



Guidebook for Developing and Leasing Airport Property

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ACRP REPORT 47

**Guidebook for Developing
and Leasing Airport Property**

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AIRPORT COOPERATIVE RESEARCH PROGRAM

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FOREWORD

By Joseph D. Navarrete

Staff Officer

Transportation Research Board

ACRP Report 47: Guidebook for Developing and Leasing Airport Property discusses the key issues associated with developing and leasing available airport land and summarizes best practices from the perspective of the airport sponsor. The guidebook presents a diverse set of case studies that show several approaches airports have taken to develop and lease property for both aeronautical uses (e.g., aircraft maintenance facilities, fixed-base operator facilities, hangars, training centers, and cargo facilities) and nonaeronautical uses (e.g., light industrial and commercial facilities). A glossary of terms is also included. This guidebook will therefore be of interest to anyone desiring a better understanding of the process for developing and leasing airport property.

Many airport sponsors, and their associated stakeholders within the community, see development of available airport property as an economic opportunity; however, the issues surrounding development on airport land are often complex and constantly evolving. The strategies, approaches, and methodologies employed for the development of airport land often vary by airport sponsor. In addition, airport property development needs to be in compliance with federal obligations and grant assurances. Most importantly, it cannot compromise an airport's safety, operational flexibility, or reliability. Airport development is also challenging due to diverse and sometimes conflicting stakeholder goals.

Under ACRP Project 01-08, "Guidebook on Best Management Practices for Leasing and Developing Airport Property," RW Armstrong worked with the objective of developing a guidebook that identifies and evaluates development opportunities, describes various types of leases, and summarizes best practices.

The research included a review of existing materials related to the leasing, sale, and development of airport property. Affected stakeholders (airport, tenant, investors, and local interests) and their respective objectives in leasing transactions were identified. Issues affecting public and private leasing and development transactions were then analyzed. The research culminated in an easy-to-follow guidebook designed to help airports and stakeholders develop and lease airport land to support public and private investments for both aeronautical and nonaeronautical uses. A technical report documenting the research process and findings was also prepared.

The research effort also included two presentation templates to assist airports in effective stakeholder communication regarding the topic. These are available at <http://www.trb.org/Main/Blurbs/64688.aspx>.



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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.

Guidebook for Developing and Leasing Airport Property

The reality of today's competitive environment for on-airport development projects, and the need for developers to move through the public-sector process quickly, begs for examples of the creative and/or hybrid solutions as well as tried and true, more traditional approaches to leasing and developing airport property. Third-party development, conduit financing and tax-exempt financing by private-sector entities, and the myriad of local and state incentives are a few of the variables that make a black and white airport leasing policy inadequate. This Guidebook presents best management practices for leasing and developing airport property, with information gathered from a wide range of case study projects as well as a thorough industry literature review. The Guidebook intends to aid the airport sponsor in implementing leases, property management, and development agreements. Financial, banking, and real estate development communities were considered in terms of terminologies and industry standard protocols, but the Guidebook is written from the perspective of the airport sponsor striving to facilitate development on leased airport property.

An important element of this study is the case study analysis. The RW Armstrong team studied 10 development projects, including two from large-hub, two from medium-hub, two from small-hub, two from non-hub, and two from general aviation airports. The case studies represented a wide range of projects and geographic diversity as well. Detailed overviews of each case study, along with a Project Attributes Matrix, can be found in Appendix A of the Guidebook. The body of the Guidebook addresses issues relevant to leasing and development of projects: lease anatomy, the airport sponsor role, project development considerations, and financial matters.

Lease Elements

Depending on the type of tenant and the tenant activity at any given airport, each lease agreement will take on its own unique characteristics to meet the needs of a given scenario. Commercial versus private tenants and the location of the leasehold (airside versus landside) affect the specificities of a lease and the elements that are included. Airport leases can generally be broken down into the following broad categories:

- Aeronautical or nonaeronautical leases,
- Land leases,
- Fixed-base operator (FBO) leases,
- Specialized aeronautical service operator (SASO) leases,
- Hangar rental leases,
- Subleases, and
- Airline leases.

Airport leases share a number of common threads and certain core elements, though the structure of the lease should ultimately reflect the activity, tenant type, and location of the leasehold in order to address the financial, development, and regulatory needs of the airport. While covering a broad spectrum of development projects that occurred at airports of different size and locations across the country, the case studies reveal general characteristics of an effective lease agreement. Disputes often arise because of ambiguity in lease language, but if the agreements leave few open issues to misinterpret, the parties involved are more likely to have a mutually beneficial, long-term relationship. The lessees will sometimes propose additional lease elements that will protect their interests, but these additions are optional and are added at the discretion of the airport sponsor as part of the negotiation. The airport sponsor should not give any single tenant an advantage over its competition or exclusive rights that violate federal grant assurances. Chapter 2 of the Guidebook details both essential and optional lease elements.

Airport Sponsor Role

It is the job of the airport sponsor to take control and set the stage for airport development projects. The airport sponsor is tasked with finding the appropriate balance between revenue maximization through development, and with meeting the demands of the airport users and surrounding community. The airport's primary priority should be to serve the aviation demands of the community, even if nonaviation development may be financially attractive. However, non-aeronautical development may also be beneficial to both the airport and the community in certain circumstances. So again, there is rarely a black and white rule of thumb that governs all situations. The airport sponsor is also responsible for coordinating applicable stakeholders, including local, state, and federal agencies, as well as the local community and business organizations. These stakeholders can contribute valuable resources, or they may present obstacles, so stakeholder engagement should begin early in the development planning in order to ensure the process advances smoothly. The airport sponsor should also have the ability to negotiate and adjust agreement terms as needed throughout the process.

Establishing airport visioning tools and goals will help both the sponsor and the tenant take advantage of opportunities that arise. Some tools that are advantageous to the visioning process are an Airport Master Plan, Infrastructure Inventory Analysis, Land Use Plan, Airport Business Plan, and Target Industry Analysis.

The airport sponsor needs to comply with all federal regulations and grant assurances. There are a total of 39 individual grant assurances that can be found in Appendix A of the *FAA Airport Compliance Manual* (Order 5190.6B). Compliance should be considered in the context of both the anticipated use of the land and in the structure of the lease. Minimum Standards and Rules and Regulations are effective tools for the airport sponsor to deploy in meeting grant assurances; these documents should be developed prior to concluding the lease and referenced in the agreement as an exhibit. These are living documents that can change as the airport matures, and since a lease can span over several decades, it is important to allow for updates to these documents. Airports should also develop a Standard Leasing Policies document, which will provide guidance in developing the lease agreement.

Finally, the airport sponsor must consider the social and political makeup of a community or region. The sociopolitical climate can affect development at an airport. Elected officials may be able to provide support and leadership for development projects and may receive community support if the project in question is perceived as an economic development opportunity. Conversely, pressure from the sociopolitical arena may also defeat a development project if it is controversial.

Project Development Considerations

The competitive environment for on-airport development projects requires a thorough understanding of today's substantive issues. The airport sponsor must consider a variety of factors and ultimately determine the tenant, developer, and financing approach to best meet the requirements of the project and all parties involved.

Existing agreements should be examined, as they can affect future development on airport lands. For example, an existing lease policy or noncompete agreement may make certain types of development less attractive.

Airport marketing can be instrumental in developing land and leasing airport property. Case study research emphasized that a good relationship with the community's Economic Development entity and/or Chamber of Commerce is almost always beneficial, and may even result in funding for a project. Funding will be a major factor in the success of a development project; whether or not the airport sponsor is responsible for financing, development may well depend on the financial resources available.

Land and facility development is another consideration for the airport sponsor. Offering shovel-ready sites that include competitive rates, land entitlements, utilities, facilities, and incentives for either aeronautical or nonaeronautical development will set the stage for a sustainable revenue base. Aspects of land/facility development that should be considered include utilities, civil site work and soil stabilization, airfield access, roadways and public access, development planning, and maintenance and upkeep of common areas, among others.

The airport sponsor is responsible for establishing the valuation of airport property and should be aware of the risk of undervaluation, especially if existing leases do not include an appropriate escalation clause. The airport sponsor should routinely update rates and charges as well as the value of both improved and unimproved property so that when a development opportunity emerges, the airport can take advantage. There are numerous valuation strategies, including appraisal, comparable sales approach, cost approach, and income approach.

Revenue maximization should be a key goal for the airport sponsor and must be a primary consideration when entering into a lease agreement. Airports are required by the FAA to establish fair and reasonable fees, and it is recommended that airports maintain a fee and rental structure that makes or moves the airport toward self-sustainability. As mentioned earlier, external stakeholders can provide valuable resources, both tangible and intangible, and should be involved in development projects from the early stages of the process.

Finance Overview

There are numerous sources for financing and funding of an airport development project depending on the stakeholders involved, incentives offered, grant funding available, and methods that are applied. The airport sponsor should consider various tools and methodologies for securing financial support for a development project.

It is up to the airport sponsor to determine who the developer will be, whether the airport sponsor itself or a third-party developer. If the airport does play the role of developer, the airport sponsor is responsible for funding the project. If the airport acquires debt to fund a project, the debt repayment cost should be offset through revenue derived from the project.

The airport sponsor must ensure that a development project is financially beneficial to the airport. A pro forma analysis, a projection of the expected costs and revenue associated with the construction and operation of an airport facility, can help the airport sponsor determine if the airport should be, or wants to be, the developer. This analysis would include financing costs, operation and maintenance

costs, lease revenue, and other associated revenue. The capital recovery rate, an important component of a pro forma analysis, can also play a role in the decision of whether or not to enlist a third-party developer. Return on Investment (ROI) is a factor that should be considered by the developer, whether it be the airport or a third party. Expectations of the developer for ROI are typically defined within the pro forma analysis.

Lease agreement terms can have a profound effect on project financing. The terms of the agreement(s) define the flexibility of the developer to satisfy all of the project requirements, including the expected return on investment and profit, even if the project has setbacks. The developer and the lender must be confident that the project terms are generous enough to allow for recovery if a setback does occur. Lease agreement components that could affect financing may include, but are not limited to, the lease term, maintenance requirements, and allowable use.

The bank or financial institution that lends money against an airport development project will typically have a slightly different perspective than the developer or the airport sponsor. Many of the metrics that can be compared between the perspectives of the developer, the bank, and the airport sponsor are the same, but the bank/financier must always look at the worst-case scenario and be comfortable with the business arrangement. The bank, financier, or lending institution will consider the debt-to-equity ratio as one metric in establishing the developer's ability to pay off the claims of its creditors in the event of default or liquidation. The lower the debt-to-equity ratio, the better the debt coverage or security to the bank in the development project.

Airport development debt comes in a variety of shapes and colors, depending on the project's size and type. Tax-exempt debt is generally applied to development projects that satisfy a public purpose or need and can come from a public-sector entity or a government. This type of funding can be complex and can appear in hybrid forms, such as a special airport facility bond. Some alternative public debt options are Recovery Zone Facility Bonds and Recovery Zone Economic Bonds, both created through the American Recovery and Reinvestment Act.

Funding can also come from private sources such as traditional banks and commercial lending institutions. Private funding is often characterized as being more expensive than public funding sources; though private funding may be less complex and require less legal expense, both public and private debt should be considered.

Again, external stakeholders can be beneficial for airport development in that they can provide funding sources. Incentives, abatements, and deferrals can come from a variety of external stakeholders, including public and private entities.

Other sources of funding include Airport Improvement Program grants, passenger facility charges, economic development grants, and private capital.

Case Studies

The 10 case studies are detailed in Appendix A. Case study airports include

- Collin County Regional Airport in McKinney, TX;
- Monroe County Airport in Bloomington, IN;
- Coastal Carolina Regional Airport in New Bern, NC;
- New Bedford Regional Airport in New Bedford, MA;
- Albany International Airport in Albany, NY;
- Baton Rouge Metropolitan Airport in Baton Rouge, LA;
- Pittsburgh International Airport in Pittsburgh, PA;
- Ted Stevens Anchorage International Airport in Anchorage, AK;
- George Bush Intercontinental Airport in Houston, TX; and
- Tampa International Airport in Tampa, FL.

Introduction

Airports are considered to be some of the most important tools in world commerce today, and, as such, are significant economic engines in most any community. However, airports are unique in their federal and local obligations, as they are highly regulated facilities that require large amounts of land. The land airports encompass can be seen as a valuable resource to be used to benefit a diverse group of stakeholders. This *Guidebook for Developing and Leasing Airport Property* will present best practices for airport land and facility leasing, so that the airport sponsors can consider, adapt, and embrace general themes to fit their unique requirements and operating characteristics.

The reality of today's competitive environment for on-airport development projects, coupled with the need for developers to move through the public-sector process quickly, begs for examples of creativity and hybrid solutions that blend innovative approaches with tried-and-true ways of leasing and developing airport property. Third-party development, innovative financing, and tax-exempt debt structure provided by private-sector entities, along with the myriad of local and state incentives are just a few of the variables that make a black-and-white airport leasing policy inadequate and outdated.

This *Guidebook* acknowledges the central issues of this topic: airport management and potential tenants need to understand the key aspects of commercial property development and business agreements, and a public-sector entity may respond differently to risk than a private-sector entity.

Public-sector organizations that own/operate airports may also have different motivations to develop and could enter the negotiation from very different perspectives. Negotiating and concluding an airport business agreement requires special expertise and an understanding of the diversity represented by businesses and organizations that typically pursue on-airport development. This *Guidebook* will examine some of the more prevalent themes within contemporary agreements and development projects.

While a wealth of information and strategies for developing airports exist, it is important to note that airports should identify relevant standards upon which to base their own best practices. Each airport will have its own set of the development requirements that are molded by the resources of the airport and the community and are tempered by the airport's tolerance for risk. Further, a development opportunity that might be appropriate for one airport might be completely unacceptable to another because of tenant mix, community goals, environmental sensitivities, or for one of many other variables.

