by either the airport owner or another governmental entity, which maintains the public purpose of the project and allows the bonds to be treated as tax-exempt debt. The conduit issuer

- retains no contingent liability for the bonds because the bonds are secured solely by special facility rentals and sometimes a corporate guarantee by the tenant. Airline special facility bonds have been used to finance hangar and maintenance facilities, cargo buildings, and ground equipment support facilities for the exclusive use of an airline. Examples include Boston Logan (Delta/Terminal A, US Airways/Terminal B), Chicago O'Hare (United/Terminal 1), Cincinnati Northern Kentucky (Continental/Terminal 3 and Concourse B), Cleveland Hopkins (Continental/Concourses C and D), Los Angeles (American/Terminal 4, Delta/Terminal 6), Newark (Continental/Terminal C), New York's John F. Kennedy (United/Terminal 7, American/Terminal 8), and San Francisco (United/Terminal 3), among others.
- **Multi-Tenant Special Facility Terminal Lease** is a project delivery method in which an airline consortium has financed an entire terminal, including Terminal One Group Association (TOGA) at JFK and Terminal 5 at Chicago O'Hare (the international terminal).
 - **Special Facility Fuel System Leases** are a project delivery method in which a special purpose corporation is created for the exclusive purpose of developing and operating the jet fuel storage and distribution system at an airport under a long-term fuel system lease. Membership in the consortium is open to all airlines serving the airport that accept the interline agreement, receiving fueling services on a non-discriminatory basis. The fuel consortium collects user fees from all air carriers using the facility. Fees are calculated on a residual basis to pay operating expenses, facilities rent (i.e., debt service), and ground rent. Charges are pro-rated primarily based on gallons of fuel delivered. Consortium airlines receive lower rates (non-members typically pay a 50% premium), but are subject to a residual interline agreement, which has a step-up provision that requires members to loan the fuel consortium their share of a defaulting member's unpaid amount. Examples include Boston Logan International Airport, Los Angeles International Airport, Oakland International Airport, Orlando International Airport, and San Francisco International Airport.
 - **Second Party Cargo Development** is a project delivery method in which an airport enters into a long-term ground lease with a cargo integrator such as FedEx and UPS. For example, at the primary express cargo hubs in Memphis and Louisville, cargo processing facilities have been financed primarily through special facility bond financing secured by FedEx and UPS, respectively. However, in both instances a substantial amount of general airport revenue bond debt also was issued for airfield, land acquisition, and other related facilities that were critical to the cargo carriers' operations.
 - **Third Party Cargo Development** is a project delivery method in which an airport owner enters into a long-term ground lease (typically 30 years) with a third party developer to design, construct, and operate a cargo handling facility. In some cases the third party develops the cargo facility for a single tenant where the term of the tenant's lease may or may not be coterminous with the third party's lease.
 - **Private Development of Consolidated Rental Car Facility** is a project delivery method in which a private developer, on behalf of the rental car companies, takes the lead on the design, construction, and financing of the project. The project is financed with special facility revenue bonds that are secured solely by CFCs charged to rental car patrons and sometimes rent paid by the rental car companies.¹⁷ Examples include Ted Stevens Anchorage International Airport and Austin-Bergstrom International Airport. This is a relatively new variation on the more traditional approach where the airport owner takes the lead in designing, financing, and constructing the facility that is financed with standalone CFC debt. Under private development, the airport owner helps to define the scope, but does not take responsibility for the development or delivery of the facility. This is seen as a means to expedite the project delivery and transfer the construction risk to the private developer.
 - **Private Parking Development** is a project delivery method in which an airport awards a long-term contract to a contractor for the development and operation of airport parking facilities. Under the terms of these contracts the contractor may be responsible for designing, building, operating, and maintaining the public parking facilities, or some combination of these tasks. The lease typically provides that the contractor (1) make scheduled minimum annual payments to the airport owner as well as additional payments based on performance and (2) guarantee payment of the debt service from bonds issued to develop parking facilities (usually special facility bonds). Given the significant profit derived from parking operations, this is not a common approach, but has been used in Gulfport-Biloxi, Hartford, New Orleans, and Providence.
 - **Private Solar Development** is a project delivery method in which an airport awards a long-term contract to a contractor to design, finance, install, and operate solar photovoltaic systems on the airport, which generate

¹⁷A rental car Customer Facility Charge (CFC) is a per transaction day, or a per transaction, charge imposed on the rental car customer by the airport, collected by the rental car companies, and remitted by the rental car companies to the airport. Imposition of a CFC has been key to the financing of consolidated rental car facilities.

power for the airport's use and the airport owner agrees to purchase the power at a fixed rate for the period of the contract through a power purchase agreement or PPA. Airports can realize significant reductions in power costs under these arrangements, although some airports have undertaken solar development themselves to realize these gains, which include renewable energy credits or RECs. Typically the economics of these developments only work for the contractor if it is able to access federal investment tax credits (or grants) for the capital cost of the project. The term of these agreements tends to be 15 to 20 years, which is the economic life of the panels. The solar photovoltaic systems require large amounts of space on an airport, but are placed in areas that do not interfere with the airport's operations. This type of arrangement has been used at airports serving Denver, Fresno, and Bakersfield.

5.2 Examples of Developer Financing and Operation

There has been a wide variety of developer financing and operation employed in the United States as illustrated by the following examples.

5.2.1 Single Tenant Special Facility Terminal Leases

Individual airlines have privately financed the construction of portions of or entire terminals, including at:

- Boston Logan (Delta/Terminal A, US Airways/Terminal B)
- Chicago O'Hare (United/Terminal 1)
- Cincinnati Northern Kentucky (Continental/Terminal 3 and Concourse B)
- Cleveland Hopkins (Continental/Concourses C and D¹⁸)
- Los Angeles (American/Terminal 4, Delta/Terminal 6)
- Newark (Continental/Terminal C)
- New York's John F. Kennedy (United/Terminal 7, American/Terminal 8)

Typically these improvements are financed under special facility bonds arrangements to allow the airlines to access tax-exempt private activity debt to lower the financing costs. Under special facility bonds, the debt is issued by either the airport owner or another governmental entity, which maintains

the public purpose of the project and allows the bonds to be treated as tax-exempt debt. The conduit issuer retains no contingent liability for the bonds because the bonds are secured solely by special facility rentals and sometimes a corporate guarantee by the tenant. Airline special facility bonds have been used to finance various types of facilities, including unit terminals or portions of passenger terminals, hangar and maintenance facilities, cargo buildings, and ground equipment support facilities for the exclusive use of the airline.

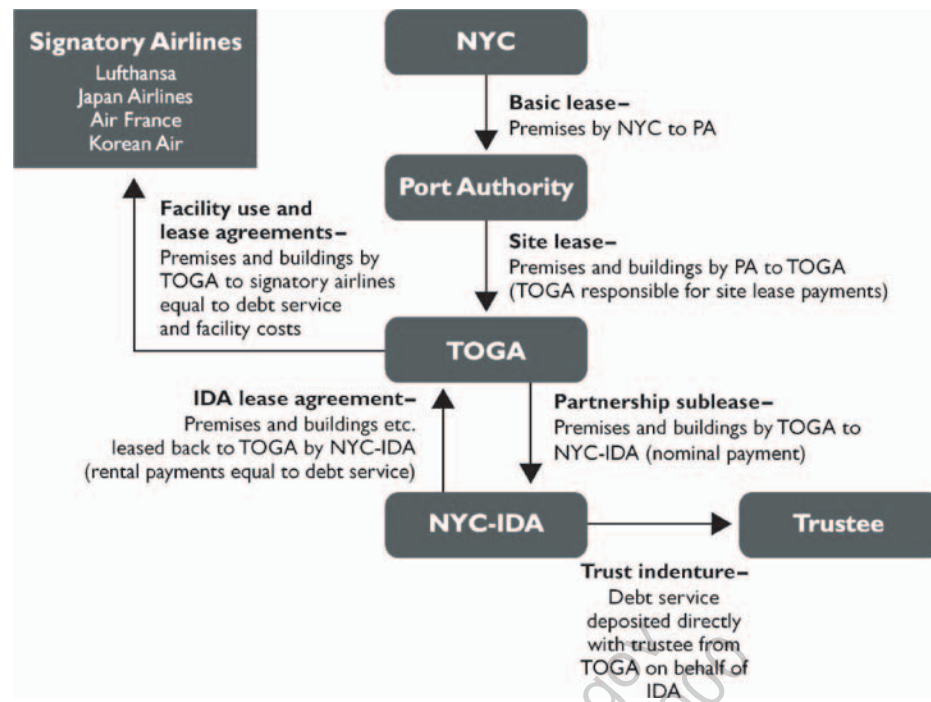
During the most recent round of airline bankruptcies in 2003 and 2004, a number of these special facility bond leases were rejected by certain airlines under the Chapter 11 bankruptcy laws while the associated ground leases were accepted resulting in a situation where the airline continued to use the facility and only pay ground rent but not debt service. This action on the part of the bankrupt airlines, led to a series of lawsuits by bondholders. (See Section 5.4.3 for more detail.)

Although there have been fewer issues of single tenant special facility financings since these lawsuits, the outcomes from these lawsuits have provided guidance on how leases should be structured in the future to avoid such a re-characterization in a bankruptcy setting. For example, in December 2009 there was a \$150 million special facility bond financing for Delta Airlines to refinance bonds issued in 2000 that were used to fund the costs of acquisition, construction, and installation of certain airport facilities for Delta at Atlanta Hartsfield International Airport. In addition, in August 2010, there was a \$30 million financing for US Airways' facilities at Philadelphia International Airport (ground support equipment maintenance facility, cargo improvements, terminal baggage handling systems, and updating and renovating offices and crew rooms).

5.2.2 Multi-Tenant Special Facility Terminal Leases

In some cases, airline consortiums have financed entire terminals, including TOGA at JFK and Terminal 5 at Chicago O'Hare (the international terminal). TOGA was formed as a limited partnership to lease, finance, construct, maintain, and operate Terminal One at JFK Airport. The facility, which serves international passengers only, was completed on time and within budget in 1998. TOGA is owned by four airlines, each holding an equal interest in the partnership—Lufthansa, Japan Airlines, Air France, and Korean Air. The tax-exempt special facility bonds for Terminal One were issued by the New York City Industrial Development Agency (IDA) on behalf of TOGA. As part of the financing, TOGA entered into a site lease with the Port Authority of New York and New Jersey for the Terminal One site. The four airline partners entered into individual facility use and lease agreements with

¹⁸In the development of Concourse D at Cleveland in 1997, the City decided it wanted to retain the right to award the concessions in the new concourse. Therefore, the non-airline areas of the concourse were financed with general airport revenue bonds and are not part of Continental Airlines' special facility leased premises.



Source: "New York City Industrial Development Agency's (IDA) special facility revenue bonds series 2005, issued for the Terminal One Group Association LP (TOGA)," Standard & Poor's Ratings Services, October 31, 2005.

Figure 5.1. Terminal One Group Association transaction legal structure.

TOGA. These airlines are ultimately responsible on a joint and step-up basis for paying all of the facility's fixed and variable costs, including debt service on the special facility bonds that financed the terminal. Terminal One was developed as a multi-use airline terminal with 640,000-square feet and 11 aircraft gates, and is one of nine airline terminals located within JFK's central terminal area complex. The lease structures to accomplish these transactions can be quite complicated as illustrated in Figure 5.1.

5.2.3 Special Facility Fuel System Leases

BOSFuel is a special purpose corporation created for the exclusive purpose of developing and operating the jet fuel storage and distribution system at Boston Logan International Airport under a fuel system lease that expires in 2039. Membership in the consortium is open to all airlines serving the airport that accept the interline agreement, while fueling service is available to all carriers serving the airport on a non-discriminatory basis. BOSFuel collects user fees from all air carriers using the facility, calculating the fees on a residual basis to pay operating expenses, facilities rent (i.e., debt service), and ground rent. Charges are pro-rated primarily based on gallons of fuel delivered. Consortium airlines receive lower rates (non-members pay a 50% premium), but are subject to a residual interline

agreement, which has a step-up provision that requires members to loan BOSFuel their share of the unpaid amount if any member defaults. In 2009, there were more than 20 airline members of BOSFuel, accounting for over 90% of total fuel volume at the airport.¹⁹

Similarly, SFO Fuel Co. LLC (SFOFuel) is a single-purpose, limited liability company that was created in 1997 to lease, construct, operate, and maintain the exclusive jet fuel facilities at San Francisco International Airport. The company issued bonds totaling approximately \$125 million to construct improvements to the consolidated fuel distribution facility. Like BOSFuel, the special facility bonds are secured solely by payments to the Airport Commission by SFOFuel from facilities rent collected from the airlines, including an unlimited step-up provision for the sharing of capital and operating expenses among the 40 member airlines in the event of any member default.

A number of other airports have similar airline fuel system consortia that were created to develop and operate jet fuel systems, including Los Angeles International Airport, St. Louis International Airport, and Anchorage International Airport.

¹⁹Fitch Downgrades \$103MM MassPort Rev Bonds for BosFuel to 'BBB' from 'A-'; Outlook Stable, The Bond Buyer, February 10, 2010.

5.2.4 Third Party Cargo Development

Cargo facility development can be accomplished by (1) the airport owner, (2) a second party who develops and subsequently occupies and uses the facility, (3) a third party who develops the facility but does not occupy or use it, (4) a contractual arrangement where the development and management of the property is shared by the public and private sectors, or (5) a combination of these strategies.

Third party airport cargo development is quite prominent in the United States today across all airport sizes and forms of governance, including at Boston Logan, Chicago O'Hare, Dallas–Fort Worth, Harrisburg, JFK, Miami, Pittsburgh, San Antonio, Seattle, Washington Dulles, and others. Airports enter into long-term ground leases (typically 30 years) with third party developers to design, construct, and operate a cargo handling facility. The third party finances the cargo building and associated truck dock and vehicular parking while the aircraft apron and road improvements are usually funded through a combination of federal, state, local, and private funds. Often the third party financing is accomplished with tax-exempt special facility bonds issued by the airport or another public agency on behalf of the third party developer. These special facility revenue bonds are repaid solely from revenues generated by the facility, as collected by the third party developer from tenants of the project. The rating for these bonds is based on the financial strength of the tenant, guarantees of a third party (e.g., bond insurer), or the level of demand for cargo facilities and the availability of other facilities on or near the airport instead of the airport as a whole. As a result, these bonds carry a higher interest rate than general airport revenue bonds.

There are three types of third party cargo financings—single tenant, multi-tenant, and pooled assets.

- **Single Tenant:** There are a number of examples of cargo financings accomplished under long-term leases with integrators such as FedEx and United Parcel Service (UPS). For example, at the primary express cargo hubs in Louisville and Memphis, cargo processing facilities have been financed primarily through special facility bond financing secured by UPS and FedEx, respectively. However, in both instances a substantial amount of general airport revenue bond debt also was issued for airfield, land acquisition, and other related facilities that were critical to the cargo carriers' operations.
- **Multi-Tenant:** Multi-tenant cargo financings, on the other hand, often involve shorter term leases with a number of cargo operators and freight forwarders and usually these bonds are unrated and privately placed. In one of the larger multi-tenant third party cargo developments, the City of Denver, the owner and operator of Denver International

Airport, entered into a 30-year ground lease with a third party developer, WorldPort at DIA Owners LLC, to design, construct, and operate a cargo handling facility on 70 acres of airport property in 2000. The proposed \$100 million cargo development (called WorldPort at DIA) was envisioned to consist of seven buildings (500,000 square feet), a new taxiway, and an aircraft ramp to be developed in phases. Two 60,000-square-foot buildings were completed in 2002, but as of 2010 only one of them had tenants. The other buildings were never constructed. The city issued special facility bonds to finance the construction on behalf of the developer, but those bonds were paid off. In 2008, the city paid JPMorgan Chase \$4 million for WorldPort, which represented 12.5% of the estimated \$32 million that former owner Lehman Brothers invested in the project. Lehman was the project's initial primary investor, but Lehman transferred WorldPort to JPMorgan Chase, which had guaranteed the bonds used to build WorldPort. WorldPort opened right after the Sept. 11, 2001, terrorist attacks, which led to a decline in air cargo shipments both in Denver and nationwide that contributed to the lack of tenants along with a fundamental shift to integrators (e.g., FedEx and UPS) who began to transport more freight by truck instead of air.

- **Pooled Assets:** The first pooled asset special facility cargo financing took place in 2002 when Cargo Acquisitions Companies Obligated Group, consisting of Aeroterm US Inc. and its financial partner Greenfield Partners (a private equity fund in Norwalk, Conn.) sold \$73.5 million to finance the acquisition of long-term leases from other third party developers at nine different airports. Combining the financing for cargo leases at nine airports into a single cross-collateralized bond issue permitted an investment grade rating. If the lease acquisitions had been financed individually, the bonds most likely would not have been rated. According to Mary Francoeur, senior vice president of Moody's at that time: "It removes a single asset risk that would normally be associated with one cargo property. It gives the structure some diversity."²⁰

Another noteworthy cargo facility development at Washington Dulles Airport involved a unique financing arrangement between the Metropolitan Washington Airports Authority (MWAA) and AFCO (the cargo developer). Under the 24-year lease, MWAA loaned AFCO \$2 million for infrastructure improvements as part of the development (in addition to special facility financing for the cargo building) where the amortization of the loan principal and interest were not payable

²⁰Michael McDonald, *Unprecedented Air Cargo Deal Uses Nine Separate Authorities*, The Bond Buyer, March 12, 2002.

until years 16 through 24 when the developer was in a position of making a profit on the development.

5.2.5 Private Development of Low-Cost Airline Terminal Development

In 2007, the City of Austin, the owner and operator of Austin-Bergstrom International Airport, recognized an emerging niche and marketing opportunity and set out to attract an ultra-low-cost Mexican airline, after seeing the implementation of this successful airline business model in Europe (Ryanair) and Asia (AirAsia) and the debut of Skybus in the United States. After contacting Mexican airline VivaAerobus, the airport realized that to compete for their service, the city would need to provide a low-cost, no frills terminal as an alternative to the existing terminal that catered to full-service airlines.

The city had two primary goals in developing this new facility—(1) it needed to be constructed quickly to respond to this market opportunity and (2) it wanted to reduce its risk in the event the airline was not successful or stopped serving the airport. Therefore, the city decided to enter into a partnership with General Electric's subsidiary, GE Commercial Aviation Services (GECAS), to develop and operate a no frills, one-story terminal building (previously owned by the National Guard) with no jetways or complex baggage system and with common use holdrooms, gates, and ticket counter areas. GECAS also operated the parking and rental car facilities at the terminal, while the city operated the airfield and security. Due to the lower level of service provided at the South Terminal, rental rates were priced at roughly half of the rates paid by the airlines in the main terminal. However, all airlines paid the same landing fee rates. The 20-year lease between the city and GECAS was structured to allow GECAS to recoup its \$6 million investment in the South Terminal facilities before the city would begin sharing in the revenues.

In May 2008, the low-cost, no frills South Terminal opened as the first facility constructed in the United States dedicated to accommodate ultra low-cost airlines. However, the negative impact on air travel resulting from a combination of the swine flu virus, the deep economic recession, and Mexican drug wars caused VivaAerobus to suspend its service from Austin in June 2009 and GECAS turned the facility back to the city. Although the South Terminal has been temporarily closed until a new ultra-low-cost carrier can be recruited to begin service, the city achieved its goals of speedy development of the facility to exploit a marketing opportunity and minimal financial risk by engaging a private company to participate in this development venture.²¹

²¹Interview with Jim Smith, Airport Director of Austin-Bergstrom International Airport, August 12, 2010; and *ACRP Report 20: Strategic Planning in the Airport Industry*, January 2010.

5.2.6 Private Development of Consolidated Rental Car Facility

Ted Stevens Anchorage International Airport. In 2005, Venture Development Group, LLC (an Alaska commercial real estate development company), contracted to develop a new \$57 million consolidated rental car facility at Ted Stevens Anchorage International Airport under the terms of a memorandum of understanding with the rental car companies operating at the airport, the state of Alaska (the owner and operator of the airport), and the Alaska Industrial Development and Export Authority. Venture Development was responsible for the design, construction, and delivery of the project and the Alaska Industrial Development and Export Authority issued the taxable revenue bonds used to finance the facility. The bonds are payable solely from and secured by a pledge of the revenues derived from the daily CFC collected by the rental car companies from their customers, and certain funds and accounts held by the trustee under the bond trust indenture. The state rented the development site to the Anchorage RAC Center, LLC, an Alaska limited liability company and special purpose entity, which manages, operates, and maintains the consolidated facility for use by the rental car companies under subleases.²²

Austin-Bergstrom International Airport. Since its opening in 1999, rental car staging and ready return space have been located on the third level of the terminal parking garage at Austin-Bergstrom International Airport. These facilities were financed with taxable special facility revenues bonds paid for with rental car CFCs. Each rental car company also operates a remote, on-site service center, located approximately one mile northwest of the terminal. The first two levels of the garage are used for public parking. As passenger traffic increased, it became apparent that there was a need for additional rental car staging and ready return space as well as additional covered public parking within walking distance to the terminal building.

In 2010, airport officials and rental car company representatives mutually agreed that the best way to solve the issue was to build a new, three or four level parking garage and consolidated rental car facility on a surface parking lot located immediately behind the existing terminal parking. This will allow the airport to convert the third floor to public parking and to develop a consolidated facility for rental car ready return and quick turnaround areas (vehicle fueling, cleaning and storage facilities) within walking distance to the terminal

²²*Official Statement, Alaska Industrial Development and Export Authority, Taxable Revenue Bonds (Rental Car Facility Project at Ted Stevens Anchorage International Airport)*, September 2005.

to avoid the need for busing of rental car customers and to reduce the need for the rental car companies to ferry vehicles back and forth between the terminal and the remote service centers. The rental car companies requested permission to take the lead on this project, using a public–private partnership business model. The city agreed to allow the rental car companies to lead the design, construction, and financing of this project to expedite the project delivery. It is expected that the facility will be funded with special facility revenue bonds secured by the CFC revenues.²³

5.2.7 Public-Private Partnership for Terminal Development

JFKIAT was formed in 1997 in partnership with the Port Authority of New York and New Jersey, to build, operate, develop, and manage the new \$1.4 billion Terminal 4 at John F. Kennedy International Airport to replace the old International Arrivals Building (IAB) that had been operated by the Port Authority since 1957. Initially JFKIAT was a joint venture of LCOR JFK Airport LLC, Schiphol USA Inc., and Lehman JFK LLC, but is now owned by Schiphol USA (a Schiphol Group Company) and Delta Air Lines, which bought a non-majority, non-controlling stake in JFKIAT in April 2010. JFKIAT assumed responsibility for the operation of the IAB and development of the new terminal in April 1997 concurrent with the financial closing of the special facility bonds issued to finance the project. The lease term expires 25 years after the date of beneficial occupancy of the new facility. The 1.5-million square-foot Terminal 4 opened at JFK in May 2001. Under the lease with the Port Authority, JFKIAT is obligated to pay certain operation and maintenance expenses and ground rent to the Port Authority, make facility rental payments sufficient to pay debt service on the bonds, and distributions from remaining revenues. Unlike the cost-recovery pricing methodology used at most U.S. airports, JFKIAT imposes differential pricing that recognizes the value to airlines of access to the facilities during peak periods and the value to JFKIAT of longer term, fixed lease commitments. These rates are generally set to reflect market-based competitive rates for rents and fees.²⁴ Terminal 4 is one of the largest terminals in the New York area serving 40 international and domestic airlines and 9.5 million passengers in 2009.²⁵ JFKIAT is the only private, nonairline company to operate a terminal at JFK.

²³Interview with Jim Smith, Airport Director of Austin-Bergstrom International Airport, August 12, 2010; and Austin City Council Agenda, Aviation item No. 5, Recommendation for Council Action, July 29, 2010.

²⁴Official Statement, the Port Authority of New York and New Jersey, *Special Project Bonds, Series 6*, JFK International Air Terminal LLC Project, April 25, 1997.

²⁵JFKIAT, *LLC News Release*, July 28, 2010.

In August 2010, the Port Authority announced its approval of a \$1.2 billion expansion of Terminal 4 to accommodate Delta's international operations. The project includes expanding Concourse B at Terminal 4 to add nine new international gates, constructing a passenger connector between Terminal 2 and Terminal 4, expanding areas for baggage claim and Customs and Border Protection, and demolishing Terminal 3. The existing Terminal 3 site will be used for aircraft parking. Delta also would continue to use Terminal 2 for domestic operations. The project would be financed with about \$900 million of special project bonds (secured by the lease on the expanded terminal), \$75 million of equity from Delta, \$215 million of PFCs, and TSA grants.²⁶

5.2.8 Private Parking Development

Although most airport owners finance parking facilities using airport funds or bonds, a few airports have awarded long-term contracts to private entities for the development and operation of airport parking facilities (e.g. Gulfport-Biloxi, Hartford, New Orleans, and Providence). Under the terms of these contracts the private entity may be responsible for designing, building, operating, and maintaining the public parking facilities, or some combination of these tasks.

The primary reasons for considering this type of an arrangement include:

1. To improve net revenues and preserve airport capital by developing new parking facilities without using airport funds,
2. To receive a large up-front payment,
3. To reduce airport staff time required to oversee and/or manage the parking operation, and/or
4. To reduce risks associated with funding new parking facilities using airport-supported bonds.²⁷

Bradley International Airport. On April 6, 2000, the State of Connecticut (the owner and operator of Bradley International Airport serving Hartford, Connecticut) issued \$47.7 million in conduit special facility parking revenue bonds to finance the costs of a new parking garage. In connection with issuance of these bonds, the state entered into a parking lease under which the parking operator (APCOA/Standard Parking, Inc.) was obligated to construct and operate the parking garage as well as all state-owned surface parking facilities through 2025.

²⁶Port Authority of New York and New Jersey, *Committee on Operations, Minutes of Special, Interim Meeting*, August 5, 2010; and N.Y.-N.J. Port Authority Approves JFK Terminal Expansion, The Bond Buyer, August 6, 2010.

²⁷ACRP Report 24: *Guidebook for Evaluating Airport Parking Strategies and Supporting Technologies*, October 2009.

The lease provides that APCOA make scheduled minimum annual payments to the state and additional payments based on performance. Under the terms of the parking lease, APCOA has guaranteed payment of the debt service from the parking garage bonds and the scheduled annual payments to the state. The state has not pledged any airport revenues towards this debt.

5.2.9 Airport Industrial Park Development

Alliance Airport was developed in a public/private partnership between the City of Fort Worth, Alliance Air Services, and the FAA. The airport is owned by the City of Fort Worth and managed by Alliance Air Services, a subsidiary of Hillwood Development Company LLC, a real estate development company owned by H. Ross Perot, Jr. Hillwood dedicated 418 acres to the City for airfield (runway/taxiway) use and the surrounding 3,000 acres are privately owned for use as an industrial airpark. The airport opened on December 14, 1989 and does not serve passenger traffic.

Although airside-related land use is not profitable, lands devoted to industrial use are the most profitable property on general aviation airports. As a result, Hillwood retained property that would generate more profit than non-airport related industrial land uses (because of the land's association with, and proximity to, the airport). Hillwood donated land for the airport and relied upon the overall success of the land development project surrounding the Alliance Airport, which appears to be succeeding. According to a 2009 report:

Since 1990, approximately 28 million square feet of space has been developed at Alliance, with most owned and managed by Hillwood. The Alliance area houses more than 150 companies and, as of January 2007, created over 27,000 jobs. Much of the development is industrial space to capitalize on the proximity of Alliance Airport. Alliance is far from completion, with only 5,500 developed out of a total of 17,000 acres. At full build-out, the development is projected to house 88 million square feet of commercial space and employ 92,000 workers.²⁸

5.2.10 Airport Light Rail Extension

In 1997, the Tri-County Metropolitan Transportation District (Tri-Met) and the Port of Portland (Port), owner and operator of Portland International Airport, wished to build a 5.5 mile extension of the existing regional light rail system to the Airport. However, under federal regulations, airport owners can only pay for the portions of air-rail extensions that are on airport property (or right-of-way) and that transport passengers to the airport. A portion of the proposed

airport extension was off-airport and funding needed to be secured for that segment. Therefore, the Port proposed a creative solution whereby it participated in the rail extension project, which was jointly developed by the Port, Tri-Met, Cascade Station Development Company (Cascade), and the Portland Development Commission (PDC).²⁹ The extension was segmented into three parts based on financial responsibility:

1. The Port was responsible for the cost of 1.2 miles of track from the airport's Portland International Center (an office and industrial park on airport) and construction of a transit station and a covered center platform on the deplaning level of the terminal, the cost of which totaled \$43 million. The Port used PFC revenues to fund its share of this cost.
2. The second 1.4-mile segment of the Airport MAX project, from the eastern boundary of the airport through the Portland International Center, was funded by PDC in exchange for the right to develop land in the Portland International Center. The development rights were then assigned by PDC to Cascade, which created Cascade Station, a 120-acre mixed-use development with over a million square feet, including retail, hotels, and offices, and was responsible for construction of streets, parking, park areas, an overpass, and other road improvements. The Port agreed to contribute, from funds other than PFC revenue, \$7 million toward the cost of the overpass. Two transit stations, funded from local and regional sources, are located within the Portland International Center.
3. In exchange for the development rights, Cascade pays PDC assignment fees, which PDC assigned to Tri-Met to repay bonds issued by Tri-Met to finance a portion of the remaining 2.9-mile portion of the Airport MAX extension that is located off-airport property.

The Airport MAX opened in September 2001.

5.3 Legal and Regulatory Considerations

The primary interests of the U.S.DOT and the FAA are to ensure that the airport owner and the developer comply with relevant legislation, regulations, and policies. Chief among these are compliance with grant assurances, the rates and charges policy, environmental regulations, and PFC regulations (if applicable).

²⁸Texas Motor Speedway Area Master Plan, Chapter 1: Background, January 2009.

²⁹The Portland Development Commission is the urban renewal agency created by the city of Portland to promote development, housing projects, and economic development within the city's urban renewal districts.

Regarding grant assurances and the rates and charges policy, the following requirements are relevant:

1. *Assurance 22* requires the airport sponsor to make the airport available for public use on reasonable terms and without unjust discrimination. Therefore, rates and charges levied on airlines for services and facilities provided by the developer must be “fair and reasonable” and the airlines cannot be subjected to “unjust discrimination” in fees and operating conditions, unless otherwise agreed to by the airline. Because the airport owner must assure compliance with federal statutes, it is necessary for the airport owner to include in the lease the requirement that the developer must provide fair and reasonable fees and avoid unjust discrimination.
2. *Assurance 23* prohibits an airport sponsor from granting an exclusive right to conduct an aeronautical activity at the airport. This prohibition applies only to aeronautical activities. It does not prohibit monopolies in, for example, car rentals, parking, and concessions.
3. *Assurance 24* requires the airport sponsor to impose rates and charges in such a manner and at such levels as to make the airport as self-sustaining as possible under the circumstances. For example, airport sponsors must charge a minimum of fair market value to lease property for non-aeronautical use, but have considerable flexibility, subject to Constitutional standards, to charge higher amounts for rent and other fees.³⁰
4. *Assurance 25* requires the airport sponsor to use airport revenue only for the capital and operating costs of the airport, the local airport system, or other local facilities owned or operated by the airport sponsor and which are directly and substantially related to the air transportation of passengers or property. A developer financing transaction would be subject to federal evaluation at least with respect to the self-sustaining assurance to insure the payments to the developer do not exceed the fair and reasonable value of its services or otherwise fail to comply with the Policy Concerning the Use of Airport Revenue. The FAA can investigate if there has been a violation with or without a formal complaint and can issue an order proposing enforcement action (e.g., reasonable rates and charges). Sanctions include, among others, withholding future grants and withholding payments under existing grants.
5. *Grant repayment*—Another consideration is when the proposed development requires the removal or demolition of any improvement funded in whole or in part with

AIP grants. If so, there may be a requirement to repay the federal government for the unamortized value of its investment in the facility or to replace the facility. For example, the FAA consented to the demolition of the IAB at JFK for the Terminal 4 development subject to the requirement that grant-funded facilities in the IAB were replaced with “like or superior” facilities.

6. *Exclusive use*—Any improvement funded with AIP grants cannot be leased on an exclusive use basis to a developer (or any other tenant). For example, if an airport uses AIP grants to construct a cargo apron and enters into an agreement with a developer to construct a cargo building that is contiguous to the apron, the apron cannot be used exclusively by the developer and its tenants.

Regarding environmental requirements, any actions required under the National Environmental Policy Act of 1969 must be completed. For example, if there is a need for an environmental assessment or environmental impact statement, the FAA will need to approve them. In the case of the Terminal 4 development at JFK, the FAA provided a categorical exclusion from the requirement for an environmental assessment and approved an updated airport layout plan including the redeveloped terminal.

In addition, the project needs to appear on an approved airport layout plan (ALP) and the appropriate airspace finding must be made by the FAA.

If PFCs are used to help fund the project, the airport owner must also ensure that the developer complies with all provisions under the PFC regulations (14 CFR part 158). In addition to the environmental, ALP, and airspace requirements noted above, if PFC revenues are used, the developer cannot:

- Enter into an exclusive long-term (defined as five years or longer) lease or use agreement with an air carrier or foreign air carrier for projects funded by PFC revenue
- Include in the rate base (e.g., through depreciation or amortization) that portion of the capital costs of a project paid for by PFC revenue for the purpose of establishing a rate, fee or charge pursuant to a contract with an air carrier or foreign air carrier

It is important to note that each state has its own unique set of laws and regulations. When contemplating privatization options, it is important to undertake a comprehensive review of these laws. For example, as found in the Boston Terminal A case study, given the unique public bidding requirements in Massachusetts, accessing tax-exempt conduit financing for private development was deemed infeasible. Once the airport owner determined that private developers needed tax-exempt debt, it had to seek other avenues for private participation in the project.

³⁰Such as the permissive standards applied to privilege fees for rental car companies.

5.4 Evaluation of Developer Financing and Operation

The reasons why an airport might consider developer financing and operation include:

- Preserve financial capacity for other essential airport development (e.g., terminals, runways, taxiways, and roadways)
- Avoid unnecessary risks (economic and political)
- Accelerate the development timeline and reduce project costs by avoiding the requirements of public bidding and approval procedures
- Limit the airport's administrative burden and need to hire additional staff to handle facility financing, bidding, design, and construction oversight as well as ongoing marketing, operation, and maintenance expenses

These factors must be tempered by the airport owner's loss of control over the land and facility (tenants, appearance, maintenance, etc.) and the unrealized potential for upside revenue generation, although some of the development leases include revenue sharing provisions.

5.4.1 Opportunities

Some of the opportunities cited for developer financing and operation include:

- Reduces reliance on municipal debt and conserves public capital for those areas where public funding is the only alternative
- Transfers risk exposure for cost overruns, delays, and debt repayment to the private sector
- Has potential to reduce operating expenses and increase operational efficiencies due to avoidance of public procurement processes and to private sector motivations and incentives
- Accesses private sector expertise for specialized functions and commercial development
- Attains the latest technical and managerial expertise for the infrastructure project
- Applies private sector techniques to accelerate project delivery and reduce construction costs
- Can enhance commercial development revenues
- Creates/retains jobs for the local economy

5.4.2 Advantages

The major advantages cited for developer financing and operation include:

- Preserves general airport revenue bond debt capacity for essential airport development
- Avoids unnecessary risks for airport owner

- Accelerates project delivery and may reduce construction costs

However, as found in the JFK Terminal 4 case study, although the terminal was completed on-schedule, the final project cost was about 20% higher than the budgeted cost.

- May bring about improved efficiency and may reduce ongoing operating expenses, which would provide low-cost facilities to tenants (especially when tax-exempt financing is employed)
- Limits administrative burden of airport and staffing responsibilities for facility financing, bidding, design, construction oversight, marketing, ongoing maintenance, administration, and management
- Minimizes or eliminates delays from local procurement policies that tend to delay contract awards

There is strong sentiment by U.S. airport managers that they can do as good a job, if not better, than private operators if they were unburdened by cumbersome, rigid regulations and processes. Nevertheless, some airport managers expressed frustration with the lack of speed when undertaking public projects and the inherent problems associated with the many local requirements to accept the lowest bid. Under a developer financing transaction, there is no low bid requirement and the project can be constructed on an expedited basis.