1.1 Purpose of This Guidebook

The objective of this *Guidebook* is to provide documented research for airport management and other relevant stakeholders to use in formulating airport leasing and development policies to support public and private investments for both aeronautical and nonaeronautical uses. The

Guidebook also provides the airport sponsor with a checklist of items to assist in collecting and refining those terms necessary to analyze the project and form the lease agreement appropriately. In addition, a PowerPoint template that allows the airport sponsor to provide the pertinent information to any relevant stakeholders is included as part of this Report and is available on the Report web page at <http://www.trb.org/Main/Blurbs/64688.aspx>. The study team also utilizes 10 case study projects that present a cross section of U.S. airports to provide examples of best management practices for leasing and development agreements. Broad explanations of best practices are provided in the text, while specific case study details are located within adjacent text boxes. Detailed depictions of each of the 10 case study projects are listed in Appendix A.

1.2 How to Use This Guidebook

The chapters of this *Guidebook* provide information tailored specifically for airport sponsors to assist in the development of airport property, while simultaneously addressing the typical concerns and interests of stakeholders and potential tenants. With this information, the reader has a template for completing the development process in an efficient manner, which will lead to cost effective development, leasing, negotiating, and regulatory adaptation.

The study team also undertook a detailed analysis of substantive issues that pertain to both public- and private-sector participants in an airport development project. These issues were highlighted and illustrated by real-life examples revealed in the study. Throughout the *Guidebook* the reader will find text boxes with examples of unique approaches and best practices found in the individual case studies. These examples are used to illustrate and highlight the specific lease and development approaches from each case study and how these can be applied to the specific lease and development topics being addressed in the main *Guidebook* text. The *Guidebook* itself is organized into the following chapters that are designed to act as building blocks for the reader, taking them from understanding the core components of a lease document, through the planning and financing phase of an airport development project:

- Chapter 1: Introduction—An introduction to the guidebook that explains its purpose, how the *Guidebook* should be utilized, and the methodology enlisted.
- Chapter 2: Anatomy of a Lease—An overview of the different types of leases typically prevalent on an airport with a detailed listing of the essential and optional elements that should be included in each.
- Chapter 3: Airport Owner/Sponsor Role—An in-depth look at airport development principles and considerations. Chapter 3 covers planning and regulatory issues to be considered by the airport sponsor and provides insight into stakeholder dynamics and sociopolitical issues that affect airport development and leasing.
- Chapter 4: Project Development Considerations—Identifies the substantive issues surrounding airport development and leasing. This chapter also illustrates nuances that affect the final agreements between airports and tenants of the study projects.
- Chapter 5: Finance Overview—Addresses certain financial perspectives and tools that the airport sponsor may utilize when considering an airport development project. Discusses the interrelationships between financing, valuation, and lease elements, and how these relationships affect each party entering into the lease agreement.
- Chapter 6: Summary of Best Practices—Identifies best practices and checklists for airport sponsors to consider, and approaches that can be adapted to suit individual airport needs when developing airport property.
- Appendices—Include case study project summaries, a list of aviation acronyms prevalent within the aviation industry, a glossary of relevant terms, and a bibliography.

Along with the hard copy of this *Guidebook*, an online version is available at <http://www.trb.org/Main/Blurbs/64688.aspx>. The online version includes the *Guidebook* in electronic format. The paper version is best suited for those interested in more detail, providing point-by-point explanations of relevant issues. The online version will serve individuals who regularly seek quick access to certain sections of the *Guidebook*. In addition to the *Guidebook*, two PowerPoint presentations (a landside, nonaeronautical in nature, and an airside, aeronautical in nature, version) can also be found online at <http://www.trb.org/Main/Blurbs/64688.aspx> for further reference and use by the airport sponsor when communicating the guidelines and best practices.

1.3 Research Approach

The research conducted for this *Guidebook* is based on a two-pronged approach that consists of first examining current literature relating to commercial leasing practices and guidelines (both airport and standard commercial leases), and second, conducting 10 case studies of airports using best practice airport lease and development policy to be used as benchmarks (either in whole or in part) by airport sponsors. The following five steps summarize the foundation of the *Guidebook's* study methodology:

- Step 1 Development of a research plan that includes a compilation of existing research, trade and news publications, and other appropriate materials that describe creative solutions in response to a competitive development environment. A bibliography was developed using several means of information retrieval.
- Step 2 Preparation of a glossary of terms relevant to leasing and developing airport property. The glossary is tailored to the airport sponsor. Its goal is to provide a tool for effective communication and consistency in preparing documents, and it includes terminologies for real estate development and banking industries as well.
- Step 3 Identification of 10 case study projects/airport sponsors to be used as representative case studies that highlight best management practices.
- Step 4 Identification of affected stakeholders, including those within the airport sponsor organizations, tenants and users of the airport, potential investors and developers of airport facilities, as well as local parties that may have a vested interest in airport development.
- Step 5 Compilation of a detailed description, analysis, categorization, and summary of substantive issues that affect public and private leasing and development transactions.

The literature review was conducted in order to identify existing materials related to leasing, sale, and development of airport property. A variety of sources are cited, including aviation, financial, real estate, and appraisal industry publications, airport websites, and relevant federal regulations. The glossary of terms and bibliography developed from the literature review can be found in the Appendices C and D of this *Guidebook*, respectively.

To compile the list of 10 benchmark case studies, project nominations were first sought from state aviation officials and FAA airport district office managers. Criteria for nomination included consideration of whether a project stimulated economic activity, created revenue for the airport sponsor, employed a diversity of innovative alliances or stakeholders, utilized creative financing, and/or optimized public and private investment.

The second step in culling the list of case studies required contacting officials and representatives from each of the nominated airports. A questionnaire was mailed to the top executives of 30 of the nominated airports and e-mailed to the top executives of the other 51 nominated airports (a list of the nominated airports can be found in Appendix E of the *Guidebook* and a copy of the questionnaire can be found in Appendix A). The intent of the survey was to gather additional

information about the nominated project(s) from their respective airports so the details of the projects could be considered for inclusion in the *Guidebook*.

The study team compiled the data collected on the nominated airports and proposed to the study panel 10 case study projects that the team felt captured the spirit of the *Guidebook* and the diversity of projects desired. The list of 10 case study projects was further refined to respond to the comments of the study panel, and, in the end, the collection of case study projects represented a contemporary collection of well-rounded development from which other airports can learn.

The study team and the study panel based final selection of the 10 case study airports on four criteria: relevance to the study, the airport's ability/willingness to participate in the study, geographic diversity to provide a cross section of airport examples throughout the country, and allocation within the five sizes of airports (general aviation, non-hub, small-hub, medium-hub, and large-hub). The selected case study airports and associated projects are listed below by airport type with a brief synopsis of the project and identification of key stakeholders involved with each.

General Aviation Airports:

- Collin County Regional Airport, Texas (TKI)
 - Project: 32,000-square-foot corporate hangar complex for EDS/Hewlett Packard
 - Stakeholders: Collin County Regional Airport, City of McKinney, Collin County Regional Investments (CCRI), McKinney Economic Development Corporation (MEDC), and the Texas Department of Transportation
- Monroe County Airport, Indiana (BMG)
 - Project: Hangar complex construction
 - Stakeholders: Monroe County Airport, Airport Board, Leaseholders

Non-Hub Airports:

- Coastal Carolina Regional Airport, North Carolina (EWN)
 - Project: Tidewater Air Services FBO/general aviation (GA) Terminal
 - Stakeholders: Airport Authority, Tidewater Air Services, State of North Carolina, local business entities
- New Bedford Regional Airport, Massachusetts (EWB)
 - Project: Reversion from old plumber training facility to flight training facility
 - Stakeholders: Bridgewater State University, City of New Bedford, New Bedford Economic Development Council, New Bedford Redevelopment Authority, Division of Capital Asset Management, Delta Air Lines

Small-Hub Airports:

- Albany International Airport, New York (ALB)
 - Project: HondaJet™ sales and maintenance facility
 - Stakeholders: Albany International Airport, New York State Dormitory Authority, HondaJet
- Baton Rouge Metropolitan Airport, Louisiana (BTR)
 - Project: Coca-Cola® bottling plant
 - Stakeholders: Greater Baton Rouge Airport District, The City of Baton Rouge-Mayor's Office, Baton Rouge Area Chamber, Louisiana Economic Development

Medium-Hub Airports:

- Pittsburgh International Airport, Pennsylvania (PIT)
 - Project: Clinton Commerce Park, a 100-acre warehouse park
 - Stakeholders: Pittsburgh International Airport, State of Pennsylvania, Allegheny County, Allegheny Conference on Community Development, Findlay Township School Board, FAA, Pennsylvania Department of Transportation, Corps of Engineers, Colombia Gas

- Anchorage International Airport, Alaska (ANC)
 - Project: Alaska CargoPort™
 - Stakeholders: Anchorage International Airport, Alaska CargoPort, State of Alaska, Alaska Industrial Development Authority

Large-Hub Airports:

- George Bush Intercontinental Airport/Houston, Texas (IAH)
 - Project: Consolidated rental car facility (CRCF)
 - Stakeholders: The City of Houston, Houston Airport System (HAS), a limited liability corporation formed by the rental car companies occupying the CRCF
- Tampa International Airport, Florida (TPA)
 - Project: Redevelopment of closed US Airways Maintenance Facility
 - Stakeholders: Tampa International Airport, PEMCO, Chamber of Commerce, City of Tampa, Hillsborough County, Enterprise Florida, Workforce Florida, Committee of 100, MacDill Air Force Base

Interviews were conducted with airport management representatives at each airport to identify the key and unique aspects of the lease agreement, gather relevant documents and data, and identify stakeholders involved in project development and the lease agreement. In most cases, site visits were also conducted to gather additional information and perspective. Detailed summaries of each case study can be found in the Appendix A of the *Guidebook*. The summaries include a detailed synopsis of the following:

- Project Overview,
- Key Stakeholders,
- Key Lease Elements,
- Financial Considerations for the Tenant, and
- Airport Benefits and Revenue.



CHAPTER 2

Anatomy of a Lease

While a lease is often considered a complex and daunting document by the legal and real estate neophyte, it can be easily understood and digested if the individual components that comprise the whole are broken down and examined in detail. Every lease, regardless of type, is comprised of essentially the same core elements; understanding the individual components of a lease will provide the necessary building blocks needed to construct and execute a successful airport lease agreement.

The first section will address the basic types of leases at an airport and the core elements included in each. The type of airport lease applicable to each agreement will vary based upon the tenant and anticipated use of the land or facility (i.e., private versus commercial venture). These general lease types can be broken down into the following broad categories:

- Aeronautical versus nonaeronautical leases,
- Land leases,
- Fixed-base operator (FBO) leases,
- Specialized aeronautical service operator (SASO) leases,
- Hangar rental leases,
- Subleases, and
- Airline leases.

Subsequent sections in this chapter will list and detail the core and optional lease elements that comprise a complete lease agreement. How these elements fit into the overall lease, the key considerations of each, and their potential impact on the airport sponsor and tenant are examined.

2.1 Airport Lease Types

There are various lease agreements, each with unique characteristics, which are in effect at any given airport. The variance between lease structures is dependent upon the type of tenant (i.e., commercial versus private individual), the location of the leasehold (i.e., airside versus landside), and the type of activity to take place within the leasehold. The structure of the lease, as indicated by the lease elements included in the agreement (discussed later in this chapter), should always reflect the activity, tenant type, and location of the leasehold in order to protect the financial, development, and regulatory needs of the airport. The following sections will present an overview of the characteristics of differing lease types, and the considerations an airport sponsor should take into account before executing a lease agreement.

2.1.1 Aeronautical Versus Nonaeronautical

Many airports have aeronautical, or aviation-related tenants, users, and lessees, and nonaeronautical tenants who lease property from the airport but do not necessarily depend on, nor

require, the airport itself for the fulfillment of their business activities. This *Guidebook* focuses primarily on aeronautical activity, which is most consistent with the core mission of the airport sponsor. However, nonaeronautical airport development is often an important component of the business mix, providing nonaeronautical or nontraditional revenue streams that can help sustain the operating requirements of the public airport.

The airport sponsor often welcomes nonaeronautical uses (e.g., cases where the airport has excess property as the result of buffers put in place to ensure compatible development; the acquisition of property under a noise mitigation program; or public benefit transfer of former military air bases that required a larger land footprint than the public airport). In such instances where the airport sponsor has excess property that is not required for aeronautical use, the FAA is generally supportive of nonaeronautical uses on airport property. Such support typically requires that the airport sponsor receives fair market value for the land, and the nonaeronautical use does not preclude or retard the aeronautical development of airport lands as demand for aeronautical property occurs.

To achieve this balance of aeronautical and nonaeronautical uses, it is important to put quality planning tools in place. The central consideration is to determine when the property will be needed for aeronautical purposes. If good forecasting and planning tools are employed and property is not foreseen to be needed for aeronautical purposes for an extended period of time (e.g., 50 years), the airport sponsor may justifiably pursue nonaeronautical development on that property. Property furthest from airfield infrastructure may have greater potential for nonaeronautical development than property closer to aeronautical surfaces that may have forecasted aeronautical needs in the next 10 to 20 years. In this example, the airport sponsor would be wise to refrain from considering new nonaeronautical development on the property that is forecast to be needed for aeronautical development in as soon as 10 years; new development is likely to require a land lease that would extend beyond 20 years. For this reason, the property furthest from airfield infrastructure may actually have a higher value for nonaeronautical development and should be considered first.

The key is that nonaeronautical development is an important tool for the airport sponsor to employ, but it should be carefully balanced with the core mission of the airport sponsor in developing airport land for aeronautical purposes.

2.1.2 Land Lease

With the possible exception of terminal leases at commercial service airports, land leases are the most common type of airport lease. A land lease is simply an agreement whereby the airport sponsor leases a parcel of land for a stated period of time (term) and the tenant, or the tenant's developer, is responsible for making improvements on that land. Long-term leases of land are most commonly used for the purpose of erecting buildings and/or making improvements. At the end of the lease term, the land and all structures and enhancements will typically revert to the owner.

Land leases should follow the basic format of facility leases and include all of the same references to the Airport Rules and Regulations, and Airport Minimum Standards discussed in Chapter 3. The land lease price per square foot (rent) may vary by location on the airport and possibly by the length of the term. The value of a land lease is also dependent on permitted uses. The site for an FBO, for example, will likely have a greater value than the site for privately-owned aircraft storage hangars because the revenue generation potential is typically much higher on the site where FBO activities are permitted.

Depending upon the type of tenant, facility, and anticipated activity that will take place on the leased land, differing elements and stipulations may need to be included in the lease agreement. Leases for commercial operations may include elements beyond typical core lease elements that

For business and recreational general aviation travelers, the FBO will provide the first impression of an airport and its community. The quality of the FBO's facilities, services, and aesthetics is critical in making that positive first impression. Realizing that their existing FBO was somewhat lacking in this area, Coastal Carolina Regional Airport partnered with the airport's existing FBO and local business leaders to construct a new FBO that would convey a positive image of the airport and community to travelers. In order to achieve this goal, the lease needed to be structured in a way that would allow the FBO to recoup its investment in the construction of the new facility. With assistance from the state, the airport completed the ground improvements for the facility and transferred the lease terms from the outdated facility to the new facility. This lease consideration, in conjunction with state funds and donations of equipment and supplies by the local business community, made the new FBO financially feasible for its operator.

are addressed in a standard airport lease policy. These considerations may include stringent insurance requirements, limitations on the types of activity that can take place, revenue sharing agreements, and minimum levels of service that must be offered. These elements are addressed in greater detail in the subsequent lease elements section of this chapter.

2.1.3 FBO Lease

At most airports, FBO leases represent an area of significant interest and reasonable complexity involving the assembly of exclusive and nonexclusive as well as public and private attributes. The majority of general aviation airports require an FBO to provide a variety of services that are identified in advance by the airport sponsor, typically through a Minimum Standards document. In return for providing this full complement of identified services, the FBO is granted the ability to sell fuel. Fuel sales are typically a significant component of an FBO's business model and income. Additional services an FBO might provide include, but are not limited to, aircraft storage, ground handling, maintenance and repair, flight instruction, aircraft rental, and aircraft sales.

Because the FBO serves as a quasi-public portal to the community, often adjacent to a public ramp, and often tasked with collecting fees on behalf of the airport, FBO leases typically contain as much airport-use agreement terminology as commercial real estate language. The added complexity of an FBO lease dictates that FBO leases be negotiated individually based upon the FBO service levels desired by the airport sponsor and the ability of the FBO to profitably provide said services.

Despite the additional complexity, FBO leases should still follow the basic format of a standard airport facility lease and include all of the same references to the Airport Rules and Regulations and Minimum Standards documents.

2.1.4 SASO Lease

While an FBO provides fueling service and engages in one or more aviation-related services, a SASO provides specialized products and services in one or more of the aviation-related service areas such as flight training or maintenance, excluding the retail sale of fuel. A SASO may operate under a direct lease agreement with the airport or as subtenant of an FBO.

A corporate hangar lease may constitute a SASO lease since its underlying purpose is a commercial enterprise whereby in-house maintenance and fueling activity may be taking place. The lease agreement may allow for these functions taking place in-house but limit these operations to based aircraft only (i.e., no servicing of transient or third-party aircraft) in order to financially protect other on-airport FBO and SASO operators.

2.1.5 Hangar Rental Agreement

A hangar lease is typically flexible enough to accommodate all hangar types, sizes, and tenants, from small T-hangars to large conventional hangars. The variable in these leases is usually the rental price. The rental price of the building may vary based on size, amenities, location, access, and condition or type of door-operating mechanism. It is not uncommon for the same size hangar to have different prices based on amenities. This type of lease generally specifies that hangars are for aircraft storage only. Hangars leased for a business purpose should be covered under an FBO

or SASO lease. Storage hangar leases generally prevent a tenant from using the property for conducting a business or for storing other items because aircraft storage hangars typically do not have safety or public amenity attributes required for a proper business venture. The lease should require compliance with Airport Rules and Regulations and Minimum Standards and is generally short in term length to allow for market adjustments in rent.

2.1.6 Sublease (Subletting)

Many agreements include language governing the tenant's ability to sublease (sublet) all, or a portion of, the leased property at the airport sponsor's discretion. Typically, the sublease is for a defined portion of the improvements: space in a conventional hangar, office space in an FBO building, or warehouse space and truck docks in a cargo building, for example. The ability and extent to which an airport tenant can sublease a facility must be clearly stated in the primary lease document between the airport sponsor and tenant. Depending on the type and function of the facility, the airport may require a formal approval process for any potential subtenants, a process that mandates the primary tenant submit written notification of the lessee's intent to sublease a portion of a facility. The submission should provide the following information to the airport:

- Location and size of the proposed sublease,
- Description of proposed use,
- Sublessee organization and authorized users, and
- Terms of the proposed sublease agreement.

It is the responsibility of both the airport and primary tenant to ensure that any sublease agreements conform to Airport Minimum Standards policy. The airport has the role of ensuring compliance with policy in its dealing with the primary tenant, as specified in the lease agreement. However, the oversight of sublease compliance can fall equally to both the airport and primary lessee. Since real estate values typically appreciate over time, it is not uncommon for the lessee to have a net profit when subletting space. In cases where the tenant pays a known amount for space and sublets for a greater amount, it's not uncommon for the airport sponsor in a commercial leasing scenario to receive a percentage of the profit. Detailed provisions should be spelled out in the lease and any operating agreement to avoid future conflict between the parties in a long-term lease agreement.

2.1.7 Airline Leases

Airline leases, as one might imagine, are prevalent at many airports and take on a variety of forms. Lease agreements (also referred to as operating permits, use agreements, or licenses in some circumstances) will reflect the financial policy and rate-setting methodology of the airport. An airport's rate-setting policy/methodology will consider the various types of spaces that an airline will need to lease, how rental rates are calculated, and the allocation of costs associated with operating those spaces.

Airlines traditionally lease their core operating spaces, such as ticket counters, boarding gates, and office/operations areas, on an exclusive or preferential basis, ensuring that they have the facilities necessary to meet the operational needs of their flight schedule. Other spaces, such as baggage claim and baggage make-up areas, are routinely leased on a joint or common use basis. Common use facilities, however, are becoming more widespread. An airline may consider leasing boarding gates and even ticket counter spaces in a shared

When George Bush Intercontinental/Houston Airport constructed its consolidated rental car facility (CRCF), it was anticipated that there would be nine rental car operators that would use the facility. Rather than negotiate and deal with nine separate lessees, the airport required the consortium of operators to form a limited liability corporation (LLC) with which the airport would enter into the lease agreement. Operators pay the LLC for operational expenses based upon their use of the facility. The LLC, in turn, is responsible for maintaining and operating the CRCF, including bus operations between the facility and the airport, utilities, and insurance. This is essentially a sublease arrangement by the LLC with the members of the consortium that constitute the LLC. Due to this arrangement, the airport has only a single entity to deal with and is able to shift much of the administrative, operational, and financial burden of the facility to the LLC.

arrangement, especially in situations where they have a limited number of flights and cannot justify the cost of leasing on an exclusive or preferential basis. Airlines just entering a market with a reduced schedule or international carriers that offer reduced frequency are examples of when common use applications might be desirable.

Aside from passenger terminals, an airline may be one of several tenants in other multitenant facilities such as cargo buildings or ground support equipment buildings. In the passenger terminal scenario, the airline lease should address the allocation of terminal space costs that are not directly leased to the airline, such as mechanical and utility rooms, and public areas such as ticketing lobbies, restrooms, and hallways. In the instance of a multitenant facility other than a passenger terminal, attention should be given to shared interior spaces such as vestibules and access hallways, and shared exterior facilities such as automobile parking and airside access. Allocation of these common area costs should always meet the unique attributes and needs of a given situation and be equitable to the parties affected. Allocation of these costs should be addressed within the rate-setting methodology.

Even within a multitenant facility, such as in the case of a passenger terminal environment, an airline may lease several different areas and/or types of facilities. For example, the airline may rent ticket counter and office space in the ticketing area of the terminal, which likely has a different rental rate associated with it than baggage make-up areas and operational spaces. In the gate area, the airline may have yet another arrangement for gate podiums and/or the use of passenger boarding bridges that have their own unique set of rates and charges.

Two rate-setting philosophies are prevalent within the industry. The compensatory model is an approach that gives the airport sponsor autonomy in setting its fees and charges. Compensatory terminal rents may be calculated on the gross terminal space minus mechanical spaces, or the total rentable space within the terminal, to include airline spaces. It may be based on some other variation, but the compensatory model typically allows the airport to retain revenues that exceed expenses. This model also places the burden of any revenue shortfall on the airport sponsor.

The second model is the residual model (sometimes referred to as the cost approach), which routinely includes a majority-in-interest airline's review of the forecast costs to be considered in the rate-setting exercise and generally places the airport sponsor in a revenue neutral position. Because the residual approach tends to focus on a break-even scenario, with appropriate reserves, both excesses and deficiencies in revenue collection generally carry from one year to the next. The cash position of the airport may, therefore, be limited in this model. Table 1 contrasts the two rate-setting approaches and highlights the attributes of each.

An airport may choose to employ a hybrid of these two approaches, as well. For example, a residual approach might be applied to airfield costs in the calculation of landing fees, while a compensatory approach might be used in setting terminal rents; or a compensatory approach may be chosen for the entire airport, with credits given for certain revenue such as terminal concessions to help reduce airline costs. Hybrid approaches are limited only by the imagination; the rate-setting approach, whether it's compensatory, residual, or a hybrid thereof should ultimately meet the needs and goals of a specific airport and its unique mix of airlines and tenants.

Landing fees and fuel flowage fees within an airport's schedule of rates and charges also play a role in airline leases and use agreements. The matrix of fees that an airline pays at any given airport can be quite complex and cover a broad range of real estate types. Ultimately, one of the metrics an airline uses to measure an airport is the total cost, per passenger, that the airline must pay in rents, fees, and charges to do business. This is then compared against other airports of similar size and against the market yield the airline is able to obtain.

Table 1. Rate-setting models: compensatory versus residual.

	Compensatory Model	Residual Model
Typical Application	Airports with positive cash flow and relatively high levels of liquidity/discretionary cash on hand or airports that require subsidy from an outside agency	Airports with consistent levels of operations and who are willing to trade cash-on-hand to reduce the fees and charges that airlines must pay
Party That Assumes the Majority of the Financial Risk	Airport—the airport sponsor bears the short-term financial risk and is more exposed to financial and economic downturns.	Airline—the airport sponsor recovers “net costs” of the airport’s operations through fees and charges paid by the airlines.
Advantages (from airport sponsor’s perspective)	The airport sponsor retains all of the benefits derived from nonaeronautical revenues and airlines receive no direct benefit from this revenue source (thereby incentivizing the airport to pursue nonaviation revenue). The airlines have limited control over capital projects, and the airport sponsor has the ability to maintain relatively stronger operating and debt coverage ratios.	The airlines guarantee the financial soundness of the airport and share in the risk of financial and economic downturns.
Disadvantages (from airport sponsor’s perspective)	The airline pays only for the facilities it uses and does not take part in sharing all of the airline-related costs of the airport.	Nonaeronautical revenues are credited toward the airline’s rate base and the airlines pay fees and charges based on net costs after nonaeronautical revenues are subtracted. The airport sponsor has less incentive to maximize nonaeronautical revenues, and the airport generally has less liquidity/discretionary cash, which can result in a weaker balance sheet and a higher cost of capital.

An airline may also occupy single-use airport developments that have the same lease attributes as any other single-tenant facility. This is especially true at airports where the airline has the level of activity and presence to support a stand-alone airport development such as a maintenance operation or its own cargo facility.

While neither airline use agreements nor rate-setting methodologies are the subject of this *Guidebook*, they both represent a component of the complex issue of airline compensation to the airport sponsor, and correlate directly to the subject of leasing and developing airport property. Ultimately, airline leases represent one small piece of this complex puzzle and contain many of the same elements as any other airport lease. For a more comprehensive discussion of this subject, the reader is encouraged to review *ACRP Report 36: Airport/Airline Agreements—Practices and Characteristics*.

2.2 Essential Lease Elements

Through the case study interviews, the intangible effects of relatively good and relatively bad agreements were revealed. It became readily apparent that agreements tend to either set the stage for a mutually beneficial long-term business relationship that will withstand changes in staff, ownership, and tenant management—or set the stage for dispute. Ambiguity in the lease agreements

themselves seems to be a common culprit or contributing factor when disputes arise. The most successful lease agreements leave few open issues to dispute or misinterpret. The following sections provide an overview of the core elements that must be included in a lease to ensure that all parties are in agreement and have the same understanding of the contract into which they are entering.

2.2.1 Lessor

The lessor is the owner of a property that is being leased. In other words, the lessor is the landlord. In the case of airport leases, the lessor is the airport sponsor or controlling agency with authority to enter into contractual agreements on behalf of the airport sponsor. For any lease agreement, the lease document must contain the names, addresses, and signatures of all parties involved in the agreement and, more specifically, the individuals authorized to execute agreements and obligate the owner/lessor and the tenant/lessee.

2.2.2 Lessee

The lessee is the person or business entity that leases the property or facility from the owner. Simply stated, the lessee is the tenant. In the case of a sublease agreement, the lessee is the tenant of the primary lease holder; the airport sponsor does not have a direct lessor-lessee agreement with the sublease tenant.