- Allows airport management to focus on other strategic issues and assets

5.4.3 Disadvantages

The major disadvantages cited for developer financing and operation include:

- Involves considerable time and effort for bidding process and negotiation of complex legal documents
- Requires that the project have a revenue stream to repay the debt
- Provides airport less control over the project and facility management
- Loss of control over the development site and future capacity expansion

As discovered in the JFK Terminal 4 case study, the long-term lease meant that control over the largest terminal site on the airport and the flexibility to respond to changing market conditions was relinquished by the airport owner (the Port Authority of New York and New Jersey or Port Authority). While this factor was not important in the early years of operation, it became a more important consideration later on. From a customer service perspective, replacing Terminal 3 was a top priority for the Port Authority, and expanding Terminal 4 was the logical and most economically viable solution. However, the Port Authority only had indirect influence

on the outcome of negotiations between Delta and JFKIAT, two parties with competing financial interests.

- Loss of flexibility to change land uses over period of lease
- Less control over types of activities and quality and appearance
- Involves considerable upfront planning, time, and expense
- Involves moderate implementation risk
- Less control of facility utilization especially under airline-financed terminals that run the risk of inefficient utilization of gates and associated terminal space
- Could involve organizational disruption and need to reassign or terminate existing employees
- Could involve buyouts and compensation for existing public workers
- Involves long-term risk if the project encounters financial problems, i.e., the airport may need to step in (even though it is not financially obligated to do so) to preserve the use of the facility and associated airport capacity
- Can expose the airport to political, legal, operational, and financial risk if the transaction is not consummated or if the private entity incurs financial difficulties
- Involves loss of key revenue streams under parking and cargo privatization

5.4.4 Complexity, Risk, and Implementation Issues

Implementing developer finance and operation transactions entails more complexity and risk than service contracts and management contracts. Private financing arrangements in the United States context are generally:

- More complicated to structure because they must be designed in a way that will satisfy airport revenue bond covenants, federal law and FAA regulations, IRS rules, airline concerns, and local political concerns
- Difficult to evaluate relative to public operation
- Involve high transaction and procurement costs
- Require considerable upfront time to arrange

Therefore, private sector development options need to be fairly concrete before they can be evaluated in technical terms and in the context of the airport's goals and objectives.

On the other hand, it generally takes longer to design and bid a facility under airport development than under private development due to the time required to follow government procurement procedures. The magnitude of the time difference depends on the length of the airport's procurement process and the experience of the developer.

There are certain penalties or hurdles that potentially could add costs or limit the effectiveness of private developer approaches, including but not limited to: (1) compliance with AIP grant assurances and PFC regulations (if used),

(2) revenue diversion issues or risks, (3) IRS tax regulations, and (4) bond indenture provisions. Assuming the hurdles can be overcome, the developer will presumably seek a higher rate of return than an airport's cost of capital in the public market, meaning that for the economics of a business deal to work for both parties, the investor may need to achieve efficiencies. Ways a developer may achieve efficiencies include (1) tax benefits, (2) savings on costs of maintenance and operation of the project, (3) revenue efficiencies, and (4) under certain circumstances more efficient access to capital markets or ability to structure debt more creatively.

To structure a developer finance and operation transaction, the developer (if not a single tenant such as an airline) typically forms a special purpose company (usually a LLC) in which they hold shares. The first purpose of the LLC is to construct and operate a new project or to re-finance and operate an existing project. The second purpose is to provide lenders a security of payment of interest and principal from a single operating entity. Because lenders have no recourse except against the cash flow of the project or the project assets, the balance sheet of each member of the LLC is protected in the event the project fails. The members of the LLC can walk away from a project if it becomes uneconomical, especially if it is not strategically essential to the business of its members, and the lenders would have no recourse against them. This lack of recourse is a defining characteristic of project finance.

Because the LLC is (intentionally) financially weak, it alone will not be able to provide lenders the security they seek. To create this security, a LLC will use a credit enhancement facility for the debt (e.g., municipal bond insurance) and negotiate contracts that allocate risk to other entities that are better able and willing to absorb it. The objective is to leave as little risk (pre-construction, construction, and post-construction) in the LLC as reasonably possible in order to provide lenders the security they seek.

Airport special facility financings came under well publicized attention and reevaluation after court decisions in the United Airlines bankruptcy in 2005 and 2006. United claimed that its leases at San Francisco, Los Angeles, John F. Kennedy, and Denver international airports were not "true" leases but were in substance unsecured loans. As a result, United could reduce its payments to the fair market rental rate for the occupied space and treat the remaining amount of principal on the bonds as unsecured debt.³¹ The legal agreements supporting special facility bond issues determine the rights and security interests of the issuer, the bond trustee, bond insurer, and the airport operator in the event of a bankruptcy by the tenant airline. In very general terms, if the airline's payment obligations are evidenced in a loan or in a lease that can be

³¹The bond payments were much greater than the fair market rental rate. The lease at Denver was ruled a true lease by the courts.

construed as a loan (often called a disguised financing lease) then the airline can default on the debt. The lease-versus-loan financing distinction is significant because under Section 365 of the Bankruptcy Code “true” leases must be assumed or rejected and the debt must be paid when scheduled, whereas disguised financings often become unsecured claims. Debt under a true lease must be repaid if the company in bankruptcy assumes that lease and doesn’t want to risk eviction from its facilities. Even though the airport owners were not legally required to pay debt service on the bonds, there was pressure from the bondholders to evict the airlines and the airline’s access to the premises was restricted.

As a result, airline special facility financing of unit terminals is likely to have limited application in the future because the rules have changed (since recent airline bankruptcies) and access to capital is more difficult and costly. Some deals are getting done, but they do not have the same economics as they once had. Moreover, there is less certainty now when a deal is started that the financing will be available and affordable.

Possible constraints and other considerations for developer finance and operation transactions might include:

Economics of the Business Deal

- Despite the representations that developers and infrastructure funds are looking for opportunities to invest private capital in airport assets, as discovered in the Boston Terminal A and JFK Terminal 4 case studies, the prospective developers contended that the projects could not be economically financed without significant access to tax-exempt debt or other airport revenues. The JFKIAT developer estimated the tax-exempt financing provided a roughly 30% discount on private financing.
- The underlying credit qualities of a transaction are typically weak due to high leverage, narrow diversification of the asset base, and limited revenue streams that make them more susceptible to event risk. It is generally believed that the underlying credit qualities of developer finance transactions will need to be stronger now than in the past, which will further challenge the feasibility of such a transaction. The cost and limited availability of bond insurance may contribute to the challenge. The experience of Terminal A at Boston and Terminal 4 at JFK highlight the difficulties of financing terminal buildings, with their high capital and operating costs, without the higher-margin parking and rental car revenues.
- Would the management contract oblige the private developer to finance ongoing capital expenditures (a full-service contract)? Such a contract entails more business risk for the developer, which must put up its own cash for maintenance and construction with no guarantee that it will fully recover its capital investment.

- Despite the potential advantages that developer financing and operation may offer, such transactions are expensive and time-consuming to arrange. The effort may be so great or costly that the airport finds the transaction costs are not worth the benefits.

FAA Oversight

- Safeguards to preserve the airport owner’s control over the actions of the LLC might affect compliance with AIP grant assurances and PFC assurances (as noted above in Section 5.3).

Tax Status (IRS Tax Regulations)

- Would a lease of the site/facilities (and potential assignment of revenues) affect the tax-exempt status of any outstanding bonds?

Bond Indenture Constraints

- If the project involves redevelopment of an existing facility, the bond indenture may or may not permit the release of the revenues, and if so, the release might affect the airport owner’s ability to comply with the bond rate covenant.
- The lease of site/facilities (and potential assignment of revenues) may or may not constitute a sale of airport property under the terms of the bond indenture. If so, the airport owner might not be able to satisfy the covenant necessary to make such a sale.

Bankruptcy

- Does the lease underlying a special facility bond transaction have the characteristics of a true lease or disguised financing? If it appears to be a disguised financing, can the lease be amended and restructured to avoid its adverse characterization?

When contemplating a special facility financing on behalf of an airline or other party, an airport owner should be careful to ensure that the lease is a single lease that fits the parameters of a true lease (as opposed to a financing lease). As discussed in the Boston Terminal A case study (in Chapter 9), shortly after the opening of new Terminal A, Delta filed for protection under Chapter 11 of the U.S. Bankruptcy Code. To assist Delta in its reorganization efforts and to avoid the potential for costly litigation, the Massachusetts Port Authority (“Massport”), with the consent of the bond trustee and bond insurer, agreed to restructure the original lease and bond trust agreement. There was a question as to whether the lease would be deemed a true lease or disguised financing.

Other Considerations

- Public–private partnerships raise questions about the role of the airport owner and what functions are most appropriate for it to perform. The questions revolve in part around who can produce a service or product more economically. A partnership would expose the airport owner to various risks—political, legal, operational, and financial. If the approach fails, the airport owner will be “politically” liable.

The early years of the lease were the most vulnerable and the Port Authority played an important role in mitigating risk in these early years. When JFKIAT fell upon hard times after September 11 and SARS, in conjunction with the accelerated debt amortization period (prior to the extension of the City Lease) and the need for completion financing, the Port Authority stepped up to assist JFKIAT by amending the lease agreement and providing subordinate financing. Although JFKIAT felt it could access financing from the bond market, the financing provided by the Port Authority provided a win-win solution for both parties as JFKIAT received relatively low priced debt at a time when its credit was rated below investment grade.

- An airport owner retains the most control over land uses occurring on property that it develops, in particular, the

ability to determine initial land uses and the flexibility to change land uses in later years in response to events or shifts in demand. Under private development, an airport owner’s control of land uses is frozen for the term of the lease unless appropriate protections are incorporated into the lease allowing it to change land uses in later years as necessary.

- An airport owner also exercises less control over uses at facilities developed by private developers, and over the quality of the appearance and maintenance of those facilities than it does over facilities it develops, unless it includes strong performance standards in the lease. The controls can also be costly to enforce.
- The lease should provide for ongoing investments in the asset to address concerns about a developer turning back a facility at the end of a long-term lease in poor condition. For example, in the Boston Terminal A lease, Delta was required to make annual maintenance reserve payments so that funds would be set aside for facility renovation, renewal, replacement, or reconstruction, and for unusual or extraordinary maintenance or repairs. Funds in the Terminal A maintenance reserve account were available to be dispensed at the discretion of the airport owner (Massport).

CHAPTER 6

Full Privatization

6.1 Specific Strategies

Under the full privatization models, the airport owner enters into a long-term lease/concession or sale of an airport with a private operator, which can be accomplished inside the APPP or outside of the program (Table 6.1).

Under a long-term lease or concession agreement, the airport owner grants full management and development control to the operator in return for the operator undertaking full capital improvements and other obligations (e.g., up-front payment, responsibility for outstanding debt). Under a sale, the airport is transferred on a freehold basis with the requirement that it continue to be used for airport purposes.

The use of a concession or lease has been seen as a way for governments to reassert control over assets either in the last resort or at the end of the concession lifetime. Among the benefits are:

- From the standpoint of public perception, ownership of a strategic national asset is retained. This can be a sensitive issue, particularly if foreign buyers are involved.
- The concession documentation can be a way for the airport owner to maintain control over areas which it believes to be strategic. These can include, for example, investment programs, service standards, and aeronautical and public parking pricing policies. Concession agreements can in some cases extend hundreds of pages.
- Concessions offer the opportunity for the airport owner to participate in the continuing success of the airport through rents or performance-related concession payments, which may, for example be related to turnover, profit, or traffic levels. This can have strong advantages for airports which are seen as high risk or facing major initial capital expenditure requirements.

Regarding a sale, there is a strong preference for a trade sale over an IPO on the basis of experience from international airport privatizations. Trade sales are primarily attractive

because of the higher receipts they yield to the government compared with IPOs. There are a number of reasons for this:

- The trade buyer is typically an experienced purchaser and has often gone through significant expert due diligence of the asset in a way that is not open to IPO purchasers. The risks attached to the purchase are therefore lower.
- A trade buyer is willing to pay a premium for control.
- Trade buyers can develop and implement a strategy for the company in which they are confident, and if necessary hire the required staff to implement it. Retail buyers are dependent on the company's management to develop and realize such strategies, and their confidence in the competence of the management team will impact the price they are willing to pay.
- Trade buyers have been able to apply modern financing techniques to fund their purchase, which has enhanced value.

These are more extensive transactions than airport-wide management contracts because significant airport development is anticipated. The term of the lease is related to the length of time needed by the operator to recover its investment in new facilities. A long-term lease transfers the principal responsibility for airport operations and development to the private lessee. Airport users pay fees and charges directly to the operator, with the operator taking on the risk involved in covering both operating and capital costs out of those revenues.

In addition, under the full privatization model, the airport owner transfers federal sponsorship requirements to the operator, whereas under partial privatization models the airport owner remains the sponsor.

6.2 Examples of Full Privatization

There are fewer examples of the long-term lease or sale of an airport in the United States than (1) partial privatization strategies and (2) international airport transactions. Below is

Table 6.1. Full privatization strategies.

Transaction Model	Description	Inside APPP	Outside APPP
Long-term lease	Contract by which airport is conveyed to an entity for a specified period	Limited to one large-hub airport in the U.S.	Any airport
Long-term concession	Contract to transfer rights to manage and or operate a property for a certain period, usually without property rights	Limited to one large-hub airport in the U.S.	Any airport
Trade sale	Competitive sale of an airport through a bidding process that usually results in majority control with a single entity	Limited to general aviation airports in the U.S.	Any airport
Flotation or initial public offering (IPO)	Sale of shares in the airport to individual and institutional subscribers through the stock market or other vehicle where management retains control	Never done in the U.S.	Never done in the U.S.

a brief description of examples inside and outside the APPP. For more background, please see Chapter 9 and Appendix H where two examples inside the APPP (Stewart International Airport and Chicago Midway Airport) and one example outside the APPP (Morristown Municipal Airport) are reviewed in depth as case studies.

6.2.1 Airport Privatization Pilot Program (APPP)

As shown in Table 6.2, there have been a number of applications for the APPP since it was created in 1996, although

the only applicant to complete the process as of March 2012 was Stewart.

6.2.1.1 Stewart International Airport

The first and only airport (as of August 2010) to be approved by the FAA under the APPP was Stewart International Airport in Newburgh, New York (60 miles north of New York City). National Express Group PLC, a U.K.-based transportation company, paid \$35 million for the 99-year award in 2000 (its first airport acquisition). Because the owner, the State of New York, was unable to secure airline

Table 6.2. The Airport Privatization Pilot Program (as of March 2012).

<ul style="list-style-type: none"> Legislation allows the lease of no more than one large-hub, at least one general aviation airport (GA airport can be sold), with the balance available from non-large-hub and general aviation airports 65% of the airlines serving the airport must approve the exemption from prohibition of revenue diversion Limits increase in airline rates Airport can receive AIP grants and levy a PFC Applicants (one position remains available for a non-large-hub or general aviation airport) 		 <p><i>Luis Muñoz Marín International Airport, San Juan, Puerto Rico is an active participant in the APPP</i></p>	
ACTIVE (4 out of 10 slots taken, including the only large-hub slot):		INACTIVE:	
LARGE-HUB: <ul style="list-style-type: none"> Chicago Midway International Airport (final application submitted Oct 2008, pending) 		<ul style="list-style-type: none"> Stewart International, Newburgh, NY (approved 2000, reverted back to public operation 2007) 	
MEDIUM/SMALL HUB: <ul style="list-style-type: none"> Luis Muñoz Marín International Airport, San Juan, Puerto Rico (preliminary approval Dec 2009) 		<ul style="list-style-type: none"> Brown Field/San Diego Commerce Center (application withdrawn 2001) 	
GA AIRPORT: <ul style="list-style-type: none"> Gwinnett County Briscoe Field Airport, Georgia (preliminary approval May 2010) Hendry County Airglades Airport, Clewiston, Fla (preliminary approval Oct 2010) 		<ul style="list-style-type: none"> Niagara Falls International (application withdrawn 2001) Aguadilla, Puerto Rico (application withdrawn 2001) New Orleans Lakefront (application terminated 2008) Louis Armstrong New Orleans International Airport (application withdrawn Nov 2010) 	

approvals to use the payment for general state purposes (discussed in detail below), it used the lease payments for airport purposes and to recoup past subsidies for Stewart Airport and its other state-owned airports (from the prior six years) in accordance with the FAA's revenue use policy. Just as U.S. airport privatization appeared to be re-energizing, Stewart reverted back to public ownership in 2007 when National Express decided to exit the airport management business and sold its interest in the airport to the Port Authority of New York and New Jersey, the operator of the three largest commercial service airports in the New York metropolitan area.

6.2.1.2 Chicago Midway Airport

The City of Chicago received airline approvals for its Midway Airport pilot privatization application, but this effort is on hold due to the inability of the selected private consortium to secure financing in the aftermath of the global credit crisis of 2008. The consortium of investors led by Citigroup Inc., John Hancock Life Insurance Co., and a unit of Vancouver International Airport submitted the highest bid (\$2.5 billion) to lease Midway. When the deal fell through in early 2009, the consortium had to pay a \$126-million penalty to the city. The FAA has granted the city's request for more time to complete the deal through a series of extensions to maintain its spot (the one reserved for a large-hub airport) in the APPP. In its January 2010 filing, the city told the FAA that it "intends to complete the privatization process at the earliest practical date" but noted that "the pace and direction continues to be dictated by conditions in the global credit and capital markets." The city indicated that talks could resume with the highest bidder or other qualified bidders, or the city could put the airport out for bid again.

6.2.1.3 Luís Muñoz Marín International Airport, San Juan, Puerto Rico

The Puerto Rico Public-Private Partnership Authority, on behalf of the Puerto Rico Ports Authority, is actively pursuing full privatization under the APPP of the Luís Muñoz Marín International Airport in San Juan. As of December 2011, the government has received preliminary approval by the FAA to enter the program, received preliminary airline approval for the plan, issued a request for qualifications, received six qualified responses, and issued the request for proposals from the best-qualified teams. Government officials want to reduce most, if not all, of the more than \$800 million of debt the Ports Authority is carrying through a lump sum payment. The concession would be for no more than 50 years and would also require the operator to make improvements to the airport.

6.2.1.4 Other APPP Applicants

Regarding the inactive airport applicants, all of which withdrew their applications except Stewart, and prior to the application submitted by New Orleans International, the FAA in 2004 reported:

Several common elements to the five airports that submitted applications were: 1) management of the airport was not the owner's primary responsibility; 2) all airport facilities were underutilized airports with either limited or sporadic commercial service and serving a general aviation clientele; 3) transferring the airport from public to private ownership is time consuming; 4) all airports were operating at a financial loss and receiving some form of subsidy from their parent agencies; 5) the private operators proposed to use a limited liability corporation to manage the airport; and 6) a strong political commitment was needed to successfully transfer the airport to private control.³²

The FAA also reported that the final application for Niagara Falls International Airport was withdrawn following the FAA's comment that the application no longer appeared financially viable. The selected private operator noted that its business plan was no longer valid. In addition, the rapid growth in air service at competing airports in the Buffalo and Hamilton, Ontario markets, coupled with circumstances following the terrorist attacks of September 11, 2001, created an environment that made it impossible to evaluate the airport's market potential.

The application of New Orleans Lakefront Airport was dismissed by the FAA in April 2008 in the aftermath of Hurricane Katrina and in view of the Orleans Levee District's diminished responsibility under revised State law.

The public owners of San Diego Brown Field and Rafael Hernandez Airport (Aguadilla) did not file final applications and withdrew their preliminary applications. The Puerto Rico Ports Authority (PRPA) withdrew its application for Aguadilla after going through the process to select an operator when PRPA management decided to develop the airport without the assistance of the private operator. San Diego withdrew its application in the face of community opposition to the idea of a cargo hub and its adverse impacts and an FAA air traffic impact analysis that identified potential conflicts between the proposed cargo traffic at San Diego Brown Field and traffic from surrounding airports and military bases that would have to be mitigated.

³²U.S. Department of Transportation, Federal Aviation Administration, *Report to Congress on the Status of the Airport Privatization Pilot Program United States Code, Title 49, Section 47134*, August 2004.

The city of New Orleans withdrew its application for Louis Armstrong New Orleans International Airport in November 2010 citing the following reasons:

After analyzing the conditions required to effectively privatize public infrastructure and the current state of capital markets, it has been concluded that New Orleans is not well positioned at this point in time to solicit bids for privatizing the Louis Armstrong International Airport. Rather, the airport is better served by focusing on its recently announced initiatives to improve operations and become a more effective asset for the City of New Orleans and the State of Louisiana. The Louis Armstrong New Orleans International Airport is thus withdrawing from the FAA APPP.³³

This review makes clear that the tumultuous first decade of the new century, which was so challenging to the airline industry, provided less than ideal conditions for the financing of airport deals under the APPP.

6.2.2 Outside the APPP

Morristown Municipal Airport is a general aviation airport that is owned by the Town of Morristown and has been managed and developed by DM AIRPORTS, LTD, an affiliate of the DeMatteis Organizations, since 1982 under a comprehensive 99-year lease. Although this lease did not require any special federal or state legislation (such as the APPP), it was entered into before the FAA formalized much of its policy regarding full privatization outside the APPP. The town granted DM AIRPORTS full management and development control in return for undertaking all capital improvements (many of which were needed at the time the lease was executed) and for defeasing the outstanding airport debt. DM AIRPORTS pays a relatively modest annual rent to the town to cover its cost to provide continuing police, emergency medical, and grant administration services for the airport. DM AIRPORTS retains all airport fees and charges in return for taking on the risk to cover operating expenses and capital expenditures (net of grants) out of those revenues.

It is important to note that the Morristown privatization occurred before the FAA promulgated its revenue use policy and before the creation of the APPP. Therefore, it is not reasonable to expect to be able to repeat this experience because the federal rules concerning, for example, the transfer of management responsibility and the use of rent proceeds and the private operator's compensation, are much stricter now.

6.3 Legal and Regulatory Considerations

6.3.1 General Conditions

The following legal requirements historically have influenced whether public airport operators have pursued partial or full privatization. These requirements have created opportunities for an airport owner to enlist private participation while remaining the airport sponsor (partial privatization) and simultaneously erected barriers to transferring sponsorship to a private operator (full privatization):

- *FAA approval authority*—Grant Assurance 5 requires FAA approval before the airport owner can “sell, lease, encumber or otherwise transfer or dispose of any part of its title or other interests” in the airport. The Surplus Property Act and subsequent statutes authorizing transfer of federal property for public airports contain similar requirements. In practice, FAA approval is required only for a sale or long-term lease of airport property to a public or private entity. Public airport owners can enter into management contracts, concession agreements, leases of airport facilities, and a host of other agreements with private entities without FAA approval. U.S.DOT and FAA thus act as the gate-keeper to full privatization.
- *Revenue use*—Both federal law and the grant assurances strictly limit the use of airport revenue for non-airport purposes. Airport revenue is defined broadly to include the proceeds from the sale or lease of airport property. There are some narrow exceptions, such as for so-called “grandfathered” airports and for repayment of loans issued by sponsoring governments. However, Congress has expressed serious concern with revenue diversion and has prescribed onerous penalties for violations. The prohibition on revenue diversion applies only to the airport sponsor, not the air carriers, FBOs, concessions, private airport managers, or any other private entities that conduct business on an airport. This has incentivized private ventures on airports but has dis-incentivized full privatization. It historically presented a particularly high barrier to full privatization because, outside the APPP, the public airport owner is required to use the sale proceeds for airport purposes and because the private operator, upon assuming responsibility for the grant assurances, must use revenue that it generates in connection with the airport for airport purposes.
- *Grant eligibility*—Under the AIP, public entities are eligible to receive an apportionment from the Entitlement Fund and to receive grants from the Discretionary Fund. In contrast, private entities are not eligible to receive an apportionment, and only private operators of certain types of airports are eligible for certain types of discretionary grants.

³³Louis Armstrong New Orleans International Airport Withdraws from FAA Airport Privatization Pilot Program, New Orleans Aviation Board Press Release, October 21, 2010.

Specifically, public-use airports operated by a private entity that are designated as relievers or that have at least 2,500 annual passenger boardings are eligible for funding for airport development projects, airport master planning, noise compatibility planning, and noise program implementation projects. This financing structure historically dis-incentivized full privatization because it encouraged public entities to retain the role of sponsor, and thus eligibility for funding under the AIP.

- *Grant repayment*—Another historical barrier to full privatization was the uncertainty as to whether or not a public airport owner would be required to repay the federal government upon sale or long-term lease to a private operator, for the value of land acquired from the federal government under the Surplus Property Act, for the value of land acquired with federal financial assistance, or for the value of grant-funded capital improvements and equipment. The relevant statutes clearly require reinvestment or repayment in the event the property is sold for a non-airport use; however, the statutes are ambiguous as to whether the reinvestment or repayment obligation is triggered by transfer of the airport to a private operator for continued use as a public airport. This uncertainty historically dis-incentivized full privatization because of the potential financial liability associated with privatization.
- *Non-aeronautical activities*—Airport owners have considerably greater latitude over non-aeronautical activities than aeronautical activities. For example, airport owners must charge a minimum of fair market value for non-aeronautical use, but can charge higher amounts for rent and other fees, subject to Constitutional standards. Similarly, airport owners are not subject to the prohibition on granting exclusive rights with respect to non-aeronautical users of an airport. While public airport operators theoretically are subject to suit under the anti-trust statutes, many courts have found that public entities are immune from liability for certain anti-competitive behavior. Private entities would not enjoy similar immunity. The greater control and flexibility over non-aeronautical activities presents the opportunity for a private operator to generate a return on its investment by maximizing non-aeronautical revenues to the greatest extent permitted by the market. This opportunity comes with some liability exposure to the private operator. As to partial privatization, airport operators can enlist private participation in non-aeronautical activities through, for example, master concession agreements and similar vehicles, to give private enterprise a significant role in non-aeronautical activities.
- *Constitutional Rights and Protections*—State and local governments acting as airport operators must not deprive airport tenants and users of the rights and protections afforded by the U.S. Constitution. These rights and protections

include, for example, freedom of speech and the press under the First and Fourteenth Amendments,³⁴ and equal protection and due process rights under the Fifth and Fourteenth Amendments. While private parties typically are *not* responsible for guaranteeing Constitutional rights and protections, courts have applied the Constitution to private actors providing a “public function”³⁵ or where the private action is “entwined” or “entangled”³⁶ with state action. One court has held that a private entity operating an airport pursuant to a lease with the public airport owner is responsible for ensuring Constitutional protections.³⁷ However, the extent to which private airport operators engaged in the range of activities described herein as full and partial privatization would be deemed state actors responsible for guaranteeing Constitutional rights and protections is uncertain.

- *Property Taxes*—Public airport operators enjoy exemptions from property taxation pursuant to the constitution and/or laws of most states. These exemptions typically would not apply to a private operator of a public-use airport. This tax structure dis-incentivizes full privatization, at least any transfer that would jeopardize the airport’s eligibility for an exemption.

6.3.2 The Airport Privatization Pilot Program (APPP)

The APPP, as enacted in 1996 and amended in 2003 and 2012, reduced uncertainty about the privatization process and addressed the recognized barriers to privatization by

³⁴The U.S. Supreme Court has declared that airport terminals are non-public fora, meaning that speech may be subject to reasonable government regulation.

³⁵*Lebron v. Nat’l R.R. Passenger Corp.*, 513 U.S. 374, 115 S.Ct. 961, 130 L.Ed.2d 902 (1995); *West v. Atkins*, 487 U.S. 42 (1988) (private physician employed part-time by a state prison hospital); *Lugar v. Edmondson Oil Co.*, 457 U.S. 922 (1982) (private seizure of property executed under a state garnishment statute); *Terry v. Adams*, 345 U.S. 461 (1953) (privately-run public elections); *Marsh v. Alabama*, 326 U.S. 501 (1946) (conduct on public streets in a company town); *but see Blum v. Yaretsky*, 457 U.S. 991 (1982) (private nursing home receiving government funds), *Rendell-Baker v. Kohn*, 457 U.S. 830 (1982) (private, remedial high school receiving government funds); *Moose Lodge No. 107 v. Irvis*, 407 U.S. 163 (1972) (private club with a state-issued liquor license).

³⁶*Brentwood Acad. v. Tenn. Secondary Schools Athletic Ass’n*, 531 U.S. 288 (2001) (private athletic association 84% of whose members are public schools); *Evans v. Newton*, 382 U.S. 296 (1966) (public park created by private will, but maintained and supervised by a municipality); *Pennsylvania v. Bd. of Dirs. of City Trusts of Philadelphia*, 353 U.S. 230 (1957) (private school operated by a state agency); *but see Nat’l Collegiate Athletic Ass’n v. Tarkanian*, 488 U.S. 179 (1988) (national athletic association with members from many states not a “state actor” with respect to Nevada law).

³⁷*Niswonger v. Am. Aviation, Inc.*, 424 F. Supp 1080 (D. Tenn. 1976).

permitting U.S.DOT to grant exemptions from certain federal obligations that historically impeded full privatization.³⁸ However, Congress required that airports and private operators satisfy demanding conditions in exchange for the exemptions and approvals, including conditions specifically designed to protect its interests and those of the airport users. The FAA thereafter prescribed detailed procedures for seeking these exemptions and approvals. Viewed as a whole, the APPP today is complex, demanding, and lengthy. This is in part because full privatization transactions are more complicated in general, but also due to the specific legislative requirements imposed by the APPP.

The federal law creating the APPP prescribes the following requirements:

1. A general aviation airport may be sold or leased. A commercial service airport may be leased only.³⁹
2. Ten airports may receive approval to privatize under the APPP.⁴⁰ One of the 10 airports must be a general aviation airport.⁴¹ No more than one airport may be a large-hub primary airport.⁴²
3. The Secretary may permit the public airport owner to use sale or lease proceeds for non-airport purposes upon approval (i) in the case of a primary airport, by at least 65% of the scheduled air carriers and by scheduled and unscheduled air carriers accounting for 65% of aircraft landed weight at the airport, and (ii) in the case of a nonprimary airport, by the Secretary after the airport has consulted with at least 65% of the owners of aircraft based at the airport.⁴³

³⁸As noted in an earlier report: “. . . legal and economic constraints currently impede the sale or lease of U.S. airports. Although FAA has permitted and even encouraged some limited forms of privatization, such as contracting for airport management or allowing private companies to develop and lease terminals, it has generally discouraged the sale or lease of an entire airport to a private entity. FAA is concerned that in selling or leasing an airport, the legal obligations that the airport had made to obtain a federal grant may not be satisfied. Chief among these obligations are restrictions on using airport revenue . . . Recognizing the barriers to and the opportunity to test the potential benefits of privatization, the Congress established an airport privatization pilot program as part of the Federal Aviation Reauthorization Act of 1996.” Source: General Accountability Office, *Airport Privatization, Issues Related to Sale or Lease of Airports*, November 1996, GAO/RCED-97-3.

³⁹49 U.S.C. § 47134(a).

⁴⁰*Id.* § 47134(b). In the initial version of the APPP adopted in 1996, the number of airports was limited to five. It was increased to 10 by the FAA Modernization and Reform Act of 2012, Pub. Law No. 112-95, § 156 (2012).

⁴¹*Id.* § 47134(d)(1).

⁴²*Id.* § 47134(d)(2).

⁴³*Id.* § 47134(b)(1)(A).

⁴⁴*Id.* § 47134(b)(2).

4. The Secretary may exempt the public airport owner from any legal requirement to repay prior grants or return airport property to the federal government.⁴⁴
5. The Secretary may permit the private operator to use airport revenue for non-airport purposes in order to “earn compensation from the operations of the airport.”⁴⁵
6. The statute requires that the following nine conditions must be satisfied to obtain approval:
 - a. The airport will continue to be available for public use on reasonable terms and without unjust discrimination.
 - b. The airport will continue to operate in the event the private operator becomes insolvent, seeks bankruptcy protection, or under similar circumstances.
 - c. The private operator will maintain, improve, and modernize the airport in accordance with plans submitted to the Secretary.
 - d. Rates and charges on air carriers will not increase faster than the rate of inflation unless a faster increase is approved by at least 65% of the air carriers serving the airport and by air carriers accounting for at least 65% of aircraft landed weight at the airport.
 - e. The fees on general aviation aircraft will not increase faster than the rate of increase for air carriers.
 - f. Safety and security at the airport will be maintained at the highest possible levels.
 - g. Noise effects will be mitigated to the same extent as at a public airport.
 - h. Adverse environmental effects will be mitigated to the same extent as at a public airport.
 - i. The sale or lease will not abrogate any collective bargaining agreement covering airport employees.⁴⁶
7. The Secretary must conclude expressly that approving the sale or lease will not result in unfair and deceptive practices or unfair methods of competition.⁴⁷
8. The Secretary must ensure that the interests of general aviation users at the airport are not adversely affected by the sale or lease.⁴⁸
9. The private operator will be eligible to impose a Passenger Facility Charge.⁴⁹
10. The airport will be eligible to receive an apportionment from the Entitlement Fund.⁵⁰
11. The private operator may impose “reasonable rental charges, landing fees, and other service charges from aircraft operators” consistent with the Anti-Head Tax Act.⁵¹

⁴⁵*Id.* § 47134(b)(3).

⁴⁶*Id.* § 47134(c).

⁴⁷*Id.* § 47134(e).

⁴⁸*Id.* § 47134(f).

⁴⁹*Id.* § 47134(g)(1).

⁵⁰*Id.* § 47134(g)(2).

⁵¹*Id.* § 47134(g)(3).

12. The federal share of financial assistance in grants issued from the Discretionary Fund issued to a private operator is 70% of project costs.⁵²

In September 1997, the FAA published detailed procedures for the submission and review of applications to sell or lease an airport in accordance with Section 47134.⁵³ The application procedures have the key features shown in Figure 6.1.

Note on Foreign Investment—In addition to the FAA application procedures, it is possible that the sale or lease of an airport to a private operator that is a foreign entity may be subject to investigation by the Committee on Foreign Investment in the United States (CFIUS).⁵⁴ An investigation may be initiated by the President, by the CFIUS, or based on voluntary notice of the intended transaction to the CFIUS. The President can prohibit the transfer upon finding that the foreign interest threatens to impair national security. Alternatively, the CFIUS can impose conditions to mitigate an identified threat. The CFIUS is concerned principally with transactions by which a U.S. business would become controlled directly or indirectly by a foreign government. In 2006, the sale of port management businesses in six major U.S. seaports to a state-owned company based in the United Arab Emirates (DP World), created a controversy when political figures in the United States feared the sale would compromise U.S. port security, even though the sale was approved by the CFIUS. After both the U.S. House and Senate took actions to block the sale, DP World sold the U.S. ports to a U.S. asset management company, ending the controversy.

6.3.3 Full Privatization Outside the APPP

Since 1996, no public airport operator has sought to sell or lease an airport to a private operator outside of the APPP. However, this option remains available, and may be pursued in the event that either all the available slots in the APPP program are encumbered, or if an owner chooses to privatize outside the regulatory boundaries of the APPP. The FAA has not published guidance specifically on this subject; however,

the FAA provided some guidelines in the *Airport Compliance Manual*, released in September 2009.⁵⁵

Privatizing outside the APPP has the following attributes:

1. FAA approval is required to transfer the grant assurances from the public owner to the private operator and may be required for other purposes.
2. The FAA will review a request to transfer an airport to a private operator in a similar fashion to its review of a request to transfer an airport to another public entity.
3. The FAA may require the public airport operator to maintain concurrent responsibility for certain grant assurances, such as the obligations concerning compatible land use and hazards to air navigation.
4. The FAA will not approve an application without a commitment by the private operator to assume responsibility for the grant assurances and any Surplus Property Act deed restrictions.
5. The FAA will not exempt the public airport operator from the prohibition on revenue diversion, but may permit the private operator to recover its initial investment and receive compensation for managing the airport.
6. The FAA will not require repayment for the value of grant-funded projects and land transferred by the federal government according to FAA Order 5190.6B.
7. The private operator will not be eligible for an apportionment from the Entitlement Fund.
8. The private operator will be required to obtain a separate Airport Operating Certificate and to prepare an Airport Security Program.
9. The private operator could impose a charge on passengers, but could not require the airlines to collect a PFC.

Table 6.3 compares the key features of full privatization under the APPP and outside the APPP.

6.4 Evaluation of Full Privatization

The most comprehensive research on the effect of privatization, corporatization, and ownership forms on airport performance concluded there is strong evidence that:

- Airports with government majority ownership and those owned by multi-levels of government are significantly less efficient than airports with a private majority ownership;
- There is no statistically significant evidence to suggest that airports owned and operated by U.S. government branches,

⁵²*Id.* § 47109(a). In the initial version of the APPP adopted in 1996, the federal share was 40%. It was increased to 70% by *Vision 100—Century of Aviation Reauthorization Act of 2003*, Pub. Law No. 108-176, § 163 (2003).

⁵³FAA, *Notice of Final Application Procedures, Airport Privatization Pilot Program: Application Procedures*, 62 Fed. Reg. 48693 (1997).