If the lessee is a commercial enterprise, the tenant's representative, or contact person, may wish to be identified in the lease parties section. Also, if the eventual tenant of the facility is to operate under a different name than the signatory of the lease, as in a "doing business as" (dba) arrangement, the dba entity must be identified as well. Provision for notification of changes by the lessee, such as moving offices or changing primary contact information, is also important, to ensure consistent communication between the parties.

2.2.3 Premises

The premises element of a lease agreement defines the land and improvements that, in total, constitute the property subject to the lease agreement. The definition of the premises will include a description of the land to be leased (including square footage, boundaries, and access), a detailed inventory of improvements and equipment to be covered in the lease, and a statement of the general condition of the leasehold improvements (if applicable).

A graphic representation of the leasehold, either a site map, airport layout plan (ALP) or aerial photograph, as well as a photograph and/or graphic depiction of any leasehold improvements (if available) should be added as an "Exhibit(s)" included within the lease agreement. The exhibit should clearly demarcate the land, facilities, or other leasehold features that are subject to the lease agreement.

2.2.4 Use of Premises

The lease should assure that the land is being leased for a specific purpose and that development is conducted in accordance with a specific site plan. The "use of premises element" of a lease agreement will specifically state the activities that can and cannot be performed within any given leasehold. A hangar lease will typically forbid commercial activity from taking place at a private hangar and may limit what can be stored in the hangar. FBO and

The developer of a commercial airport property may seek a longer lease term to ensure they recoup their facility investment. Ted Stevens Anchorage International Airport was able to effectively lengthen the lease term for the Lynxs Group, the developer of the Alaska CargoPort, with the inclusion of four 5-year lease extension options. The Airport was limited to a 35-year lease term by state regulation, which would not have met the needs of the developer. Through the addition of the lease extension options, the Airport was able to guarantee Lynxs 55-year occupancy of the CargoPort.

SASO leases will specifically state (and in the case of a SASO, may limit) the commercial activity that can take place at the leasehold. For land leases, the “use of premises element” will state what improvements may be constructed and for what purposes.

The majority of the items included in the use of premises section should be referenced in the Airport Rules and Regulations and Minimum Standards documents. This would enable the airport to modify this lease element in accordance with revisions to these documents as items and requirements may change over the term of the lease.

2.2.5 Lease Term

The lease term states the fixed period in which the lease agreement is in effect. Each lease situation is slightly different, depending on when the lease was negotiated, the size of the tenant’s investment, and the useful life of the improvements. While there are no set rules, and different airports have differing guidelines based upon applicable state and local statutes, it is important to consider that leases that are too long in term may prevent land from being developed in the most advantageous manner. Conversely, a lease term that is too short may prevent the potential tenant from being able to fully amortize their initial investment for the necessary improvements, thus dissuading interested tenants from entering into airport development projects.

The typical airport land lease term will range from a 20- to 30-year term, where, at the termination of the lease, all improvements (financed by the tenant or otherwise) revert back to the airport. The length of the lease term must consider the ability of the developer to fully amortize its investment in improvements over the length of the lease agreement. The larger the investment in leasehold improvements, the longer the lease term will need to be. The airport sponsor, however, must ensure that the lease term does not violate any state or local statute regarding acceptable lease term length for publically owned land. The FAA also advises against longer lease terms and considers any term longer than 50 years to be fee-simple transactions (i.e., the tenant becomes the de-facto owner of the leased property).

2.2.6 Rent

The rental amount is usually determined by fair market value, or is the result of a competitive solicitation offer, but can be a combination of both. In a competitive environment, the forces of supply and demand should yield a determination of what is known as market value. While a comparison of similar facilities (i.e., comparing competing airports of similar size, service, and infrastructure) is an acceptable method of determining market value, other market factors affecting the value of the land can be quite different. If the airport sponsor owns the facility or improvements, the airport may consider a fair market value basis for minimum financial offer to remain competitive with the market. The exception to this rule is in facilities such as airline terminals where they were constructed with grants or facility charges. In these cases, operation and maintenance drives rental amounts, and replacement cost and/or development costs are typically not a factor in establishing rental rates.

In addition to stipulating the lease rate, the rent element of the lease should also include the timing and acceptable methods of payment, as well as the provisions and penalties associated with the failure to make timely payments.

Baton Rouge Metropolitan Airport has established land lease rates based on fair market value, on a sliding scale. These values are updated every 5 years, after evaluating comparable properties, with a maximum increase of 10% to ensure rates do not exceed commercially acceptable limits. The sliding scale rewards larger developments.

Baton Rouge Metropolitan Airport land appraisal rates, 2005–2009.

Parcel Size (Acres)	Cost Per Square Foot	Cost Per Acre
0–0.25	\$0.18	\$7,840.80
0.25–0.5	\$0.17	\$7,405.20
0.5–0.75	\$0.15	\$6,354.00
0.75–1	\$0.14	\$6,098.40
1–7	\$0.13	\$5,662.80
7–10	\$0.12	\$5,227.20

2.2.7 Escalation Clause

One of the most troubling aspects of long-term land leases is providing for the continued adjustment of rental property to compensate for inflation. When rent remains constant during a time of inflation, the airport is losing income, and this period may last for several years. The ideal situation is for an annual reappraisal of property, but this can be relatively expensive to administer. Rate studies may be implemented to establish appropriate rents throughout the lease term, but the most common form of rent escalation is a standard increase every 3 to 5 years, where rent escalation is tied to one or more of the consumer price indices set by the U.S. Department of Labor. This usually establishes a reasonable rate for the next period of time, while ensuring that the costly process of identifying a correct lease rate does not have to be completed more often than necessary.

2.2.8 Operation and Maintenance

The operation and maintenance (O&M) element(s) of a lease agreement will specify the division of responsibility between the lessee and lessor for the cost and effort required to maintain the leasehold to airport standards, and allocate the expenses associated with daily operation of the facility (utility costs). It should be the goal of the airport sponsor to assign to the lessee the general maintenance and repair responsibility and expense along with grounds upkeep obligations.

The O&M section of the lease will list the specific responsibilities of the lessee for leasehold maintenance and upkeep, as well as detail the minimum standards that must be met. These responsibilities and standards are often referenced in the Airport Minimum Standards document, so referencing this document within the lease agreement will prove beneficial for the airport in the long term. These documents can generally be modified to reflect changes in the regulatory and operational environment in a much easier fashion than individual lease agreements.

Escalation clauses are common and necessary elements in airport leases, particularly those with longer lease terms. The frequency and escalation basis (i.e., set percentage, inflation based, appraisal) is open to negotiation. The airport sponsor can offer an initial period of deferred rent escalation in order to provide the tenant with cost certainty through a predetermined period. As part of the incentive package offered to EDS/Hewlett Packard to relocate their corporate aviation facility, Collin County Regional Airport structured the escalation clause in the lease agreement to provide a fixed rent through the first 10 years of a 40-year lease term. Rent adjustments begin at the end of the 10th year and 5 years thereafter.

The airport sponsor may have the duty to perform any maintenance and upkeep that is not specifically referenced as the responsibility of the lessee within the lease agreement or Airport Minimum Standards document. It is in the best interests of the airport to be as detailed as possible when assigning these obligations within the lease, as well as ensuring that the Airport Minimum Standards document is as complete, up-to-date, and in compliance with FAA, TSA, environmental, and other applicable regulations as possible.

The responsibility of general operation costs, with items such as utilities, janitorial, and landscaping costs, may also be assigned within the operation and maintenance element of the lease agreement. These may also be addressed in an individual subsection of the lease agreement, depending upon the complexity of the arrangement. Typically, for stand-alone leaseholds, the lessee will assume all utility and operational costs. However, in the case of an agreement in which only a portion of a facility is leased, such as an office space within an airport-owned GA terminal, the lessor may assume utility and operation costs as part of the lease agreement.

O&M costs can be a point of negotiation between the airport sponsor and the tenant/developer. With this in mind, the decision of who pays O&M costs and how O&M costs are allocated or shared should be tailored to the specific business circumstances of a given lease agreement. In the case of multiple tenants within the same leasehold, O&M costs can be allocated or pro-rated accordingly, rather than the airport sponsor assuming the costs. The airport

sponsor may also choose to share O&M expenses or duties with the tenant/developer to ease the financial burden on tenants and/or prospective tenants.

The reality is that O&M costs are a real expense to any airport development project, and the lease should identify the party or parties responsible for these costs with a spirit of fairness in mind. In some cases, the airport sponsor may be able to provide certain maintenance services or utilities at a rate that is lower than an individual tenant is able to achieve. In other cases, the tenant may be able to provide services more efficiently than the public sector. Efficiency should always be considered when allocating O&M responsibility.

2.2.9 Construction of Improvements

The construction of improvements element of the lease agreement should detail the required approval process from the lessor regarding any repairs, renovations, improvements, and alterations. Generally, the airport should receive, review, comment as necessary, and approve any construction and/or alterations before changes are made. This ensures that design standards, quality, and conformance to standards are met and follow the long-term vision for the airport. Needless to say, all planned improvements must comply with the Airport Rules and Regulations and Minimum Standards documents.

A land lease may also contain a provision within the construction of improvements clause that provides a clear timeline as to when the construction of improvements and beginning of facility operation must occur. This clause will protect the airport sponsor from the practice of “land banking” (entering into a land lease agreement to reserve land for unstated future development) and ensure that airport land assets are used for immediate highest-and-best use.

2.2.10 Reversion/Reversionary Clause

The reversion of leasehold improvements refers to the transition of ownership of all improvements to the airport sponsor at the termination of the lease agreement. Permanent leasehold improvements typically revert, while items such as signs, trade fixtures, conveyors, racks, and hoists typically do not. The termination of a lease may not be solely due to the expiration of the term, though that is the most common case. A lease may also terminate prior to the expiration of the lease term should one party in the lease agreement fail to meet the obligations stipulated in the lease. These failures may include failure to pay rent, violation of Airport Rules and Regulations, failure to comply with the Airport Minimum Standards, violation of a lease-specific clause within the agreement, or actions that trigger the termination of a lease such as leasing to a lessee’s competitor when a noncompete clause is in effect.

If a schedule for the construction of improvements is in effect for a land lease, the lessee should be required to complete the construction of any new facilities within the specific allotment of time or the lease agreement can be terminated. Note that violations or actions that result in the termination of a lease, and associated reversion of improvements prior to the end of the lease term, must be clearly stated in the lease document.

The reversion upon termination at the end of a lease term, or upon early termination, properly protects the airport and its interest in the property, yet often leads to issues with improvement

The lease structure at Monroe County Airport offers the tenant an equity position in the leasehold improvements. The leases are structured to allow tenants to maintain partial ownership of the facility at the end of the lease term. This structure gives the tenant motivation to maintain the facility in good repair because their equity stake in the facility will be directly affected by the appraised value of the facility at the end of the lease. In addition, the appraised value of the equity stake may have appreciated over the course of the lease term and be worth more than the initial investment in improvements. This type of arrangement is beneficial to both the airport sponsor and the lessee, albeit an innovative and non-traditional approach. The airport uses a large percentage of revenues from the leases for a “building fund,” which funds the buyback of facilities at the end of the lease term.

The airport sponsor must guarantee the right to inspect the premises in order to ensure compliance with the lease agreement. Right to inspect must extend not only to the primary tenant, but also to all sublessees as well. Anchorage International Airport, when working with the developer and primary lessee of the Alaska CargoPort, included language in the lease that guaranteed the right of the airport to inspect the premises of all sublessees of the facility. As a result, all sublease agreements administered by the primary tenant include language that guarantees the airport access for inspection.

maintenance and upkeep as the lease nears the end of its term. The tenant should understand that leasehold improvements are “wasting assets” that have a limited useful life (typically the length of the lease term), and will depreciate through the course of the lease. In other words, most tenants will typically enter into long-term lease agreements with the understanding that any investment in leasehold improvements will be fully depreciated over the length of the lease and have no expectation of asset recovery at the termination of the lease. Since leasehold improvements will revert to airport ownership, tenants may have little motivation to put additional resources into the current facility unless enforceable specifications for upkeep and maintenance are appropriately detailed in the lease document or referenced in the Airport Minimum Standards document. Specifically, a schedule for routine and preventive maintenance and set system inspections with reports to airport management is prudent language to include.

Leases that do not specify reversion, or that leave ownership of the improvements with the developer/tenant, can cause an unexpected or unprepared obligation on the part of the airport sponsor. Leases that require the airport sponsor to purchase the improvements from the tenant may put a financial burden on the sponsor when the lease expires. These obligations must be considered, and funding sources established, if the airport plans on entering into an agreement that requires payment to the lessee at the end of the lease term.

2.2.11 Rights, Reservations, and Obligations of Lessor

Many contemporary leases provide the lessor with the right of ingress and egress to leased premises. Leases should also reference the rights of the lessor for the purpose of enforcing compliance with the Airport Rules and Regulations and for ensuring that maintenance standards detailed in the lease agreement are being met. In addition, the airport sponsor may wish to include the right to show the property to potential tenants prior to lease expiration, or if the lease is expected to be terminated for any other reason. Since the lessee will have leasehold rights to the improved facility, the lease should specify a reasonable lessor notification period prior to inspection, or establish an inspection schedule within the lease document.

Airport management may also want to reserve the right to close the airport facility, including, but not limited to, the runway, taxiway, apron, terminal building, and automobile parking facilities when reasonably necessary. This should be at the airport’s sole discretion for the purpose of maintenance, repair, further development or construction, or for the safety of the general public.

2.2.12 Rights, Reservations, and Obligations of Lessee

This element of the lease agreement should clearly state the rights that the tenant is entitled to as lessee, and the obligations the lessee must fulfill under the lease agreement. Rights of the lessee typically include, but are not limited to

- Ingress and egress, including use of public infrastructure;
- Signage (for commercial enterprises), stipulating acceptable size, location, and form;
- Quiet enjoyment, defined as possession and unimpaired use of the leasehold without interference; and
- Approved alterations and additions to improvements.

The obligations of the lessee section of the lease should include those functions that are typically associated with the operation of the specific facility. Obligations of the lessee should not

include items that are addressed in other sections of the lease agreement, such as facility maintenance obligations or stipulations on use of the premises. Obligations of the lessee vary based on the type of tenant and operation (e.g., private versus commercial, aeronautical versus non-aeronautical), but will generally include the following language:

- Conduct and disturbance discussion specifying acceptable code of conduct for facility tenants, employees, customers, and vendor/suppliers. This language typically covers noise, demeanor, and appearance of individuals, vehicles, and equipment;
- Economic nondiscrimination language for commercial operators that ensures equitable pricing and services;
- Based aircraft reporting requirements;
- Other reporting requirements, as stipulated; and
- Disposal of trash and waste.

Along with the disposal of trash, additional wording should be added under this section of a lease agreement to include oils, fluids, or any hazardous waste. Current federal and some local regulations dictate the amount of hazardous material that is permitted to be stored at any one time. Such is the case with aircraft refinishing facilities and the storage of certain waste oils and fluids. Environmental regulations can be complex and change often, so language directing compliance with environmental jurisdictions is important. Such a lease clause (i.e., one that is affected by changes in regulation outside of the lessor's control) is also referred to as a living clause.

2.2.13 Security Requirements

New leases should reference the Airport Rules and Regulations and require any current or future compliance with aviation-specific, federally-mandated security requirements by the TSA and/or Department of Homeland Security. The lease should also state that security requirements may change as the Homeland Security Threat Advisory Levels change, and, if required, the lessee must adjust operations to reflect the current security requirements.

2.2.14 Damage to Facilities

Circumstances and responsibility for repairing damages to facilities during the course of the lease term should be described and outlined in this section of the airport lease. Even if the developer pays the entire cost of agreed-upon improvements to airport land, all parties should understand and agree to the manner in which damages will be repaired should damages occur. Specifically, requirements for premises insurance should be considered, with clarity as to how insurance proceeds shall be used. The timeframe for which repairs shall be made should also be described fully. The airport sponsor's interest should be well protected in this language, precluding a tenant that is late in the lease term from opting out of its responsibility to repair damaged facilities.

Natural disaster, fire, vandalism, and employee abuse should all be considered within this section of the airport lease, clearly identifying the party responsible for repairs in each scenario. This section may also consider provisions for payment of rent in the event of damaged facilities, especially if damages render the leasehold unusable for normal business activity. The airport sponsor should strongly consider the requirement for business interruption insurance so that the tenant has some financial security in the event of significant or catastrophic damage, and so that the airport sponsor is protected from loss of its revenue stream.

2.2.15 Insurance Obligations

In order to protect the lessee and the airport sponsor from financial liability arising from the operations of a tenant, insurance requirements should be detailed in all lease agreements. Insurance

requirements, at a minimum, should outline coverage types and amounts so that the airport is protected from financial liability. These requirements will vary based upon the type of tenant (e.g., private versus commercial enterprise), the ownership of the physical structures and equipment (e.g., airport sponsor or lessee), the scale of the operation, and the relative risk of harm or loss based upon the type of enterprise. Typical insurance coverage will include (depending upon lessee, ownership of improvements, and anticipated activity):

- Property (structure and/or contents),
- General liability or commercial general liability,
- Automobile,
- Fire,
- Liability, and
- Environmental.

The level of coverage required can be set by the airport sponsor or may be assigned by state or local authorities. Excessive coverage requirements may present an undue financial burden on airport tenants and warrants consideration when setting minimum levels. In September 2008, Airports Council International – North America (ACI-NA) surveyed concessionaires at commercial service airports of all sizes (*ACI-NA Phase II: Concessionaires Survey*), focusing on insurance and risk management issues. The report was completed within the past few years and may be a useful resource to the reader of this *Guidebook* when setting insurance levels. The survey results reveal the various types of insurance an airport should contemplate (e.g., property, general liability, auto, and fire) as well as minimum amounts for the various categories prevalent at airports across the country. The survey report also considers airports of different sizes. Surveys such as these provide relevant benchmarks for the airport sponsor when establishing minimum levels of insurance coverage. Because an airport sponsor must balance the need for protection of its interest with the real costs imposed on tenants and airport users, establishing appropriate levels of insurance coverage is an important topic that has direct consequences to the tenant's ability to maintain a successful business venture. Being consistent with like airports, without leaving the airport sponsor unreasonably exposed to risk, is a responsible approach to finding that balance.

If the airport sponsor is the owner of the physical improvements on the land being leased (either through new construction funded by the airport or by means of reversion due to the termination of a lease agreement), the airport may be responsible for premises insurance. An umbrella policy may be the most effective approach, though liability, contents (e.g., aircraft and/or equipment), and other stipulated hazards such as environmental contamination generally remain the responsibility of the tenant.

It is the responsibility of the airport sponsor to ensure that the lessee and any sublessee are in compliance with the insurance requirements outlined within the lease. This is typically accomplished by requiring the lessee to provide airport management with appropriate insurance documentation (Certificate of Insurance) on an annual basis from a reputable insurance firm licensed to do business in the state in which the airport is located. The lease agreement may include language that requires the lessee to notify the airport of the cancellation of insurance, within a stipulated time frame, should such an event occur.

2.2.16 Environmental

Environmental awareness and consciousness has risen significantly in past decades within many facets of modern life. Real estate, and more specifically, leased airport property is no exception. In fact, environmental consideration is now routinely a point of significant discussion in lease negotiations.

Environmental aspects to be considered in airport leases include the current environmental condition of land and/or airport facilities; responsibility for past, present, and future environmental remediation; environmental insurance requirements; and landlord assurance that the tenant will be financially capable of resolving potential liability exposures.

At the very minimum, all parties of an airport lease agreement should agree on the environmental condition of the property at the time the property is placed under control of the tenant, as well as the condition the property is expected to be in at the time it reverts to the airport sponsor. Specifically, soil conditions and historical data regarding fuels, solvents, and other contaminants should be discussed and a baseline for expectations established. If existing buildings are a part of the airport lease, asbestos and other building materials/equipment should undergo a similar baseline survey. Many airports have experienced decades of tenants and operations on a given piece of property. As acceptable activities have changed and environmental awareness has increased, past activities and practices may no longer be appropriate or allowed by the airport sponsor. Fuel releases from aircraft, for example, were dismissed more readily in the early days of aviation than they are today. Airport sponsors today are held to high standards as environmental stewards, especially in the areas of water quality and storm water management, both of which could be affected by tenant fuel releases.

All parties should also agree on the level of environmental insurance, or liability insurance that covers environmental issues, as a term of the airport lease. Even if both parties agree that levels and standards may change over the course of the lease, an honest and constructive discussion can save all parties pain in the future. The airport sponsor deserves, and should expect, to be indemnified by the airport tenant on matters environmental and otherwise. The tenant should have an understanding of the prevailing obligations and associated expenses that are imposed by the airport sponsor regarding environmental insurance.

A third aspect of a minimum level of environmental discussion should be the airport sponsor's confidence in the ability of the tenant to environmentally remediate airport property in the event of contamination. Of course, environmental insurance speaks directly to this point, but environmental insurance can be very expensive. Just as the airport sponsor must gauge the tenant's ability to make payment for rents, fees, and charges, it must also gauge the tenant's ability to remediate contamination should environmental contamination occur. Other means of establishing security of obligations in this regard are bonds, letters of credit, and/or funds in escrow. As with many issues, the airport sponsor walks the fine line of protecting the airport's assets without imposing undue hardship on the tenant who wishes to utilize the airport.

2.2.17 Taxes and Fees

The airport sponsor, typically a public entity that operates the airport for public benefit and use, is likely exempt from many taxes and fees, including property taxes. When private development in support of a commercial venture takes place on public property, interpretation as to how the tenant of the leased property is taxed varies widely and can easily change with the political winds and economic climate. Airport sponsors, therefore, should strive to protect themselves from incremental development costs and associated tax exposure by appropriately passing any tax liability through to the tenant that occupies the airport property. These provisions and protection of the airport sponsor should be fully described within the language of the lease.

Similarly, the airport sponsor should be prepared, through language within the lease, to pass through any fees that might be assessed to a given airport development project on leased airport property. For example, impact fees that some communities levy on new development to offset the public investment required to support that development should be passed through to the tenant, even though the airport sponsor is the owner of the land being developed.

2.2.18 Liens

Improvements on leased airport property are often financed, and the bank or lending institution is likely to require some type of security against the money to be loaned. Liens are the common instrument in this regard, as the lender has a recorded interest in the improvements and a right to claim ownership of those improvements should the borrower default on the loan. Liens are typically recorded at the appropriate courthouse as a legal claim against real property. In the event of default of the loan, the lender will have first claim to the property if it has a first lien position, or stand behind the first lien holder in the case of a second lien position. Lien position establishes priority for satisfying claims against the real property that secures collateral interest.

The caveat to this basic real estate principle is that the airport sponsor is restricted from disposal of property without FAA concurrence. In this case, a lien on the property itself must be precluded in the lease agreement. Lenders cannot be allowed to dispose of public airport property in the interest of satisfying a defaulted loan. The improvements can serve as security against debt—though the airport sponsor would typically restrict the placement of liens to new development it has approved—with strict conditions for cure (e.g., payment of outstanding rents owed). Specifically, lease language should include airport sponsor approval of any new tenant the lender wishes to place in facilities encumbered by a lien, in the event of loan default, to preserve compatibility of the airport sponsor’s vision for airport development. Ultimately, a lien on tenant improvements will generally provide less security than a traditional lien placed on fee simple property owned by the borrower.

2.2.19 Defaults

The defaults section of a lease should stipulate the scenario(s) in which the terms of the lease have been violated. This section should include methods for curing the default, as well as periods of time that must pass without curing before the lease can be terminated. For example, typical default provisions will include termination language that speaks to what happens in the event the tenant does not pay the agreed-upon rents. But, the defaults section should also include language that allows the tenant to cure, the timeframe in which this must occur, and how penalties or late fees are to be applied. Additionally, default language in this example should address how the airport sponsor will apply or pursue security deposits, bonds, or letters of credit. Essentially, the defaults section will describe which (if not all) violations of the lease provisions will trigger lease default, the actions the airport sponsor intends to take in the event of default, and the recourses that the lessee is entitled to if provisions and/or terms of the lease are not met.

Default language that speaks to a failure to pay rent is perhaps the most common, but should not be the only parameter for lease default language. Failure to comply with airport rules and/or regulations, environmental damage to airport property, inappropriate use of airport land and/or facilities, and illegal activities are other examples that the airport sponsor should consider addressing within the context of a defaults section of a lease. Language that requires the tenant to comply with local, state, and federal laws, rules, and regulations, which may change during the course of the lease term, should be considered in order to protect the airport sponsor if the regulatory environment changes.

Default clauses should be considered from both the airport sponsor’s perspective and the lessee’s perspective. Specifically, the airport sponsor should consider events that would be unacceptable to the tenant and allow for language that responds to the needs of the lessee. However, the airport sponsor should never restrict its ability in any of the lease provisions to operate and develop the airport in a manner that is consistent with federal grant assurances. While the defaults section should consider and accommodate, when able, the perspective of the tenant, the lease should not restrict or penalize the airport sponsor in carrying out its primary objective of oper-

ating and developing a public airport within the parameters of state and federal regulations and guidelines.

2.2.20 Assignments and Subletting

The assignment of a lease is the process of transferring all rights and provisions of a lease from one tenant to another. A request for assignment may occur because one company is being acquired or sold by another, so the legal obligations need to transfer to the new legal entity. Another request may occur simply because the developer wants to divest of the liability and/or sell any equity interest in the facility. Subletting is the process of leasing part or all of the facility to another party without transferring any of the lessee's responsibilities to the airport sponsor.

Assignment and subletting language is important in an airport lease, especially in circumstances where permanent improvements need to be amortized over long periods of time to meet market pricing. The developer and/or the financier of the project will typically want some assurance from the airport sponsor that, if circumstances dictate, another tenant can replace the initial tenant and/or subletting is allowed if the financial and/or business circumstances of the tenant change over time. The initial tenant may sign a lease that is sufficient in length to amortize investment in improvements, but many things can happen over the course of a 20- or 30-year lease.

For the reasons just described, many airport leases include language that allows assignment, subletting, or both, within specific parameters. If improvements were made on airside property for the storage of aircraft, the allowable uses of the lease, including any assignment or subletting, should preclude nonaeronautical activity. Restrictions on use affect the market price of a facility, so the developer and lender often look for flexibility in the lease that will allow assignment and/or subleasing in order to build confidence in the commercial viability of a project.

At the minimum, the airport sponsor should consider assignment and subletting language that passes all obligations of the initial lease to any assignee or subtenant. The airport sponsor often requires pre-approval of any assignment or subletting, though approval should not be unduly or arbitrarily denied if the assignee and/or subtenant meets the spirit of the initial lease agreement. Some lease agreements include language that requires the initial tenant/developer to pay a percentage of any profit derived from an assignment or sublease, or a fee for the administrative effort to consider and execute an assignment and/or a sublease. All of these aspects should be considered during the lease negotiation process and balanced with the overall objectives of the airport sponsor.

2.2.21 Regulatory Compliance

The regulatory compliance section of a lease is a vitally important component of an airport lease agreement in that it assists the airport sponsor in keeping pace with a changing regulatory environment. The airport sponsor can and should require regulatory compliance with known applicable local, state, and federal regulations. In addition, the regulatory compliance section should pass along responsibility for complying with the inevitable additions and/or modifications to existing regulations that will certainly occur over the course of decades.