⁵⁴See 50 U.S.C. § 2170. See also Dept. of Treasury, *Final Rule, Regulations Pertaining to Mergers, Acquisitions, and Takeovers by Foreign Persons*, 73 Fed. Reg. 70716 (2008); Dept. of Treasury, *Notice, Guidance Concerning the National Security Review Conducted by the Committee on Foreign Investment in the United States*, 73 Fed. Reg. 74567 (2008).

⁵⁵FAA Order 5190.6B, *Airport Compliance Manual*, § 6.15 (Privatization Outside of the Airport Privatization Pilot Program) (Sept. 2009).

Airport Privatization Pilot Program Application Procedures

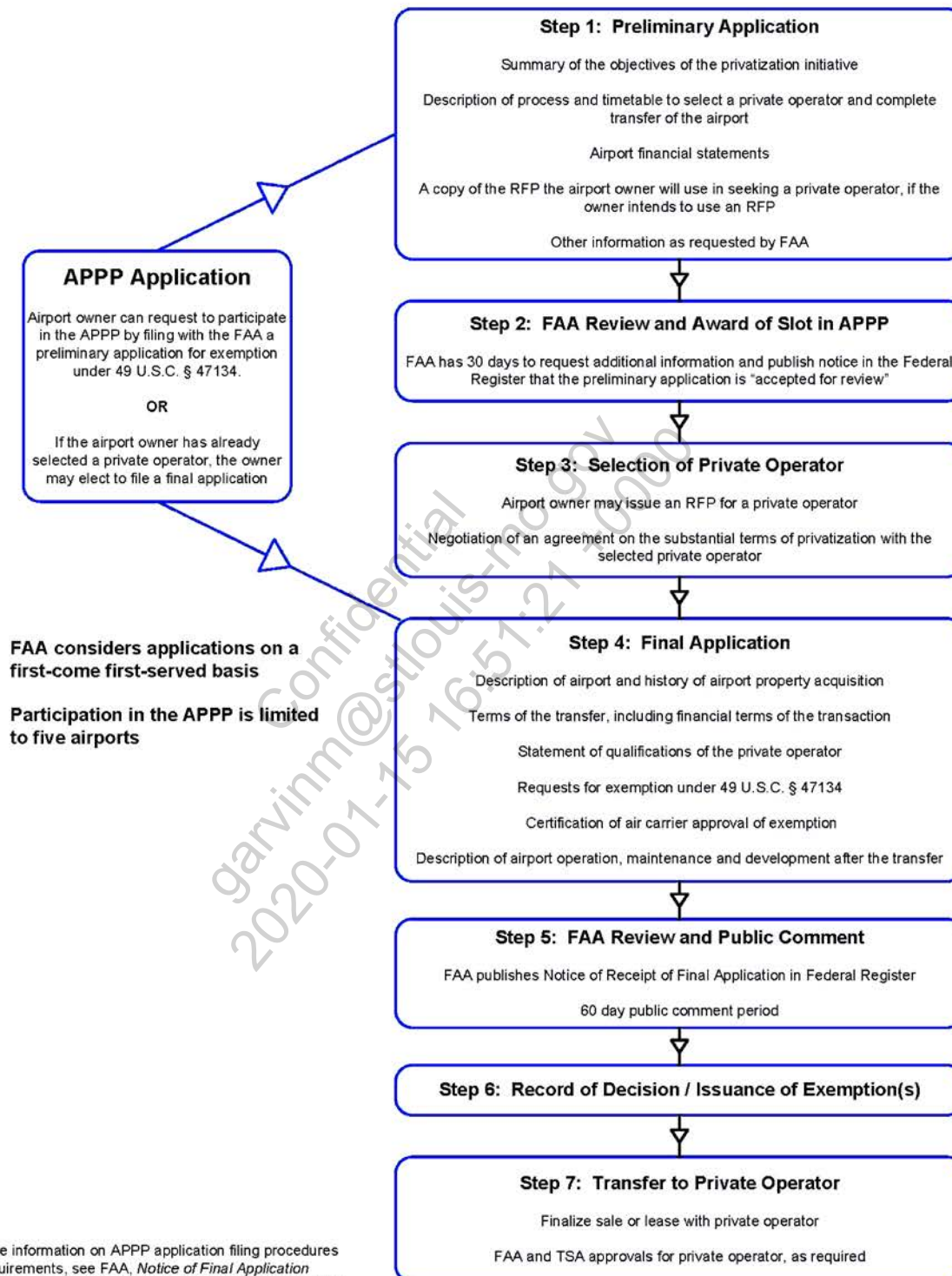


Figure 6.1. APPP application procedures.

Table 6.3. Key features of full privatization under the APPP and outside the APPP.

	Full Privatization Pursuant to Pilot Program (49 USC § 47134)	Full Privatization Outside Pilot Program (per FAA Order 5190.6B)
Eligible Airports	No more than five airports eligible to participate. Only one slot currently available.	No cap on number or type of airports.
Lease or Sale	Commercial service airports can be leased, but <u>not</u> sold. General Aviation airports can be leased or sold.	Airport can be leased or sold.
Airport Sponsorship and Grant Assurances	Private operator becomes airport sponsor, subject to Grant Assurances. The FAA may require public airport owner to remain responsible for certain Assurances.	Private operator becomes airport sponsor, subject to Grant Assurances. The FAA may require public airport owner to remain responsible for certain Assurances.
FAA Approval	FAA approval required under the APPP statute.	FAA approval required, primarily to transfer the Grant Assurances to the private operator, and to approve a new Airport Operating Certificate, if applicable.
Application Process	The FAA has developed application process specifically for the APPP.	Subject to the application requirements for transfer or release of Grant Assurances, currently set forth in FAA Order 5190.6B.
Use of Sale Proceeds	Public airport owner can request FAA approval to use sale proceeds for non-airport purposes. For primary airports, requires consent of 65% of airlines. For nonprimary airports, requires consultation with 65% of based aircraft owners.	Sale proceeds must be used for airport purposes.
Use of Revenue by Private Operator	The FAA is authorized to permit private operator to earn compensation from airport operations.	Private operator generally subject to the prohibition on revenue diversion. FAA may recognize right to recover initial investment and receive reasonable compensation for managing airport.
Grant Repayment	The FAA <u>may</u> excuse public airport sponsor from any repayment obligation that may exist.	The FAA <u>will</u> excuse public airport sponsor from any repayment obligation that may exist.
AIP – Entitlement	Private operator is eligible for grants from the Entitlement Fund.	Private operator is <u>not</u> eligible for grants from the Entitlement Fund.
AIP – Discretionary	Private operator at certain types of airports may be eligible for grants from Discretionary Fund. If eligible, federal share will be limited to 70% of project cost.	Private operator at certain types of airports may be eligible for grants from Discretionary Fund. If eligible, federal share will be 75% or 90%, depending on NPIAS status of airport.
Rates and Charges	Rates on airlines may not exceed inflation rate without consent of 65% of airlines. Rates on aircraft owners may not exceed percentage rate increase on airlines.	Rates and charges must be reasonable and not unjustly discriminatory, pursuant to Grant Assurances.
Private Operator's Charges on Passengers	Private operator is authorized to impose, collect and use a Passenger Facility Charge.	Private operator not authorized to impose a PFC but is authorized to impose charges on passengers, subject to reasonableness and non-discrimination requirements of the Grant Assurances.

- independent airport authorities in North America, or airports elsewhere operated by 100% government corporations have lower operating efficiency than airports with a private majority ownership;
- Airports with a private majority ownership achieve significantly higher operating profit margins than other airports;

- Whereas airports with government majority ownership or multi-level government ownership have the lowest operating profit margin; and
- Airports with private majority ownership derive a much higher proportion of their total revenue from non-aviation services than any other category of airports with significantly

lower aeronautical charges than airports in other ownership categories excluding U.S. airports.⁵⁶

6.4.1 Opportunities

Some of the opportunities cited for full privatization include:

- Creates potential to promote increase in service, commerce, and economic development.

Policy makers recognize that airports are strategic assets and have the potential to deliver long-term value to the local economy. Some policy makers see airport privatization as an economic development strategy. For example, David Alvarez, executive director of the Puerto Rico Public-Private Partnerships Authority, believes that the privatization of San Juan's Luis Munoz Marin Airport is, "More than a transaction, it is an economic development measure for Puerto Rico."⁵⁷ He also believes that the private sector can do a better job than the public sector managing airports.

- Secures a lump sum or ongoing lease payments by selling or leasing airport for budgetary relief (asset monetization) or for annual payments to government owner.

One of the primary motivations for airport privatization from policy makers may be to derive cash proceeds from the sale or long-term lease of the airport either through an up-front payment or annual payments. However, diverting airport lease or sale proceeds is prohibited under federal law without airline approval, and this can only be accomplished under the APPP. Often there is tension between the desire for money from the lease and not wanting to turn over a public asset to the private sector.

The financial situation for municipalities is expected to get worse as they run out of ways to raise funds for pensions, capital improvements, and ongoing operations. Therefore, the potential for a cash-out payment (under the APPP) may be attractive to politicians that do not currently receive financial benefits from airports because of the prohibition on revenue diversion.

- Obtains private capital investment for capacity expansion and modernization and reduces need for public investment and debt. A confluence of factors may force U.S. airport owners to explore privatization in the not-too-distant future, including the potential loss of tax-exempt

financing, real reductions in AIP funding, and no increase in the PFC level.

- Has the potential to increase the operating efficiency of existing facilities.
- Has the potential to introduce technological and management expertise.
- Has the potential to allow for more commercialization and potential for a more business-like management philosophy for the airport.

As the largest and most important tenant for commercial service airports, airlines in the United States are still skeptical about full privatization, but can see some benefits if it is "done right and well." The key concerns for U.S. airlines are reasonable rates and charges, maintenance of the facilities, and sufficient (but not excessive) facilities. They believe that some airports are better candidates than others for full privatization. They believe the "practicality for privatization" depends on the factual circumstances for the airport. For example:

- Higher debt airports are less appealing candidates for privatization because the higher the debt, the higher the premium needed to pay off the debt and still realize a meaningful residual payment for the government. Moreover, the airport debt is likely to be tax-exempt while the private entity would need to replace that debt with more costly taxable debt.
- Well run airports are not good candidates for privatization because it will be more difficult to extract cost efficiencies and uncover revenue opportunities from the future operation of the airport.
- Airports that have problems with governance and lack operational independence might be better run under alternative structures such as privatization. There could be significant efficiencies gained if the airport is shielded from political influence.

6.4.2 Advantages

Advantages cited regarding full privatization include:

- Allows airport to be developed, managed, and operated as a business. However, it should be noted that U.S. airport managers believe that as a number of airports have transitioned from residual to compensatory ratemaking, public airport managers have been motivated to operate their airports more efficiently and be more entrepreneurial.

U.S. airport managers also feel that they can do as good a job, if not better, than private operators if they were unburdened by cumbersome, rigid regulations and processes such as civil service hiring and construction bidding requirements. Nevertheless, some airport managers

⁵⁶Tae H. Oum, Nicole Adler, Chunyuan Yu, *Privatization, corporatization, ownership forms and their effects on the performance of the world's major airports*, Journal of Air Transport Management, November 2006.

⁵⁷David Alvarez, Puerto Rico Airport PPP Update & Perspectives, Bond Buyer Transportation Finance/P3 Conference, November 10, 2010.

expressed frustration with the lack of speed when undertaking public projects and the inherent problems associated with the many local requirements to accept the lowest bid. With a PPP, the government can avoid the low bid, move faster, get better quality control, and still meet disadvantaged business enterprise (DBE) goals.

- Provides ability for the private sector to innovate, introduce operational efficiencies, and create new income streams. The areas with most potential for private operators are (1) operating efficiencies, by maximizing the utilization of existing facilities and incentivizing employees, and (2) maximizing non-aeronautical revenues.
 - Regarding the utilization of existing facilities, one operator has realized 30% to 40% savings in terminal space requirements by strategically positioning new technology such as common use self-service kiosks at key points (parking lots, rental car return areas) to move passengers more efficiently and minimize the amount of ticket queue space needed.
 - In terms of non-aeronautical revenues, by making the security screening process more efficient, passengers have more time to spend post security and are more relaxed. In addition, private operators tailor concession programs to the airport's demographics and actively manage these programs.
 - Private operators have more flexibility to incentivize employees (e.g., bonuses, succession programs, and training), can use employees for a wider range of disciplines, and are not burdened by public processes. They note that public ownership imposes significant costs on the system especially through procurement rules (e.g., local business enterprise goals, consultant selection, concession awards) and rigid personnel systems.
- De-politicizes airport operations and insulates airport from broader public policies.
- Provides flexibility to structure and tailor debt to meet infrastructure needs, including potential to tap foreign markets for financing.

6.4.3 Disadvantages

Disadvantages cited regarding full privatization include:

- Involves significant time, effort, and out-of-pocket expense to undertake (for both the public and private sector). Therefore, an airport owner seeking to privatize its airport(s) needs to give careful consideration to the design of the privatization transaction process. Failure to meet the requirements of potential investors could lead to a lack of willingness on the part of investors to participate in the bidding process.
- Involves loss of control by policy makers such as long-term policy decisions, influencing the award of contracts, and

hiring decisions. Losing control over airport assets can be a vexing decision for policy makers. In addition, there is not always consensus among policy makers on the merits of privatizing their airport.

- Requires multiple layers of approvals (federal, state, local, tenants, and employees).
- Can be constrained by existence of airline use and lease agreements.
- Involves limitations on aeronautical rate increases and requires airline approval to take money out of the aviation system, which can be difficult to obtain and can reduce the value of the transaction. The airlines often also ask for capital investment commitments.

Some U.S. airport managers feel that the requirement for 65% airline approval puts the airlines back in control of airports because their approval is needed for the airport owner to monetize the airport. Private airport operators feel that the APPP is an “utter failure.” For example, the unusually restrictive rules under the APPP give airlines an “effective veto” over privatization. Moreover, they expressed concern that the airlines got a “sweetheart deal” at Midway, which will serve as the baseline for all future privatization transactions.

On the other hand, some airlines see merits in the idea of stable and predictable landing fees and rental rates that could come under privatized airports. In fact, as a result of the concessions made in the proposed Midway transaction, the airlines have started to be more receptive to potential long-term leases. It was important to Southwest Airlines that the Midway deal included price caps and operating standards. The operator lease included extensive performance standards that were negotiated with the city and Southwest. Southwest also required guarantees that the airport would be run in a customer service friendly fashion, with a particular focus on pricing controls—to the greatest extent possible—with respect to parking, concessions, etc. Southwest wanted to make sure that concessions and parking rates, in particular, were competitive with those at Chicago O’Hare so that use of Midway by passengers was not cost-prohibitive. The Midway lease also required that the operator continue to make capital expenditures to maintain and develop the airport, which was an important factor for the airlines.

However, some airlines expressed skepticism on whether the selected Midway operator could have made the Midway deal work and concern that the deal might have been renegotiated if the operator was failing.

Given the long-term nature of the leases, airlines are concerned about controlling their costs at airports in the future. They will endeavor to do this through negotiated price caps and escalators, and/or through some form of participation in the concession agreement.

- Tempts elected officials to want to cash-out value (“borrow against the future”) without necessarily appreciating and understanding the long-term implications to the airport enterprise. For example, many U.S. airport managers believe that the Midway transaction was proposed almost entirely for the upfront payment. They believe it was not pursued because of the lack of competence of its management team or the inability to finance airport improvements. Airport managers were concerned about the longer term implications of the transaction on the ability for Midway to serve the needs of the community.

The airlines noted that it is important to align the interests of the parties (airport owner, private operator, and airlines) more closely. Rather than a large upfront payment, they think it might be better to structure the transaction with annual payments whereby all parties benefit if the airport grows. They reason that a large upfront payment does not motivate the airport owner beyond the transaction date and leaves all the risk to the operator and airlines. This in turn motivates the airlines to negotiate a cap on rate increases to mitigate their risk in the transaction.

- Involves higher financing costs (for private capital) than public tax-exempt debt.

Usually full privatization transactions are financed by a mix of equity, bank debt, and bond debt. Although private operators can optimize the capital structure in a prudent manner, they universally agree that the tax-favored status in the United States (which was cited as worth as much or more than 200 basis points) is a significant deterrent to full privatization. In addition, bank loans have shorter amortization periods than tax-exempt bonds, which increases the refinancing risk. Therefore, it is vital to time capital expenditures correctly and not overbuild facilities.

Lenders (banks) have become more selective when it comes to identifying investment opportunities. They tend to focus on (1) leverage, senior lien, and refinancing risk, (2) cash flow stability, and (3) security (i.e., in the case of default, lenders need recourse to assets to offset the debt).

Investors (private equity funds, infrastructure funds, and pension funds) are concerned about risk and return, control, and transaction process. Investors determine the rate of return that they will require in exchange for exposure to these risks, which tends to vary among the three categories of investors.

Regarding equity, the airlines are concerned that private entities need to earn a return on their investment in addition to higher borrowing costs from their lack of access to tax-exempt debt and grants (outside the APPP). As interest rates increase in the future, the spread between taxable and tax-exempt debt will likely increase. They are concerned that savings from more efficient operations and enhanced non-aeronautical revenues may not be large enough to

recover the operator’s higher cost of capital except at airports that are run inefficiently and/or have high social policies.

However, private airport operators were dismissive of those who cite privatization as likely to lead to increased costs to air carriers. They believe it is in the interest of the airline and the private operator to keep costs low. Also, under federal regulations, aeronautical rates are subject to the reasonableness and unjust discrimination standards imposed by the grant assurances. In fact, around the world, private airport operators face a variety of national regulations covering aeronautical rate-setting (e.g., approval by regulators, standards legislated consistent with International Civil Aviation Organization (ICAO) principles, and airport-airline dispute resolution mechanisms) and they still manage to earn a profit.

Private airport operators were also dismissive of claims that they cannot compensate for their profits through cost reductions. They believe they can realize significant savings over public airport operators by not being bound by public procurement and management procedures. Part of those savings can be used to hire more qualified staff, even if they have to pay their staff more. The operators invest in highly qualified people and use their expertise to drive down the costs to operate the airport while keeping capital expenditures in check.

- Could involve buyouts and compensation for existing public workers.

Labor will strongly oppose any privatization measures that abrogate union contracts, contract out existing airport employees’ work, or reduce wages and benefits. Under the APPP, airport owners are not permitted to abrogate collective bargaining agreements covering airport employees.

In the Midway transaction, the city of Chicago secured the support of unions by ensuring that current employees would be offered jobs with similar pay and benefits in the lease with the operator or in another department within the city. The city’s commitment to use the lease proceeds to fund pensions and city infrastructure also helped win union support for the transaction.

In the Stewart transaction, the state required the operator to retain the State Troopers for airport security protection to avoid labor issues. In Midway and Morristown, the cities retained the responsibility for providing police and fire protection.

- Can involve implementation risk in the event the bidder desires to get out of the transaction. As shown in the Stewart case study, the airport owner reserved the right to approve any assignment of the lease and prohibited the operator from selling the lease for a period of five years.
- Can involve loss of control of the airport by the airport owner. However, the airport owner can include performance

standards in the lease, which can be fixed for the duration of the long-term contract.

- Affords limited opportunities because many of the largest U.S. airports already operate like commercial enterprises and few of the smaller airports have strong commercial potential.

As noted earlier, the airlines contend that some airports are better candidates than others for full privatization. They believe the “practicality for privatization” depends on the factual circumstances for the airport.

- May result in a renegotiation of the contract due to changing market conditions, which are next to impossible to foresee, because of the long-term nature of these leases (50–99 years).
- Creates long-term risk and responsibility for the airport owner to continue to oversee the performance of the privatized operator and may also require the airport owner to be ready to operate the airport, if needed, in the event of default or bankruptcy.
- Can expose the airport owner to political, legal, operational, and financial risk if the transaction is not consummated or if the private entity incurs financial difficulties.
- Uncertain effects on tort liability for acts of terrorism, aircraft accidents, etc., particularly since the private operator would not likely be entitled to the same sovereign legal immunities as a public entity.
- Runs the risk that tenants and users may perceive pricing to be unfair because the private operator will likely offer market pricing even though aeronautical charges will be subject to fee reasonableness requirements and under the APPP to air carrier consent for fee increases greater than inflation. If tenants and users are accustomed to low and subsidized costs they may not respond well to market prices, particularly if they are not introduced in an incremental manner.
- Presents potential for controversy in the event of foreign ownership. In addition, it is possible that the sale or lease of an airport to a private operator that is a foreign entity may be subject to investigation by the CFIUS. For example, the sale of port management businesses in six major U.S. seaports to a state-owned company based in the United Arab Emirates (DP World) in 2006, created a controversy by political figures in the United States who feared the sale would compromise U.S. port security even though the sale was approved by the CFIUS.
- Gives airport owner less control over customer service standards and airport pricing although performance standards can and should be included in the lease.

For example, passengers are primarily concerned with the prices and the quality of service. Prices include airline fares, purchases from airport concessions (e.g., food/beverage, merchandise, services), and the cost to use airport facilities such as parking, rental cars, taxis, WiFi, etc. For example, if

airline costs increase as a result of a change in operation, the airlines could increase their ticket prices and/or cut back or eliminate flights in response.

On the other hand, private airport operators believe consumer concerns about increased parking rates and concession pricing are a fallacy. Private developers have demonstrated a serious commitment to street pricing as being integral to their business model (e.g. Westfield, Marketplace, and AIRMALL® at their U.S. concession operations). They believe private operators need to be competitive with off-airport parking lots and other modes of transportation, and through better management, their prices do not have to be higher to achieve more net revenue.

In addition, as noted above, performance standards can and should be included in the lease.

- May involve less consideration of local policy issues, environmental impacts, and community interests in favor of shareholder and investor interests. Unlike private entities, public entities do not report to shareholders and are bound to a different bottom-line.
- May receive less local support if the public owner cannot take money out of the aviation system.
- Provides less access to federal grants.

6.4.4 Complexity, Risk, and Other Implementation Issues

Entering into a long-term lease or sale involves the most complexity and risk for an airport owner as demonstrated in the Chicago Midway transaction where the city spent over three years and roughly \$13 million for costs associated with the privatization process only for the transaction to fail due to the collapse of the debt and equity markets. (The city received a \$126 million breakup fee from the winning bidder and was able to reimburse itself for all its out-of-pocket expenses and still have \$113 million left over for other general fund uses because the fee was considered to be liquidated damages and not airport revenue.)

As noted in the Midway case study, going through the APPP can be a lengthy, complex, time-consuming, and expensive process. The rewards could be big, but success is not guaranteed. Full airport privatization in the United States is far more complicated than privatizing toll roads or parking facilities given the highly regulated environment, a more diversified mix of revenue generating assets, complexities involved in operating an airport, the pace of technological changes affecting airports, and the multiple approvals needed, including:

- FAA (for various approvals)
- TSA (for the airport security plan)
- CFIUS (if CFIUS regulations apply in the context of the sale or lease of the airport to a private operator that is a foreign entity)

- Labor (in particular collective bargaining agreements)
- Airlines (if revenue is to be used for non-airport purposes)
- Local requirements (e.g., city council)
- State legislation (if existing state law would preclude the transaction and/or if seeking exemption from property taxes)

Therefore, it is important to estimate the expected net proceeds early in the process to know if the transaction can yield positive benefits.

Other issues involved in transferring the control of an airport (by lease or sale) to the private sector include:

- Ensuring that the public interest in the airport and its services is protected.
- Ensuring that private sector returns do not overly burden user non-aeronautical fees.⁵⁸ Indeed, privatization generates concerns about profit-taking from an asset that is traditionally viewed as a nonprofit governmental function.⁵⁹

Successful implementation of full privatization models also requires that there be a committed political leader to champion it.⁶⁰

Bankruptcy also is an important consideration. In evaluating the opportunities for and barriers to airport privatization prior to the APPP, the U.S. General Accounting Office found that the Bankruptcy Code may limit a local government's ability to terminate a lease or management contract or substitute a new operator in the event of bankruptcy, and also may enable the private operator under bankruptcy protection to reject the lease or management agreement.⁶¹

Congress partly addressed this risk by requiring, as a condition of approval under the APPP, that the applicant demonstrate that airport operations would not be interrupted in the event that the private operator seeks bankruptcy protection.⁶² Applicants have argued, and FAA has accepted, that, as a measure of last resort, the public entity could retake possession of the airport in the exercise of its police or regulatory

powers.⁶³ This is because, while the filing of a petition under the Bankruptcy Code triggers an automatic stay of most judicial and administrative proceedings, certain actions in furtherance of a public entity's police and regulatory power are not subject to this bar.⁶⁴

As a legal and practical matter, the sale, lease or concession agreement explicitly will address remedies in the event of bankruptcy. As reflected in examples of privatized assets other than airports, it may be the case that a private operator is fully capable of continuing to operate the facility while in the process of reorganization under the Bankruptcy Code. Nevertheless, bankruptcy plainly adds complexity and some measure of risk to the long-term lease or sale of an airport.

It is also more difficult to offer tax-exempt financing to bidders for long-term leases, which is a way to substantially lower the amount of financing needed by private investors (as frequently employed in developer financings). This is because in order to qualify for the federal tax exemption, the asset must be governmentally owned, which means the term of the lease cannot be greater than 80% of the useful life of the asset. In addition, under IRS regulations, tax-exempt bonds cannot be used to acquire existing assets unless at least 15% of the proceeds are used for rehabilitation expenditures for buildings associated with the property.⁶⁵

As noted earlier, direct and indirect federal controls dramatically affect the incentives and opportunities for privatizing public-use airports. For example:

- The sale or lease of an airport to a private operator, within or outside of the APPP, requires FAA approval.
- For privatization outside the APPP, the FAA requires that private operators agree to assume responsibility for the grant assurances, Surplus Property Act deed restrictions, and other federal obligations. The FAA has not indicated what other conditions might apply to privatization outside of the APPP.
- For privatization within or outside the APPP, the private operator will be responsible for compliance with the grant assurances, at least for so long as the grant assurances might otherwise remain applicable. Also, the FAA may require that the public airport operator in either circumstance concurrently maintain responsibility for certain grant assurances.
- In 2009, the FAA clarified that public airport operators privatizing outside the APPP will not have to reinvest or repay prior federal grants so long as the airport continues to be made available for public use.

⁵⁸Regarding aeronautical user fees under the APPP, statutory provisions, grant assurances, and the FAA's Record of Decision would govern the return on investment permitted by the airport operator. Outside the APPP, grant assurances govern the reasonableness of airport-airline fees.

⁵⁹Laurence E. Gesell, Ph.D., A.A.E. Arizona State University, *Airport Privatization and the Reluctance of U.S. Airports to Adapt*, September 15, 2007.

⁶⁰GAO, *Privatization: Lessons Learned by State and Local Governments*, GAO/GGD-97, March 1997.

⁶¹GAO, *Airport Privatization: Issues Related to the Sale or Lease of U.S. Commercial Airports*, November 7, 1996.

⁶²49 USC § 47134(c)(2).

⁶³See FAA, *Record of Decision for the Participation of Stewart International Airport, Newburgh, New York; In the Airport Privatization Pilot Program* at 21 (2001).

⁶⁴11 USC § 362(b)(4).

⁶⁵26 USC 147—Sec. 147. Other requirements applicable to certain private activity bonds.

Table 6.4. Summary of incentives/disincentives to partial and full privatization.

Issue	Partial Privatization	Full Privatization
FAA Approval	May or may not be needed, depending on structure and terms	Necessary and can deter
Revenue Use	Not a barrier	Requires express exemption
Grant Eligibility	Public entity remains sponsor and eligible	Entitlements only available through APPP; lower discretionary federal share for airports in APPP
Grant Repayment	n.a.	May not be required if remains an airport
Control over Aeronautical Activities	Subject to grant assurances and AHTA standards	Under APPP, subject to caps, grant assurances, and AHTA reasonableness standard Outside APPP subject to grant assurances
Control over Non-aeronautical Activities	Viable revenue source resulting from flexibility to control rates	Viable revenue source resulting from flexibility to control rates

- The APPP permits U.S.DOT to grant an exemption from the prohibition on revenue diversion “to the extent necessary to permit the purchaser or lessee to earn compensation from the operations of the airport.” FAA guidance indicates that a private operator acting outside of the APPP would be subject to all of the grant assurances, presumably including the prohibition on revenue diversion. However, the FAA has acknowledged that a private operator may have a limited right to recover its initial investment and earn some measure of compensation for managing the airport.

Table 6.4 presents a summary of the legal incentives and disincentives under partial and full privatization.

Airports participating in the APPP must also satisfy nine conditions prescribed by Section 47134 (as described earlier).

The sale of U.S. public airports is very uncommon, primarily due to the federal restrictions. Under the APPP, only general aviation airports can be sold.

6.5 Frequently Asked Questions About Full Privatization

The following is a short summary—in the form of questions and answers—concerning the principal legal issues presented by full airport privatization within and outside of the APPP. The underlying source material (statutes, regulations, guidance, etc.) is provided in Appendix D.2.

Is FAA approval required for sale or lease to a private operator?

Yes. The sale or lease of an airport to a private operator, within or outside of the APPP, requires FAA approval.

What conditions apply to FAA’s consideration of a request to sell or lease an airport to a private operator?

Airports participating in the APPP must satisfy nine conditions prescribed by Section 47134. For privatization outside

the APPP, the FAA requires that private operators agree to assume responsibility for the grant assurances, Surplus Property Act deed restrictions and other federal obligations. The FAA has not indicated what other conditions might apply to privatization outside of the APPP.

Is the public airport owner or the private operator responsible for compliance with the grant assurances upon transfer?

For privatization within or outside the APPP, the private operator will be responsible for compliance with the grant assurances, at least for so long as the grant assurances might otherwise remain applicable. Also, FAA may require that the public airport operator in either circumstance concurrently maintain responsibility for certain grant assurances.

Will sale or lease proceeds constitute “airport revenue”?

Yes. Sale or lease proceeds to any private operator will constitute airport revenue. However, an applicant under the APPP can request an exemption permitting the public airport operator to use sale or lease proceeds for non-airport purposes (see next question).

What restrictions apply to a public airport owner’s use of sale or lease proceeds?

Under the APPP, the Secretary may grant an exemption permitting the public airport owner to use sale or lease proceeds for non-airport purposes upon approval by 65% of air carriers, by number and landed weight, at a primary airport, and upon consultation with 65% of based aircraft at all other airports. If the applicant does not seek or obtain consent or conduct the required consultation, and for airports privatizing outside the APPP, the public airport owner is required to use sale or lease proceeds for airport purposes.

Is a public airport owner required to reinvest or repay the federal government when selling or leasing property acquired with “federal assistance”?

Maybe. Section 47134 explicitly permits U.S.DOT to excuse any reinvestment or repayment obligation. In 2009, the FAA clarified that public airport operators privatizing outside the APPP will not have to reinvest or repay prior grants so long as the airport continues to be made available for public use.

Is a public airport owner permitted to use sale or lease proceeds to repay the General Fund for prior contributions to the airport?

Yes. Whether or not privatizing under the APPP and whether or not a public airport operator receives approval by air carriers, the public airport operator can repay loans made by the sponsoring government within the preceding six years. The public airport operator likely can also repay loans made by a sponsoring government pursuant to written obligations, whether or not issued within the preceding six years.

What restrictions apply to a private operator's use of revenue generated from the airport?

Section 47134 permits U.S.DOT to grant an exemption from the prohibition on revenue diversion "to the extent necessary to permit the purchaser or lessee to earn compensation from the operations of the airport." FAA guidance indicates that a private operator acting outside of the APPP would be subject to all of the grant assurances, presumably including the prohibition on revenue diversion. However, the FAA has acknowledged that a private operator may have a limited right to recover its initial investment and earn some measure of compensation for managing the airport.

What restrictions apply to a private operator's imposition of rates and charges?

Section 47134 limits increases in fees imposed on air carriers to the rate of inflation without approval by 65% of air carriers (by number and landed weight), and limits the percentage increase in fees to General Aviation to the percentage increase charged to air carriers. While not subject to the AHTA's demand that rates and charges be "reasonable," a private operator outside of the APPP would be subject to the reasonableness and unjust discrimination standards imposed by the grant assurances.

Is a private operator eligible for apportionment from the AIP Entitlement Fund?

Section 47134 explicitly authorizes a private operator to receive an apportionment from the Entitlement Fund. Private operators acting outside the APPP are not eligible for an apportionment.

Is a private operator eligible for grants from the AIP Discretionary Fund?

Yes. Section 47109 provides that the federal share for discretionary grants for airports privatized under the APPP shall be 70%. Private operators outside the APPP may be eligible for discretionary grants if the airport is a reliever airport or receives 2,500 annual passenger boardings.

Is a private operator authorized to impose a Passenger Facility Charge?

Section 47134 explicitly authorizes a private operator to impose a Passenger Facility Charge. While private operators acting outside the APPP technically are not eligible to impose a Passenger Facility Charge, private operators may impose charges on enplaning passengers.

Is a private operator required to separately obtain an Airport Operating Certificate?

Yes. A private operator, within or outside the APPP, is required to request, secure and maintain an Airport Operating Certificate if the aeronautical activity at the airport demands a certificate.

Is a private operator required to maintain an Airport Security Program?

Yes. A private operator, within or outside the APPP, is required to maintain an Airport Security Program, depending on the nature and type of commercial passenger service.

Is the public airport owner or the private operator obligated to provide law enforcement at the airport upon transfer?

A private airport operator, within or outside the APPP, must provide law enforcement personnel or ensure that law enforcement personnel are available to respond to an incident, depending on the type of Airport Security Program in place at the airport.

6.6 Relevance and Lessons Learned From International Airport Privatization and Non-Airport Privatization in the U.S. Transport Sector

As noted above, unlike in the United States, international airport privatization often means the full or partial transfer of airport ownership from the public sector to the private sector through very long-term leases or concessions, an outright sale, or IPOs (i.e., full privatization). This transfer of control and/or ownership is often accompanied by requirements to improve the airport's infrastructure and service levels and provide new capacity to keep pace with demand under a regulatory framework for aeronautical charges. Similarly, most of the non-airport transport examples entail long-term concessions or leases of the entire asset (i.e., also full privatization).

While there is a significant body of information to be learned from these experiences (as can be found in Appendices C and D), not much of it is transferable to the U.S. airport sector given the unique regulatory, finance, and legal framework in the United States as described earlier.

Some of the themes and lessons learned of relevance to U.S. airport transactions include:

1. Long-term concessions may have the advantage of enabling the owner to participate in the continuing success of the airport through securing returns from rental payments or performance-related payments. This may have particular advantages for some sorts of privatizations where buyers would be unwilling or unable to make high upfront payments.
2. The success of these deals (ranging from 30 to 99 years) cannot be determined in the short term. Also, the length of a concession needs to be considered carefully. In particular, longer terms raise more upfront money, but do not necessarily deliver overall best value for money. To date the term of long-term leases or concessions for “brown-field” surface transport assets has been driven, at least in part, by accounting treatment and tax exposure, and the same rules apply to airports where the useful life of existing terminals can be 30–40 years. This suggests a 50-year term should be adequate for depreciation treatment on airport deals, and depending on the age of the airport, possibly less. In the case of the Chicago Skyway, the bridge had major components with a long useful life of 75 or more years, which led to the 99-year term and the city of Chicago seemed comfortable carrying the 99-year term over to Midway to maximize the upfront payment, but this term does not appear to have been driven by tax or accounting considerations. However, while a longer term does raise more upfront money, it should be remembered that it does not necessarily deliver overall best value for money.
3. Although funding constraints may be a key factor in moving a public sector body to consider privatization, value for money must be the main rationale. For example, the adoption of 63-20 financing⁶⁶ may have appeared to offer a low-cost funding solution, but the resultant misalignment of risk and reward did not always deliver value for money. Further, award criteria should not simply focus on price and, as value for money in its widest sense should be

the objective, the inclusion of other considerations, such as environmental benefits, is both possible and beneficial. For airports, the consideration of wider economic and environmental benefits, and their inclusion within award criteria, is highly relevant.

4. Similarly, in measuring the success of a transaction, while the amount of the money received is an important consideration, it should not be the only criteria. It is also important to consider the investments made by the private entity in infrastructure, the level of service provided, the pricing of services to the public, the degree of environmental stewardship, and employee satisfaction. Airports, like all transportation infrastructure, do not operate in isolation, and have the same duties of care to stakeholders as other businesses. As such they must learn to balance simple monetary gains against these other wider considerations when considering privatization options.
5. The letting of concessions delivers a stable financial environment to address maintenance needs of economically critical infrastructure, and this appears to remain true even if the project finances fail. Indeed, many have argued that, even when projects failed financially, it should always be remembered that much needed essential economic infrastructure was delivered when it was needed, and often decades ahead of when it would have been delivered using traditional funding approaches. However, to ensure full public support, the public sponsor also needs a clearly articulated plan for how any additional proceeds raised by the public sector are to be invested, especially when revenues are being raised from one sector (such as an airport) to finance another (such as highways or other social facilities).
6. The early years of a concession are the most vulnerable and the public sector has an important role to play in mitigating risk in these early years. The public sector must also appreciate the expectations of the market and deliver a transparent and timely procurement process. Valuing and then correctly allocating risk is central to delivering value for money for the public sector and, hopefully, ensuring a successful outcome for all the parties involved. In recent years, the aviation industry has experienced volatile market demand and conditions, usually as a consequence of events beyond the industry’s control. Airport owners need to consider whether some form of government involvement whether to mitigate market risk, help provide some degree of credit enhancement, or defer rental payments in the critical early years of a concession delivers better value for money. In fact, as noted in the JFKIAT case study, the Port Authority of New York and New Jersey had to step up and provide completion financing in the context of the 2001 recession and the September 11th terrorist attacks. Also, Massport had to assist Delta in its bankruptcy

⁶⁶63-20 financing refers to the issuance of tax-exempt bonds by non-profit entities to finance tangible public assets pursuant to IRS revenue ruling 63-20 of 1963, typically under long-term leases. For example, the 63-20 financing structure has been used to build hospitals, toll roads/bridges, university buildings, city halls, water and sewage facilities, hotels, and convention centers.

reorganization efforts for Terminal A at Boston Logan Airport to avoid the potential for costly litigation. This is a new form of cooperation in response to market failures of previous toll roads and other privatized assets.

7. For strategic transportation projects, the role of the private sector is seen as one of delivery, not of definition or specification. A solicited approach to privatization procurements allows the public sponsor to maintain control of project identification (and therefore the overall strategy for the project and sector) while ensuring the private sector is focused on the areas where it can best deliver value for money, namely, delivery of the service required.

8. Although projects may appear to be similar, all have unique features, and these must be understood when developing the term and nature of the deal between the public and private sectors. Also, even the most technically complex project can be procured through privatization techniques. However, the involvement of the private sector cannot fundamentally change the nature of a project. For example, a project that needs a significant subsidy if procured by traditional means will still need a subsidy if procured as a privatization. In addition, even infrastructure of regional or national importance can, in principle, be procured through privatization techniques.

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CHAPTER 7

Other Examples

Some forms of private sector involvement do not fit into the generic models discussed earlier, but are worthy of mention and are described here.

7.1 Green-Field Private Airport Development

As indicated earlier, the direct and indirect federal controls on airports are largely the result of federal financial assistance to the airport. The legal structure applicable to an airport developed on a green-field site by a private entity without federal financial assistance is dramatically different. The private developer/operator would not be constrained by the grant assurances, statutory requirements applicable only to public entities (e.g., the Anti-Head Tax Act or AHTA), and statutory requirements applicable to entities that have received federal assistance at some point in the past (e.g., the statutory prohibition on revenue diversion found at 49 U.S.C. § 47133).

Further, while it is possible that a private airport developer/operator would be deemed a “state actor” responsible for guaranteeing the rights and protections afforded by the U.S. Constitution (e.g., on the basis that operating a public-use airport is a public function), private airport developers/operators are less likely to be deemed bound by the U.S. Constitution. If subject to the Constitution, a private airport developer/operator’s rates and charges likely would need to satisfy the rather favorable standard applied to public airport owners prior to the enactment of the AHTA.⁶⁷

Freed from these constraints, a private developer/operator could, for example, do the following:

1. Impose user fees directly on passengers, likely subject to constitutional limits.⁶⁸
2. Permit only certain air carriers to serve the airport.
3. Divert revenue from the airport.

At the same time, a private developer/operator would not enjoy several of the benefits and protections afforded government entities. In particular, the private developer/operator would *not* (1) be able to issue tax-exempt debt, (2) be eligible for state constitutional and statutory exemptions from property taxation, and (3) enjoy state action immunity from liability under the federal anti-trust statutes.

There have been a few examples of private airport development of airports, most of which have been for general aviation airports.

7.1.1 New General Aviation Airport

There are numerous examples of privately developed general aviation airports in the United States. For example, Houston Executive Airport was built with private funds by WCF, LLC, which was founded by a Houston-area pilot and business executive. The airport is located 28 nautical miles west of the central business district of Houston, comprises 1,280 acres, has a 6,610-foot runway, and offers aircraft hangars and business aviation terminal facilities. The airport is designed for the business aviation community and general aviation pilots (not for commercial Part 121 carriers) as an alternative to the area’s more crowded commercial service air carrier

⁶⁷See *Evansville-Vanderburgh Airport Auth. v. Delta Airlines*, 405 U.S. 707 (1972) (The U.S. Supreme Court held that a fee is constitutional if it (1) is based on some fair approximation of the use or privilege, (2) does not discriminate against interstate commerce, and (3) is not excessive in comparison with the benefit conferred.).

⁶⁸In considering the legality of an “airport facility charge” imposed by the private operator of the Branson Airport, DOT found that neither the AHTA nor the PFC statute applied, since the airport operator was not a public entity, but reserved judgment on whether the “reasonableness” requirement of 49 U.S.C. § 47129 applies to a private airport operator. Letter from S. Podberesky, DOT, to G. Wicks re: Branson Airport’s Airport Facility Charge Request (Jan. 16, 2009).

airports. Construction started in November 2005 and the airport opened in January 2007.⁶⁹

7.1.2 New Passenger Commercial Service Airport

Branson Airport is the only privately owned commercial passenger airport in the United States. It was built as a new airport on a green-field site by private investors to be operated as a for-profit business without the aid of federal or state grants. The airport opened in May 2009 with a 7,140-foot runway capable of handling 737s and 757s, a modest 40,000-square-foot terminal with four ramp loading gates, a contractor-operated control tower, and extensive general aviation facilities to serve the popular country-western music and entertainment tourist destination of Branson, Missouri. Prior to its opening, the nearest airport with scheduled service to Branson was 52 miles away (in Springfield) and offered virtually no service by low-cost carriers.

A group of entrepreneurs created Branson Airport LLC, acquired a parcel of land in Branson, received airspace approvals from the FAA, negotiated a 30-year agreement with the City of Branson to pay the airport \$8.24 for each arriving visitor (with an annual cap of \$2 million), and raised \$27 million in equity and \$111 million in tax-exempt revenue bonds to pay for the airport development. The \$8.24 per arriving passenger represents a subsidy from the city's general fund for the private airport. Branson Airport LLC retained Aviation Facilities Company, Inc. (AFCO) to oversee construction of the airport.

Because Branson Airport LLC did not accept federal AIP grants for the airport, it is not constrained by FAA grant assurances. As a result, Branson Airport LLC has been able to offer airlines exclusive rights to provide commercial service from specific cities to the airport. In return, the airlines are required to offer low fares that are negotiated between Branson Airport LLC and the individual airlines. For example, Branson Airport LLC signed up AirTran for exclusive service to Atlanta and Milwaukee as well as Sun Country for service to Minneapolis-St. Paul and Dallas. Branson LLC and its affiliated travel agency also started a scheduled charter service with ticket prices they determine in consultation with the airports at the other end of the routes. In addition, Branson Airport LLC signed an exclusive rental car agreement with Enterprise Rent-A-Car, which is unusual in the airport industry.

However, although Branson Airport LLC may assess an airport facility charge on passengers using the airport, air carriers are not permitted to separately list an airport-assessed airport facility charge from their advertised fares for air transportation to and from the airport (a PFC, in contrast, is separately listed from the base ticket price). According to the U.S.DOT,

because the company will be operating the airport as a private entity, the airport facility charge is not a government-imposed charge and may not be advertised separately from the fare for air transportation in compliance with the U.S.DOT's full fare advertising rule set forth in 14 CFR 399.84 and its more than 20 years of enforcement case precedent.

Since its opening, which was one month before the end of the longest recession in U.S. postwar history, Branson Airport LLC has struggled to meet traffic projections. In 2010, Branson Airport LLC (1) suffered a \$2.2 million operating loss for the first six months of the year, (2) had to dip into reserves to cover its July 1, 2010 debt service payment, (3) reached an agreement with the city to make its payments directly to a nonprofit transportation district instead of the airport to forward to the trustee for debt service, and (4) needed the investor group behind the airport to pump in an additional \$22 million to support operations.⁷⁰ After falling into a technical default on its bonds in January 2011, Branson Airport LLC entered into a forbearance and funding agreement with the bondholder's trustee, which staves off enforcement actions (until June 30, 2012) to give the airport time for services and revenues to "become sufficient to meet all operating and debt service costs," allowing the company to "stabilize its business."⁷¹ On the basis of projections in the bond offering statement, the company believed 180,000 travelers would use the airport in 2009 rising to 275,000 in 2010. However, in 2010 the airport served only 92,000 passengers.

7.2 Examples of 'Reverse' Privatization

There are also examples where (1) certain functions that were privatized have reverted back to public control or ownership and (2) public airport owners provide services to the private sector. As noted above, Stewart International Airport, which was privatized under the APFP in 2000, reverted back to public ownership in 2007 when National Express sold its interest in the airport to the Port Authority of New York and New Jersey. Also mentioned earlier both Indianapolis and Harrisburg reverted back to public management of their airports after a number of years of private operation by BAA. Other examples are described here.

7.2.1 In-sourcing Services

Clark County, the owner and operator of Las Vegas McCarran International Airport, has been replacing private contractors with county workers by in-sourcing a number

⁶⁹FAA Airport Master (Form 5010 PDF), July 31, 2008; and Houston Executive Airport, official website.

⁷⁰Yvette Shields, *Branson Hits Turbulence*, The Bond Buyer, August 4, 2010.

⁷¹Yvette Shields, *Branson Airport Gets Forbearance*, The Bond Buyer, May 11, 2011.

of functions. In the early 1990s, the county took over the responsibility for cleaning of all leased areas in public view, including the baggage claim area, the gate holdrooms, and the area in front of the ticket counters, from the airlines. The county did this because the service provided by the airline contractors was not performed to an acceptable standard for the airport. This function was added to the county's in-house custodial staff resulting in an increase of approximately 100 custodial staff to cover existing and new space added over time. The county believes that while its cost for performing this work is higher than what the airlines were spending, the standard of cleanliness is much greater than it was when the airlines performed this function.

In 1990, all of the baggage handling systems were owned, maintained, and operated by the airlines with the exception of the baggage claim system, which the county owned and maintained. As the airport transitioned to a common use operation, it started to bring this function in-house. The county started assuming control over certain ticket counter and bag make-up areas as those areas became true common use facilities. When the county installed its in-line baggage screening system, it had to replace most of the baggage handling systems, which was done as one integrated project. At the end of the project, the county owned all of the baggage handling systems (except for the one used by Southwest Airlines, which it subsequently bought) and now owns and maintains all of the baggage handling systems at the airport. Maintenance of the baggage system is performed in-house. Initially, the county maintained part of the system with in-house staff and part with an outside contractor (split roughly 50/50), but found that the part that was maintained in-house was better maintained than the portion maintained by the outside contract for the same or slightly less cost. As a result, the county brought all of the maintenance in-house.

In the early 1990s, the airlines owned most of the jetways at the airport. The airport standard at that time was for airlines to provide and maintain jetways for their leased gates. After an incident where the county encountered difficulty relocating one airline to another terminal due to its ownership of the jetways, it was decided that the county should own all the jetways to avoid these constraints as it sought to maximize the utilization of the terminals. This was accomplished over time as new gates were added and as the county bought airline jetways on existing gates. The county now owns and maintains in-house all of the jetways at the airport.

7.2.2 Public Airport Providing Private Contract Services

The Allegheny County Airport Authority, which operates Pittsburgh International Airport, provides an interesting example of a public owner providing a private function to

a private company. In September 2009, the airport authority entered into an agreement with JBT Aerotech (an airport ground support equipment and services company) to renovate jetways for JBT Aerotech's customers east of the Mississippi River. The airport hopes to generate up to \$500,000 from this service contract.⁷² After US Airways de-hubbed its Pittsburgh operations, the authority had less equipment to maintain for the airport and creatively redeployed its maintenance staff initially by refurbishing and selling excess jetways and by contracting out its trained staff to JBT Aerotech.

7.2.3 International Airport Privatization Services

The Houston Airport System manages three airports (George Bush Intercontinental, William P. Hobby, and Ellington Airport) and leverages its planning, development, and operating experience from these airports to provide airport professional services in the international arena. The Houston Airport System participates in the international market for airport privatization and strategic development services through its HAS Development Corporation (HASDC), a Texas nonprofit corporation. HASDC participates in bids for airport concessions globally and markets its expertise for the operational, commercial, and financial development of airports around the world. For example, HASDC is one of four partners in Quiport Corp. which developed and manages the new Quito Airport in Ecuador.

7.2.4 Private Airport Reverting to Public Ownership and Operation

In January 2010, Deutsche Post DHL announced it would deed the privately owned Wilmington Air Park in Ohio to Clinton County Port Authority as a result of DHL's pullback from the domestic U.S. market. DHL acquired Wilmington Air Park when it bought freight carrier Airborne Express, which owned the airport and used it for its central sorting hub. DHL had previously sorted packages at the Cincinnati Northern Kentucky International Airport (CVG), but consolidated operations at Wilmington after the acquisition. The state of Kentucky offered DHL a \$1.87 million tax credit to make CVG its hub, which led DHL to close its Wilmington Air Park hub. As of August 2010, the future of Wilmington as an airport is in question. Wilmington Air Park was the former Clinton County Air Force Base and is equipped with a control tower and two runways with lengths of 10,701 and 9,000 feet.

⁷² Allegheny Airport Authority to Renovate Jetways for Airports, Pittsburgh Tribune Review, September 12, 2009.

CHAPTER 8

Decision Tree Matrix, Evaluation Checklist, and Process

Each airport owner has different reasons for considering some form of airport privatization. Therefore, it is important to put these goals and objectives into context when considering which solution may be most appropriate under the circumstances. The primary purpose of this chapter is to help the reader understand the process and considerations for identifying and evaluating realistic options for private sector involvement in airport management, operation, and finance and when, why, and how to employ the private sector in light of the airport owner's objectives.

8.1 Decision Tree Filter and Matrix

The process for considering various forms of privatization involves a multi-step process starting with identification of the owner's goals and objectives, familiarization with the specific strategies available, comparison of those goals to those of other stakeholders, identification of ways to mitigate stakeholder risks, review of the transaction's complexity and risk, and valuation of the transaction (Figure 8.1). The key to achieving the highest probability of success is to be both well-informed and rigorous about the evaluation process, while accounting for the diversity of stakeholder views.

Figure 8.2 summarizes the range of privatization models or families of options.

Table 8.1 provides an overview and guide for selecting a privatization business model based on an airport owner's assessment and prioritization of goals and the level of difficulty and complexity to implement the strategy.

The further an airport progresses along the privatization continuum, the more complicated the effort becomes, and while the stakes get higher, so do the potential rewards.

8.2 Owner's Goals and Objectives

In considering which, if any, of the privatization models are appropriate for a particular airport, the first step would be to identify the airport owner's and the community's specific

goals and/or the problems to be addressed. This would allow for an initial screening of the alternatives that are best suited to the situation. As part of this analysis, the airport owner and its constituents should also consider options available under the current public model (e.g., transition to an airport authority).

The identification of goals and objectives can derive from an internal planning exercise, input and direction from elected and appointed officials, and public outreach. This process will benefit from rigorous and contemporary airport planning, in the form of, for example, an airport master plan, airport system plan (if applicable), business plan, or strategic plan.

As illustrated in Table 8.2, some techniques do not fit certain goals, in part due to the strictures of federal law and policy.

There are numerous issues that may arise in attempting to align the airport owner's objectives with the privatization models. For example, if the primary objective is for the public owner to extract a lump sum cash payment, the only model that could meet that goal would be privatizing under the APPP, with airline approval at primary airports. In this case the term of the lease is an important consideration because the longer the term, the higher the potential payment. If the primary objective is to reduce airport debt, this could be achieved by full privatization under the APPP or outside the APPP. At the other end of the spectrum, if the owner wanted to reduce costs for its airline tenants while maintaining as much control as possible, it might consider service contracts.

Under airport-wide management contracts, when acquiring services on behalf of the public owner, the operator may or may not be released from public procurement regulations, which is often a driving motivation in privatization efforts. This should be determined in advance based on procurement laws. For example, for the Indianapolis Airport Authority, BAA's procurement of goods with their own operating funds was not considered public dollars in the same way as the authority's funds.

Single-purpose airport authorities are not as likely to be attracted to full privatization under the APPP because one

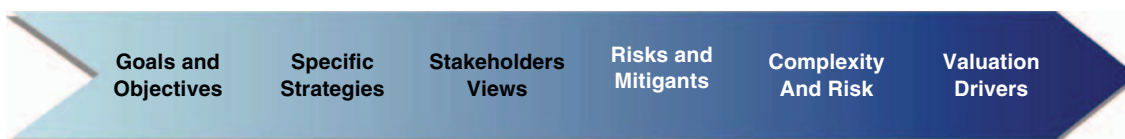


Figure 8.1. Decision tree filter.

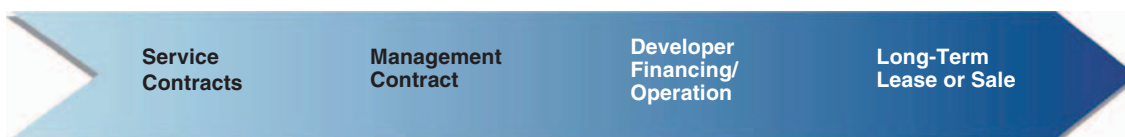


Figure 8.2. Airport privatization continuum.

Table 8.1. Guide for selecting a privatization model.

Factor	Attributes/Issues
Service Contracts	
Legal	Relatively easy to implement
Regulatory	Limited regulatory hurdles
Governance	Relatively limited monitoring and compliance (administration, not policy formulation)
Financial	Limited staffing and out-of-pocket expense required by owner
Internal-economic	Potential to reduce costs for tenants and users
External-economic	Limited or no economic development benefits
Commercial	Lower private sector employment and overhead costs
Management Contracts	
Legal	Limited legal constraints
Regulatory	No special conditions required to implement under current laws
Governance	Significant monitoring and compliance for owner; relatively easy exit
Financial	Limited staffing and out-of-pocket expense required by owner
Internal-economic	Potential to improve financial operations of the airport
External-economic	Limited economic development benefits
Commercial	Relatively small compensation for private operator
Developer/Project Finance and Operation	
Legal	Complicated legal constraints to conform to bond indentures
Regulatory	Compliance with federal grant assurances and IRS regulations
Governance	Limits administrative burden and staffing responsibilities of owner with limited follow-on monitoring once transaction is complete
Financial	Potential to create significant financial improvements via capacity for commercial enhancements and cost savings; offloads debt and risk to private sector
Internal-economic	Transfers risk exposure to private sector
External-economic	Significant potential for economic development benefits
Commercial	Good opportunity to generate profits for private companies
Long-Term Lease or Sale	
Legal	Significant legal hurdles, including property tax exemption and labor contracts
Regulatory	Most extensive regulatory hurdles (federal, state, local) and potentially airline approval requirement
Governance	Upfront risk; modest amount of ongoing monitoring and compliance; difficult to exit
Financial	Highest out-of-pocket expense to accomplish
Internal-economic	Uncertain outcome
External-economic	Potential for significant economic development benefits; upfront financial benefits with long-term risks
Commercial	Strong potential to generate profits for private companies

Table 8.2. Owner's goals decision tree matrix.

Goals and Objectives	Partial Privatization			Full Privatization ¹	
	Service Contracts	Management Contracts	Developer Financing/Operation	Inside APPP	Outside APPP
Maintain community control of airport operation and development decisions	X	X			
Secure operating efficiencies	X	X	X	X	X
Introduce innovative revenue enhancements	X	X	X	X	X
Eliminate airport subsidies	X	X		X	X
Reduce airline costs	X				
Convert underutilized facility into economic catalyst		X	X	X	X
De-politicize airport decisions		X	X	X	X
Address identified deficiencies in airport management		X		X	X
Advance ideological interest in private sector participation		X	X	X	X
Address improper conduct, e.g. corruption		X		X	X
Access private capital			X	X	X
Accelerate project delivery			X	X	X
Reduce construction costs			X	X	X
Transfer construction risk			X	X	X
Minimize organizational disruption			X		
Use sale or lease proceeds for non-airport purposes				X*	
Repay airport debt				X	X

* Only with 65% airline approval at primary airports.

¹ "Full privatization" includes outright sale and long-term lease. For example, the proposed long-term lease of Midway would fit in this category. Greenfield private development is not considered privatization.

major appeal for this option is the ability to extract a cash outlay to fund other government programs, and there may be little interest, incentive, or ability for an airport authority to transfer sale or lease proceeds to a general purpose government.

In general, if the motivation is extracting revenue from the airport, well run airports are poor candidates for any of the privatization models because it will be more difficult to extract cost efficiencies and uncover revenue opportunities from the future operation. However, they may have available land or other property that is underutilized that could be developed by a private operator as a source of additional revenue.

Motivations for private sector involvement for the airport case studies are summarized in Table 8.3. In many cases, the objectives reflected a belief that a private sector operator with airport expertise could achieve the stated goals better than a public sector operator.

8.3 Stakeholder Views

As public entities, airport owners face competing demands from various stakeholders that could be affected by a change in activities that were once performed by government that are

turned over to private entities. It is important to understand how these key parties perceive the change in operation and how it might affect their use of the airport.

After an initial screening of the privatization models with respect to the airport owner's goals, the next step would be to consider the perspectives and range of acceptance by major stakeholders for the models under consideration.

It is important to remember that stakeholder views depend upon the unique circumstances for each airport and the means by which the public owner chooses to implement privatization. In addition, some stakeholders are more vocal than others. Communities may need to engage the stakeholders directly about the opportunities and concerns at the airport. While the information provided in this chapter can help guide an airport, it is not a substitute for airport specific information. Some communities approach this through consultant studies, blue-ribbon panels, and working groups. Often the structure of the process can have an effect on the outcome. So care should be taken to avoid biasing the process.

The research team surveyed key stakeholder groups to document their issues and concerns regarding privatization

Table 8.3. Summary of motivations for private involvement for case study airports.

Airport-wide Management Contract
<i>Indianapolis Airport Authority</i>
<ul style="list-style-type: none"> ▪ Attract new airline service and encourage economic development by reducing airline costs through increased nonairline revenues and reduced operating expenses ▪ Improve customer service and quality ▪ Increase the expertise and diversity of Airport staff
Developer Financing and Operation
<i>John F. Kennedy International Airport Terminal 4 (JFKIAT)</i>
<ul style="list-style-type: none"> ▪ Preserve financing capacity for the Port Authority's 5-year capital program ▪ Minimize construction risk and management oversight ▪ Reduce operational responsibilities ▪ Deliver a functional terminal on time and on budget with no additional financing required by the Port Authority ▪ Improve operational efficiency and increase terminal capacity by replacing exclusive use arrangements with common use arrangements and new pricing approaches ▪ Gain PPP experience for possible deployment to other agency operations
<i>Boston Logan Terminal A</i>
<ul style="list-style-type: none"> ▪ Introduce private sector participation into airport operations ▪ Redevelop Terminal A while preserving the Authority's financing capacity for its sizable capital program
Long-Term Lease Inside the APPP
<i>Stewart International Airport (SWF)</i>
<ul style="list-style-type: none"> ▪ Leverage the expertise of the private sector to develop the underutilized airport to its fullest potential ▪ Develop the real estate on the vast site to create jobs and economic development, which was a priority for the Hudson River Valley due to large industrial concerns laying off workers and closing plants at the time ▪ Get out of the business of managing airports ▪ Introduce private sector participation into airport operations
<i>Chicago Midway International Airport</i>
<ul style="list-style-type: none"> ▪ Maximize sale proceeds for the city's unfunded pension liability, infrastructure improvements, and other general fund purposes (primary objective) ▪ Establish a new framework of rates and charges that provides lower and more predictable rates for airlines operating at the Airport ▪ Improve the competitive position, service quality, growth prospects and efficiency of Midway Airport for the benefit of Chicago residents, airlines, and other users ▪ Ensure that future Airport development is safe, functional, efficient and delivered when necessary ▪ Minimize the City's exposure to residual risks and liabilities from the process ▪ Ensure fair and equitable treatment of existing Airport employees ▪ Ensure a smooth transition from public to private management in a timely manner
Long-Term Lease/Management Contract Outside the APPP
<i>Morristown Municipal Airport</i>
<ul style="list-style-type: none"> ▪ Pay off \$2 million in airport long-term debt ▪ With the aid of federal and state grants, make substantial upgrades to the airport's infrastructure that was in a state of disarray with the airport's corporate users threatening to leave and the FAA threatening to close the facility if upgrades were not made to the airport ▪ Turn the airport into an economic catalyst for the town and the region

and their perspectives on the potential advantages and disadvantages. Table 8.4 summarizes the key interests of each stakeholder group. Appendix G provides a full description of the perspectives of the key stakeholder groups.

8.4 Complexity, Risk, and Other Implementation Issues

An important consideration in evaluating potential privatization models is the level of complexity and risk to implement the action. This is particularly important in the public sector where officials tend to be risk averse. On a scale ranging from the least complex and risky to most complex and

risky, the privatization models generally can be ranked as shown in Table 8.5.

A detailed discussion of the logic behind these ratings can be found in the chapters for each strategy.

The size of the airport (in terms of passengers, aircraft operations, or revenue) can affect the consideration of the various private-sector options given the potential savings, revenues, implementation risk, and costs of the process. Given the high costs, complexity, and implementation risk associated with full privatization as well as the regulatory dis-incentives, there has been much greater experimentation with partial privatization in the United States. Only 82 of the 3,332 public-use airports in the United States are privately owned, and virtually

Table 8.4. Key stakeholder interests.

Stakeholder	Key Interests
Policy Makers	<ul style="list-style-type: none"> ▪ Ensure the airport is developed in a manner that promotes regional economic development ▪ Create an operating environment that encourages increased passenger traffic ▪ Raise money from a sale or lease of the airport to help pay for municipal budget deficits, pension deficits, infrastructure development, and other general purpose needs ▪ Provide opportunity for operational efficiencies and revenue development ▪ Provide access to private capital for airport improvements and development ▪ Ensure the transaction is successful ▪ Retain a degree of control over the airport assets (e.g., prices, CapEx, levels of service, noise mitigation, etc.) ▪ Protect existing civil service employees
U.S. Airport Management	<ul style="list-style-type: none"> ▪ Promote safety, security, airline service, customer service, financial stability, compliance with laws and regulations, non-aeronautical revenue development, operational efficiencies, labor stability, and other measures that enhance the reputation of the airport ▪ Provide for the best interests of the tenants, passengers, and community over the long-term ▪ Provide an opportunity for the government to monetize a government-owned asset (minority view) ▪ Deploy P3 on a select basis to maximize the value to all stakeholders ▪ Get relief from cumbersome public procurement rules and social policy mandates to operate airports more like a business than a unit of government ▪ Reduce federal economic regulation to allow public airports more freedom
Airlines	<ul style="list-style-type: none"> ▪ Reduce airline costs to operate at the airport ▪ Provide greater predictability and stability in rates ▪ Ensure efficient airline operations ▪ Ensure operator meets stated operating standards ▪ Provide sufficient capacity to accommodate demand ▪ Provide quality level of service for passengers ▪ Prevent monopolistic actions ▪ Construct deal that makes business sense for the airlines ▪ Permit consortiums for airline terminal equipment maintenance and fuel systems
U.S.DOT/FAA	<ul style="list-style-type: none"> ▪ Protect the federal government's investment in airports ▪ Ensure airports abide by and comply with federal laws and regulations ▪ Provide capacity to accommodate future growth ▪ Prevent actions that would discourage growth for national airport system
Privatized International Airports	<ul style="list-style-type: none"> ▪ Promote safety, security, airline service, and customer service ▪ Take actions to increase traffic levels, drive efficiency, introduce innovation, increase non-aeronautical revenues, and produce reasonable financial returns for investors ▪ Align operator and airline interests through per passenger charges
Private Domestic Airport Operators	<ul style="list-style-type: none"> ▪ Promote safety, security, airline service, and customer service ▪ Maximize their financial return through operating savings, revenue enhancements, and high facility utilization ▪ Expedite delivery of services relative to public sector rules ▪ Minimize airline costs to the mutual benefit of the airlines, the operator, and passengers ▪ Incentivize employees through bonuses, succession programs, and training ▪ Prefer light handed regimes with no pricing regulation, because it provides the most flexibility
Lenders	<ul style="list-style-type: none"> ▪ Receive timely repayment of debt obligations at a rate commensurate with the risk ▪ Secure senior status on debt repayment ▪ Be protected against refinancing risk ▪ Lock up as much security as possible in the case of default
Investors	<ul style="list-style-type: none"> ▪ Earn a reasonable return on investment, which is dependent on the amount of risk ▪ See an appropriate balance between equity and debt to maximize returns ▪ Minimize exposure to political and regulatory risk ▪ Invest for the time horizon desired ▪ Conduct the transaction under a transparent process ▪ Have access to relevant data to conduct due diligence ▪ Provide for a clear and credible timetable for the process ▪ Minimize the cost of participating, especially in the initial round
Financial Advisors	<ul style="list-style-type: none"> ▪ Provide the most advantageous conditions for the financial offering ▪ Protect the airport owner's long-term financial interests ▪ Maximize the potential for the transaction's success ▪ Explain which risks can be passed to the private investors and which cannot ▪ Develop a reasonable estimate of the value of the transaction and manage the government's expectations regarding the value of the transaction

(continued on next page)

Table 8.4. (Continued).

Stakeholder	Key Interests
<i>Rating Agencies</i>	<ul style="list-style-type: none"> Assess potential for a project or airport to generate adequate cash flow to pay bondholders with special attention paid to risks and risk allocation (including refinancing risk) and flexibility to deal with adverse conditions See debt fully repaid by end of the concession with an appropriate “tail period” See strong legal provisions Have the ability to withstand financial stress tests
<i>Labor</i>	<ul style="list-style-type: none"> Protect employment stability, pensions, and compensation levels Advocate policies that support a union-friendly outcome Participate in all activities, including design, construction, maintenance, and operation Ensure the interests of its members are protected Maintain and expand the unionizing and collective bargaining rights of their members
<i>Passengers</i>	<ul style="list-style-type: none"> Experience high-quality, fast, reliable, safe, hassle-free, and comfortable trip through airports Be charged reasonable prices Have access to a wide variety of concession opportunities and other amenities

Table 8.5. Assessing complexity and risk.

Model	Complexity	Risk
Service contracts	Low	Low
Airport-wide management contract	Medium	Low
Developer financing/operation	Medium	Medium-High
Long-term lease or sale	High	High

all of them are general aviation airports. All but one of the 522 primary and commercial service airports⁷³ is owned by local or state governments.⁷⁴ Moreover, a majority of the applicants for the APPP have been small airports⁷⁵ that were underutilized, subsidized by the government owner, had either limited or sporadic commercial service, and served primarily general aviation.⁷⁶

By contrast, most airport privatization transactions outside the United States have been for an airport that was of a

relatively material size in terms of passenger throughput or for a system or group of airports that included smaller airports. The likely reasons for this include:

- Privatization involves significant transaction costs, including legal and investment banking advice. For a small airport, those transaction costs are likely to represent a high proportion of the transaction value.
- Many smaller airports are not self-sustaining. Although there are several examples of airports with throughput of 1 million passengers per year or even lower that generate positive Earnings Before Interest, Taxes, Depreciation, and Amortization (EBITDA), they are in the minority. Although it is not impossible, it is relatively problematic to attract investors to loss-making airports.
- Larger airports tend to have lower reliance on single carriers or routes, and therefore to have relatively lower risk profiles, which helps to make them more saleable.
- The lower risk profiles of larger airports also make the future investment frequently required easier to finance.

8.5 Valuation and Valuation Drivers

In evaluating airport privatization models, it also is important to estimate the potential value of the transaction for both the airport owner and the private operator. The transaction value will help determine if the potential financial rewards are worth the level of effort and associated implementation risk. The valuation process includes consideration of the key attributes of the facility followed by a projection of key metrics.

Privatization can generate value in the following ways:

- Enhancing non-aeronautical revenues
- Cost savings through optimized use of facilities
- Rightsizing CapEx—no overbuilding

⁷³Primary and commercial service airports are defined by the FAA as airports that (1) have scheduled passenger service, (2) enplane 2,500 or more passengers per year, and (3) are publicly owned.

⁷⁴The notable exception is Branson Airport, which is the only privately owned commercial passenger airport in the U.S. that was developed on a green-field site.

⁷⁵Four primary airports have applied—Stewart International Airport, Chicago Midway International Airport, Louis Armstrong New Orleans International Airport, Luis Muñoz Marín International Airport (San Juan, Puerto Rico)—of which only Chicago Midway and San Juan remain active. Six non-primary and general aviation airports have applied—Brown Field/San Diego Commerce Center, Niagara Falls International Airport, Aguadilla Airport (Puerto Rico), New Orleans Lakefront Airport, Gwinnett County Briscoe Field Airport (Georgia), Hendry County Airglades Airport (Florida)—of which only Gwinnett County and Hendry County remain active.

⁷⁶FAA, *Report to Congress on the Status of the Airport Privatization Pilot Program*, United States Code, Title 49, Section 47134, at 2 (2004).

- Efficiencies on procurement and purchasing functions
- Applying commercial business practices
- Aligning actions with the needs of different market segments (e.g., low-cost carriers)
- Realizing less political and lobbying influence
- Adopting a strategic and business approach to long-term needs

Because no two airports are alike, each airport will have different strengths and weaknesses. For example, small hub airports cannot expect to realize the same level of concession revenues per passenger as that of a major international gateway. Airports with an older, less efficient terminal are not able to provide the concession space needed to take full advantage of the market. Airports that are well run are weaker candidates for privatization because there is less value to be derived unless there is collateral land for development. But in virtually all cases there are structural inefficiencies inherent in government operation that could be improved by the private sector.

The value of the transaction can be affected by numerous factors, and depends on the type of privatization as follows:

Service Contracts

- Condition of the facilities or equipment
- Current staffing levels
- Requirements to retain government staff if any
- Labor hiring conditions if any (collective bargaining agreements, full-time versus part-time, etc.)
- Peaking characteristics
- Operating and performance standards

Management Contracts

- Condition of the facilities
- Potential for non-aeronautical revenue enhancement
- Potential for operational efficiencies
- Utilization of the facility and capacity to accommodate additional demand
- Amount of vacant space

Developer Financing and Operation

- Scope of the transaction (one or more cargo buildings, terminal building, parking facilities, etc.)
- Responsibility for airside development and operations
- Condition of the facility
- Utilization of the facility and capacity to accommodate additional demand
- Exclusive franchise or competing facilities (other terminals, cargo facilities, parking facilities)
- Degree of competition from other on-airport facilities or alternative airports or other transportation forms
- Availability of tax-exempt financing
- Credit market conditions
- Availability of PFC revenues

Full Privatization (Inside or Outside the APPP)

- Facility attributes
 - Multiple airport system or group (e.g., BAA in United Kingdom) versus single airport (e.g., Midway)
 - Condition of the facility
 - Utilization of the facility
 - Capacity to accommodate additional demand (airside, landside)
 - Degree of technological innovation
 - Undeveloped land potential
- Capital investments and funding
 - Level of investment required, including capital investments (CapEx), working capital, unfunded pension liabilities, etc.
 - CapEx triggers or mandated capital improvement program
 - Capital structure and ability to access tax-exempt debt
 - Credit market conditions and competing investment opportunities
 - PFC level and capacity
 - Return on asset base (RAB)
- Pricing power or constraints to pricing
 - Level of existing aeronautical charges (cost per enplanement or CPE) and contractual, regulatory, and practical potential to raise fees
 - Dependence on volume-based fees
 - Other aeronautical contractual agreements and associated terms
 - Non-aeronautical revenue per passenger
 - Constraints on non-aeronautical charges such as price caps or contractual agreements
 - Competition from off-airport vendors (parking, hotels, etc.)
 - CFC level
- Potential for operational efficiencies and operating expenses per passenger
- Underlying demand characteristics of the market, including:
 - Strength and diversity of the local economy
 - Business versus leisure oriented market
 - Demographics and income levels of the passenger base (population, employment base, unemployment rates, personal consumption, wealth levels, construction, and housing market conditions)
 - Enplanement base and volatility
 - Origination-destination (O&D) versus connecting passengers
 - Presence, scale, and potential for international passengers (gateway airports)
 - Degree of competition from alternative airports or other transportation modes
 - Airline diversity (versus domination by single airline)
 - Financial condition of dominant airline(s)

- Prominence of low-cost carriers versus legacy airlines, etc.
- Aircraft operations
- Cargo tonnage
- Other business terms and conditions
 - Length of lease or concession
 - Deed restrictions
 - Value of unamortized AIP grants and potential need to repay the grants
 - Shareholder structure and percentage of control offered to private sector
 - Detailed performance standards and associated penalties and incentives
 - Inherited collective bargaining agreements
 - Requirements to comply with government's procurement rules
 - Other external regulations (e.g., passenger volume cap, slot rules, noise rules, nighttime curfew)
 - Breakup or clawback terms

8.6 Financial Metrics

In attempting to value a transaction, it is important to consider the airport's ranking in a range of key financial metrics. The objective of this exercise is to investigate how a private entity would look at the opportunity, and what levers they could pull to enhance value.