For example, an airport sponsor, as landowner, is responsible for complying with water quality regulations of the Environmental Protection Agency. The airport sponsor should pass along water quality responsibilities to its tenants, within their respective leaseholds, for complying with these same regulations, requiring participation in the airport's storm water protection plan, and future compliance with any new regulations that may come over the course of the lease.

Regulatory compliance requirements should be broad enough to encompass the many areas that affect the airport sponsor as owner of a public airport. Federal aviation and environmental

regulations are prevalent at all airports, while a mix of local, state, and other federal regulations exist and vary depending on location. The regulatory compliance section of an airport lease agreement must acknowledge and require the tenant, as one member of an airport's community, to adhere to the same standards for compliance as the other members of the airport and the airport community as a whole.

2.2.22 Hold Harmless Provision

The lease between the airport sponsor and the tenant should include a hold harmless or indemnity clause that protects the airport sponsor from any legal action, suits, proceedings, claims, damage, loss, liability, cost, or expense that may be filed against the lessee for any reason arising from the operation and/or negligence of the lessee. In the spirit of quid pro quo, the airport sponsor is typically asked and often evaluates reciprocal language that considers the lessee's position. Many airport leases include some level of hold harmless protection for the lessee as well, protecting them in the case of negligence on the part of the airport sponsor.

2.2.23 Nondiscrimination

Part 21 of 49 CFR (Code of Federal Regulations) outlines the mandate for nondiscrimination in federally-assisted programs of the Department of Transportation. Airport sponsors that receive federal grant funding through the Airport Improvement Program (AIP) are bound by grant assurances that prohibit discrimination on the grounds of race, color, or national origin. Tenants leasing property that is part of an airport's lands fall within the parameters of a federally-assisted transportation program, so the airport sponsor should include nondiscrimination language in its lease agreements, which is typically found under a "nondiscrimination" heading of the lease document.

2.2.24 Living Clauses

Living clauses play an important role in the lease document. These clauses allow existing agreements to evolve as associated regulations and laws change during the course of the lease term (e.g., wildlife, security, and environmental). Rules and Regulations, Minimum Standards, Rates and Charges, and Schedules of Insurances are other examples of documents that will likely change over time and that can be addressed through living clauses to maintain consistency.

Airport sponsors should always be aware of ongoing regulation amendments and changes. It is the airport sponsor's responsibility to ensure the airport and all encompassing aspects conform to state and federal laws. Airport tenants should remain current on these laws, as the changes may require substantial financial obligations or a complete change of operating standards.

2.2.25 Force Majeure

The *force majeure* provision of an airport development and/or airport lease should consider unavoidable causes for delay due to acts of God and natural disaster, which may set the stage for failures to perform the provisions of the agreement. *Force majeure* clauses are often provided to address delays in construction due to weather and should consider both the developer/tenant and the airport sponsor perspectives. Specifically, agreements should include *force majeure* language when the airport sponsor has agreed to do certain things or make certain improvements. For example, the airport sponsor may agree to construct a taxiway extension to meet the needs of a new development, but the agreement should include *force majeure* language that protects it

if a hurricane or unusual rainfall delays construction and places the sponsor in the position of being unable to meet the obligations of the lease/development agreement due to circumstances beyond its control.

2.2.26 Holdover

Holdover provisions of an airport lease simply allow the airport sponsor to extend the terms of an existing airport lease, in the event both the airport sponsor and the tenant desire to continue the relationship as it exists, without execution of a new lease. Holdover provisions are useful in bridging gaps and meeting short-term needs of the parties involved, but should be used sparingly. Renegotiation of a lease or transition of lessees are typical uses of holdover provisions, where it is mutually beneficial for all parties to preserve the terms of the existing agreement without rushing negotiation for the sake of meeting a deadline, or for bridging the operational gaps that might occur between tenants. At the end of a long-term lease, the revenue associated with a lease may be below market value, so holdover provisions of that lease may result in a reduced revenue stream to the airport sponsor. Holdover provisions should be used sparingly.

Holdover provisions should not be confused with extension options, as extension options involve an additional period of time, as well as adjustment in rental rates for that extended period. Holdover language may include an adjustment in rents as well, but this provision is meant to provide short-term extension of the protections and terms described within the lease document and not the protection of the tenant that is reluctant to negotiate a new agreement. For this reason, the airport sponsor may choose to negotiate a premium into the lease for the exercise of holdover provisions, as well as the ability to waive increased rents or premiums, if the application of holdover provisions is for benefit of the airport sponsor.

2.3 Optional Lease Elements

Optional lease elements are typically added to address financial and business concerns of commercial lessees and are designed to protect the investments made in on-airport facilities. These lease elements are not a requirement. They are negotiated into the agreement by the lessee in order to protect the lessee's interests. However, their addition to the lease agreement is at the discretion of the airport sponsor. The airport sponsor must be certain that the addition of any language granting or limiting commercial activity does not provide a single tenant with a potential commercial advantage over its competition, limit on-airport competition, or hinder the highest-and-best use of airport land or facilities. Any lease element that does so may put the airport in violation of FAA grant assurances. These grant assurances are addressed in greater detail in Chapter 3, Section 3.2 (Grant Assurances and Federal Compliance) of this *Guidebook*.

2.3.1 Noncompete Clause

A noncompete clause is intended to protect the business and financial position of an airport commercial lessee by limiting on-airport competition in the field of commerce in which the lessee is engaged. The clause states that the airport will not lease a property to a commercial entity that will provide the same services and be in direct competition with the lessee. A noncompete clause is most common among FBOs and maintenance, repair, and overhaul (MRO) facilities and business providing essential fueling and maintenance services to airport users. A noncompete clause will typically provide the lessee with a means to terminate the lease agreement without penalty should the terms be violated.

Tampa International Airport had two large, empty maintenance hangars they were actively marketing; one vacated by US Airways and the other vacated by Delta Air Lines. The airport was able to attract interest in the US Airways facility from PEMCO World Air Services. However, PEMCO was concerned that should a competitor locate in the vacant Delta facility, its ability to profitably operate in the region would be compromised. One of the concessions the airport made when negotiating PEMCO's lease agreement was the inclusion of a noncompete clause that granted PEMCO the right to void the lease if another third-party MRO was located on-airport during their lease term. Despite this element in the lease, the airport still actively markets the Delta hangar.

The airport sponsor should be wary when entering into an agreement that contains a noncompete clause because it may be perceived as offering the existing tenant a monopoly with all of the negative connotations associated with such an arrangement (e.g., the potential for higher prices and lower service levels). Without proper context, noncompete language can also be viewed as a violation of Federal Grant Assurances 22 and 23 that address economic nondiscrimination and the granting of exclusive rights. When structured properly, noncompete language can allow the airport sponsor to grant access to another competing commercial enterprise, while respecting an existing tenant's interests. In other words, noncompete language can give the airport sponsor the flexibility to pursue a superior tenant should it choose to do so, while respecting the existing tenant's perspective that a new entrant would force them out of the market, and giving that existing tenant an out. Such an arrangement would be most prevalent in circumstances where the existing tenant has very little or no investment/debt in the facilities they occupy. This type of language is meant to provide the existing tenant a means to terminate the lease should competitive conditions on the airport change. The airport sponsor should, however, be cautious not to establish a scenario in which negative consequences will occur should it pursue new tenants/competition. Specifically, if the existing tenant is paying a large amount in rents and fees, and has noncompete language in its lease, the airport sponsor may have a disincentive to pursue new tenants. A negative financial impact to the sponsor and presumed disincentive can be perceived as an exclusive right to operate.

Ultimately, it is the airport sponsor's decision whether or not to enter into such an agreement, and it should be made only after conducting a detailed analysis of the nature of the potential lessee's business in relation to the current availability of such services, the overall airport need and desire for the lessee's services, and the perceived ability of the lessee to adequately provide said services.

Albany International Airport, in an effort to attract HondaJet's northeastern sales and service center, offered several incentives and guarantees to make the Albany site as financially and operationally attractive possible. Among the concerns of HondaJet was the ability to accommodate future expansion. To alleviate this concern, the airport included a "right of first refusal" clause in the lease agreement. This clause allows HondaJet to lease an additional 45,000 square foot parcel adjacent to the chosen development site prior to the airport leasing this land to any other interested party. Clauses such as these protect a tenant's investment by ensuring that their future development and expansion needs are guaranteed, while still allowing the airport to market the property.

2.3.2 Right of First Refusal

A right of first refusal is a contractual right placed in the lease agreement that gives the lessee the option to enter into a lease agreement with the lessor for a specified airport property in advance of an interested third party. This does not specifically limit the airport from marketing the property, but it may limit the property's marketability if prospective tenants are aware that the property is subject to a right of first refusal. An existing commercial tenant may demand such a clause to limit potential competition on-airport, or to ensure space and resources for future expansion.

The airport sponsor will need to enter into such an agreement with caution, particularly if the lessee seeks to place set lease rates into effect for the property in advance (e.g., lease rate will mirror rates of those for the lessee's current property). Such stipulations may hinder the airport's ability to achieve market value rent for the property in question. Grant Assurance 24, Fee and Rental Structure, states the airport sponsor shall "maintain a fee and rental structure for

the facilities and services at the airport that will make the airport as self-sustaining as possible.” This means achieving market value rates for all available property.

2.3.3 Percent of Revenue

Another method of revenue recognition for the airport sponsor, a method that is common in terminal concessions lease agreements, is percentage of gross revenue payment. The airport sponsor may enter into an agreement with a lessee that may reduce the base cost per square foot rate of a land and/or facility lease, but make up for this loss in airport revenue by stipulating that the airport receives a percentage of the tenant’s gross revenue derived from the activity at the facility. Typically, a floor, or minimum monthly payment is set, and the greater of the minimum payment or percentage of profits is paid to the airport. This approach could, however, require a greater involvement of the airport, an agreed-upon auditing process, and solid understanding of what defines gross revenue.

2.3.4 Term Extension Options

Flexibility in the length of the lease term can be achieved through extension provisions written into the lease. These can be 5- to 10-year extension clauses that effectively extend the lease term to a length that is mutually beneficial for both the airport sponsor and the tenant. This is a particularly beneficial tool when an airport sponsor is limited by statute (state or local) from issuing lease terms for a period long enough to allow a tenant to amortize its facility investment. The airport sponsor will want to ensure that any lease rate escalation occurs periodically in order to keep pace with market rates and current appraisal values.

Tampa International Airport was able to entice PEMCO World Air Services, an MRO operator, to a 150,000 square foot maintenance hangar that was vacated by US Airways. PEMCO, unsure of the ultimate financial success of the new venture, was wary of entering into a long-term fixed lease. The airport agreed to a revenue sharing arrangement, with payments of a 1.3% share of PEMCO’s gross revenue generated from the facility. This arrangement allows the airport to reduce the lessee’s fixed lease payments, which appeals to the tenant desiring reduced start-up costs, but ties the airport directly to the success of the lessee’s enterprise. The airport has the potential for greater returns over the life of the lease in this scenario.

Term extension options are a common component of a lease agreement that will often allow the developer and tenant to recoup initial investment in improvements or extend the useful life of improvements. Knepper Press, when developing the Clinton Commerce Park at Pittsburgh International Airport, secured two 10-year lease extensions on the initial 29-year lease term. These options ultimately made the lease deal more attractive for Knepper Press and assured the airport sponsor a long-term, viable tenant.



CHAPTER 3

Airport Owner/Sponsor Role

Airport owners, or sponsors, as referred to by the FAA when describing airport owners, are the driving force behind most individual development projects. As the land owner, the airport sponsor establishes and sets the direction for planning related to airport development.

In addition to setting the stage for airport development projects, it is important that the airport sponsor strike an appropriate balance between maximizing revenue through development and meeting the demands of the airport users and surrounding community. It is also important to remember that the primary role of the airport is to serve the current and projected aviation demands of the airport's users and surrounding community first; ancillary and nonaviation related development, no matter how financially attractive to the airport sponsor or surrounding community, are secondary considerations. Since the airport performs an important role in the support and development of a given region's population and economic base, and provides core services to its users, the airport, and its primary function of serving aviation demand, should always be considered its most important asset to the local community and the surrounding region as a whole.

Perhaps one of the most important roles of the airport sponsor is the coordination of applicable stakeholders beyond just the lessor-lessee paradigm; these stakeholders range from local, state, and federal agencies, to local community and business organizations. Stakeholders can bring valuable resources to a given project/lease agreement, and, conversely, can also present obstacles if not brought into the process early. Identification and engagement of these entities should occur at the beginning of any potential project, and their input, whether positive or negative, needs to be duly considered throughout the planning and development process.

Finally, the negotiation process itself will open the door to subjectivity. Therefore, any guideline or policy must be flexible enough to accommodate the varied needs of the potential tenants, and to provide the airport sponsor with the ability to negotiate and adjust terms as needed. Flexibility and give-and-take from both sides of the negotiating table is often the key to the successful negotiation.

Throughout the negotiation process, the airport sponsor should consider simple guidelines when dealing with the potential tenant. The following guidelines are excerpts from *FAA/ACC Best Practices: Improving the Quality of Airport Projects* (FAA/ACC, 2008):

- Listen actively to the extent possible, try to understand the perspective of the speaker, ask clarifying questions, and repeat back to the speaker what you think was said.
- Show mutual professional respect.
- Engage in early, ongoing, and open communication.
- Be forthright and realistic with expectations.
- Be accessible.
- Show patience and flexibility when discussing differences.
- Practice timely communication.
- Meet professional and project commitments.