Financial metrics for service contracts depend upon the nature of the contract, economies of scale, skill set and training, and compensation comparisons between public and private sector employees. The appropriate metrics should be carefully tied to the service quality standards desired. Measurable performance standards should be built into contracts as well as incentives for exceeding standards and penalties for underperforming.

Financial metrics for airport-wide management contracts can be difficult to estimate as described under the Indianapolis case study in Chapter 9 and Appendix H. Quantifying efficiency gains and revenue enhancements can be challenging in part due to defining a baseline and separating out the effect of changes in traffic, implementation of capital improvements, differences in inflation between baseline projections and actual experience, changes in expenses due to legal and accounting mandates, etc. Nevertheless, specific targets can be set regarding financial results, safety and security, customer service, operation and maintenance, and capital program management to evaluate performance on an annual basis against the baseline under public operation. As experienced in Indianapolis, it becomes harder and harder over time for the contractor to realize increasing savings.

Financial metrics for developer financing and operation depend on the type of facility. For passenger terminals, annual metrics could include operating expense per enplaned passenger, airline cost per enplaned passenger, concession

revenue per passenger, customer service, and cash flow (if the airport owner shares in the net revenue). The cost to deliver the project can be compared to the cost of development by a public airport owner for a comparable facility (e.g., cost per square-foot) after making sure the comparisons include the same project elements (e.g., turn-key versus tenant-financed finishes and equipment) and are adjusted for construction time period. For example, construction costs declined considerably after the financial crisis in 2008.

For full privatization, the financial metrics used relative to peer airports include:

- EBITDA⁷⁷ margin
- EBITDA per passenger
- RAB
- Airline Cost Per Enplanement (CPE)
- CPE rank
- Non-aeronautical revenue per passenger
- CapEx per passenger
- OpEx per passenger

A variety of valuation methodologies are employed:

- Cost-based methodologies, including historic cost and depreciated replacement cost
- Value based methodologies, including fair market value, net present value, and deprival value
- The concept of opportunity cost, representing the amount lost by not using the resource in its best alternative use
- Optimization—to remove inefficiencies that exist in the current asset configuration such as non-productive assets, duplication, excess capacity, and or redundant assets

Different options can be considered appropriate for valuing different categories of assets.

Table 8.6 summarizes how a private consortium would view a potential airport investment opportunity (non-aeronautical revenues would be generally viewed as the area with the highest potential for value enhancement, as these revenues are less regulated, providing a relatively high degree of flexibility) and often are not fully exploited by public authorities. The drivers and associated potential to enhance value for each metric are likely to be different depending on the underlying structure of the privatization arrangements.

For example, duty free revenues would be influenced by the level and nature of international passenger departures and by the current spend rate per passenger (as well as the forecast impact of spend rates associated with enhancements to the duty free shopping experience that the private operator could undertake).

⁷⁷Earnings Before Interest, Tax, Depreciation, and Interest (EBITDA).

Table 8.6. Valuation drivers and potential for valuation enhancement.

Value Driver	Potential for Value Enhancement
<ul style="list-style-type: none"> ▪ Aeronautical revenues <ul style="list-style-type: none"> – Landing fees – Terminal rentals 	<ul style="list-style-type: none"> ▪ Low potential – often subject to cap, regulation ▪ Value comes from increased operations, maximum take-off weight
<ul style="list-style-type: none"> ▪ Non-aeronautical revenues <ul style="list-style-type: none"> – Retail – Food/beverage – Duty free – Public parking – Rental cars – Commercial development 	<ul style="list-style-type: none"> ▪ Highest potential – opportunities for innovation ▪ Promote airport user discretionary spending (duty free, retail, parking) ▪ Negotiation of favorable business arrangements ▪ Proactive commercial development
<ul style="list-style-type: none"> ▪ Operation and maintenance expense <ul style="list-style-type: none"> – Staff – Utilities – Contract services – Equipment/material 	<ul style="list-style-type: none"> ▪ Limited-medium potential – usually within imposed constraints ▪ Staff reductions usually subject to limitation ▪ Opportunities for efficiency and productivity improvement ▪ Outsourcing potential ▪ Renegotiated supply contracts

Table 8.7 illustrates that there are limits to increasing non-aeronautical concession revenues depending on the profile of the airport. For example, the operator of a small hub airport cannot be expected to develop a concession program on par with that of a major international gateway. Similarly, an airport with an older, less efficient terminal cannot provide the concession space needed to take full advantage of the market. Airports that have predominantly short-haul flights will realize lower passenger spend rates than airports with long-haul flights because passengers making long-haul trips tend to arrive sooner, spend more time in the terminal, and make more retail and food and beverage purchases for use or consumption during their trip.

Aeronautical revenues would often be considered as the area with the least potential for value enhancement because this

revenue category is regulated and, in the United States, covered by an airline lease and use agreement or the U.S.DOT Rates and Charges Policy (the Policy). The Policy requires that rates and charges levied on airlines for services and facilities at U.S. airports be “reasonable” and that airlines cannot be subjected to “unjust discrimination” in fees and operating conditions, unless otherwise agreed to by the airline. It also has required historical cost pricing for airfield fees. Any airline that is not a signatory to an agreement may challenge the fee under the Policy if the airline believes the rates imposed by the airport owner do not meet these requirements. However, under the APPP where aeronautical rates are subject to caps, there is the potential to increase aeronautical revenues by increasing traffic.

Operating expenses would generally have moderate potential at least in the short-term period; there may be operating

Table 8.7. Factors affecting concession program demand and performance potential.

Factor	Less Demand / Sales	More Demand / Sales
1 Terminal configuration	Multiple flows	Single flow
2 Average trip length	Short haul	Long haul
3 International versus domestic	Domestic	International
4 Passenger dwell time	Short	Long
5 Originating versus connecting	Connecting	Originating
6 Purpose of travel	Business	Leisure
7 Passenger demographics	Lower average income	High average income
8 Traffic peaks	A few, concentrated peaks	Traffic evenly distributed
9 Location of concession space	Indirect exposure to passenger flows	Direct exposure to passenger flows
10 Quantity of concession space	Constrained	Commercially optimized

Source: LeighFisher, *ACRP Report 54: Resource Manual for Airport In Terminal Concessions*, November 2011.

cost reductions that could be made, but airport privatization transactions often carry staffing level constraints, such as not abrogating labor agreements that would limit a private operator's flexibility. Another business plan metric, such as demand for janitorial service in the terminal, would vary somewhat with passenger levels but is more affected by changes in terminal space. For example, a 10% increase in passengers using a terminal may call for but a 2% increase in the number of janitors. A new terminal expansion that increases terminal space by a significant amount would likely need a significant expansion of janitorial staff.

Other key financial and business plan metrics include capital structure, leverage levels, and expected return on investment.

The largest value driver is passengers because the incremental cost to handle one passenger is a small fraction of the incremental revenues contributed by that passenger.

8.7 Risks and Mitigants

There can be measures taken to mitigate most of the risks to privatization strategies. From an airport owner's

perspective, some general guidelines for mitigating risk include the following:

- Develop a master plan and investment plan for the concession term
- Establish performance and quality of service standards
- Forbid the private operator from selling the lease for at least five years
- Make sure the risk/reward ratio is attractive and well-defined
- Contractually allocate risks between the government and the private sector
- Allow for efficient and reasonable infrastructure development requirements for which the users are willing to acknowledge and pay the costs
- Conduct a simple and transparent process for the bidding with clear evaluation criteria
- Carefully think through specifications for the contracts
- Clearly spell out rules for extending or renegotiating contracts, if any

Tables 8.8 to 8.11 summarize specific opportunities, key stakeholder concerns, and potential mitigating measures

Table 8.8. Service contracts—stakeholder views, risks, and mitigants.

Stakeholder	Opportunities	Risks/Concerns	Mitigating Measures
Policy Makers	<ul style="list-style-type: none"> ▪ Retain control over the airport assets (e.g., prices, CapEx, levels of service, noise mitigation, etc.) ▪ Provide opportunity for operational efficiencies and cost reductions 	<ul style="list-style-type: none"> ▪ Loss of civil service jobs ▪ Less control over performance and level of service 	<ul style="list-style-type: none"> ▪ Consider requiring contractor to hire airport employees ▪ Include strong performance and service standards in contract
U.S. Airport Management	<ul style="list-style-type: none"> ▪ Reduce airport costs for employee salaries and benefits ▪ Allow airport management to focus on core and strategic issues ▪ Retain airport oversight of contracts to ensure compliance with airport goals ▪ De-politicize the provision of services (e.g., concessions) 	<ul style="list-style-type: none"> ▪ Could involve organizational disruption (i.e., reassign or terminate existing employees) ▪ Could encounter labor resistance ▪ Quality of products and services and customer satisfaction ▪ Level of capital investment and sufficiency of maintenance 	<ul style="list-style-type: none"> ▪ Plan in advance – avoid hiring full-time employees for this function ▪ Keep employees advised of plans and potential for their employment by contractor ▪ Provide for termination and take-back if performance standards are not met ▪ Specify investment requirements and performance standards
Airlines	<ul style="list-style-type: none"> ▪ Reduce airline costs to operate at the airport ▪ Provide greater predictability and stability in rates ▪ Ensure efficient airline operations ▪ Provide opportunity for airline equipment maintenance or fuel system consortia 	<ul style="list-style-type: none"> ▪ Contractor meets stated operating and service standards ▪ Service disruptions 	<ul style="list-style-type: none"> ▪ Negotiate detailed operating and performance standards in service contract ▪ Make selection based on proposals, not lowest bid ▪ Include strong indemnification provision
Federal Regulations		<ul style="list-style-type: none"> ▪ Compliance with federal laws and regulations by owner and its contractors 	<ul style="list-style-type: none"> ▪ Monitor compliance
Private Contractors	<ul style="list-style-type: none"> ▪ Make a profit ▪ Increase depth and breadth of company 	<ul style="list-style-type: none"> ▪ Can be hard to monitor ▪ Can be problems with service quality 	<ul style="list-style-type: none"> ▪ Negotiate performance-based contracts that hold contractors accountable for meeting specific quality service standards
Lenders	▪ n.a.	▪ n.a.	▪ n.a.
Investors	▪ n.a.	▪ n.a.	▪ n.a.
Rating Agencies	<ul style="list-style-type: none"> ▪ Reduce operating expenses ▪ Increase nonairline revenues 	<ul style="list-style-type: none"> ▪ New, untested technology and potential disruption to operations 	<ul style="list-style-type: none"> ▪ Avoid untested new technology
Labor	<ul style="list-style-type: none"> ▪ Be hired by the private operator 	<ul style="list-style-type: none"> ▪ Protection of existing civil service jobs ▪ Violation of collective bargaining agreements 	<ul style="list-style-type: none"> ▪ Work with airport management to minimize impact ▪ Negotiate changes to agreements if possible
Passengers	<ul style="list-style-type: none"> ▪ Improve customer service and the passenger experience for business and leisure travelers ▪ Improve access to a wider variety of concession opportunities and amenities 	<ul style="list-style-type: none"> ▪ Reasonable pricing ▪ Maintaining high levels of safety and security 	<ul style="list-style-type: none"> ▪ Retain owner approval rights over pricing ▪ Establish price controls (e.g., “street pricing” for concessions)

Table 8.9. Management contracts—stakeholder views, risks, and mitigants.

Stakeholder	Opportunities	Risks/Concerns	Mitigating Measures
Policy Makers	<ul style="list-style-type: none"> Provide better service at the same or reduced cost Attract new airline service and encourage economic development by reducing airline costs through increased nonairline revenues and reduced operating expenses Improve customer service and quality Improve the expertise and diversity of airport staff Improve the airport's long-term competitive position Retain a significant degree of control over the airport assets (e.g., prices, CapEx, levels of service, noise mitigation, etc.) 	<ul style="list-style-type: none"> Operator focuses on maximizing its fee at the expense of customer service Ensure fair and equitable treatment of existing airport employees Involves considerable time and effort for bidding process Delegates a significant degree of control over airport operations 	<ul style="list-style-type: none"> Tie compensation to each goal not just reduction in airline costs Consider contracting with multiple firms specializing in each area in which improvement was targeted Require private operator to offer comparable employment to current airport employees and/or require that the owner offer alternative jobs to those employees who do not go to work for the operator Invest time upfront for first transaction so renewal or rebidding takes less time Retain controls over key functions (police, fire, noise mitigation) Include performance oversight standards for the private operator in the lease Limit term to 10 or 15 years, which also is needed to meet "qualified management contract" test under IRS regulations
U.S. Airport Management	<ul style="list-style-type: none"> Provide greater incentives for management and employees to perform better Ability to maximize efficiency and improve performance based upon private operator's work at other airports Might provide relief from cumbersome public procurement rules and social policy mandates and permit airport to operate more like a business than a unit of government Can streamline and improve certain processes Airport owner retains control over capital development and other key decisions 	<ul style="list-style-type: none"> Could involve organizational disruption (i.e., reassign or terminate existing employees) Difficult to truly measure performance for the purpose of justifying compensation Tracking contract compliance can be a time consuming and substantial undertaking for the airport owner 	<ul style="list-style-type: none"> Require operator to offer employment to airport employees Assess effectiveness and economics of contracting with multiple firms specializing in each area in which improvement is targeted (e.g., ARFF, parking, fueling, fixed base operations) Use metrics to gauge performance that are transparent and easily measurable and tie compensation to each goal the owner is trying to achieve (e.g., lower costs, enhanced nonairline revenues, improved customer service, new air service)
Airlines	<ul style="list-style-type: none"> Reduce airline costs to operate at the airport Maintain capital project approval ("majority-in-interest") rights Provide greater predictability and stability in rates Ensure efficient airline operations Ensure that any monies generated on airport remain in the airport system and are not diverted to other purposes Provide opportunity for airline terminal equipment maintenance and fuel system consortia 	<ul style="list-style-type: none"> Ensuring contractor meets stated operating and performance standards Once initial efficiencies are attained, it becomes increasingly difficult to attain further improvements and realize the full value of the management fee Control private operator's management fees and limit airport revenue taken off the airport 	<ul style="list-style-type: none"> Negotiate detailed operating and performance standards Rebid the contract periodically
Federal Regulations		<ul style="list-style-type: none"> Ensuring airport and its operator abide by and comply with federal laws and regulations 	<ul style="list-style-type: none"> Include terms requiring the private entity to conduct its activities consistent with the grant assurances and other federal obligations imposed on the owner and that the management agreement itself be subordinate to the grant assurances Execute separate agreements for airport management functions and aeronautical activities to be conducted by the private entity
Private Contractors	<ul style="list-style-type: none"> Make a profit Position the contractor to transition to full privatization at the airport Provide opportunity to sell other services, such as planning and construction management at the airport Establish good relationships with primary tenants 	<ul style="list-style-type: none"> For airport-wide contracts, limited opportunity to earn good returns Diverts management attention for other more profitable ventures 	<ul style="list-style-type: none"> Strong performance on a high-profile project may influence the chances for subsequent business Gain U.S. experience that would position the contractor well for full privatization opportunities elsewhere in the U.S.
Lenders	<ul style="list-style-type: none"> n.a. 	<ul style="list-style-type: none"> n.a. 	<ul style="list-style-type: none"> n.a.
Investors	<ul style="list-style-type: none"> n.a. 	<ul style="list-style-type: none"> n.a. 	<ul style="list-style-type: none"> n.a.
Rating Agencies	<ul style="list-style-type: none"> Reduce operating expenses Increase nonairline revenues Enhance management expertise 	<ul style="list-style-type: none"> Transition risk 	<ul style="list-style-type: none"> Hire operator with good reputation and proven experience Allow for ramp up time

(continued on next page)

Table 8.9. (Continued).

Stakeholder	Opportunities	Risks/Concerns	Mitigating Measures
<i>Labor</i>	<ul style="list-style-type: none"> Be hired by the private operator Learn specialized skills from national or global company 	<ul style="list-style-type: none"> Protect existing civil service jobs Violation of collective bargaining agreements 	<ul style="list-style-type: none"> Require private operator to offer comparable employment to current airport employees and/or require that the owner offer alternative jobs to those employees who do not go to work for the operator Require operator to agree to appropriate procedures to protect the rights of employees to organize to engage in collective bargaining
<i>Passengers</i>	<ul style="list-style-type: none"> Improve customer service and the passenger experience for business and leisure travelers Improve access to a wider variety of concession opportunities and other amenities 	<ul style="list-style-type: none"> Reasonable pricing Maintaining high levels of safety and security 	<ul style="list-style-type: none"> Retain approval rights on all rate increases Include operating and performance standards in lease agreement with private operator Conduct quality of service monitoring

Table 8.10. Developer financing/operation—stakeholder views, risks, and mitigants.

Stakeholder	Opportunities	Risks/Concerns	Mitigating Measures
<i>Policy Makers</i>	<ul style="list-style-type: none"> Retain some control over most airport assets Increase operational efficiencies and revenue enhancements Preserve financing capacity Reduce reliance on municipal debt Attract private financing Transfer financial risk exposure for cost overruns, delays, and debt repayment to the private sector Deliver a functional facility on time and on budget Improve service quality 	<ul style="list-style-type: none"> Ensure fair and equitable treatment of existing airport employees Could involve buyouts and compensation for existing public workers Requires considerable upfront planning, time, and expense Loss of control over pricing, capital investments, levels of service and maintenance Loss of control over the site and the flexibility to respond to changing market conditions Potential need to repay federal grants Ensure a smooth transition from public to private management in a timely manner Involves long-term risk if the project encounters financial problems, especially under LLC model 	<ul style="list-style-type: none"> Require private operator to offer comparable employment to current airport employees and/or require that the owner offer alternative jobs to those employees who do not go to work for the operator Include price controls, capital investment requirements, performance and maintenance standards Maintain control over key services such as terminal concessions (e.g., Boston) or terminal advertising (e.g., New York) Include provisions allowing for the recapture of underutilized space (see Boston Terminal A case study) Include provisions allowing for redevelopment of the site subject to certain conditions and repayment Replace AIP-funded assets in kind, coordinate with the FAA early Have a good transition plan in place Include acceleration clauses in event of default Require GMP construction contract supported by performance bonds Require completion within set time period Require equity investment Require bond insurance Include default recapture language in agreements
<i>U.S. Airport Management</i>	<ul style="list-style-type: none"> Preserve public capital for those areas where public funding is the only alternative Minimize construction risk and management oversight Apply private sector techniques to accelerate project delivery and reduce construction costs Reduce operating expenses and increase operational efficiencies due to (a) avoidance of public procurement processes and (b) private sector motivations and incentives Reduce operational responsibilities Permit airport management to focus on other strategic issues and assets 	<ul style="list-style-type: none"> Involves considerable upfront planning, time, and expense Requires that the project have a revenue stream to repay the debt Less airport control over the project and delivery of quality facility 	<ul style="list-style-type: none"> Has potential to deliver project faster Use for projects that have revenue stream Require developer construct project to airport's specifications Negotiate clear, well-understood agreements, including a development agreement, lease agreement, and GMP contract Invoke a shared understanding of the goals of the project and familiarity with the underlying contractual documents Have regular communication among the key stakeholders Include incentives for achieving goals combined with penalties for failure to perform

Table 8.10. (Continued).

Stakeholder	Opportunities	Risks/Concerns	Mitigating Measures
		<ul style="list-style-type: none"> Loss of control over future capacity expansion and flexibility to change land uses over period of lease Less control of facility utilization and management Less control over types of activities and quality and appearance Potential competition with airport facilities Loss of key revenue streams under parking and cargo privatization Could involve organizational disruption and need to reassign or terminate existing employees Need to repay the Federal government for the value of grant-funded capital improvements Bond indenture constraints Potential impact on tax status of outstanding bonds Loss of control in event of default 	<ul style="list-style-type: none"> Develop design guidelines to (1) document the minimum acceptable standards, (2) address review and approval of plans, specifications, schedule, costs, and change orders, and (3) specify materials standards, sizing requirements, sustainability, and concession space Include provisions allowing for redevelopment of the site subject to certain conditions and repayment Include limits on uses and require conformance with airport quality control standards Include provisions allowing for the recapture of underutilized space (see Boston Terminal A case study) Include provision to relocate all operations to a qualifying replacement premise on airport (see BOS Terminal A) Include performance oversight standards for the developer Limit uses under agreement Retain control of and revenues from terminal concessions Require private operator to offer comparable employment to current airport employees Require developer to replace AIP-funded assets in kind Get guidance from bond counsel on ways to protect tax status and include in documents Design lease to fit the parameters of a "true" lease as opposed to a "financing" lease if tax-exempt financing used
Airlines	<ul style="list-style-type: none"> Reduce airline costs and increase operational efficiencies by avoiding public procurement processes and by private sector motivations and incentives Reduce airline costs to operate at the airport Provide greater predictability and stability in rates 	<ul style="list-style-type: none"> Ensure developer meets stated operating standards Ensure efficient airline operations Predictability and stability in rates if the airline is not the developer 	<ul style="list-style-type: none"> Include strong operating and service performance standards in the lease with the private operator
Federal Regulations		<ul style="list-style-type: none"> Ensure airports abide by and comply with federal laws and regulations, in particular the self-sustaining assurance to insure the payments to the private developer do not exceed the fair and reasonable value of its services or otherwise fail to comply with the revenue use policy Loss of control over future capacity expansion 	<ul style="list-style-type: none"> Include safeguards in the lease to preserve the owner's control over the actions of the operator that might affect compliance with AIP grant and PFC assurances Include provisions allowing for redevelopment of the site subject to certain conditions and repayment
Private Developers	<ul style="list-style-type: none"> Earn profit on development fees and ongoing operation of facility Gain U.S. experience to position the company well for full privatization opportunities in the future Establish good relationships with potential tenants 	<ul style="list-style-type: none"> Lack of clear and transparent solicitation process Obligations to finance ongoing CapEx Potential that project is not implemented after spending considerable time and effort on solicitation Cost and limited availability of bond insurance Potential company is not selected and spends considerable time and effort Potential that the project turns out to be unsuccessful and affects the developer's reputation 	<ul style="list-style-type: none"> Conduct transparent process on a credible timetable Provide clear project specifications and ongoing responsibilities Vet political, legal, economic, and financial feasibility of the project before soliciting interest Consider backstopping the project in the early years Provide clear selection criteria Select developer that has strong experience with similar projects

(continued on next page)

Table 8.10. (Continued).

Stakeholder	Opportunities	Risks/Concerns	Mitigating Measures
Lenders	<ul style="list-style-type: none"> ▪ Lend in a sector with substantial growth opportunity 	<ul style="list-style-type: none"> ▪ Nonrecourse financing entails a risk if the developer is an LLC or has limited assets to guarantee the investment 	<ul style="list-style-type: none"> ▪ Require level annual principal and interest payments and reserves
Investors	<ul style="list-style-type: none"> ▪ Invest in a sector with substantial growth opportunity 	<ul style="list-style-type: none"> ▪ Risk of bankruptcy and loss of investment 	<ul style="list-style-type: none"> ▪ Select developer that has strong experience with similar projects ▪ Require material levels of direct equity investment or guarantees from developer
Rating Agencies	<ul style="list-style-type: none"> ▪ Expand capacity to accommodate higher levels of traffic 	<ul style="list-style-type: none"> ▪ Potential for project to generate adequate cash flow to pay bondholders ▪ Completion and delay risk ▪ Traffic risk ▪ Characterization of lease as a “financing” lease vs. “true” lease ▪ Obsolescence risk ▪ Debt structure risk ▪ Loss of key revenue streams to owner under parking and cargo privatization 	<ul style="list-style-type: none"> ▪ Select developer that has strong experience with similar projects ▪ Require material levels of direct equity investment or guarantees combined with covenants to retain adequate capitalization (liquidity and reserves) ▪ Require parent support or guarantee ▪ Select developer with history of support for investments ▪ Mandate minimum ownership and change of control covenants through life of debt ▪ Require GMP or contractor retentions, penalty payments, and liquidated damages ▪ Hire experienced developer who can attract service ▪ Draft legal documents properly to avoid this characterization ▪ Require continued capital investment in facility over life of lease ▪ Require level annual principal and interest payments and reserves ▪ Maintain strong debt service coverage on outstanding revenue bonds
Labor	<ul style="list-style-type: none"> ▪ Opportunity to be hired by the private operator with higher pay 	<ul style="list-style-type: none"> ▪ Ensure no decrease in salaries and benefits ▪ Retain years-of-service credited towards pension requirements ▪ Maintain the stability and protections otherwise provided by government jobs 	<ul style="list-style-type: none"> ▪ Require offers of employment by developer under substantially similar terms and conditions as government ▪ Require operator to provide retirement program (e.g., 401(k) or defined pension plan) ▪ Prohibit abrogation of existing collective bargaining agreements
Passengers	<ul style="list-style-type: none"> ▪ Improve customer service and the passenger experience for business and leisure travelers ▪ Improve access to a wider variety of concession opportunities and other amenities 	<ul style="list-style-type: none"> ▪ Reasonable pricing ▪ Maintaining high levels of safety and security 	<ul style="list-style-type: none"> ▪ Set reasonable conditions on rate increases ▪ Include operating and performance standards in lease agreement with private operator ▪ Conduct quality of service monitoring to ensure that airport operators do not degrade service standards as a means of reducing costs and increasing profit

Table 8.11. Full privatization—stakeholder views, risks, and mitigants.

Stakeholder	Opportunities	Risks/Concerns	Mitigating Measures
Policy Makers	<ul style="list-style-type: none"> ▪ Raise money to fund municipal budget deficits, pension deficits, infrastructure development, and other general purpose needs ▪ Reduce public debt ▪ Encourage economic development ▪ Allow for higher infrastructure investment in airport facilities by providing access to private capital for airport improvements and development ▪ Transfer financial risks to private sector ▪ Increase operational efficiencies and revenue enhancements ▪ Increase passenger traffic and air service to boost local employment and visitor spending ▪ Shrink the size of government and promote ideological interest in increased private sector participation ▪ Focus on core services of government (public safety, education, etc.) 	<ul style="list-style-type: none"> ▪ Requires considerable upfront planning, time, and expense ▪ Retaining high level service and operating standards ▪ Loss of a significant degree of control over the airport assets ▪ Fair and equitable treatment of existing airport employees ▪ Potential need to repay federal grants and therefore reduce the net cash payout ▪ Exposure to residual risks and liabilities from the process ▪ Protecting the reasonable interests of current and future airlines ▪ Ensuring a smooth transition from public to private management in a timely manner ▪ Requests to cancel concession contracts ▪ Lack of slots under the APPP ▪ Reduced ability to maximize value of airport as economic and transportation asset ▪ Responsiveness of private operator to community needs and concerns ▪ Environmental stewardship 	<ul style="list-style-type: none"> ▪ Consider risks and reward before deploying too many resources ▪ Include strong operating and service performance standards in the lease with the private operator ▪ Retain controls over key functions (police, fire, noise mitigation) ▪ Require operator to develop annual capital asset maintenance plan, capital improvement program report, and 5-year capital improvement program for owner's approval ▪ Require private operator to offer comparable employment to current airport employees and/or require that the owner offer alternative jobs to those employees who do not go to work for the operator ▪ Require operator to maintain wages at levels comparable to those of other government employees ▪ Require operator to agree to appropriate procedures to protect the rights of employees to organize to engage in collective bargaining ▪ Coordinate early with FAA headquarters on potential exposure and means to avoid repayment ▪ Form a team with technical advisors that have experience with complex legal, financial, operational, and regulatory issues ▪ Make sure the goals are always transparent and well-articulated to help minimize resistance to the transaction ▪ Get key stakeholders on board early (including labor and airlines) to maximize the potential for success ▪ Get strong political commitment to achieve privatization ▪ Develop and implement a coherent and integrated strategy with reduced political interference and increased transparency ▪ Require winning bidder to post earnest money ▪ Negotiate a long-term airline agreement with the carriers ▪ Have a good transition plan in place ▪ Carefully manage public perception ▪ Forbid the private operator from selling the lease for 5 years ▪ Align the interests of the private company with the appropriate incentives ▪ Consider opportunity while slots remain available ▪ Align the interests of the government and operator ▪ Establish an airport advisory commission and require the operator to meet with the commission on a regular basis (see SWF) ▪ Include strong environmental compliance provisions and enforcement penalties in lease ▪ Maintain control of noise mitigation
U.S. Airport Management	<ul style="list-style-type: none"> ▪ Provide an opportunity for the government to cash-in on a government-owned asset (minority view) ▪ Provide relief from cumbersome public procurement rules and social policy mandates to operate airports more like a business than a unit of government 	<ul style="list-style-type: none"> ▪ Concern that elected officials might sell or lease airports for the wrong reason ▪ Provide for the best interests of the tenants, passengers, and community over the long-term ▪ Loss of management jobs ▪ Concern that 65% airline approval entails too many concessions 	<ul style="list-style-type: none"> ▪ Conduct workshops with elected officials on the pros and cons of this model ▪ Include strong operating, service, and CapEx performance standards in the lease with the private operator ▪ Consider full privatization outside APPP

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Table 8.11. (Continued).

Stakeholder	Opportunities	Risks/Concerns	Mitigating Measures
		<ul style="list-style-type: none"> ▪ Lack of access to tax-exempt debt by private operator driving up the cost of capital ▪ Ability to shift ultimate risk to operator and likelihood of continued involvement and responsibility ▪ No guarantee that the private airport operator will achieve financial success, retain interest in the business, or be successful in its execution 	<ul style="list-style-type: none"> ▪ Allow for short-term financing to permit the operator to exploit the low end of the yield curve ▪ Require operator to invest a material level of equity ▪ Align the interests of the private company with the appropriate incentives
Airlines	<ul style="list-style-type: none"> ▪ Provide greater predictability and stability in rates ▪ Best suited for airports that have less operational independence and more challenging governance structures ▪ Prefer deal structured with annual payments where all parties benefit if the airport grows ▪ Shift economic risk from airlines to operator 	<ul style="list-style-type: none"> ▪ Controlling and minimizing increases in and greater predictability of airport charges ▪ Efficient airline operations ▪ Certainty regarding the availability of gates and other facilities for their operations ▪ Drive for profit maximization will come at the expense of airline profits and consumer welfare ▪ Abuse of monopoly position ▪ Reduced investment in aeronautical infrastructure and priority to invest in commercial revenue infrastructure 	<ul style="list-style-type: none"> ▪ Limit future airline rate increases to inflation adjustments ▪ Grant the airlines approval rights for capital improvement costs to be included in airline rates ▪ Include strong operating and service performance standards in the lease with the private operator ▪ Negotiate gate and space protocols in airline agreement ▪ Require operator to make capital expenditures to maintain and develop the airport ▪ Require guarantees that the airport will be run in a customer service friendly fashion, with a particular focus on pricing controls ▪ Give the airlines sign off rights on the bidders' qualifications ▪ Require operator to provide annual capital asset maintenance plan, capital improvement program report, and five-year capital improvement program to the airlines
Federal Regulations		<ul style="list-style-type: none"> ▪ Compliance with federal laws and regulations, including grant assurances, environmental regulations, revenue use policy, and the rates and charges policy ▪ No revenue diversion except as permitted under the APPP⁷⁸ and determining a reasonable rate of return ▪ Satisfying the 9 statutory conditions under the APPP ▪ Justifying exemptions granted under the APPP ▪ May be subject to investigation by the Committee on Foreign Investment in the United States (CFIUS) 	<ul style="list-style-type: none"> ▪ Monitor airports to ensure they comply with federal laws and regulations ▪ Issue order or guidance on specific requirements and terms ▪ Establish rules for reasonable rate of return ▪ Encourage potential APPP applicants to meet with FAA staff early and often ▪ Confer with applicants and Congressional representatives
Private Airport Operators	<ul style="list-style-type: none"> ▪ Increase efficiencies from being able to manage all employees and do more contracting out ▪ Engage in procurement faster and more efficiently (for operations and CapEx) ▪ Exploit nonairline commercial opportunities ▪ Maximize utilization of terminal space, including new technology to move passengers more efficiently and minimize the amount of space needed ▪ Leverage experience and expertise gained from international airport privatization ▪ Gain U.S. experience that would position the company well for similar opportunities in the future ▪ Private operators have more flexibility to incentivize employees (e.g., 	<ul style="list-style-type: none"> ▪ Complying with the owner's M/WBE and related ordinances ▪ Retaining existing public service employees and collective bargaining agreements ▪ Limitation on aeronautical charges, which could reduce the flexibility of the operator to set charges, and hinder its ability to respond to specific new opportunities ▪ Non-negotiable and restrictive airline use and lease agreement ▪ Giving airlines a veto right over new assets (which may be used in practice to inhibit competition, e.g. in the case of facilities for low-cost carriers) ▪ Unfunded government mandates and take-backs 	<ul style="list-style-type: none"> ▪ Minimize requirements imposed on lessee ▪ Give employees the option to remain with the government ▪ Allow operator to negotiate future labor agreements ▪ Limited due to restrictions in APPP ▪ Consider full privatization outside APPP ▪ Confer with potential private operators before concluding airline lease negotiations ▪ Negotiate exclusions in MII provisions in airline agreement ▪ Provide ARFF and security activities paid for from a fund set aside from lease award proceeds (see Midway)

⁷⁸The APPP permits U.S.DOT to grant an exemption from the prohibition on revenue diversion "to the extent necessary to permit the purchaser or lessee to earn compensation from the operations of the airport." FAA guidance indicates that a private operator acting outside of the APPP would be subject to all of the grant assurances, presumably including the prohibition on revenue diversion. However, it is uncertain whether FAA would permit a private operator in such circumstances to derive a rate of return on its investment in the airport.

Table 8.11. (Continued).

Stakeholder	Opportunities	Risks/Concerns	Mitigating Measures
	bonuses, succession programs, and training), can use employees for a wider range of disciplines, and are not burdened by public processes	<ul style="list-style-type: none"> Financial return may be limited due to FAA provided exemption from the revenue use assurance, under the APPP Access to AIP grants Inability to levy a PFC except under the APPP Significant benefit to government ownership under the U.S. regime Burden of the grant assurances and other obligations on airport sponsors Potential responsibility for ensuring Constitutional protections 	<ul style="list-style-type: none"> Consider the APPP where entitlement grants and discretionary grants remain available (at 70% federal share for discretionary) Private operators outside the APPP may be eligible for discretionary grants if the airport is a reliever airport or receives 2,500 annual passenger boardings Privatization outside the APPP may permit the imposition of charges on passengers None Include requirements in lease that operator comply with grant assurances with strong penalties Limited
Lenders	<ul style="list-style-type: none"> Invest in sector with historically strong cash flow generation and resiliency Be appropriately rewarded (via an interest rate margin) for the risk to provide debt financing 	<ul style="list-style-type: none"> Stability of the cash flows generated by the airport Security in the case of default High leverage, i.e. proportion of the airport's enterprise value funded by debt rather than equity Subordination of the debt, i.e., if the operator has existing debt that ranks higher in priority for claims on available funds Refinancing risk especially if the loan provided has a short maturity Time and cost of bid process Earnings quality Traffic risks Likely investment required 	<ul style="list-style-type: none"> Select operator with strong credentials Be comfortable with risk/reward Invest in airports that have limited exposure to traffic risk Require cost-based ratemaking Obtain influence on operating, commercial, financial, and strategic decision making Negotiate priority treatment Require equity investment by operator Negotiate parity debt or higher returns Provide a structure allowing for partial or full deferral of principal
Investors	<ul style="list-style-type: none"> Secure long-term investment with strong competitive position -- returns have been profitable in most cases Secure strong cash flows Capture opportunities for commercial revenue growth Achieve savings from operational efficiencies Realize inflation adjusted returns Acquire long-term growth prospects 	<ul style="list-style-type: none"> Operator experience and management practices Liquidity levels CapEx requirements and expected debt financing needed Capital structure, debt maturities Revenue diversity and stability Ability to raise rates Operating restrictions Dividend policy and history of shareholder distributions Ability to withstand stress tests Need to optimize equity returns may result in a capital structure that is inconsistent with higher credit quality 	<ul style="list-style-type: none"> Conduct transparent process for the transaction Provide clear and credible timetable for the process Minimize cost of participating, especially in the initial round Provide access to relevant data to conduct due diligence Access to management team Help promote air service Have reasonable expectations of the value of the transaction Award lease to strong and experienced operator/lessee Limited Mandate reasonable CapEx requirements and allow operator to maximize the utilization of existing facilities first Require equity investment Limited at smaller airports Set reasonable conditions on rate increases Minimize operating conditions within reasonable performance standards Select operator that has strong experience Require strong legal provisions None
Rating Agencies	<ul style="list-style-type: none"> Increase traffic Increase non-aeronautical revenues Reduce operating expenses 		

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Table 8.11. (Continued).

Stakeholder	Opportunities	Risks/Concerns	Mitigating Measures
<i>Labor</i>	<ul style="list-style-type: none"> Work for a private operator with no change in pay/benefits and with incentive compensation and career development opportunities by working for a company with a global network Fund pension liabilities and infrastructure investments from lease payments 	<ul style="list-style-type: none"> Stability and protections provided by government jobs Loss of jobs and collective bargaining rights⁷⁹ No decrease in salaries and benefits Years-of-service credited towards pension requirements 	<ul style="list-style-type: none"> Require offers of employment by developer under substantially similar terms and conditions as government Prohibit abrogation of existing collective bargaining agreements Require Project Labor Agreements for large capital projects Protect workers from wage and benefit reductions Require operator to provide retirement program (e.g., 401(k) or defined pension plan)
<i>Passengers</i>	<ul style="list-style-type: none"> Improve customer service and the passenger experience for both business and leisure travelers Improve access to a wider variety of concession opportunities and other amenities 	<ul style="list-style-type: none"> Increases in pricing for parking, concessions, etc. Maintaining high levels of safety and security Private operator profit maximization at the expense of consumer welfare and satisfaction Diminished community control 	<ul style="list-style-type: none"> Set reasonable conditions on rate increases Include operating and performance standards in lease agreement with private operator Conduct quality of service monitoring to ensure that airport operators do not degrade service standards as a means of reducing costs and increasing profit Retain controls over noise mitigation

to stakeholder concerns for each privatization model. The tables are not checklists, but qualitative guidance in assessing the attributes present in a model and are only part of the evaluation process. As noted earlier, the U.S.DOT/FAA, in its capacity as regulator of airports, is concerned with airport compliance with applicable federal laws, regulations, and policy. We have attempted to summarize relevant aspects of such laws, regulations, and policies in the tables above in terms of federal regulatory risks for each model and provide potential mitigants to be considered by parties to ensure compliance. These are not the views of the U.S.DOT/FAA.

In some cases, the concerns expressed by stakeholders represent unintended consequences resulting from attempts to mollify other stakeholders. Such unintended consequences are clearly undesirable, and a major priority should be to minimize the likelihood of such effects to the extent possible and reasonable. In the end, tradeoffs will be required.

It should also be noted that *the absence of mitigating measures is also a concern*, which is indicated by no comment on the summary tables.

8.8 Evaluation Checklist

The final step is to evaluate the appropriate privatization models against more specific owner criteria. The privatization initiative should only proceed if there is a sound economic, financial, and legal basis with a high probability of success and

support from key stakeholders. From an airport owner's perspective, the privatization models can be evaluated in terms of issues and opportunities regarding (1) governance, (2) regulatory, (3) legal, (4) financial, (5) economic, (6) commercial, (7) labor, (8) customer service, and (9) implementation. In this context, these terms mean:

1. **Governance** refers to the degree of policy decision making required or control retained by the airport owner.
2. **Regulatory** refers to rules that are established by federal policies such as grant assurances, Surplus Property Act deed restrictions, Airport Security Program, CFIUS, prohibition on revenue diversion, Policy Regarding Airport Rates and Charges, APPP conditions, IRS regulations, etc.
3. **Legal** refers to external constraints that are established by laws, labor contracts, and financial commitments made to various parties such as bondholders and trustees.
4. **Financial** refers to the responsibility for staffing, management, and capital improvements as well as paying operating expenses and debt service, and includes the potential for revenue increases and/or cost reductions.

Table 8.12 summarizes the *financial responsibilities* under each model with respect to staffing, management, and capital expenditures (CapEx).

Government operation—the airport owner provides the labor, management, and capital funding.

Service contracts—the contractor provides the staffing, the airport owner oversees the performance, and there is no CapEx requirement.

⁷⁹Under the APPP statute, any collective bargaining agreements covering airport employees that are in effect on the date of the sale or lease of the airport cannot be abrogated by the sale or lease.

Table 8.12. Financial responsibilities for staffing, management, and CapEx.

Model	Staffing	Management	CapEx
Government operation	●	●	●
Private Sector Models			
Service contracts	●	○	n.a.
Airport-wide management contract	●	●	n.a.
Developer financing/operation	○	●	●
Long-term lease or sale	●	●	●
Legend:			
●	Operator (government or private) provides		
○	Operator (government or private) oversees		
n.a.	Not applicable		

Management contract—the contractor provides the staffing and management, but has no responsibility for CapEx.

Developer financing/operation—the contractor contracts out most of the operation, manages the facility, and provides the financing.

Long-term lease or sale—the contractor provides the staffing, management, and financing of airport operation and development.

5. **Economic** refers to both enterprise and external impacts. Enterprise economic impacts pertain to the overall economics of the transaction for the airport owner and its tenants. External economics refer to the economic development impacts and associated costs and benefits of the transaction to the community or region served by the airport. Airports create tremendous economic value for the local economy by attracting and retaining industries and creating new jobs.

6. **Commercial** refers to the profit to be earned by the contractor, which is what motivates the private company. The higher degree of commercialization, the higher the level of potential profit over the term of the lease.

7. **Labor** refers to commitments to existing employees under collective bargaining agreements, local laws, and political acceptance.

8. **Customer Service** refers to the experience of passengers, airlines, and other tenants using the airport as well as residents living in the vicinity of the airport.

9. **Implementation** refers to the ability to successfully complete the transaction and to derive value from it over the long-term.

Table 8.13 provides a provisional evaluation checklist for the airport owner.

Table 8.13. Evaluation checklist.

Issues	Yes	No	n/a
Governance			
▪ Compatibility with goals for future role in airport ownership/management			
▪ Retention of residual controls for key policy issues			
▪ Opportunity for local/regional participation			
▪ Appropriate level of sponsor/public control over policy and operations			
▪ Ability to implement economic development initiatives			
Regulatory			
▪ Compatibility with FAA requirements			
▪ Requirements to repay federal/state grants			
▪ Deed restrictions			
▪ Compatibility with state legal constraints (e.g., police powers, local government charters, municipal authorities, procurement rules, sale or lease of public property)			
Legal			
▪ Requirements in collective bargaining agreements			
▪ Covenants in bond indenture, including release of revenues, ability to meet the rate covenant, long-term lease or sale of property, changes affecting the tax status of outstanding debt			
▪ Requirements in leases with existing tenants, including airline use and lease agreements			
▪ Responsibility for environmental liability			

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Table 8.13. (Continued).

Issues	Yes	No	n/a
Financial <ul style="list-style-type: none"> Financial return to airport owner Potential to improve financial operations of airport Access to federal and state grants Need to refund outstanding debt and associated cost of the transaction Timely access to debt financing for capital improvements and requirements to access tax-exempt debt Financial capacity of private sector partner 			
Economic <ul style="list-style-type: none"> Ability to implement airport efficiency initiatives Ability to implement more efficient procurement and contracting mechanisms (e.g., purchasing, personnel, contracting) Ability to enhance non-aeronautical revenues Ability to develop facilities and promote air service more efficiently and aggressively Ability to develop the airport in a manner that promotes regional economic development 			
Commercial <ul style="list-style-type: none"> Requirements to renegotiate airline lease and use agreements Requirements to renegotiate other major lease and use agreements (e.g., terminal concession, parking, rental cars) Ability to increase emphasis on commercial and economic development 			
Labor <ul style="list-style-type: none"> Flexibility to structure compensation and benefit packages to attract and retain management talent Requirements in collective bargaining agreements regarding placement process for existing employees (e.g., retain, reassign to another public agency, or displace) Labor ties to owner Responsibility for pension liabilities Requirements under state laws on replacement retirement package Obligations under “successor clauses” and ability to renegotiate labor agreements Limitations in state laws regarding outsourcing Need for management continuity and experience and transition issues 			
Customer Service <ul style="list-style-type: none"> Ability to maintain or improve levels of service Existence of reasonable prices Access to a wide variety of concession opportunities and other amenities Ability to address external impacts and implement mitigation measures (e.g., aircraft noise, ground access) 			
Implementation <ul style="list-style-type: none"> Implementation risk Implementation complexity/controversy Experience, capability, and financial resources of contractor Long-term value for money 			

CHAPTER 9

Case Studies

Case studies can be a useful means of illustrating first-hand experiences and lessons learned from those experiences and therefore can provide helpful background for any airport considering the various privatization models. The purpose of this chapter is to summarize the lessons learned from the case studies that were undertaken for a range of airport sizes, privatization strategies, and forms of governance. They were conducted for successful and unsuccessful efforts. The following information comes from the case studies in Appendix H which documents in more detail (1) the initial goals and objectives of the airport sponsor for undertaking the privatization initiative, (2) a summary of the process employed, (4) a summary of the business terms of the initiative, (4) documentation of the experience to date, and (5) lessons learned. It is recommended that the reader review the case studies in their entirety to better appreciate the unique circumstances surrounding each case.

Case studies for U.S. airports consisted of:

Airport System Management Contract:

1. **Indianapolis Airport Authority**—airport system comprising a medium-hub airport and five general aviation airports, which entered into an airport system management contract that later reverted back to public operation.

Developer Financing and Operation:

2. **John F. Kennedy International Airport Terminal 4 (JFK IAT)**—large-hub airport, private development, financing, and operation of a major international unit terminal.
3. **Boston Logan International Airport Terminal A**—large-hub, terminal development, where private developer financing was initially considered, then airline special facility financing was undertaken, which was followed by the airline's bankruptcy resulting in a workout that required an amendment to the transaction documents.

APPP Applicants:

4. **Stewart International Airport**—non-hub airport and only airport approved under the APPP, which reverted back to public operation.

5. **Chicago Midway International Airport**—large-hub airport that occupies the only large-hub slot under the APPP, which was put on hold after the financial crisis in the fall of 2008.

The case studies for Stewart International Airport and Midway Airport provide interesting contrasts and helpful background for any airport considering privatization under the APPP.

Full Privatization Outside the APPP:

6. **Morristown Municipal Airport**—general aviation airport with long-standing, long-term airport-wide management and development agreement.

Summary of Case Studies

Summaries of the U.S. case studies are available here and fuller summaries follow. The full case studies can be found in Appendix H.

Indianapolis Airport Authority

Type of Transaction: Airport-wide Management Contract

Airports: Indianapolis International Airport and five general aviation airports

Airport Owner: Indianapolis Airport Authority

Private Contractor: BAA Indianapolis LLC

Objectives:

- Attract new airline service and encourage economic development by reducing airline costs through increased nonairline revenues and reduced operating expenses
- Improve customer service and quality
- Increase the expertise and diversity of Airport staff

Level of Interest: Four private-sector firms plus the existing Airport Authority staff submitted proposals

Solicitation Timeline: RFQ issued in September 1994

Contract Execution: October 1995

Contract Duration: Initially 10 years, but extended to December 2007 and later terminated in June 2007

Transaction Features and Highlights:

- BAA was initially compensated on the basis of savings in airline payments per enplaned passenger versus a baseline cost defined in the contract
- The agreement was amended to change the compensation methodology by providing for a fixed and a variable component due to the difficulty in determining the savings
- The variable component was based on performance achieved towards different goals as opposed to the single goal of reduction of airline CPE
- The Authority reassumed control of the airport system following the early termination of the agreement in June 2007
- BAA was not released from the requirements of Authority procurement ordinances
- Once initial efficiencies had been gained by BAA, it became difficult to make ongoing improvements with effects similar in magnitude and parties started questioning the value gained by retaining BAA relative to the fixed annual fee

John F. Kennedy International Airport Terminal 4

Type of Transaction: Developer Financing and Operation

Airport: John F. Kennedy International Airport

Airport Owner: Port Authority of New York and New Jersey

Private Contractor: JFK International Air Terminal LLC (JFKIAT), a joint venture of LCOR JFK Airport, LLC, Schiphol USA Inc., and Lehman JFK LLC; LCOR and Lehman left the joint venture in 2010 coincident with the announcement of the Delta expansion

Objectives:

- Preserve financing capacity for the Port Authority's 5-year capital program
- Minimize construction risk and management oversight
- Reduce operational responsibilities
- Deliver a functional terminal on time and on budget with no additional financing required by the Port Authority
- Improve operational efficiency and increase terminal capacity by replacing exclusive use arrangements with common use arrangements and new pricing approaches
- Gain PPP experience for possible deployment to other agency operations

Level of Interest: Four proponents responded to the RFP

Solicitation Timeline: RFQ issued in July 1995

Contract Execution: May 1997

Contract Duration:

- The lease term was to expire on the earlier of the date (1) 25 years after the date of beneficial occupancy of the

new facility, or (2) the day prior to the date on which the Port Authority's lease with the City of New York for JFK (which was 2015 at the time the lease was signed)

- Due to a significant capital expansion negotiated in 2010 to accommodate the operations of Delta Air Lines, the contract was extended through the earlier of 30 years from the date of beneficial occupancy of the expanded terminal or December 2043

Project Cost: 1997 initial project: \$1,069 million; 2010 expansion project: \$660 million

Transaction Features and Highlights:

- JFKIAT was the first private, nonairline entity to develop and operate an international air terminal in the United States
- The lease required that JFKIAT complete the project within 5 years from the execution of the lease or face significant financial penalties
- The project was completed on time, but at a construction cost approximately 20% over the budgeted amount
- The cost overruns required that JFKIAT obtain completion financing, which was provided by the Port Authority and subordinate to the special facility bonds issued for the initial financing
- JFKIAT sets airline rates and charges to reflect market demand for the facilities it offers rather than use cost-recovery formulas like most U.S. airports, including off-peak rates and volume discounts
- In August 2010, the Port Authority, JFKIAT and Delta announced plans for a \$660 million expansion to accommodate the operations of Delta
- The execution of the long-term lease with Delta in 2010 significantly changed the nature of the transaction to have features more similar to an airline special facility lease

Boston Logan International Airport Terminal A

Type of Transaction: Developer Financing and Operation

Airport: Boston Logan International Airport

Airport Owner: Massachusetts Port Authority (Massport)

Private Contractor: Delta Air Lines

Objectives:

- Introduce private sector participation into airport operations
- Redevelop Terminal A while preserving the Authority's financing capacity for its sizable capital program

Level of Interest: Seven teams submitted qualifications and five were short listed

Solicitation Timeline:

- 1996–1997: Massport studied approaches for private development and went through a competitive selection process that was abandoned
- 1998: Discussions were initiated with Delta

Contract Execution: August 2001

Contract Duration:

- Initial term began on the opening day (March 16, 2005) and lasted 5 years
- Extension terms provided for 20 automatic one-year extensions unless Delta was in default
- After Delta filed for bankruptcy, the “Amended and Restated Lease” term was also reduced from 25 to 10 years and Delta returned approximately one-third of its space

Project Cost: 1997 project: \$1,069 million (versus budget of \$876 million); 2010 expansion: \$660 million

Transaction Features and Highlights:

- Initially Massport explored a private developer approach for the replacement terminal, but due to state public bidding laws, and the private developers’ requests “to shift risk to the Authority” or for “subsidies” such as a share of rental car commissions, this approach was deemed infeasible
- The negotiating process was lengthy and complex, in part to ensure that (1) the terminal’s design and construction met Massport’s goals and (2) it provided Massport with the ongoing flexibility after the terminal’s opening to maximize the utilization of the terminal and site
- Unlike most special facility-backed terminal financings for airline tenants, this transaction gave Massport considerable leverage to take back facilities under certain circumstances
- Massport retained control of and the revenues from the Terminal A concessions
- The lease required that Delta complete the project within 5 years from the execution of the lease
- Six months after the opening of new Terminal A, Delta filed for Chapter 11 bankruptcy
- As part of a complex restructuring of Delta’s terminal lease and financing arrangements, Massport, Delta, the bond trustee, and the bond insurer negotiated amended terms to the Terminal A lease to avoid litigation over Delta’s potential rejection of the lease

Stewart International Airport

Type of Transaction: Long-Term Lease Inside the APPP

Airport: Stewart International Airport (SWF)

Airport Owner: New York State Department of Transportation (NYSDOT)

Private Contractor: UK-based National Express Group (NEG), with the long-term lease subsequently acquired by the Port Authority of New York and New Jersey

Objectives:

- Leverage the expertise of the private sector to develop the underutilized airport to its fullest potential
- Develop the real estate on the vast site to create jobs and economic development, which was a priority for the

Hudson River Valley due to large industrial concerns laying off workers and closing plants at the time

- Get out of the business of managing airports
- Introduce private sector participation into airport operations

Level of Interest: Four private-sector firms and the existing Airport Authority staff submitted proposals

Solicitation Timeline: Five teams submitted proposals, of which four were deemed qualified bidders

Contract Execution:

- Lease signed November 1999
- Lease became effective in April 2000 after state comptroller, state attorney general, and FAA approval

APPP Timeline:

- October 23, 1997, NYSDOT filed a preliminary application for participation
- January 10, 1999, NYSDOT filed its final application
- February 16, 1999, in an effort to clarify certain parts of the application, FAA staff requested responses to questions from NYSDOT and NEG
- April 8, 1999, the FAA published a Notice of Receipt of Final Application in the Federal Register
- June 12, 1999, a public meeting was held
- March 30, 2000, the FAA issued its Record of Decision approving the privatization application and approved the requested federal exemptions

Contract Duration: 99-year lease, but NEG sold its interests in the remaining 91 years of the lease to the Port Authority of New York and New Jersey in October 2007

Transaction Value: Initial Lease Payment of \$35 million and annual payments equal to 5% of gross income that were projected to begin on or about the 10th anniversary of the lease

Transaction Features and Highlights:

- Stewart International Airport was the first and only airport to complete the APPP process
- NYSDOT contracted with private companies to operate parking facilities, cargo facilities, and rest of the airport (under an airport-wide management contract); therefore, a significant amount of SWF operations were already outsourced to contractors
- The RFP gave the bidders the option of proposing on (1) the airport, (2) just the undeveloped land west (approximately 5,600 acres), or (3) both
- NEG elected not to bid on the undeveloped land, and at the encouragement of environmental groups, most of the undeveloped land was set aside by the state under a “forever green” statute
- NYSDOT did not request an exemption for use of airport revenue for general purposes because the airlines declined to approve NYSDOT’s request for an exemption
- Shortly before the beginning of the lease term in November 1999, NEG asked NYSDOT to be relieved of its lease

obligations after reconsidering the company's strategic priorities and interests in remaining in the airport industry

- The transaction prohibited the sale of the lease to another party for 5 years
- NEG paid \$35 million in an upfront lease payment and made \$10 million in capital contributions at SWF during its operation of the airport
- NEG sold the lease after 7 years of operation to the Port Authority for \$78.5 million, allowing it to recover its investments and realize a significant capital gain
- Because the Port Authority is a public agency and not a commercial entity, the airport was no longer eligible to continue in the APPP under Port Authority control and its participation in the program was terminated

Chicago Midway International Airport

Type of Transaction: Long-Term Lease Inside the APPP

Airport: Chicago Midway International Airport

Airport Owner: City of Chicago

Private Contractor: The winning bidder was Midway Investment and Development Company LLC (MIDCo), a consortium comprised of Vancouver Airport Services Ltd. as the operator, and Citi Infrastructure Investors and John Hancock Insurance Company as investors

Objectives:

- Maximize sale proceeds for the City's unfunded pension liability, infrastructure improvements, and other general fund purposes (primary objective)
- Establish a new framework of rates and charges that provides lower and more predictable rates for airlines operating at the Airport
- Improve the competitive position, service quality, growth prospects and efficiency of Midway Airport for the benefit of Chicago residents, airlines, and other users
- Ensure that future Airport development is safe, functional, efficient and delivered when necessary
- Minimize the City's exposure to residual risks and liabilities from the process
- Ensure fair and equitable treatment of existing Airport employees
- Ensure a smooth transition from public to private management in a timely manner

Level of Interest: Six groups submitted qualifications, one was eliminated due to lack of qualifications, two teams decided to withdraw, leaving three teams that submitted bids

Solicitation Timeline: RFQ issued February 2008

Contract Execution: The deal fell through in April 2009 after the consortium was unable to come up with the full upfront rent payment and had to pay the city a \$126-million breakup fee

APPP Timeline:

- September 16, 2006: Chicago filed a preliminary application for participation
- October 14, 2008: Chicago filed its final application for review and approval
- January 12, 2009: the FAA said its final review of the privatization application could not be completed because critical financial documents had not been submitted (financial agreements)
- November 8, 2008: FAA held a public meeting in Chicago to receive public comments
- April 1, 2009: the FAA granted its 1st extension to the City to provide additional information
- Several extensions have been provided since April 2009

Contract Duration: 99 years (proposed)

Transaction Value: \$2.521 billion upfront payment (proposed, but not paid)

Transaction Features and Highlights:

- The City of Chicago holds the only large-hub slot under the APPP
- The City was the only APPP applicant to secure airline approvals for its exemption to use airport revenue for general purposes after a lengthy negotiation resulting in an agreement that (1) capped airline rates and charges at a level below total 2008 charges and freeze rates for the first six years, (2) limited future rate increases to inflation for the remainder of the 25-year use agreement, (3) granted the airlines approval rights for capital improvement costs to be included in airline rates, (4) provided strong operating and service performance standards, and (5) gave the airlines sign off rights on the bidders' qualifications
- Under special state legislation that was secured, private investors who lease Midway would be guaranteed property tax exemptions; however, runways could not be expanded beyond the current boundaries and all city workers directly employed at Midway must be offered substantially similar jobs at comparable pay
- On the basis of discussions with potential bidders, the City decided to maintain responsibility for police and fire functions for Midway to mitigate the risks perceived by the potential bidders
- Some people believe the only reason the transaction failed to reach financial close was due to the collapse of the debt and equity markets while other people have expressed skepticism on the ability for MIDCo to be able to make a profit, which is why they were unable to get financing
- The \$2.52 billion bid translated into an EBITDA multiple of 28x and might now be viewed as a high-water mark for airport valuations (London City Airport achieved a 30x multiple on the sale to GIP/AIG in 2007 and the failed 40x multiple valuation of a 60% stake in Auckland

International Airport by Dubai Aerospace Enterprise also in 2007 was the highest ever and an outlier)

Morristown Municipal Airport

Type of Transaction: Long-Term Lease/Management Contract Outside the APPP

Airport: Morristown Municipal Airport (MMU)

Airport Owner: Town of Morristown

Private Contractor: DM AIRPORTS, LTD. (DM), an affiliate of the DeMatteis Organizations

Objectives:

- Pay off \$2 million in airport long-term debt
- With the aid of federal and state grants, make substantial upgrades to the airport's infrastructure that was in a state of disarray with the airport's corporate users threatening to leave and the FAA threatening to close the facility if upgrades were not made to the airport
- Turn the airport into an economic catalyst for the town and the region

Level of Interest: The town studied various proposals and considered several potential developers to run the airport

Solicitation Timeline: Proposals entertained during 1981

Contract Execution: December 1981

Contract Duration: 99 years

Transaction Value: Annual lease payments to (1) pay annual rent to the town (intended to cover the town's costs associated with the airport under DM's operation, which consist of police services, auditing, and grant administration), (2) pay all outstanding airport debt service when due (\$2 million was outstanding), and (3) undertake all capital improvements

Transaction Features and Highlights:

- DM has wide discretion and is responsible for making decisions regarding the development of MMU (i.e., capital improvement projects) and managing its operation, which includes among other things, negotiating leases, handling staff and services, and setting rates, fees, and charges
- The only residual airport controls retained by the town are the signing of airport grants and approval of site plans, but the town is obligated to mutually cooperate with DM in securing such approvals
- DM retains all revenues derived from its operation of the airport
- The lease also gives DM the right to mortgage all or any portion of its interest in the lease (without the town's consent) to obtain the most favorable financing needed for airport development
- The lease is assignable "without restriction of any kind"
- Although DM is the primary interface with the FAA and other federal agencies, the town remains the airport

sponsor and must execute grant agreements; however, DM is responsible for all grant compliance

- DM initially contracted the management and operation of the airport to an airport management company because it did not have this expertise, but in 1992, after having achieved stability within the airport management team, DM allowed the contract to expire and hired the airport management staff to work directly for it

9.1 Indianapolis Airport Authority

9.1.1 Transaction Background

In the 1990s, Mayor Stephen Goldsmith pursued many privatization initiatives as the City of Indianapolis faced pension funding deficits, unfunded infrastructure needs, and increased competition from suburban municipalities for jobs and wanted to establish Indianapolis as a leader in privatization.

In 1994, the Indianapolis Airport Authority, a municipal corporation formed in 1962 and governed by an eight member board (with five members appointed by the mayor of Indianapolis), solicited bids to manage its airport system that included Indianapolis International Airport and five general aviation airports. The authority board created a managed competition committee to oversee a competitive bidding process for the rights to operate, maintain, and manage the airport system. Although the board considered an outright sale or lease of the authority's airports, it decided against doing so because of the difficulty in getting regulatory approval.

The winning bidder, BAA Indianapolis LLC, won a 10-year management contract extending from October 1, 1995 through September 30, 2005.

The Authority staff participated in the competitive bidding process against four private sector firms, but lost the competition to BAA Indianapolis LLC, a subsidiary of BAA USA, which was a subsidiary of BAA International (collectively BAA).

Under the terms of the management contract, BAA was to be compensated on the basis of savings in airline payments per enplaned passenger versus a hypothetical baseline cost defined in the contract. BAA and the Authority agreed to share in the reduction in airline payments per enplaned passenger versus the projected baseline assuming no efficiencies were gained. The savings were calculated annually as the difference between the baseline and actual airline payments per enplaned passenger number, times the number of enplaned passengers for that year. The agreement provided for BAA to receive 32.5% of the savings as a management fee, subject to a \$4 million annual cap, escalated for inflation. The Authority's share of the savings (67.5%) would accrue to the airlines in the form of reduced

rates and charges. (In essence, the airlines were to receive \$0.675 of every \$1.00 of savings produced by BAA.)

During 2002 (and into early 2003), the Authority and BAA negotiated an amendment to the management contract, which was contemplated in the seventh year of the contract. Both parties had an incentive at the time to negotiate the extension. The Authority was motivated to change the compensation structure, as the annual processes required to calculate the fee became increasingly difficult to administer. BAA viewed its contract with the Authority as important experience in anticipation of similar opportunities arising in the future, especially after having its management contract for the Harrisburg airport system terminated in mid-2001. BAA also saw the extension as an opportunity to market planning and development services related to the Midfield Terminal redevelopment, which was at the time expected to be completed by 2007.

9.1.2 Objectives

The overarching objective for pursuing a management contract by the Airport Authority was to attract new airline service and encourage economic development by reducing airline costs through increased nonairline revenues and reduced operating expenses.

Other objectives were to improve customer service and quality and improve the diversity and expertise of airport staff.

9.1.3 Stakeholder Interests

Airlines. Airline tenants were primarily interested in reducing rates and charges, maintaining capital project approval (majority-in-interest) rights, and ensuring that any monies generated on airport remained in the airport system and were not diverted to other purposes. While the airlines were opposed in principle to paying management fees for a private operator, they were the beneficiary of efficiencies achieved at the airport as a result of the “residual” methodology employed for the calculation of airline rates and charges. Notwithstanding this benefit, the airlines regularly questioned the value BAA contributed in relation to its annual fee.

Labor. The management contract required BAA to use its best efforts to employ all Authority staff and offer each employee an initial compensation and benefits package similar to what the employee was receiving as an Authority employee. Substantially all Authority staff became employees of BAA.

9.1.4 Outcome

Although the Authority initially viewed the managed competition concept as a way to change the way business was

conducted over the long term at the airport, the Authority reassumed control of the airport system following the early termination of the agreement in July 2007. In the end, not all of the expectations were met. The Authority acknowledged that BAA was successful in gaining certain efficiencies and conceded that BAA was able to do so more quickly than the Authority may have been able to do so otherwise. There is also general agreement that BAA’s operation was beneficial for staff as a whole, as employees gained broader airport management expertise and the opportunity to interact with colleagues in the United Kingdom. This interaction was valuable, as it brought to staff the private sector airport management perspective.

BAA assumed operational control in the year that reflected budget cuts implemented by the Authority in advance of the competitive bidding process. Under the terms of the management contract, in which the baseline was projected from the year before the reductions, BAA received the benefit of most of these operating expense cuts. As rental car and terminal concession agreements expired, BAA negotiated more favorable financial terms. BAA fully implemented the successful Pittsburgh “AirMall” concept with street pricing at the airport, which it later introduced at the airports serving Baltimore, Boston, and Cleveland. Although various attempts were made to increase parking revenues with the introduction of new products such as valet parking, most of these initiatives were not deemed to be particularly effective. While BAA did pursue outsourcing of services such as janitorial, in general, the savings were not significantly greater than the contracts the Authority already had in place. Air service marketing efforts were expanded, but without achieving the desired effect of new international service.

From the first year of the contract, it became apparent that the compensation methodology prescribed by the agreement would be difficult to administer. Since under the residual airline ratemaking structure, the airlines ultimately paid BAA’s management fee, they lobbied the Authority to ensure that BAA did not receive the benefits of “windfall improvements” not subject to BAA’s control. To protect its financial interests, BAA spent much time and effort in documenting and estimating the effects of its efforts. The financial effect of many of BAA’s initiatives, such as implementing a new customer complaint program for parking operations, employee training programs, and new schedules and other changes to shuttle bus operations, were impossible to measure meaningfully.

The structure of the compensation calculation disincentivized BAA from implementing any customer service initiative that resulted in increased operating expenses, even though improved customer service was cited as a goal during the competitive bidding process and was supported by the spirit of the management contract. While the parties attempted in good faith to use a more technical approach to

identify appropriate baseline adjustments in the initial years of the contract, the annual compensation calculation eventually became more of a negotiation. The negotiation became more contentious as the baseline projected in 1994 became increasingly meaningless as a result of changes in the airline industry, the economy, and new security requirements as a result of September 11.

As noted earlier, the arrangement was terminated under mutual agreement by both parties to provide for (1) an early transition of personnel and operations back to the Authority and (2) a smooth transition in advance of the opening of the new \$1.07 billion Midfield Terminal in late 2008. There was no significant change in the operation and management of the airport facilities after the transition.

9.1.5 Lessons Learned

Lessons by the stakeholders in the Indianapolis Airport Authority airport system management contract included the following:

- Government departments competing in managed competition efforts can be disadvantaged, as regulations generally prevent them from partnering with private firms or guaranteeing performance. Evaluation criteria may need to be assessed with this potential conflict in mind.
- Whatever metrics are used to gauge performance should be transparent and easily measurable. Improvements made by BAA as measured by airline payments per enplaned passenger were difficult to track as they required the estimation of a hypothetical baseline comparison (including numerous categories of operating expenses and nonairline revenues, which can be extremely variable from year to year). Over the long-term agreement, especially after the operational changes necessitated by increased security measures following the September 11, 2001 terrorist attacks, it became increasingly difficult to estimate meaningfully what the baseline would have been. In this respect, the annual management fee became an annual negotiation between the Authority and BAA and frequently was contentious.
- Tracking contract compliance became a substantial undertaking for the Board, which eventually hired professionals with airport and public management expertise to oversee the contract. Much time was spent defining a peer set of airports to use for benchmarking BAA's performance, with inconclusive results.
- Once initial efficiencies had been gained by BAA, it became difficult to make ongoing improvements with effects similar in magnitude. For this reason, a strategy may be to contract with a private-sector firm on a short-term basis to gain the majority of potential efficiencies before transferring the operational responsibilities back to the public sector. The

Authority-BAA contract worked in this regard to the extent that staff gained broader, international airport management expertise during the term of the contract.

- From BAA's perspective, once initial efficiencies were attained, it became increasingly difficult to attain further improvements and realize the full value of the management fee. Moreover, the relatively small maximum annual compensation amount (initially \$4 million, reduced later to \$1.85 million), while appropriate for a firm that may have viewed the opportunity as a "loss leader" necessary to achieve more lucrative contracts in the future, may not have been enough of an incentive to attain more difficult-to-achieve improvements.⁸⁰
- When many goals are trying to be achieved through privatization, the compensation needs to be tied to each goal. The initial compensation structure for BAA was tied to improvement in one variable—airline payments per enplaned passenger—and not separately to the individual goals the Authority was trying to achieve (e.g., improved customer service and new air service). The amended agreement changed the compensation structure so that BAA was compensated for its progress against separate goals, but the new structure may also have been difficult to truly measure efficiencies for the purpose of justifying compensation.
- To achieve the full benefits of privatization, it may be more effective to contract with multiple firms specializing in each area in which improvement was targeted. While BAA had successful U.S. experience with concession programs, other firms may have had more expertise in areas such as parking or building maintenance. While the management contract allowed BAA to contract with other firms, BAA often was incentivized to maintain as much control as possible.
- With few exceptions, there were no 'magic solutions' that could not have been attained under continued public management. When acquiring services on behalf of the Authority, BAA was not released from Authority procurement regulations, which is often a large motivation in privatization efforts. However, BAA's procurement of goods with their own operating funds was not considered 'public' dollars in the same way as the Authority's funds. Moreover, BAA employed substantially the same staff as the Authority did before. In the end, BAA's approach to improve performance involved typical airport management best practices to increase nonairline revenues with more advantageous contract terms, increase parking revenues without sacrificing market share, increase commercial development, and outsource non-core services. Notwithstanding these

⁸⁰ As a point of reference, the management fee for airport management services for Albany International Airport was fixed at \$407,286 in 2010, an airport that accommodated 1.3 million enplaned passengers in 2009, compared with IND's 3.7 million enplaned passengers.

industry-accepted approaches, having a private operator involved may have streamlined and improved certain processes, especially with regard to renegotiating concession, rental car, and other nonairline contracts.

9.2 JFKIAT Terminal 4

9.2.1 Transaction Background

JFK International Air Terminal LLC (JFKIAT) was formed in 1997 in partnership with the Port Authority of New York and New Jersey (the “Port Authority”) to build, operate, develop, and manage the \$1.4 billion Terminal 4 at John F. Kennedy International Airport (JFK). Terminal 4 replaced the original International Arrivals Building (IAB), which had been built, operated, expanded, and renovated by the Port Authority since 1957. Since the central terminal complex was developed in the late 1950s and early 1960s, the IAB has been the only terminal at JFK not exclusively leased, developed, and operated by airlines. For this reason, the terminal has traditionally housed the operations of numerous foreign-flag airlines, typically operating with low frequencies. (In November 2010, 38 airlines provided service at Terminal 4.)

Recognizing that the IAB no longer functioned efficiently due to insufficient capacity and outdated building systems, the Port Authority initiated in 1993 planning and design studies for its redevelopment. Realizing that the project would require significant capital investment and program management and oversight, the Port Authority decided in 1995 to involve the private sector in the design, construction, and operation of the new facility on the site of the existing IAB.

JFKIAT was selected by the Port Authority following a competitive bidding process. JFKIAT was a joint venture of LCOR JFK Airport, LLC, Schiphol USA Inc., and Lehman JFK LLC. JFKIAT assumed responsibility for the operation of the IAB and development of the new state-of-the-art international terminal building in May 1997 shortly after the financial closing of the special facility bonds issued to finance the project. JFKIAT was the first private, nonairline entity to manage an international air terminal in the United States.

The 1.5-million square foot terminal opened in May 2001 with two concourses (Concourses A and B) and 16 loading-bridge-equipped gates and an apron capable of accommodating up to 24 remotely parked aircraft. Terminal 4 is the largest international terminal in the New York area, with federal inspection services (FIS) facilities capable of processing 3,200 passengers per hour, and provides the only 24-hour FIS facility at JFK.

Terminal 4 was generally recognized in the industry as the preeminent example of nonairline, private sector participation in terminal development and operation, with benefits having been realized in increased operating efficiency,

enhanced levels of service for passengers and airlines, and reduced operating costs.

In August 2010, JFKIAT, the Port Authority, and Delta Air Lines announced a \$660 million expansion of Terminal 4 (the 2010 Expansion Project), which includes an extension of Concourse B to include nine additional loading-bridge-equipped gates, new airline lounges, centralized security checkpoints, a secure-side connector to Terminal 2, the demolition of Terminal 3, and expanded remote aircraft parking facilities. Construction is expected to begin in the fourth quarter of 2010, with all work to be completed within five years.