The following sections of this chapter will examine in detail the key responsibilities of the airport sponsor when planning and evaluating potential airport development projects and when negotiating their associated lease agreements. The tools, policy, and considerations addressed in these sections are designed, when implemented, to provide the airport sponsor with the foundation on which to evaluate the financial, operational, and regulatory desirability of individual airport development projects.

3.1 Airport Vision

In order to take full advantage of development opportunities in a manner that is beneficial to both the airport sponsor and the tenant, it is necessary to understand the potential of the airport in relation to the surrounding community. This is an ongoing and often evolving process that includes the following steps:

- Establishing an Airport Master Plan or other visioning tool;
- Aligning airport and community goals;
- Setting a leasing policy;
- Providing flexibility; and
- Coordinating with local, state, and federal agencies, when appropriate.

There are several tools that the airport sponsor has at his disposal that will assist in defining the airport's market niche, what development is realistically possible, and the anticipated demand that will drive future airport use. These tools, when used in conjunction, will provide the airport sponsor with a road map that guides future growth and establishes guidelines and benchmarks necessary to ensure the financial viability of the airport.

3.1.1 Airport Master Plan

Many of the airports that have found success with leasing and developing airport property began with a vision or a strategy that served as an implementation plan for successful development. The Airport Master Plan is the predominant vehicle for such a vision or strategy, methodically analyzing demand, forecast activity, tenant base, business clusters, utility infrastructure, environmental considerations, and airfield attributes to describe how land might be leased and developed for special-use aeronautical and nonaeronautical tenants/users.

An Airport Master Plan is a comprehensive study of an airport or system of airports. It prescribes short-, medium-, and long-term development plans to meet future airport demand, and it puts forward recommendations for the safe, efficient, and economical development of an airport to meet the needs of the community it serves. The plan should be thoughtful, well coordinated, practical, and cost effective, and it should include a realistic assessment of needs and resources consistent with the established goals and objectives. The FAA offers guidance for Airport Master Plans in Advisory Circular (AC) 150/5070-6B. The master planning process often serves as a consensus-building forum for community leadership, stakeholders, corporate citizens, and members of the airport community to go through a vetting process that ultimately yields a realistic vision for the future. The vision or strategy should also consider priority of development.

The Airport Layout Plan (ALP) is an important component of the Airport Master Plan and translates the goals and objectives of the planning effort into tangible airport attributes. Runways, taxiways, ramps, approaches, and other airport attributes are laid out, showing both current and ultimate geometries. Meteorological data are also included to match runway alignments and wind coverage to existing and proposed aeronautical facilities, and the parcels of land that

make up the airport are shown, along with the history of acquisition, to provide insight as to how the airport developed over time.

From an airport leasing and land development perspective, the ALP identifies both existing airport development and planned airport development. The ALP may be very detailed in some areas, such as showing additional rows of T-hangars precisely laid out to function with existing ramp and hangar facilities, or it may be purposely vague in other areas, such as preserving a sizable parcel for a future FBO, ensuring the land area is adequate to meet the minimum standards requirements. While the Airport Master Plan may be updated every 7 to 8 years, or longer, the ALP is mandated by FAA Grant Assurance 29 to be up to date at all times. As the capital improvement plan described in the Master Plan is implemented, and more often than not, modified as time goes on, the ALP is updated to show the improvements and airport development. As new parcels of land are acquired, buildings are constructed, and aeronautical facilities are improved over time, the ALP serves as a living archive if updated appropriately.

In some cases, airports take visioning and strategic planning to a broader scale, deploying strategic plans or business plans that consider the greater region, relationship between modes of transportation, and transportation infrastructure beyond aviation. It is important to look at business activities and clusters within the community and region that might provide synergy to airport development and analyze opportunities that exist because of proximity of the airport and those business activities. These macro studies can provide a broader vision and a more refined strategy for leasing and developing airport property, but they too must tie back to and be consistent with the Airport Master Plan and the Airport Layout Plan.

All of these visioning strategies strive to identify opportunities and niches for the airport to pursue, as well as prioritization. Some opportunities are quite obvious; others may be more dependent on the business climate in the community, and some opportunities may come completely unexpectedly. A master or strategic plan should be flexible enough to accommodate creative and emerging opportunities. An airport might want a specific service or type of development because it will spur other activities, but market demand will ultimately drive airport development. Examples of airport development that might be desired and described within the Airport Master Plan include FBOs, hangars, and aircraft service providers. Beyond the pure aeronautical developments described within a Master Plan are examples such as express cargo, which can spur nonaeronautical development such as freight forwarding, trucking, third-party logistics, and other activities that directly involve local and regional business and commerce. In short, focusing on key development that is consistent with a strategy or a vision may take priority over other types of development because of the opportunity for synergy that might exist.

3.1.2 Infrastructure Inventory Analysis

It is important for airport stakeholders to be aware of the airport's current infrastructure. Up-to-date records—maintained by the airport and made available to stakeholders—can help stakeholders identify problems and potential shortcomings. Keeping a detailed inventory of the airport's infrastructure at the ready will assist the airport sponsor and community stakeholders in marketing the airport to potential tenants and ease the development planning process.

An Airport Master Plan will typically inventory an airport's infrastructure assets in detail, thus making the Master Plan the ideal starting point for an infrastructure inventory. However, several years may pass before an Airport Master Plan is updated, so construction of any improvements in the interim period may not be reflected in this document. The airport sponsor will need to keep records of airport infrastructure independent of the Master Plan, focusing on leasable land and facilities, as well as land and facilities that are currently under lease. While the most important

piece in the inventory analysis is the land that the airport owns and controls, the airport sponsor needs also to be aware of any key infrastructure or features immediately surrounding the airport such as access roads, utilities, industrial parks, vacant land available for development, and any associated zoning regulations. Again, the availability of such infrastructure inventory information will assist the airport and community stakeholders in marketing and promoting the airport to potential tenants and developers.

3.1.3 Land Use Plan

Establishing and aligning the long-term development goals of the airport and community with potential tenants is a key function of the airport sponsor and a Land Use Plan provides the map where each type of development will occur (e.g., aeronautical versus nonaeronautical use). Not all potential lease agreements fit within the overall goals and direction of the airport or the community; this can be especially true of nonaeronautical land uses because of the need to develop aviation-compatible projects within close proximity of the airport. When noncompatible land uses exist, such as those outlined in Advisory Circular 150/5020-1, *Noise Control and Compatibility Planning for Airports*, and/or Advisory Circular 150/5200-33B, *Hazardous Wildlife Attractants On or Near Airports*, operational conflicts can arise that either compromise safety or compromise the long-term opportunities that exist for the airport.

A Land Use Plan for a portion of, or for the entire airport, is an excellent visioning tool for the airport sponsor to utilize. Land Use Plans can be a valuable resource in outlining general characteristics of the land on and around the airport, often complementing and/or augmenting a comprehensive planning model used by public entities. Land Use Plans are instrumental in identifying types of uses on or around the airport and can be referenced for compatibility. Non-compatible land uses such as residential development, for example, should not be in close proximity to runway ends. Similarly, compatible land use such as industrial, may illustrate an opportunity for similar on-airport development, whether it's aeronautical or non-aeronautical.

Land Use Plans are also routinely used to augment ALPs by adding detail to a specific area. An ALP may, for example, show an area of industrial development, whereas a Land Use Plan may take that same area and go into the detail of utility infrastructure, existing and proposed roadways, example pad sites, and/or differentiation of development type within the subject area.

3.1.4 Airport Business Plan

In addition to aligning airport goals with those of the community, the airport sponsor must ensure the airport remains a viable economic entity as it moves forward with development. An Airport Business Plan is an excellent tool to achieve this goal. A successful Airport Business Plan will examine both the market-driven realities of the airport's community as well as the financial situation in which it is operating. The airport sponsor must be able to identify anticipated airport demand within its market area (or catchment area) in relation to competing airports while simultaneously identifying areas in which the airport can maximize its revenue while meeting current and forecasted demand. In order to accomplish these goals, an Airport Business Plan must examine several facets of the airport and its surrounding community, including airport facilities and services (current and planned), population and economic growth, surrounding airports, airport lease policy, rates and charges, financing availability/sources, and land use planning among other

Land and infrastructure development can be a risky venture for public entities not specializing in these aspects. Having a detailed and consistent Land Use Plan can help minimize these risks by allowing for long-term planning and phasing of development projects. With intentions of facilitating commercial and industrial development around the airport, Pittsburgh International Airport initiated a phased commerce park development program on land not suitable for aeronautical use. With a detailed plan in hand, the airport pursued grant funds for infrastructure and civil site development consistent with its established development goals. This approach has resulted in the construction of more than 2,000 feet of roadway, utilities, and other infrastructure that was essential to the eventual marketing and leasing of the commerce park.

factors. Bringing these multiple factors into a single, clear, concise, and implementable strategic document is the hallmark of a successful business plan.

The market analysis section of the Airport Business Plan must be designed to identify potential airport tenants and/or business sectors that can be supported by, and are desirable to, the airport and its surrounding community. A market evaluation must identify which aviation- and airport-intensive industries are best suited for both the community (based upon economic and demographic profile) and for airport capabilities and infrastructure (as detailed in the Airport Master Plan and infrastructure inventory analysis). This analysis will identify where the airport is capable of recruiting new business and tenants without structural or institutional changes and where and what type of changes or reforms may be needed to successfully attract the targeted industries/activity.

The financial planning tasks within an Airport Business Plan must include the preparation of revenue and expense projections as well as capital expenditure planning. A key component of this task is an examination of existing leases with particular attention to existing and future revenue generated from the leases. The airport sponsor should ensure that all current and potential lease agreements meet financial thresholds identified in any established leasing policy. A lease rate-setting exercise should also be conducted, whereby rates at similar sized airports with comparable infrastructure and services are compared to those currently in effect at the airport. Through this exercise, the airport sponsor will be provided with a comparative basis to set or adjust current land and facility rates and charges.

3.1.5 Target Industry Analysis

The Target Industry Analysis can be done as part of the Airport Business Plan, or as a stand-alone study. The goal of a Target Industry Analysis is to identify businesses and industries that are most suited to conduct business on available airport land. Typically, the Target Industry Analysis will focus on nonaeronautical businesses suitable for airport lands that do not have airside access or are deemed not to have any future aeronautical uses. Generating a list of target industries is

accomplished by examining regional demographic trends, employment concentrations, industry clusters, the regional industry profile, and other community attributes (e.g., roadway infrastructure, utilities, communications, available incentives) in conjunction with specific airport infrastructure, land availability, and competing airport considerations. Through this exercise, a list of business and industry types most suited for both the community and the airport will be derived.

The airport sponsor may want to consider working closely with local economic development agencies and the local chamber of commerce when undertaking this exercise. Not only will these organizations help in identifying the target industries most suited for the region (particularly nonaeronautical businesses), they can also help in recruiting the targeted businesses.

Albany International Airport has pursued the Very Light Jet (VLJ) market niche and proactively approached HondaJet after developing a Factory Service Center for Eclipse Aviation. The Airport had learned that HondaJet was interested in a New England location, so it offered a quick, efficient, and friendly package that included options on airport land and permitting assistance that fulfilled HondaJet's facility needs and timeframe. The approach was focused on the user's needs and the clustering of like businesses, resulting in an economic win for the region.

3.2 Grant Assurances and Federal Compliance

The airport sponsor is responsible for assuring that any lease or land use agreement is in compliance with applicable federal regulations and adheres to FAA guidance. Compliance considerations must be examined in the context of both the anticipated use of the land and in the structure of the lease.

Grant assurances cover a wide gamut of federal regulations, culled from multiple pieces of the FAA Advisory Circulars, Executive Orders, and Federal Regulations, all designed to ensure that the airport sponsor, and any potential tenant at the airport, comply with existing regulation (both aviation specific and nonaviation in nature) in the development, leasing, and operation of airport land. The FAA introduces grant assurances with the following explanation (FAA, Order 5190.6B, 2009):

When airport owners or sponsors, planning agencies, or other organizations accept funds from FAA-administered airport financial assistance programs, they must agree to certain obligations (or assurances). These obligations require the recipients to maintain and operate their facilities safely and efficiently and in accordance with specified conditions. The assurances appear either in the application for Federal assistance and become part of the final grant offer or in restrictive covenants to property deeds. The duration of these obligations depends on the type of recipient, the useful life of the facility being developed, and other conditions stipulated in the assurances.

There are a total of 39 individual grant assurances listed in Appendix A of the *FAA Airport Compliance Manual* (Order 5190.6B) (see Appendix D for Web link). However, not all of these grant assurances are directly applicable to the airport sponsor-tenant relationship, either in the airport development context or in the more traditional lessor-lessee relationship. The following sections present those grant assurances that have the potential to directly impact airport land development, business arrangements, and lease structure. If the FAA deems the airport sponsor to be in violation of any sponsor grant assurances, federal airport funding could be curtailed until the airport is no longer in violation. A detailed discussion of airport sponsor federal grant obligations and responsibilities can be found in Chapter 4 of the *FAA Airport Compliance Manual* (Order 5190.6B).

3.2.1 Airport Operation Protection

Grant Assurance 5 speaks to Preserving Rights and Powers and is designed to ensure that the airport sponsor does not enter into any agreement that will inhibit its ability to provide the core services of a public-use airport. This is a very broad assurance that states at its outset:

It (the airport sponsor) will not take or permit any action which would operate to deprive it of any of the rights and powers necessary to perform any or all of the terms, conditions, and assurances in the grant agreement without the written approval of the Secretary, and will act promptly to acquire, extinguish or modify any outstanding rights or claims of right of others which would interfere with such performance by the sponsor.

Grant Assurance 5 also limits the transfer or disposal of land on which federal funds have been spent without the approval of the FAA, which is addressed in greater detail under Grant Assurance 31: Disposal of Land. The airport sponsor should consider all aspects of airport operations and the many systems that are required for sustained airport operations. For example, an airport's utility infrastructure is vital to airport development, so failure on the airport sponsor's part to retain legal access to its utility systems could in fact be considered a noncompliance issue. In the case of privately owned, public-use airports, this grant assurance stipulates that in order to be in compliance, the airport must remain in operation as a public-use facility.