In 2010, in connection with the proposed redevelopment, Schiphol acquired the LCOR and Lehman ownership stakes to become the sole partner. Subsequently, Delta bought a non-majority, non-controlling stake in JFKIAT in April 2010.

9.2.2 Objectives

After the election of George Pataki as New York governor in 1994, political support of privatization initiatives at state agencies increased. In this environment, the Port Authority⁸¹ began considering involving private sector participation in its operations. The Terminal 4 redevelopment was identified as an attractive opportunity as its cost comprised approximately one-fourth of the cost of the agency’s 5-year capital program and the Port Authority wished to preserve future funding capacity. Other large-scale construction projects were planned or in process at JFK, including the quadrant roadway reconfiguration and the AirTrain rail transit system, which was to connect the terminal complex with subway and regional rail systems. The financial and management resources required to implement these complex projects along with the redevelopment of Terminal 4 provided further encouragement for the agency to explore alternative project delivery methods. Finally, the IAB was operationally intensive, with approximately 230 Port Authority employees staffing the facility at the time.

In summary, the Port Authority’s primary objectives in partnering with the private sector to redevelop the IAB in 1997 were:

- Preserving financing capacity
- Minimizing construction risk and management oversight
- Reducing operational responsibilities
 - Delivering a functional terminal on time and on budget with no additional financing required by the Port Authority

⁸¹The Port Authority is a bi-state port district established through an intergovernmental contract between the states of New York and New Jersey. The governor of each state appoints 6 members to the Board of Commissioners, which oversees the Port Authority.

- Improving operational efficiency and increasing terminal capacity by replacing exclusive use arrangements with common use arrangements and new pricing approaches
- Gaining PPP experience for possible deployment to other agency operations

9.2.3 Stakeholder Interests

Labor. The Port Authority required JFKIAT to interview existing staff for possible employment, but JFKIAT was not contractually obligated to employ any staff. The Port Authority guaranteed jobs in other facilities to those not absorbed by JFKIAT and required JFKIAT to include \$4 million in project costs for the Port Authority's costs in realigning the IAB staff, which were mostly early retirement benefits. JFKIAT contracted most services out to third parties in order to realize operating expense efficiencies and the expertise of specialized firms. A number of the Port Authority employees were hired by these third party contractors and many skycaps all went to work for a concessionaire.

Airlines. The IAB had historically been served by a large number of foreign-flag airlines, including approximately 45 airlines at the time of the award. Airline interests in the redevelopment of Terminal 4 were divergent, but had the following in common:

- Minimizing the disruption of IAB operations during the construction of Terminal 4
- Replacing the aging IAB with an operationally efficient terminal capable of accommodating forecast demand
- Having certainty with regard to the availability of gate and other facilities for their operations
- Minimizing increases in rates and charges
- Ensuring levels remained competitive with other JFK terminals
- Having the ability to enter into agreements whereby preferential rights such as gate assignments and lower rates and charges could be obtained in exchange for guaranteed activity levels
- Improving customer service and the passenger experience

9.2.4 Outcome

At financial closing (April 1997), JFKIAT intended to enter into a guaranteed maximum price (GMP) contract with its construction contractor with a projected date of beneficial occupancy of December 15, 2000. However, JFKIAT was unable to enter into a GMP contract due to the limited set of construction documents. The project was completed in May 2001 at a construction cost approximately 20% over the budgeted amount. (The final cost of construction was approximately \$1,069 million, compared to an original estimate in

1997 of \$876 million.) JFKIAT attributed the cost overruns to (1) staging costs, (2) unforeseen site conditions, (3) subcontractor disputes, and (4) architectural design features. JFKIAT was highly motivated to complete the project by May 8, 2001 (the deadline in the lease) because upon DBO it could increase the per passenger rates and realize significant increased revenues as well as avoid paying a significant penalty under the lease if not finished by then. Due to the loss of time dealing with the existing conditions, it cost more to accelerate the later stages of construction.

The cost overruns required that JFKIAT obtain completion financing, which was provided by the Port Authority through a \$172 million subordinate loan as noted above.

Since its completion in 2001, Terminal 4 has operated successfully, substantially improving operational efficiency compared with the IAB, in large part due to the new state-of-the-art building, and serving many airline tenants with diverse interests. Its operational and pricing structure has enabled it to respond more proactively to changes in the airline industry. As a full common use terminal, Terminal 4 was able to accommodate numerous airlines that operate at relatively low frequencies, thereby increasing utilization versus the IAB.

Terminal 4 has also captured an increased share of passenger traffic at JFK, with its 13.2% share of passengers enplaned in 1999 increasing to 19.9% in 2009. JFKIAT attributes this increase to the terminal's increased capacity and ability to accommodate new entrants. The low frequency airlines that are not affiliated with a major airline alliance generally prefer operating from Terminal 4 over other JFK terminals because it is not operated by an airline. While priority use rights are conferred to some contracting airlines, airlines operating from Terminal 4 have greater certainty that their flights will not be "bumped" due to the scheduling decisions of a landlord airline. Airlines also realize efficiencies in the sense that they can separately negotiate operating agreements with JFKIAT with provisions such as term and guaranteed traffic levels tailored to their needs, as opposed to negotiating under less flexible terms with the airlines operating the other unit terminals.

Internal forecasts of concession revenues that were prepared during the planning process were not realized. JFKIAT attributes this shortcoming primarily to the (1) significantly worse-than-expected sales of duty free goods after the abolition of duty free sales for intra-European Union traffic in July 1999, (2) traffic declines after September 11, and (3) passenger behavior changes after September 11 due to longer security checkpoint times. With the increased security measures put into place following the September 11, 2001 terrorist attacks, passenger behavior has changed with reduced pre-security dwell times as the majority of passengers proceed directly to their departure gates after check-in. Most concession outlets were located pre-security. This problem was

partially addressed by adding concession outlets post security and was addressed in a more comprehensive manner in the 2010 Expansion Project by consolidating and moving the security checkpoints before the main concession courtyard.

JFKIAT has realized savings in operating and maintenance expenses by reducing personnel, outsourcing functions (major maintenance, janitorial and custodial, security, etc.), and introducing efficient work processes. By outsourcing certain services that had traditionally been provided by the Port Authority, JFKIAT was able to reduce in-house headcount by almost 75% (from approximately 230 to 60). Other operating efficiencies such as a building automation system were built into the energy-efficient design of the new terminal. The ability to operate outside of Port Authority procurement procedures, employment pay scales and contracts, and political influence allowed JFKIAT in many cases to obtain more advantageous contractual terms than could have been obtained by the Port Authority. In the end, JFKIAT had a strong incentive to maximize passenger throughput, “run a tight ship” and “sweat the asset,” as it would retain any excess revenues and operational savings.

Terminal 4, which opened in May 2001, underperformed in the first two years of operations (2002–2003), reflecting the difficult operating environment in the early 2000s. The events of September 11, weak economic conditions, outbreak of Severe Acute Respiratory Syndrome (SARS), and Iraq war had a severe effect on international traffic in the United States and at JFK. These unforeseen external factors significantly affected the project’s operating performance. For example, total international passengers at JFK declined 18% between 2000 and 2003. However, since that time Terminal 4 has benefited from a strong recovery in passenger volumes, an associated increase in revenues, and the extension of the debt amortization period for senior and subordinate debt (from 2015 to 2025) as a result of the extension of the City Lease with the Port Authority in 2004.

Ultimately, with the 2010 Expansion Project and Delta’s cost-recovery rates, more than half of Terminal 4 now effectively operates like other airline-financed terminals at JFK.

9.2.5 Lessons Learned

The JFKIAT Terminal 4 project was a first-of-its-kind experiment and as a result has provided some lessons learned by the stakeholders, including:

- The ability to access tax-exempt financing made the Terminal 4 redevelopment viable. LCOR estimated the tax-exempt financing provided a roughly 30% discount on private financing.
- Although the Port Authority sought to attract private equity in the project, ultimately its access to the tax-exempt

bond market on behalf of the developers and the associated lower cost of capital dis-incentivized a large equity investment that would have required higher returns for the developer. JFKIAT’s contribution of \$15 million was motivated by the Port Authority’s desire that the consortium have “skin in the game.”

- JFKIAT was able to successfully experiment with market-based pricing, which very few public airports use. In particular, after the downturn in traffic resulting from September 11 and SARS, as a private entity JFKIAT was able to negotiate special pricing with airlines that could not have been accomplished under typical airport-airline ratemaking agreements.
- Normally in the United States, airport terminals are subsidized by parking and rental car revenues given the large amount of public space. In this case, Terminal 4 had to stand financially on its own without these subsidies. As a result, the JFKIAT model is not universally transferable to other U.S. airports. It worked at JFK because of the inter-airport terminal capacity limitations, high user rate levels for competing facilities, high percentage of international traffic (which can support substantially higher charges), and ability to charge fixed, profit-based pricing to use the terminal. Therefore, the model may not be readily adaptable in other locations without some form of subsidy from other nonairline revenues, particularly parking and rental car revenues. This model is best suited to application at large, multi-airline airports with unit terminals.
- A frequently cited rationale for involving the private sector in facility development is to obtain construction and program management expertise and therefore mitigate the risk of cost overruns and schedule delays. While Terminal 4 was completed on-schedule, the final project cost was about 20% higher than the budgeted cost. One of the complexities in its development was the requirement to remain operational during construction.
- The structure of the financial returns, whereby both the Port Authority and JFKIAT derived residual cash flow value from the project, helped to align a number of their interests. JFKIAT was highly motivated to complete the project as quickly as possible, much like a traditional real estate developer.
- Risk avoidance in general is an overarching rationale for privatization. In the case of Terminal 4, however, one might question the magnitude of the “real” risk that was actually assumed by JFKIAT. JFKIAT only invested \$15 million in equity, but did invest a great deal of time and effort in the venture as well as risk \$33 million in predevelopment expenditures. Regardless of the financial viability of the project, the Port Authority in the end must serve the public interest of ensuring the busiest international terminal in the region remains operational. JFKIAT, on the other

hand, could “walk away” if the operation in its judgment became unfeasible. Ultimately the main risk for the project rested with the bond insurer and bondholders, not JFKIAT or the Port Authority.

- Unlike toll road projects where the term of the transaction is usually 50 years or more, the relatively short term for this transaction (initially 15 years) limited the amount of equity that could reasonably be bid. Given the limited amount of equity, the return on investment is quite large.
- The early years of the lease were the most vulnerable and the Port Authority played an important role in mitigating risk in these early years. When JFKIAT fell upon hard times after September 11 and SARS, in conjunction with the accelerated debt amortization period (prior to the extension of the City Lease) and the need for completion financing, the Port Authority stepped up to assist JFKIAT by amending the lease agreement and providing subordinate financing. Although JFKIAT felt it could access financing from the bond market, the financing provided by the Port Authority provided a win-win solution for both parties as JFKIAT had a credit rating at the time that was below investment grade. The level of cooperation provided by the Port Authority to JFKIAT demonstrated its commitment to the facility and desire for its success.
- The long-term lease meant that control over the site and the flexibility to respond to changing market conditions was relinquished by the Port Authority. While this factor was not important in the early years of operation, it became a more important consideration later on. From a customer service perspective, replacing Terminal 3 was a top priority for the Port Authority, and expanding Terminal 4 was the logical and most economically viable solution. However, the Port Authority only had indirect influence on the outcome of negotiations between Delta and JFKIAT, two parties with competing financial interests. In the end, Delta’s interest to pay cost-recovery rates and Schiphol’s interest to maintain a good relationship with Delta and its SkyTeam partners were met with Schiphol’s purchase of LCOR’s and Lehman’s stakes in JFKIAT. Although a short-term lease may be more appropriate to protect against industry uncertainty, a shorter term would be less attractive to private investors and harder to secure financing.
- Key to the success of the Terminal 4 project was the fact that there was no “anchor tenant,” whose needs were driving facility design and development at the expense of other tenants. With no airline having a large share of traffic at the terminal, any organized opposition to the project was difficult. (These dynamics have changed to some degree as a result of the Terminal 4 expansion project and Delta’s preferential-lease status.)
- The project has also been successful because it is one of several terminals at JFK that must compete for traffic with

other terminals. This competition works to keep rates from becoming unreasonable and to incentivize JFKIAT to run an efficient facility with high customer service standards.⁸² Competition between terminals minimizes the need for more heavy handed regulation, as JFKIAT must compete for airline customers.

- JFKIAT also has a strong incentive to maximize the passenger throughput of the terminal based on the per passenger pricing regime and the associated passenger-related concession revenues. JFKIAT is also incentivized to minimize operating expenses; however, maximizing revenues in a competitive environment requires high service levels so the incentives are well aligned for both the Port Authority and JFKIAT.

9.3 Boston Terminal A

9.3.1 Transaction Background

With political pressure to privatize Boston Logan International Airport and recognizing that a needed redevelopment of Terminal A would require significant capital investment, the Massachusetts Port Authority (Massport) decided in 1996 to explore private sector involvement in the Terminal A project. Initially, Massport explored a private developer approach for the replacement terminal, but due to state public bidding laws, and the private developers’ requests “to shift risk to the Authority” or for subsidies such as a share of rental car commissions, this approach was deemed infeasible. Massport then began negotiations with Delta to develop the new terminal.

New Terminal A was developed under a special facility lease between Massport and Delta and was largely funded with special facility revenue bonds issued in August 2001, which were secured solely by Delta and insured by Ambac Assurance Corporation (Ambac). When the lease was signed on August 16, 2001, the terminal was considered fairly well designed. After the terrorist events of September 11, 2001, Massport and Delta worked together to redesign the terminal to incorporate additional security features and to reduce costs.⁸³

Shortly after the opening of new Terminal A, Delta filed for protection under Chapter 11 of the U.S. Bankruptcy Code on September 14, 2005. To assist Delta in its reorganization efforts and to avoid the potential for costly litigation, Massport, with

⁸²It should also be noted that JFKIAT has the obligation to provide fair and reasonable fees and avoid unjust discrimination pursuant to its lease with the Port Authority, which is responsible for assuring compliance of federal statutes, DOT/FAA policy, and FAA grant assurances by its tenants and contractors.

⁸³Dave Bannard, *Large Capital Projects*, AAAE Airport Magazine, June/July 2010.

the consent of the bond trustee and Ambac, agreed to restructure the original lease and bond trust agreement.

Under the restructuring, Massport is not obligated to make the debt service payments on the Terminal A bonds. If pledged facility rentals and associated reserves are insufficient to make the debt service payments, the payments become the responsibility of Ambac under the terms of the bond insurance agreement.

9.3.2 Objectives

Governor Weld was committed to establishing Massachusetts as a leader in privatization. Given the political environment, Massport began considering alternatives for private sector participation in its operations. The redevelopment of Terminal A was identified as an attractive opportunity given its significant cost and Massport needed to preserve financing capacity for the Logan Modernization Program as well as its sizable airfield, sound proofing, major maintenance, and the other port facility improvements.

9.3.3 Stakeholder Interests

Delta was the largest carrier operating from Logan (in terms of passengers) when Massport started talking to Delta about Terminal A. Delta wanted to continue to expand its operations at Logan and consolidate all of its product lines at that time in one building, which operated from different terminals at that time. Terminal A was the only site that had enough potential to accommodate all these products in one building. In addition, as the first terminal on the entrance road combined with new state-of-the-art facilities, Delta felt the new terminal would give it a competitive advantage over its competitors at Logan.

9.3.4 Outcome

Six months after the opening of new Terminal A, Delta filed for protection under Chapter 11 of the U.S. Bankruptcy Code on September 14, 2005. To assist Delta in its reorganization efforts and to avoid the potential for costly litigation, Massport, with the consent of the bond trustee and Ambac, agreed to restructure the original lease and bond trust agreement. Delta then signed an amended and restated 10-year lease dated July 1, 2006, reducing the number of aircraft gates it leased in Terminal A and associated space by approximately one-third (from 22 to 14 gates). Massport subsequently leased four of the relinquished gates and two regional aircraft ground loading positions to Continental Airlines, under a 5-year lease agreement (that expires in November 2012). After Delta and Northwest merged, Delta leased the remaining gates in Terminal A.

9.3.5 Lessons Learned

This hybrid single airline special facility financing had a number of unique characteristics and as a result has provided some interesting and instructive lessons learned, including:

- Despite the representations that developers and infrastructure funds are looking for opportunities to invest private capital in airport assets, as was the case for the JFKIAT project, the prospective developers contended that the Terminal A project could not be economically financed without significant access to tax-exempt debt or other airport revenues.
- The experiences of Terminal A at Logan and Terminal 4 at JFK highlight the difficulties of financing terminal buildings, with their high capital and operating costs, without the higher-margin parking and rental car revenues. A terminal developed by an airline, such as Terminal A at Logan, may be more feasible as the airline may be solving to minimize its overall operating costs rather than seeking satisfactory commercial returns on its investment. In the case of Delta, it was able to consolidate its operations that had been spread over two terminals into one building thereby saving on labor and equipment costs.
- Each state has its own unique set of laws and regulations. When contemplating privatization options, it is important to undertake a comprehensive review of these laws. Given the unique public bidding requirements in Massachusetts, accessing tax-exempt conduit financing for private development was deemed infeasible. Once Massport determined that private developers needed the conduit debt, it had to seek other avenues for private participation in the project.
- When contemplating a special facility financing on behalf of an airline or other party, an airport owner should be careful to ensure that the lease is a single lease that fits the parameters of a true lease (as opposed to a financing lease).
- Logan is primarily an origin-destination (O&D) airport and has a diverse mix of carriers, with no airline accounting for more than 20% of the passenger share in 2010. Under this type of situation an airport owner should consider the desirability of including gate and space take-back provisions, as used in the Terminal A lease, if using special facility debt. Also, an airport should evaluate the merits of maintaining the facility on behalf of the airline (and charging associated rent) and retaining control over the concessions (and associated revenues).
- With respect to the construction side of the project, the lessons learned are best summarized by Massport's deputy chief legal counsel assigned to the Terminal A transaction:

Take the time to carefully and clearly document the parties' understanding before commencing the work, but provide for flexibility within that framework; ensure that everyone involved

in the project understands what has been agreed upon; maintain continuous communication throughout the project; and craft a structure that aligns all parties' goals. By taking time upfront, significant time and money can be saved in the long run.⁸⁴

- The lease required that Delta make annual maintenance reserve payments so that funds would be set aside for facility renovation, renewal, replacement, or reconstruction, and for unusual or extraordinary maintenance or repairs. This feature addresses concerns about a private tenant turning back a facility at the end of a long-term lease in poor condition. Funds in the Terminal A maintenance reserve account can be dispensed at Massport's discretion.

9.4 Stewart International Airport

9.4.1 Transaction Background

In 1999, Stewart International Airport (SWF) became the first and only⁸⁵ airport to complete the APPP process. It was operated by a subsidiary of UK-based National Express Group (NEG), under a 99-year lease with the state of New York (the owner). NEG operated the airport from November 1, 1999 through October 31, 2007, when it sold the remaining 91 years of the lease to the Port Authority of New York and New Jersey. Because the Port Authority is a public agency and not a commercial entity, the airport was no longer eligible to continue in the APPP under Port Authority control and its participation in the program was terminated.

9.4.2 Objectives

Governor George Pataki wanted to be a leader in public asset and operation privatization alternatives and SWF was determined to be a good candidate for privatization. He believed that turning the airport over to the private sector would provide the Hudson Valley region with better air service, greater economic development, and a strengthened tax base. Therefore, the primary motivations were to (1) leverage the expertise of the private sector to develop the underutilized airport to its fullest potential and (2) develop the real estate on the vast site to create jobs and economic development, which was a priority for the Hudson River Valley due to large industrial concerns laying off workers and closing plants at the time. The RFP gave the bidders the option of proposing on (1) the airport, (2) just the undeveloped land (approximately 5,600 acres), or (3) both.

In addition, it was recognized that managing airports was not a "core business" for the state and the New York

Department of Transportation (NYSDOT) was continually funding SWF with no prospect of financial return.

Finally, the certain parties to the transaction felt that NEG would turn the airport around, develop Stewart to its fullest potential, and consummate a landmark transaction that would become a model for airport privatization throughout the country.

9.4.3 Stakeholder Interests

Airlines. The airlines declined to approve NYSDOT's request for an exemption to use airport revenue for general purposes because they were concerned that granting the exemption for SWF would establish a precedent that could be used in the privatization of larger airports. Therefore, when filing its final APPP application for SWF, NYSDOT did not request an exemption for use of airport revenue for general purposes.

Labor. Under the APPP statute, all collective bargaining agreements covering airport employees that are in effect on the date of the sale or lease of the airport cannot be abrogated by the sale or lease. Therefore, NYSDOT required NEG to develop a plan offering existing NYSDOT employees at the airport the option to remain in the employment of NYSDOT or to receive an offer of employment with NEG. One of the conditions of the lease was to retain the State Troopers as the airport security to avoid labor issues.

NYSDOT contracted with Air Group International (AGI) to operate the airport under a management contract. In addition, the parking operations were contracted to another private entity and NYSDOT leased the airport's cargo facilities. While the ownership of SWF resided with NYSDOT, a significant amount of SWF operations were outsourced to contractors.

Community. The goals of the Stewart Airport Commission (SAC), which acts in an advisory only capacity and has no governance authority over the airport, were and continue to be (1) improve passenger air service and (2) contribute to the region's economic development. Under the lease, NEG was required to meet on a regular basis with SAC.

9.4.4 Outcome

Shortly before the beginning of the lease term in November 1999, NEG approached NYSDOT asking to be relieved of its lease obligations. Apparently, NEG had already started thinking about getting out of the airport business to focus on its core business in the bus and rail sectors, and in February 2001 sold its only other airport operations (3 airports in England). NYSDOT refused the request and NEG proceeded

⁸⁴Dave Bannard, *Large Capital Projects*, AAAE Airport Magazine, June/July 2010.

⁸⁵As of November 2011.

as contracted to take over SWF operations. Moreover, the SWF transaction prohibited the sale of the lease to another party for 5 years, or until November 1, 2004.

NEG hired an experienced airport manager to run SWF who was not an employee of NEG but was a contractor. The airport manager continued in that position until the airport lease was taken over by the Port Authority and reported to NEG's U.S. subsidiary, which was a large bus operation. SWF had to perform as a competitive business enterprise within the NEG family of companies. Ongoing corporate investments and initiatives had to be justified by reasonable expectation of a satisfactory financial return over the life of the investment. Potential SWF investments also had to compete with potential rail and bus investments within NEG's capital portfolio. Beyond the lease commitments, investments at SWF had to be as good as or better than alternative NEG investments.

NEG took over operations roughly 10 months before the terrorist events of September 11 and managed SWF during a difficult period for regional airports. It competed successfully for AIP grants and worked to attract real estate development and airline service, including JetBlue and AirTran (which subsequently exited the market). In terms of the profits from airport operations, the FAA concluded that despite a steady decline in passengers after NEG took over operation, NEG's profit was similar to that achieved by NYSDOT under its last full year of operation, which was likely a result of operating efficiencies achieved by NEG.⁸⁶

Although the SWF privatization did not materially improve passenger air service, it did continue economic development activity related to the airport and was able to accelerate construction projects relative to public operation.

9.4.5 Lessons Learned

SWF's entry and exit from the APPP provided a first-of-its-kind experiment and as a result has provided some interesting and instructive lessons, including:

- As demonstrated by other case studies, strong political commitment was necessary to achieve privatization. The reason the initial privatization process succeeded was because Governor Pataki was a strong political champion.
- Navigating through the APPP process took the state considerable time and resources (as it did for the city of Chicago). It took 34 months from the time NYSDOT submitted its preliminary application to the FAA until the FAA issued its record of decision approving the transaction. The process included preparing the preliminary APPP application,

developing the RFP, evaluating the responses, selecting an operator, drafting and negotiating the complex lease terms, preparing the final APPP application, managing public participation, securing local approvals, and building political support. In considering the timeline, it is important to remember that there are both federal and local requirements. In the case of the SWF privatization, local approvals were required from labor groups, the state attorney general, and state controller, among others. It is important to remember, too, that this was the very first such transaction in the U.S., undoubtedly adding to the length of time required.

- Although the state and NEG thought it was reasonable to include the cost of capital in the airline rates over and above allowances for inflation without having to seek airline approval under the APPP, the FAA said that rates could not increase faster than the rate of inflation without airline approval.
- For-profit private companies must make strategic decisions in the interests of their shareholders, which may not always be in the best interests of the airport community. After operating the airport for 7 years, NEG was no longer interested in investing resources in airports. NEG exited the airport industry and concentrated on its core rail and bus businesses. There was no appetite to invest seed money into the airport because NEG was looking for an immediate financial return. As a result, total operating revenue remained flat at best during the NEG operation. NEG fulfilled its lease requirements, but the original enthusiasm and energy for the business waned, and the state was disappointed that additional investments did not materialize. There is no guarantee that the private airport operator will achieve financial success, retain interest in the business, or be successful in its execution. Therefore, the challenge in structuring a successful transaction is to align the interests of the private company with the appropriate incentives.
- NEG paid \$35 million in lease payments and made \$10 million in capital contributions at SWF. It did not materially improve SWF's financial performance during its tenure, in part due to the significant cutbacks in air service after September 11, and in part due to the realignment of the company's strategic priorities. It is likely that NEG did not realize the return on its investment as expected during its operation of the airport. In addition, NEG was facing a 5% of gross income lease payment beginning on the 10th anniversary that would further dilute its earnings. NEG sold the lease after 7 years of operation to the Port Authority for \$78.5 million, allowing it to recover its investments and realize a significant capital gain, which was not plowed back into airport improvements.
- One of the intentions of the APPP was to evaluate the potential for new private sector investment in airports through privatization. Indeed NEG invested \$10 million of its own funds into SWF capital development, but it also received a

⁸⁶U.S. Department of Transportation, Federal Aviation Administration, *Report to Congress on the Status of the Airport Privatization Pilot Program*, August 2004.

significant return on that investment and its \$35 million lease payment from the sale of the remaining leasehold interest.

- While there was significant economic development associated with SWF during the privatized period, the community's principal goal of improved air service was not achieved. There is only so much a regional airport operator can do to entice sustainable air service. Some believe that the Port Authority has considerably more leverage to entice airline service at SWF due to its control over JFK, LaGuardia, and Newark airports, and its ability under federal law to potentially cross-subsidize the facility. However, this remains to be seen.
- One of the reasons NEG's bid was considered the most attractive was due to its plans to operate express bus service between New York City and SWF similar to the services it operates linking the London airports. It was expected that the SWF bus service would stimulate low fare service from the airport; however, the bus service plan was never implemented.
- SWF was improved on the margin by NEG due to the new leases and commercial development; however, the airport experienced significant challenges before, during, and after privatization—enplaned passenger traffic peaked in 1997 at 435,000, troughed in 2002 after September 11 at 170,000, peaked again in 2008 at 446,000, and then declined sharply again in 2009 to 187,000. Neither privatization nor public operation is a panacea for an airport that experiences challenges attracting demand.
- The state's 5-year prohibition from selling the lease worked well. It was designed to prohibit the bidder from flipping the airport for a profit shortly after the transaction.
- The Port Authority has the resources and capacity to make large investments in SWF to implement a long-term vision without expecting short-term financial returns. It does not have to justify its SWF investments and initiatives on a current business basis. As such, the Port Authority has the flexibility to implement a longer-term vision of SWF as a significant reliever airport for the greater New York area by making the infrastructure improvements and offering the marketing and financial incentives to achieve this vision.
- A more local governance structure, such as ownership by the county, towns, or airport authority, may have been more involved in airport operations and management than a state department.

9.5 Chicago Midway International Airport

9.5.1 Transaction Background

The proposed long-term lease of Chicago Midway International Airport (Midway) to a private firm was by far the largest proposed airport privatization in the United States

and was posited to be a landmark transaction as the first privatization of a major commercial airport in the United States. In addition, the city of Chicago was the only applicant in the history of the APPP that was able to secure airline approvals for its application, which is needed for the city to use the lease revenues for non-airport purposes.

In 2005, the city secured state legislation to extend the airport's exemption from property taxes to a private owner, which paved the way for the transaction and committed the city to use 90% of the net proceeds to finance infrastructure work or up to 45% of the net proceeds to shore up the city's \$9 billion (at the time) unfunded pension liability. These commitments were needed to secure the support of the powerful Chicago Federation of Labor. In October 2006, the city secured the only large-hub slot under the APPP. In February 2008, the city secured airline approvals for its APPP and immediately issued a request for qualifications (RFQ) for bidders. Bids were received on September 30, 2008 two weeks after Lehman Brothers Holdings collapsed (September 16), which triggered the global credit crisis. When the private consortium was unable to come up with the full up-front rent payment under the lease (purchase price) of \$2.521 billion in April 2009, the deal fell through and the consortium had to pay a \$126-million breakup fee to the city, of which \$75 million had been posted as collateral after city council approved the lease. Since that time, the FAA has granted the city's requests for more time to complete the deal through a series of extensions to maintain its spot in the APPP.

9.5.2 Objectives

The city began exploring the privatization of Midway Airport soon after it announced its \$1.83 billion 99-year lease of the Chicago Skyway Toll Bridge System in October 2004, a deal considered the first long-term, major PPP involving an existing asset in the U.S. and which closed in January, 2005. Subsequently, the city entered into a long-term lease on its downtown parking garages in a \$563 million deal which closed in December, 2006. In February, 2009, the City also leased its parking meter system for \$1.15 billion.

The primary motivation for the Midway transaction was to get "value out of the airport" by leasing the airport on a long-term basis to a private operator and using the proceeds for the city's unfunded pension liability, infrastructure improvements, and other general fund purposes.

Also as stated in the February 2008 RFQ, the city's primary objectives were:

Protect the Public Interest

- Maintain the highest levels of public and passenger safety and security
- Protect the public interest within the context of seeking value for the City and the airlines

- Establish a new framework of rates and charges that provides lower and more predictable rates for airlines operating at the Airport
- Improve the competitive position, service quality, growth prospects and efficiency of Midway Airport for the benefit of Chicago residents, airlines and other users

Risk Adjusted Value Optimization

- Maximize sale proceeds
- Ensure that future Airport development is safe, functional, efficient and delivered when necessary
- Minimize the City's exposure to residual risks and liabilities from the process

Fair and Transparent Process

- Protect the reasonable interests of current and future airline users
- Ensure fair and equitable treatment of existing Airport employees
- Ensure a smooth transition from public to private management in a timely manner

9.5.3 Stakeholder Interests

Airlines. Under the APPPP, in order for the city to apply lease revenues from the transaction for general city purposes, the lease must receive the approval of both 65% of the airlines operating at Midway and airlines representing 65% of the annual landed weight. This provision gave all Midway carriers, especially Southwest with 84.4% of the passenger market share in 2008, considerable bargaining power.

The city and Southwest Airlines negotiated an agreement that would have generated millions of dollars in net present value savings for the airlines serving Midway. The use agreement would have extended through 2033, with five-year renewals afterward. Specifically, the deal won airline approval because it would:

- Cap airline rates and charges at a level below total 2008 charges and freeze rates for the first six years. It should be noted that the residual airline rates that were in effect at that time did not include amortization of principal on the bonds issued to finance the terminal redevelopment. Therefore, the airlines would have been able to lock in very favorable rates before they spiked. Airline CPE ranged from \$3.38–\$7.55 from 2004–2009, with the high occurring in 2009. However, the budgeted CPE in 2010 increased sharply to \$11.39, which had been planned due to the deferral of principal amortization and expiration of the application of Letter of Intent grants to debt service. The airport also projected CPE to increase sharply again in 2011, to \$14.63, but remain near that level through 2018.
- Limit future rate increases to inflation for the remainder of the 25-year use agreement.

- Grant the airlines approval rights for capital improvement costs to be included in airline rates (i.e., the cost of ongoing capital projects would be added to annual airline charges only after airline approval).
- Provide strong operating and service performance standards, including a capital asset maintenance plan, capital improvement program report, and five-year capital improvement program that must be developed on an annual basis by the private operator and submitted to the city and the airlines for approval by the city and a majority-in-interest by the airlines. These reports would define and describe the planned rehabilitation, replacement, and reconstruction capital requirements.
- Transfer the risk of operations and maintenance costs from the airlines to the private operator.
- Give the airlines sign off rights on the bidders' qualifications.

Not only would the transaction have provided the airlines considerable net present value savings (especially in the near term), but it would have also provided stable, predictable rates and charges, which is one of the airlines' biggest concerns.

The airlines also wanted to maintain the Midway Airlines Terminal Consortium (MATCO), which was formed to operate and manage the terminal airline equipment and systems, including pre-conditioned air systems, aircraft ground power-400Hz system, passenger loading bridges, potable water cabinets, baggage handling systems, MUFIDS, battery charging, security checkpoint equipment, and aircraft fueling systems.

Labor. The city won the support of unions by ensuring that current employees would be offered jobs with similar pay and benefits in any lease. The city's commitment to use the net proceeds to fund pensions and infrastructure also helped. The Illinois legislation that allowed the city to lease Midway requires the private operator to pay employees "an amount not less than the economic equivalent of the standard of wages and benefits enjoyed by the lessor's employees who previously performed that work." In addition, the private operator and the city must offer employment "under substantially similar terms and conditions" to municipal employees working at the airport. There is also a labor neutrality and card check agreement covering unrepresented workers.⁸⁷ It is important to note that the city was willing to

⁸⁷In 2006, the Illinois General Assembly enacted Public Act 94-750, which provides for certain requirements that must be satisfied in connection with the privatization of Midway. These requirements relate to labor relations and employee protections; continued compliance with applicable ordinances governing contracting with minority-owned and women-owned businesses, prohibiting discrimination and requiring appropriate affirmative action; and application of the net proceeds of the privatization by the city.

offer the employees positions elsewhere in city government, which may not be an option in other situations.

Community. In order to maintain Midway's property tax-exempt status under private operation, the city had to negotiate with the state legislature. The tax-exempt status was considered necessary for the transaction to be economically viable and as such was a front end activity. In addition to the labor protections noted above, the state legislation also:

- Required that at least 90% of the proceeds from the lease be used for infrastructure construction and maintenance and for contributions to the municipal employee pension funds.
- Prohibited the expansion of any of the Midway runways.⁸⁸

Potential Bidders. The city also met several times with potential bidders to learn about their interests and concerns to design a solicitation that met their needs. Through these discussions, it was determined that the city would need to maintain the police and fire functions for Midway to mitigate the risks perceived by the potential bidders.

9.5.4 Outcome

The consortium of investors led by Citigroup Inc., a unit of Vancouver International Airport, and John Hancock Life Insurance Co. submitted the highest bid (\$2.521 billion) to lease Midway in September 2008. The winning consortium was called Midway Investment and Development Company LLC (MIDCo). In the context of the global financial crisis, MIDCo was unable to raise the entire purchase price for the lease by the city's deadline in April 2009 and as a result forfeited the \$126 million in earnest money it posted to the city.

People involved with the Midway transaction trumpeted its merits and win-win proposition to all stakeholders. They believe the only reason the transaction failed to reach financial close was due to the collapse of the debt and equity markets. Others have expressed concerns about the precedents set in terms of the amount of the bid proposal of the winning bidder and the favorable provisions in the airline agreement. They fear that other policy makers will expect to realize the same multiples (28 times revenues) and that the airlines will see the Midway lease as the benchmark for future privatization transactions even though the conditions are different for every airport. A number of people have expressed skepticism on the ability for MIDCo to be able to make a profit given the amount of the bid, the rate caps under the airline

use agreement, the relatively well-developed terminal retail program, the operating efficiencies introduced by the city in 2009, the limited potential for land development, and limitations on passenger throughput growth due to the prohibition on runway expansion and lack of land for terminal expansion. A preliminary assessment would suggest that the highly leveraged environment existing before the collapse of the global markets had fueled unrealistic prices and expectations for some underlying assets whose values have since waned.

9.5.5 Lessons Learned

This case study has provided some important lessons learned by the stakeholders, including:

- A successful APPP application process requires strong political support and leadership. The city of Chicago had that in Mayor Richard M. Daley. There was also a very supportive administration in Washington, D.C., and there was political momentum from the large bid on the Skyway deal.
- Going through the APPP is lengthy, complex, and time-consuming and can be an expensive process. The rewards to the airport owner can be potentially large, but success is not guaranteed. Any public sponsor should consider the level of effort, expense, and risk before applying.
- Privatizing an airport under the APPP in the United States is far more complicated than privatizing toll roads or parking facilities given the highly regulated environment, complexities involved in operating an airport, the pace of technological changes affecting airports, and the multiple approvals needed, including the FAA, TSA, CFIUS (if the sale or lease of the airport is to a private operator that is a foreign entity⁸⁹), labor, and airlines (if revenue is to be used for non-airport purposes) in addition to the local approval requirements (e.g., city council).
- It is important to include in the airport's privatization team technical advisors given the extensive and complex legal, financial, operational, and regulatory issues involved in the airport industry. The city had very capable external advisors and engaged airport staff productively in the operational issues.
- The goals for the privatization should be clearly articulated. The city's goals were always transparent and well-articulated, which helped eliminate resistance to the transaction.
- It is important to estimate the expected net proceeds early in the process to know if the transaction can yield positive benefits. The city retained financial advisors to run various scenarios to assist it in making the decision to go forward with the transaction.

⁸⁸The airport is located in a densely developed section of the city, including residential development. Also, in December 2005, a Southwest Airlines aircraft slid off a runway at Midway while landing in a snowstorm and crashed into automobile traffic, killing a six-year-old boy.

⁸⁹Due to the lack of airport privatization in the United States most of the potential bidders tend to be global infrastructure specialists.

- The public sponsor needs to get key stakeholders on board early, including labor and airlines, to maximize the potential for success.
- Transparency and public outreach are important. The FAA sets up public dockets that contain valuable information, but local residents often are not aware of this resource. In the case of Midway, where homes are as close as 30 feet from the airport boundary, the local community was very supportive because the local community understood the economic value of the airport.⁹⁰
- Maintaining property tax exemptions under private operation of a long-term lease was important for the economics of the deal or would otherwise need to be reflected in the valuation of the airport.
- Oversight and performance standards were important to include in the operator's concession lease and they were coordinated with the airlines. The operator would be held accountable.
- The length of a lease needs to be considered carefully. Initially it was expected that the Midway lease would be for "50 years or more" as U.S. accounting rules dictate that, for expenses to be deducted by the lessee, the length of the lease needs to equate to the remaining economic life of the asset, and this deal was approved for a term of 99 years to maximize the up-front lease payment to the City. The level of equity investment is tied to the term, which falls off dramatically with shorter terms. On the other hand, with long-term leases it is important to ensure the operator does not neglect the asset in the final years of the lease. This is why the Midway operator was required to prepare a capital asset maintenance plan, capital improvement program report, and five-year capital improvement program each year and submit them to the city and the airlines for approval.
- The city was not in a position to offer tax-exempt financing to the bidders, which is one way to substantially lower the amount of financing needed by private investors (as shown in the JFKIAT case study). This is because in order to qualify for the federal tax exemption, the asset must be governmentally owned, which means the term of the lease cannot be greater than 80% of the useful life of the asset. As noted above, privatization models push for longer terms. In addition, under IRS regulations, tax-exempt bonds cannot be used to acquire existing assets unless at least 15% of the proceeds are used for rehabilitation expenditures for buildings associated with the property.⁹¹
- Privatization through the APPP is not a solution for every airport. It was attempted by the City of Chicago because it

allowed for the net proceeds paid up-front under the lease to be used off-airport. However, and as best expressed by Amy Weaver of Southwest Airlines who participated in the Midway transaction,

The APPP outlines a practical, effective process for privatization. Airports, airlines and any other players need to remember that each privatization deal is unique . . . The pilot program is flexible enough to accommodate . . . unique qualities.⁹²

One of the reasons the airline rates could be frozen for the first six years at Midway was because the city had just completed a major terminal redevelopment program and the APPP rules provide airlines with negotiating leverage.

9.6 Morristown Municipal Airport

9.6.1 Transaction Background

Morristown Municipal Airport (MMU) is a general aviation airport that is owned by the Town of Morristown and has been managed and developed by DM AIRPORTS, LTD. (DM), an affiliate of the DeMatteis Organizations, since 1982 under a comprehensive long-term lease.

The airport is located in Hanover Township in Northern New Jersey in close proximity to New York City. MMU provides services for businesses located in Morris County where approximately 50 of the nation's Fortune 500 companies are either headquartered or have major facilities. As a result, MMU has a significant number of high-end users at the airport and competes primarily with Teterboro Airport and Westchester County Airport for business. Therefore, DM is highly incentivized to provide strong customer service at reasonable prices to its clientele and offers special aviation enhancements.

The Agreement of Lease between the town and DM was entered into in December 1981 with a term of 99 years commencing on May 1, 1982 and extending through April 30, 2081. Under the long-term lease, the town granted the full management and development control of the airport to DM in return for DM (1) paying annual rent to the town, (2) paying all outstanding airport debt service when due, and (3) undertaking all capital improvements. As such, DM has wide discretion and is responsible for making decisions regarding the development of MMU (i.e., capital improvement projects) and managing its operation, which includes among other things, negotiating leases, handling staff and services, and setting rates, fees, and charges. The only residual airport controls retained by the town are the signing of

⁹⁰Interview with Erin O'Donnell, Managing Deputy Commissioner of Chicago Midway International, September 20, 2010.

⁹¹26 USC 147—Sec. 147. Other requirements applicable to certain private activity bonds.

⁹²Amy Weaver, *Southwest Airlines says Midway indicates privatization can fly in the United States*, HNTB Aviation Insight, Spring 2010.

airport grants and approval of site plans, but the town is obligated to mutually cooperate with DM in securing such approvals. DM retains all revenues derived from its operation of the airport.

The 99-year term of the lease was deemed necessary for DM to recover its payment of the town's outstanding airport debt and its investment in upgrading existing facilities and constructing new ones. DM also has responsibility for all airport repairs, maintenance, and operations (except police services which are provided by the town) and compliance with all governmental regulations. In addition, DM is responsible for obtaining at its own cost all site plan approvals and zoning approvals and permits for airport development with the full cooperation of the town.

The lease gives DM great flexibility in carrying out its charge of operating the airport as a public airport subject to all applicable laws, regulations and agreements, including compliance with FAA grant assurances.

The lease also gives DM the right to mortgage all or any portion of its interest in the lease (without the town's consent) to obtain the most favorable financing needed for airport development. In addition, the lease is assignable "without restriction of any kind."

Airport users pay fees and charges directly to DM and DM assumes the risk involved in covering both operating and capital costs out of those revenues.

It is important to note that the Morristown privatization occurred before the FAA promulgated its revenue use policy and before the creation of the APPP. Therefore, it is not reasonable to expect to be able to repeat this experience because the federal rules are much stricter now. Nevertheless, the lease served as a model for the Stewart lease under the APPP.

9.6.2 Objectives

In 1981, after operating the airport unprofitably for many years, the town had accumulated over \$2 million in debt for airport capital improvements even though its infrastructure was in a state of disarray. The airport's corporate users were threatening to leave because the airport and the FAA was threatening to close the facility if upgrades were not made. The town recognized it did not have the talent on staff to run the airport properly and looked to a private company to operate and manage it on their behalf, pay off the debt, and make the necessary capital improvements to appease the FAA and tenants. After careful consideration, the town concluded that the airport could be better operated and developed by a private entity. The town studied various proposals and considered several potential developers to run the airport.

Therefore, the primary objectives in the MMU privatization were to:

- Pay off \$2 million in airport long-term debt.
- Make substantial upgrades to the airport's infrastructure with the aid of federal and state grants, which was in a state of disarray.
- Turn the airport into an economic catalyst for the town and the region.

9.6.3 Stakeholder Interests

Labor. When DM took over operation of the airport in 1981, there were approximately 35 employees on the airport payroll. The maintenance and operations staff was offered positions by DM, but most of the senior employees moved to positions within the town government to maintain their municipal status and pension benefits.

Local Government. The management contract has served the Town of Morristown well. The town's only responsibilities for the airport are police protection, emergency medical response, grant administration and audits, and site plan approvals. DM converted a facility in a state of disrepair into an economic engine by investing in the airport's infrastructure and providing a high level of service to the users. This arrangement has also worked well for Hanover Township, where the airport is located, because DM must pay land taxes to the township unlike a municipal operator.

Community. DM is responsible for all interactions with the community with regard to the airport. Morris County views MMU as a critical community asset for retaining and attracting business. Therefore, the Morris County Freeholders⁹³ established an Airport Advisory Committee in 2003 to interact with DM and MMU tenants, which meets on a bi-monthly basis (but only if there is business to discuss). Although this committee has no jurisdiction over the airport or DM, it has been instrumental in bringing together residents, pilots, government officials, and airport personnel to address noise issues at MMU, among other issues. It also helps DM to build goodwill with the community.

Tenants. DM also actively engages airport tenants through various channels. The Morristown Aviation Association (MAA) is an association of mostly airport tenants and some transients that was established to provide a forum for tenant interaction. DM jointly sponsors a periodic publication on airport updates with the MAA and the Morristown Airport Pilots Association.

⁹³In New Jersey, county legislators are called "Freeholders."

MMU also has U.S. Customs and Border Protection services for international flights. Because MMU does not have sufficient volume to justify a federal agent being assigned to the airport, the tenants decided to set up a user fee association to pay for one. DM administers the user fee service on behalf of the Morristown Airport Customs Association. Tenants and transients pay to clear with higher rates for transients and non-members. Entities who clear frequently often become a member of the Association.

The tenants also decided they wanted ARFF even though MMU is not a Part 139 airport⁹⁴ and ARFF is not required because of the high-end aircraft they use. Like customs, ARFF is not a cost responsibility of DM, but instead is funded by a surcharge on fuel flowage per gallon. However, DM puts out to bid and administers the ARFF contract. The FAA funded 95% of the cost of the ARFF station through an AIP grant as well as 95% of the cost of the first ARFF vehicle (up to Index A). The tenants paid for the cost of a second vehicle through the fuel flowage surcharge because the FAA said it would not support an Index B service.

9.6.4 Outcome

DM initially entered into the long-term lease for the airport based on the potential for commercial development on and around the airport. DM had plans to develop property for commercial, hotel, office, industrial and/or manufacturing purposes. However, subsequently, wetland limitations and the taking of 11 acres of airport property for expansion of Route 24 eliminated the expected potential for commercial land development.⁹⁵ Although DM had the option to terminate the long-term lease due to this land taking, it concluded that it could continue to successfully operate the airport without this developable property.

DM paid off the airport long-term debt, made substantial upgrades to the airport with the aid of federal and state grants, and turned the airport into an economic catalyst for the town and the region.

Over the first 28 years of operations (1982—2010), DM has:

- Implemented capital improvements and provided the necessary facilities and services to meet aviation market demand
- Improved customer service at the airport by providing superior facilities and services at competitive rates

- Helped organize, manage, and participate in tenant customer service programs (e.g., the U.S. Customs and Border Protection and ARFF services)
- Marketed the airport's desirable location and high-end facilities to retain and attract customers for the benefit of the local economy
- Transformed MMU into a financially self-sustaining, competitive facility for the region
- Elevated MMU's position to be one of the two premier general aviation airports in northern New Jersey, with Teterboro as the other
- Fostered strong community relations by promoting the airport and engaging its tenants, the Morris County Freeholders, the local chamber of commerce, and other stakeholders
- Established a corporate identity for the airport through participation in aviation trade association events and conferences and marketing efforts, including its user friendly website
- Turned MMU into an economic engine for the town and the region

By contrast, as noted earlier, under the town's operation, the FAA was threatening to shut the airport down due to its state of disrepair.

9.6.5 Lessons Learned

The case study for MMU provides helpful background for any airport considering full privatization outside the APPP, in particular for a general aviation airport. However, it should be noted that the 99-year lease was entered into before the FAA formalized much of its policy regarding airport revenue use and full privatization outside the APPP.

- The MMU long-term lease did not require any special federal or state legislation (such as the APPP).
- However, like the JFKIAT Terminal 4 project, there appear to be special circumstances that make the MMU experiment successful, in particular the demand for high-end general aviation users. Although DM has been approached by several other airports, DM has declined these offers because the market was not there for a viable business opportunity, suggesting that the business climate in Morristown is somewhat unique.
- The DeMatteis Organizations learned that once a professional staff was in place and successfully operating the airport it was no longer necessary to contract out the airport management and therefore was able to save money by no longer having to pay the annual management fee.
- According to DM, privatization allows for a more efficient and effective way to operate the airport. Decisions can be

⁹⁴Although not required, some large GA airports do have 139 certificates, which greatly affects staffing and operating expenses.

⁹⁵As a result of the land taking, DM's annual base rent was abated slightly. In addition, there was a negotiated settlement on the value of the land that was taken, which was shared approximately 80% by the town and 20% by DM.

made in a timely manner. Moreover, bureaucracy, politics, and competing funding priorities do not factor into the business decisions. Unlike the Indianapolis management contract, DM is not required to adhere to local municipal procurement regulations, which allows for greater operating efficiencies and speedier delivery of services.

- Due to the nature of the agreement (in particular its term and development responsibilities), DM pays land and improvement taxes to Hanover Township. Typically, public airport owners/operators do not pay property taxes. Therefore, this type of privatization allows a local municipality (other than the owner) to derive incremental tax revenues.
- Community outreach is important for airports. Although not mandated in the lease, DM actively and successfully engages the community and its tenants. This is an area for possible improvement in a lease in the event the lessee was not as committed to the airport and its rapport with the community.
- The lease does not include specific oversight and performance standards. This would typically be included in a long-term lease or management contract of this type. However, given the competitive nature of high-end general aviation use in the New York metropolitan area, DM is incentivized to provide a high level product.
- The term of a long-term agreement, where the public sponsor grants full management and development control to the operator in return for the operator undertaking full capital improvements, needs to be considered carefully. Where significant airport development is anticipated, the term of the lease should be related to the length of time needed by the operator to recover its investment. In this

case it was felt that a 99-year lease was needed due to DM's obligation to defease the \$2 million in outstanding airport debt and make the necessary improvements to the airport. Whether a 99-year lease is necessary or appropriate for a similar deal should be carefully considered. DM pays a relatively modest annual rent for the privilege of retaining all airport fees and charges in return for taking on the risk to cover operating expenses and capital expenditures (net of grants) out of those revenues.

- The form of compensation—upfront lump sum versus annual rent—is also something to be carefully considered and evaluated. The town decided to take the annual rent to cover its cost to provide continuing police, emergency medical, and grant administration services for the airport. By comparison, the city of Chicago opted for an upfront payment and set aside funds for its ongoing obligation to provide police and fire protection for Midway Airport.
- The lease does not have definable requirements for maintaining the airport other than “maintain the Airport in reasonably good operating condition subject to deterioration caused by wear and tear” and there is no obligation to set aside funds towards the end of its term to make sure the asset is in good condition when the lease expires. For example, under the proposed 99-year Midway lease the operator was required to prepare a capital asset maintenance plan, capital improvement program report, and five-year capital improvement program each year and submit them to the city and the airlines for approval. While DM has done a good job maintaining the airport after 28 years of stewardship, there could be stronger requirements in the lease about maintaining the airport in the later years of the term.

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APPENDIX A

Abbreviations and Acronyms

AAIA	Airport and Airway Improvement Act of 1982
AATF	Airport and Airway Trust Fund
ACRP	Airport Cooperative Research Program
AHTA	Anti-Head Tax Act
AIP	Airport Improvement Program
AMT	Alternative Minimum Tax
APPP	Airport Privatization Pilot Program
ARFF	Aircraft Rescue and Firefighting
ARRA	American Recovery and Reinvestment Act
BABs	Build America Bonds
BOT	Build-Operate-Transfer
BTO	Build-Transfer-Operate
CapEx	Capital Expenditures
CFIUS	Committee on Foreign Investment in the United States
CFR	Code of Federal Regulations
CM at risk	Construction Manager at Risk
CPI	Consumer Price Index
DBOM	Design-Build-Operate-Maintain
DBOM/F	Design-Build-Operate-Maintain and Finance
DBOT	Design-Build-Operate-Transfer
DOJ	U.S. Department of Justice
EBITDA	Earnings Before Interest, Tax, Depreciation, and Amortization
FAA	Federal Aviation Administration
FBO	Fixed-Base Operator
GA	General Aviation
GAO	General Accounting Office, now the General Accountability Office
HVAC	Heating, Ventilation, and Air Conditioning
NYSDOT	New York State Department of Transportation
OpEx	Operating Expenditures
PFCs	Passenger Facility Charges
RAB	Regulatory Asset Base
RFP	Request for Proposal
SWFAA	SWF Airport Acquisition, Inc.
TSA	Transportation Security Administration
U.S.DOT	U.S. Department of Transportation

APPENDIX B

Glossary of Privatization Terms

63-20 financing: The issuance of tax-exempt bonds by nonprofit entities to finance tangible public assets pursuant to IRS revenue ruling 63-20 of 1963, typically under long-term leases. For example, the 63-20 financing structure has been used to build hospitals, toll roads/bridges, university buildings, city halls, water and sewage facilities, hotels, and convention centers.

Aeronautical: Aeronautical use includes services provided by air carriers related directly and substantially to the movement of passengers, baggage, mail, and cargo on the airport and any activity which involves, makes possible, or is required for the operation of aircraft, or which contributes to or is required for the safety of such operations.

Airport and Airway Trust Fund (AATF): A fund established by the Airport and Airway Revenue Act of 1970 (the Act) that provides the revenues used to fund AIP projects and the administration of AIP. The Act, as amended, authorizes the use of funds from the AATF to make grants under AIP on a fiscal year basis. The U.S. Congress authorizes obligation authority to distribute AATF revenues to U.S. airports. Revenues for the AATF are derived from passenger ticket taxes and other excise taxes. The AATF provides multiyear capital for aviation system infrastructure such as facilities and equipment (F&E) and AIP and has helped fuel predictable growth in aviation infrastructure. Because the AATF is funded with user money, it keeps reliance on taxpayers to a minimum.

Airport Compliance Manual: Order 5190.6B that was released in September 2006, which sets forth policies and procedures for the FAA Airport Compliance Program. It provides basic guidance for FAA personnel in interpreting and administering the various continuing commitments airport owners make to the United States as a condition for the grant of federal funds or the conveyance of federal property for airport purposes. Order 5190.6B discusses the obligations set forth in the standard airport sponsor assurances, addresses the application

of the assurances in the operation of public-use airports, and facilitates interpretation of the assurances by FAA personnel.

Airport Improvement Program (AIP): The federal grants-in-aid program that provides grants to public agencies—and, in some cases, to private owners and entities—for the planning and development of public use airports that are included in the National Plan of Integrated Airport Systems (NPIAS). Eligible projects include those improvements related to enhancing airport safety, capacity, security, and environmental concerns. For large and medium primary hub airports, the grant covers 75% of eligible costs (or 80% for noise program implementation). For small primary, reliever, and general aviation airports, the grant covers 95% of eligible costs.

AIP Entitlement Grants: AIP funds that must be apportioned by formula each year to specific airport sponsors, types of airports, or states under statutory provisions.

AIP Discretionary Grants: AIP funds remaining after entitlement funds are determined. FAA approves discretionary funds for use on specific projects after consideration of project priority and other selection criteria. The FAA allocates discretionary funds to high priority project needs in a manner that best advances statutory goals and objectives to enhance the national airport system. Investment decisions are made using structured selection criteria that include a variety of factors that help identify critical annual development needs within associated AIP funding levels.

Airport Master Plan: A long-range plan for development of an airport, including descriptions of the data and alternative analyses on which the plan is based.

Airport Privatization: In its generic form, airport privatization can mean any one of the various strategies described above, meaning a broad range of arrangements under which activities once performed by government are to varying degrees turned over to private entities.

Airport Privatization Pilot Program or APPP: A program under the category of long-term lease or sale called the Airport Privatization Pilot Program (49 U.S.C. Section 47134), which was enacted by the U.S. Congress in 1996 and amended in 2003 and 2012 to allow up to five airports to be leased or sold under specific conditions as approved by the Secretary of Transportation. The APPP was created to address barriers to privatization in the United States by permitting the U.S.DOT to grant exemptions from certain federal obligations that historically discouraged full privatization by requiring the airport owner and private operators to satisfy rigorous conditions in exchange for the exemptions and approvals.

Airport Sponsor: A public agency or tax-supported organization, such as an airport authority, city, county, state or federal government, that is authorized to own and operate an airport, to obtain property interests, to obtain funds, and to be legally, financially, and otherwise able to meet all applicable requirements of the current laws and regulations.

Amortization: The repayment of principal, through scheduled mortgage payments. The scheduled payment, less the interest, equals amortization.

Anti-Head Tax Act or AHTA: The act passed in 1973 (49 USC Section 40116) that allows a publicly owned airport authority to collect only reasonable landing fees and charges from airlines using airport facilities.

Build America Bonds or BABs: State or local governmental bonds that could be issued as tax-exempt bonds, but which the issuer elects to treat as BABs. Interest on BABs is taxable to the bondholder, but a federal income tax credit (of 35% of the interest paid on the bond in each tax year) is provided in lieu of the tax exemption. BABs were included in the American Recovery and Reinvestment Act of 2009 and were available for bonds issued between February 17, 2009 and December 31, 2010.

Build-Operate-Transfer (BOT): An approach where the private partner builds a facility to the specifications set by the airport owner, operates the facility for a specified time period, and then transfers the facility to the agency at the end of the contract. In most cases, the private partner will also provide some, or all, of the financing for the facility. Therefore, the term of the contract must be sufficient to enable the private partner to realize a reasonable return on its investment through user fees.

Build-Transfer-Operate (BTO): An approach that is similar to the BOT model except that the transfer to the airport owner takes place at the time construction is completed, rather than at the end of the lease period.

Building Blocks: Within a CPI-X approach to regulation, a methodology where costs are defined as operating costs, and return of and on capital.

CapEx: Capital expenditures.

Claw Back: A feature of regulation where excess profits made in one regulatory period are recovered by the regulator in the subsequent period.

Commercialization: Refers to the application of business-like approaches to the management and operation of airports by shifting aviation management and operations from government department to a business-focused entity to allow market forces, incentives, and mechanisms drive the delivery of services. It is a shift in management not ownership of the airport.

Committee on Foreign Investment in the United States (CFIUS): The inter-agency committee of the U.S. government that reviews the national security implications of foreign investments in U.S. companies or operations. Chaired by the Secretary of the Treasury, CFIUS includes representatives from 16 U.S. departments and agencies, including the Commerce, Defense, Homeland Security, and State departments.

Concession: Contract to transfer rights to manage and/or operate a property for a certain period, usually without property rights.

Consumer Price Index (CPI): Measures inflation by calculating the change in price of a “fixed market basket of goods and services,” purchased by a specified population during a “base” period of time. CPI bears little direct relationship to actual costs of building operation or the value of real estate, but is commonly used to increase the base rental periodically, as a means of protecting the landlord’s rental stream against inflation, in lieu of the landlord undertaking the record keeping necessary to determine the true change in operating expenses.

Construction Manager at Risk (CM at risk): A project delivery method where the construction manager commits to deliver the project within a Guaranteed Maximum Price (GMP). The construction manager acts as consultant to the airport owner in the development and design phases and as a general contractor during the construction phase. Due to the financial commitment, the CM at risk has an incentive to manage and control construction costs to not exceed the GMP.

Corporatization: The process by which an airport previously subsumed within a government agency is transformed into a government-controlled corporation in order to introduce corporate management culture and efficiency.

Cost Per Enplanement (CPE): A standard metric in the United States to compare total airline payments (including landing fees and terminal rentals) expressed on a per enplaned passenger basis.

Contracting Services or Outsourcing: Airport owners routinely contract out to the private sector certain airport services traditionally provided by government or internal employees in order to (1) achieve operating efficiencies through outsourcing the operation of functions that readily are available through the private sector (e.g., janitorial, escalator/elevator repair, non-police security, parking operations), (2) enhance nonairline revenue (e.g., terminal concessions), or (3) provide project design and delivery (e.g., construction management and program management) for capital improvements.

Commercial Service Airports: Public airports receiving scheduled passenger service and having 2,500 or more enplaned passengers (also referred to as boardings) per year. There were 501 commercial service airports in calendar year 2010.

CPI-X: A regulatory regime in which aeronautical prices increase by inflation (the consumer price index) less a specified percentage (X).

Customer Facility Charge (CFC): A rental car Customer Facility Charge (CFC) is a per transaction day, or a per transaction, charge imposed on the rental car customer by the airport, collected by the rental car companies, and remitted by the rental car companies to the airport. Imposition of a CFC has been key to the financing of consolidated rental car facilities.

Depreciation: Spreading out the cost of a capital asset over its estimated useful life or a decrease in the usefulness, and therefore value, of real property improvements or other assets caused by deterioration or obsolescence.

Design-Build-Operate-Maintain (DBOM): An approach where a single contractor is responsible for designing, constructing, operating, and maintaining a facility with financing secured by the airport owner. The owner maintains ownership and retains a significant level of oversight of the operations (as set forth in the contract). Under this model the risk for construction cost overruns and responsibility for annual operating expenses belongs to the private contractor.

Design-Build-Operate-Maintain and Finance (DBOM/F): An approach where the contractor also is responsible for financing the project. Most examples of airport project finance transactions in the U.S. involve special purpose facilities for single or multi-tenant use, typically an airline, one or more cargo tenants, or rental car companies. The revenues from such special purpose facilities are pledged to pay debt service on the obligations incurred for such special purpose facilities

and are not included in general airport revenues. Project finance is also used on behalf of private, third parties that are not tenants of the facilities

Design-Build-Operate-Transfer (DBOT): An approach where a private partner designs, constructs, and operates a facility and hands over ownership of the facility to the airport owner after operating it for a specified period of time. Under this model the responsibility for construction cost overruns and annual operating expenses belongs to the private contractor.

Developer Financing: A form of project financing, but is distinguished by the private sector also putting its own equity capital at risk as well as managing and operating the facility.

Dual till: An approach to regulation of aeronautical charges where the level of charges is set to recover aeronautical costs only.

Earnest Money: The monetary advance, by a buyer, of a portion of the purchase price in a real estate transaction, to indicate the intention and ability of the buyer to carry out the contract.

EBITDA multiple: The implied enterprise value divided by the airport's EBITDA (earnings before interest, tax, and depreciation). It should be noted that in some cases this multiple is specified publicly for a sale even though the assumptions on EBITDA and Enterprise Value are not themselves directly stated.

FAA Order 5190.6B: The order released in September 2010 also called the Airport Compliance Manual, which sets forth policies and procedures for the FAA Airport Compliance Program. It provides basic guidance for FAA personnel in interpreting and administering the various continuing commitments airport owners make to the United States as a condition for the grant of federal funds or the conveyance of federal property for airport purposes. Order 5190.6B discusses the obligations set forth in the standard airport sponsor assurances, addresses the application of the assurances in the operation of public-use airports, and facilitates interpretation of the assurances by FAA personnel.

Fair Market Value (FMV): The sale price at which a property would change hands between a willing buyer and willing seller, neither being under any compulsion to buy or sell, and both having reasonable knowledge of the relevant facts.

Federal Aviation Administration (FAA): The United States government agency responsible for ensuring the safe and efficient use of the nation's airports and airspace.

Federal Aviation Regulation (FAR): Regulations established by the Federal Aviation Administration (FAA) to govern the operation of aircraft, airways, and airmen.

Fee Simple Ownership: The full purchase of land and improvements.

Fixed Base Operator (FBO): Provides aviation services to the general public, including, but not limited to, the sale of fuel and oil; aircraft sales, rental, maintenance, and repair; parking and tie-down or storage of aircraft; flight training; air taxi/charter operations; and specialty services such as instrument and avionics maintenance, painting, overhaul, aerial application, aerial photography, aerial hoists, and pipeline patrol.

Freehold sale: An estate in land, a form of fee simple ownership.

Full Privatization: Full privatization refers to strategies where the full control and/or operation of an entire airport are vested with a private entity, including the long-term lease or sale, whether through the APPP or otherwise. As noted above, APPP is a program under which a long-term lease or sale can occur with full control vested in the private operator except for certain residual powers retained by the airport owner.

General Aviation (GA): That portion of civil aviation that encompasses all facets of aviation, except air carriers.

Golden share: A share held usually by government without economic value which conveys defined voting rights over airport strategic and other decisions.

Gold plating: A perceived problem of systems of economic regulation that incentivize over-investment.

Governmental Bonds or non-AMT Bonds: Bonds as defined in Section 141 of the Code where interest is fully free of taxation for bondholders.

Grant Assurances: Obligations attached to FAA administered airport financial assistance programs that require the recipients to maintain and operate their facilities safely and efficiently and in accordance with specified conditions.

Heavy handed regulation: An approach to regulation of aeronautical charges where price approval is set with maximum regulatory intervention.

Hybrid till: An approach to regulation of aeronautical charges where the level of charges is set to recover aeronautical costs less a subsidy from the profits of non-aeronautical activities.

Financial Investors: Providers of equity, including private equity funds, infrastructure funds, and pension funds.

Lease: An agreement whereby the owner of real property (landlord or lessor) gives the right of possession to another (tenant or lessee) for a specified period of time (term) and for a specified consideration (rent).

Lease Term: A fixed, noncancelable period of time for which a lease agreement is in force. This terminology refers to the lease period.

Lenders: Providers of debt financing to support an acquisition or as ongoing lenders, including lending bankers, infrastructure funds, and the bond market. Many airports are financed by a mix of equity, bank debt, and bond debt.

Light Handed Regulation: An approach to regulation of aeronautical charges where price approval is set with minimal regulatory intervention, potentially through reserve powers regulation. Reserve powers regulation is an approach to regulation of aeronautical charges where price approval is set by agreement between airports and airlines, with an independent regulator deployed if agreement is not reached.

Long-term Lease or Sale: A long-term lease, long-term concession, sale, or other transfer of an entire airport to private operation and/or ownership (e.g., BAA in the United Kingdom, Australian airports).

Management Contract: An approach where a private entity manages an airport or certain airport facilities for a specified period of time and typically provides little or no capital investment. The private manager's objective is to improve the financial and operational efficiency of the facility for which the manager is paid a fee and is reimbursed for its expenses, subject to a budget that is usually set by the manager and approved by the airport owner. Most airports operate their public parking facilities using a management contract, and some use a management contract for the operation of individual terminals or master terminal concessions, hangars, warehouses, or, in a few cases, for their entire airport.

Master Terminal Concession Developer: An approach where the developer acts as the airport owner's master lessee and is responsible for developing and managing terminal concession and retail activities, including merchandising, retail, food and beverage, and sometimes advertising services. Typically, the concession developer is not authorized to operate terminal concessions except in the case of a vacancy. The airport owner and developer share in the revenues under various formulas. Often the developer is required to contribute to a repair and replacement fund to cover certain repair and replacement costs.

National Plan of Integrated Airport Systems (NPIAS): A document that is prepared and published every 2 years by the FAA, which identifies public-use airports that are important to public transportation and contribute to the needs of civil aviation, national defense, and the Postal Service. Airports under the NPIAS are eligible for AIP grants.

Non-aeronautical: Uses and services that are not related to the movement of aircraft, passengers, baggage, mail, and cargo.

Nonprimary Airports: Airports with less than 10,000 annual passenger enplanements (boardings), of which there were 125 in calendar year 2010.

Outsourcing: The delegation of operations from the public sector to a private entity that specializes in the operation, maintenance, or management of that activity.

Parking Concession Agreements: An approach where the private operator is typically responsible for all aspects of day-to-day parking operations, including shuttle buses, facility maintenance, and fee collections. As payment for their services, the concessionaire receives a percentage of the gross revenues from parking operations, but is required to pay the greater of this percentage amount or a minimum annual guaranteed amount to the airport owner. Therefore, the concessionaire assumes most of the risk for potential downturns in parking revenues, but also receives greater rewards if there is an unexpected increase in airline passenger traffic.

Partial Privatization: Partial privatization refers to all other strategies where partial control and full ownership of an airport remains vested with the public owner.

Passenger Facility Charges (PFCs): A charge per eligible enplaned passenger in the United States authorized by 49 U.S.C. 40117 and regulated by 14 CFR Part 158 for FAA-approved capital improvements. PFCs are an exemption from the Anti-Head Tax Act.

Primary Airports: Airports with more than 10,000 annual passenger enplanements (boardings), of which there were 375 in calendar year 2010.

Private Airport Operators: Participants in full airport privatization that do not have an equity interest in the transaction but operate the facility.

Private Activity Bonds or AMT Bonds: Bonds that are generally excluded from taxable income of the holder, is an item of tax preference under the alternative minimum tax provisions of Section 142 of the Internal Revenue Code of 1986 (as amended) and the Treasury Regulations. AMT Bonds are issued for facilities that will have excessive use by private users (e.g., terminal buildings).

Private Airport Development: Development of an entire airport without the aid of federal or state grants by private investors to be operated as a for-profit business. It should be noted that private airport development without government support is not considered to be airport privatization for purposes of the guidebook since it does not involve the transfer

of control or ownership from the public sector to the private sector. For example, Branson Airport, which was developed without government funding, is not considered a form of airport privatization.

Project Financing: Project financing is the most common way to channel private sector investment into public sector infrastructure. Money is borrowed (often through a tax-exempt conduit issuer of municipal bonds) for the specific purpose of financing a project, and lenders are repaid only from the cash flow generated by the project or, in the event the project fails, in some cases, from the value of the project assets. Thus, if project revenues never materialize because the project is abandoned during construction or if project revenues are disrupted because of operational problems, there is no alternative source of cash flow to meet debt service requirements. Most examples of airport project finance transactions in the United States involve special purpose facilities for single or multi-tenant use, typically an airline (e.g., unit passenger terminal, terminal equipment, or fuel storage and distribution systems), one or more cargo tenants (cargo buildings), or rental car companies (consolidated rental car facilities).

Public-Private Partnerships or PPP or P3: P3s are strategies in which a public agency (federal, state, or municipal) grants a private entity the right to design, build, maintain, operate, or finance airport infrastructure (e.g., terminal building, cargo building, entire airport) for a contracted period while the public agency maintains rights or obligations during the contract period and maintains ownership of the asset. PPPs can confer a wide range of options in terms of capital allocation and respective levels of participation, ranging from a design/build contracting process to innovative approaches where a private operator takes charge of the construction, financing, and management of an asset over a long-term concession.

Public-use Airport: An airport open to the public that also meets the following criteria: (1) publicly owned, (2) privately owned but designated by FAA as a reliever, or (3) privately owned but having scheduled service and at least 2,500 annual enplanements.

OpEx: Operating expenses.

Regulatory Asset Base (RAB): The investment base upon which the operator is permitted to earn a reasonable return.

Surplus Property Act: An act of the U.S. Congress enacted October 3, 1944 to provide for the disposal of surplus government property to “a State, political subdivision of a State, or tax-supported organization” that puts limitations on the sale, lease, encumbrance, transfer, or disposal of any part of the airport owner’s title or other interests in such property.

Tax-Exempt Debt: Instruments such as governmental bonds, private activity bonds, and other debt obligations, which are exempt from certain federal taxes and sometimes state taxes. Interest on “Private Activity Bonds” or “AMT Bonds,” although generally excluded from taxable income of the holder, is an item of tax preference under the alternative minimum tax provisions of Section 142 of the Internal Revenue Code of 1986 (as amended) and the Treasury Regulations. Interest on “Governmental Bonds” or “non-AMT Bonds” as defined in Section 141 of the Code is fully free of taxation for bondholders. AMT Bonds are issued for facilities that will have excessive use by private users (e.g.,

terminal buildings). Non-AMT Bonds are used for facilities that do not have an excessive level of use by private users (e.g., roadways and sometimes parking and airfield facilities). The federal subsidies for AMT and non-AMT bonds result in lower interest costs on long-term debt, which provide a comparative advantage for public entities financing infrastructure improvements.

Vision 100–Century of Aviation Reauthorization Act (Vision 100): Public Law (P.L.) 108-176, which authorized obligation authority for AIP for federal fiscal years 2004 through 2008.

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APPENDICES C THROUGH H

Appendices C through H, as submitted by the research agency, are available on the accompanying CD. Their titles are as follows:

- C. International Airport Privatization, Lessons Learned, and Transaction Summaries
 - D. Non-Airport Privatization in the U.S. Transport Sector
 - E. Emerging Domestic Issues Influencing U.S. Airport Privatization
 - F. U.S. Regulatory and Policy Framework
 - G. Key Stakeholder Interests and Concerns
 - H. Detailed Case Studies
-

Abbreviations and acronyms used without definitions in TRB publications:

AAAE	American Association of Airport Executives
AASHO	American Association of State Highway Officials
AASHTO	American Association of State Highway and Transportation Officials
ACI-NA	Airports Council International-North America
ACRP	Airport Cooperative Research Program
ADA	Americans with Disabilities Act
APTA	American Public Transportation Association
ASCE	American Society of Civil Engineers
ASME	American Society of Mechanical Engineers
ASTM	American Society for Testing and Materials
ATA	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
HMCPRP	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
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