3.2.2 Community Considerations

Community considerations are addressed in Grant Assurances 6, 7 and 8. These assurances are designed to ensure that the airport sponsor accounts for the existing plans, interests, and concerns of both the surrounding community (particularly local planning agencies) and current airport users prior to entering into an airport development or leasing agreement. These considerations become more prevalent in larger land development or commercial enterprise lease agreements, but do not necessarily require action on the part of the airport sponsor in the case

of hangar lease agreements for existing facilities. The following provides a summary of what can be termed the “community considerations” grant assurances:

Grant Assurance 6: Consistency with Local Plans. The project must be reasonably consistent with public agency plans (existing at the time of submission of the application) for the development of the area surrounding the airport.

Grant Assurance 7: Consideration of Local Interest. The airport sponsor must give fair consideration to the interest of communities in or near where the project may be located.

Grant Assurance 8: Consultation with Users. The airport sponsor must undertake reasonable consultations with affected parties using the airport at which the project is proposed.

3.2.3 Land Management Compliance

There are four grant assurances that deal specifically with land use and land management, with guidelines focusing primarily on safety, planning, and airport standards. Note that disposal of airport land is covered in the next section, Land Releases. The following provides an overview of the sponsor assurances that must be considered to ensure airport compliance:

Grant Assurance 20: Hazard Removal and Mitigation. Compliance with this assurance is designed to ensure the safety of airport flight operations. The airport sponsor must take appropriate action to assure that terminal airspace required to protect instrument and visual operations to the airport are adequately cleared and protected. This involves not only removing or mitigating existing airport hazards, but also preventing the construction or creation of future airport hazards.

Grant Assurance 21: Compatible Land Use. The airport sponsor must take appropriate action, including the adoption of zoning laws, to restrict the use of land adjacent to, or in the immediate vicinity of, the airport to activities and purposes compatible with normal airport operations. This includes considerations for noise compatibility of any planned development on such land.

Grant Assurance 29: ALP. The ALP is considered the key tool in planning and coordinating future airport development. It is mandated that the airport sponsor keep the ALP up to date at all times, showing (1) boundaries of the airport and all proposed additions, together with the boundaries of all offsite areas owned or controlled by the sponsor for airport purposes and proposed additions, (2) the location and nature of all existing and proposed airport facilities and structures, and (3) the location of all existing and proposed nonaviation areas with all existing improvements.

Grant Assurance 38: Hangar Construction. This assurance states that an aircraft hangar owner is subject to airport rules and regulations as dictated by the airport sponsor and stipulated in the lease. If the airport sponsor and a person who owns an aircraft agree that a hangar is to be constructed at the aircraft owner’s expense, the airport sponsor will enter into a lease agreement with the aircraft owner “that is subject to terms and conditions on the hangar as the airport owner or operator may impose.” These terms and conditions are typically spelled out in the lease agreement and will reference the Airport Minimum Standards document.

It is important to note that all changes to the ALP must be approved by the FAA. In fact, close coordination with the FAA and its appropriate airport district office is prudent in complying with all of the above grant assurances while embarking on airport development. Good communication and close coordination is a sound strategy for avoiding instances of noncompliance with federal grant assurances.

3.2.4 Land Releases

Land releases involve the disposal of airport lands, and, more specifically, the approval required of the FAA to “release” land acquired with federal funds (thus allowing the airport sponsor to dispose of the land or allow it to be used for nonaeronautical purposes). The airport sponsor may dispose of land if said land is deemed unnecessary for aeronautical purposes. However, the airport sponsor may be required to reimburse the FAA, or the FAA may stipulate how land sale proceeds are to be spent by the airport sponsor. The following provides an overview of the assurance addressing the disposal of airport land purchased with federal funds:

Grant Assurance 31: Disposal of Land. This assurance stipulates when and how an airport sponsor can dispose of land acquired with federal funds. The airport sponsor must repay the FAA the portion of the proceeds “which is proportionate to the United States’ share of the cost of acquisition of such land.” In addition, the airport sponsor may purchase the land for a proportional share of the initial federal investment, based on current fair market value. The disposal of land must comply with federal assurances under the following circumstances:

- Land purchased under a grant for airport noise compatibility purposes can be disposed of when the land is no longer needed for such purposes, at fair market value, and at the earliest feasible time. The proceeds will either be paid back to the FAA (net gain can be kept by the airport sponsor after repayment), or be reinvested in an approved noise compatibility project.
- Land purchased under a grant for airport development purposes (other than noise compatibility) can be disposed of when the land is no longer needed for airport purposes, at fair market value. At the FAA’s discretion, the proceeds due to the FAA can be reinvested in another eligible airport improvement project, or be paid for deposit in the trust fund if no eligible project exists.
- Land is considered to be needed for airport purposes (not eligible for disposal) if it may be needed for aeronautical purposes (including runway protection zones) or serve as noise buffer land, and/or the revenue from interim uses of such land contributes to the financial self-sufficiency of the airport.

Within the context of airport development, the airport sponsor must be careful not to structure a lease agreement that may violate the Disposal of Land assurance due to an extended lease term. The FAA will typically view any lease term in excess of 50 years as a disposal of land, and therefore subject to the stipulations listed in Grant Assurance 31. Often, maximum lease terms are set by local or state statute and may exceed what the FAA considers an acceptable length. The *FAA Airport Compliance Manual, Part VII: Releases and Property Reversions* (Order 5190.6B) provides a detailed overview on the release and disposal of airport land.

The FAA defines disposal of land to include a lease in excess of 50 years, while certain states allow for longer term leases without considering them a disposal of property. The airport sponsor can balance these two definitions by meeting the state standard first, and then presenting the lease to the FAA for consideration and concurrence before executing agreements. Several of the case studies mentioned in this *Guidebook* include long-term leases, so it is important to coordinate with the FAA’s Airport Development Office before finalizing such a negotiation, should the airport sponsor choose to use one of these case studies as a model.

3.2.5 Business Practice Assurances

There are three primary grant assurances that speak directly to the business practices of the airport sponsor. These grant assurances impose guidelines as to how the airport sponsor must interact with commercial and noncommercial tenants on the airport, and are important practices in establishing a fair and equitable business environment. These assurances directly impact the

airport sponsor, and, in certain cases, dictate business practices to airport tenants, even though the ultimate responsibility for compliance falls to the airport sponsor.

The following paragraphs briefly summarize the core compliance mandates of each of the FAA Sponsor Assurances that speak to business practices of the airport sponsor, along with some descriptive examples of the intent of the assurances:

Grant Assurance 22: Economic Nondiscrimination, addresses the equitable treatment of airport tenants by the airport sponsor in assessing rates, charges, and lease terms.

- The airport sponsor will make the airport available as an airport for public use on reasonable terms and without unjust discrimination to all types, kinds, and classes of aeronautical activities, including commercial aeronautical activities offering services to the public at the airport.
- Any commercial aeronautical business operating at airport must (1) furnish services on a reasonable basis to all airport users and (2) charge reasonable prices for each unit or service and be allowed to make reasonable and nondiscriminatory discounts, rebates, or other similar types of price reductions to volume purchasers.
- Each FBO at the airport shall be subject to the same rates, fees, rentals, and other charges as are uniformly applicable to all other FBOs operating at the airport.
- Air carriers (whether as a tenant, nontenant, or subtenant of another air carrier) shall be subject to nondiscriminatory and substantially comparable rules, regulations, conditions, rates, fees, rentals, and other charges with respect to facilities.
- The airport sponsor will not prevent any person, firm, or corporation operating aircraft on the airport from performing any services on its own aircraft with its own employees (including, but not limited to maintenance, repair, and fueling).

Grant Assurance 24: Fee and Rental Structure, simply states that the airport sponsor must set rates, charges, and leasehold rents that, to the extent possible, will ensure the financial self-sustainability of the airport. This grant assurance instructs the airport sponsor to “maintain a fee and rental structure for the facilities and services at the airport which will make the airport as self-sustaining as possible under the circumstances existing at the particular airport, taking into account such factors as the volume of traffic and economy of collection.” The assurance stipulates that federal funds cannot be included in the cost basis used to establish fees, rates, and charges to airport users.

Grant Assurance 39: Competitive Access, addresses a reporting function required of the airport sponsor (at a medium-hub or large-hub airport only) should the airport, due to lack of capacity, be unable to accommodate new or expanded service by a commercial carrier. This assurance states that if a large-hub or medium-hub airport sponsor is unable to accommodate one or more requests by an air carrier for access to gates or other facilities, the airport sponsor must report the situation to the FAA. The report must (1) describe the requests; (2) provide an explanation as to why the requests could not be accommodated; and (3) provide a time frame within which the airport will be able to accommodate the requests, if at all.

3.2.6 Exclusive Rights

Exclusive Rights are discussed in great detail in Chapter 8 of the *FAA Airport Compliance Manual* (Order 5190.6B), and defined as “a power, privilege, or other right excluding or debarring another from enjoying or exercising a like power, privilege or right.” The *Compliance Manual* further states that such a right “may be conferred either by express agreement, by imposition of unreasonable standards or requirements, or by another means.” Noncompete clauses, if structured in such a way that expressly forbids the airport sponsor from leasing airport property to a category of lessee (i.e., potential competition) and right of first refusal clauses that effectively

allow an existing tenant to land bank airport property (i.e., lease land without constructing improvement within a set time-frame), can, and often are, considered by the FAA to be the granting of exclusive right. As such, the FAA cautions that such clauses be avoided.

Grant Assurance 23: Exclusive Rights, states that the airport sponsor cannot grant any single commercial enterprise exclusive rights to conduct aeronautical activities or be the sole provider of services to that airport. The prohibition on granting exclusive rights does not apply to services provided by the airport sponsor itself. The airport sponsor may elect to be the sole provider of services such as fueling or maintenance, but must do so with the airport sponsor's own employees and equipment (i.e., the services and management of the enterprise cannot be contracted out to a third-party provider).

3.2.7 Environmental Compliance

The airport sponsor is responsible for the overall implementation of the National Environmental Policy Act (NEPA), as well as other federal environmental laws and regulations. This includes airport noise compatibility planning [Federal Aviation Regulations (FAR) Part 150], airport noise and access restrictions (FAR Part 161), environmental review for airport development, and the application of the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970. The airport sponsor is ultimately responsible for ensuring environmental compliance of the tenants and users of airport property.

Environmental responsibility is an integral part of the sponsor-tenant relationship and, as such, the sponsor must ensure that tenant's planned development and/or its on-airport operations are in full compliance with federal, state, and local environmental regulations. Environmental compliance may vary from airport to airport based upon state and local statutes, and even airport-specific guidelines. Despite the potential variations in applicable regulations, there are core guidelines for the airport sponsor to follow in order to be NEPA compliant when undertaking an airport development project. The *National Environmental Policy Act (NEPA) Implementing Instructions for Airport Actions*, (Order 5050.4B) states the following under the Airport Sponsor Responsibilities sub-heading (NEPA, 2006):

As an applicant for federal approval, an airport sponsor should take on some or all of the following responsibilities:

- (1) In consultation with the FAA's Office of Airports (ARP), planners and environmental specialists should consider known environmental factors in early master planning efforts regarding proposed airport development projects. Doing so would help the sponsor:
 - a. Identify obvious, specially-protected environmental resources such as Federally-listed endangered species, historic properties, wetlands, and parkland during the development's conceptual phase when the greatest range of alternatives exists.
 - b. Consider practicable, possible, or prudent alternatives to avoid specially-protected resources.
 - c. Consider conceptual mitigation in project design to reduce unavoidable environmental effects if no practicable, possible, or prudent alternative exists.
- (2) Provide environmental information to its consultant or to ARP.
- (3) Prepare Environmental Assessments (EAs) or hire qualified environmental contractors to prepare those documents.
- (4) Provide opportunities for public participation and a public hearing, if one is appropriate.
- (5) Consult with ARP personnel, and as needed, coordinate with Federal, State, and local agencies, Federally-recognized Tribes, and the affected community as described in this Order.
- (6) Join ARP in a Memorandum of Understanding to pay the contractor ARP selects to help it prepare the Environmental Impact Statement for a proposed action.

The list of potential environmental issues and compliance mandates with the potential to impact airport development is significant and will likely vary based on the size, scope, and intended function of the airport development project. It is not possible to address them all within

the context of this *Guidebook*, though the FAA does offer guidance to the airport sponsor in navigating environmental policy complexities as they pertain to airport sponsors. This guidance can be found in the following FAA publications:

- *National Environmental Policy Act (NEPA) Implementing Instructions for Airport Actions* (Order 5050.4B);
- *FAA Environmental Desk Reference for Airport Actions*; and
- *Environmental Impacts: Policies and Procedures* (Order 1050.1E CHG 1).

3.2.8 Through-the-Fence Agreements

A through-the-fence (TTF) agreement is unlike a land or facility lease in that it does not involve airport-owned property. Instead, a TTF agreement authorizes access to the airport from privately-owned property adjacent to the airport. The decision of whether or not to allow TTF access to property owners is for the airport sponsor to decide, as the airport is not required to grant direct access to adjacent property owners. Both positive and negative examples of TTF agreements can be found. Note that this discussion is directed toward commercial aeronautical application of TTF access. TTF access to residential dwellings, with or without hangars, is discouraged by the FAA and currently under policy review at the time of this writing. The FAA provides guidance on TTF agreement in the *FAA Airport Compliance Manual* (Order 5190.6) and advises against such agreements, but does not forbid them. Specific FAA positions on this subject include:

- The existence of such an arrangement could place an encumbrance upon the airport property unless the airport owner retains the legal right to access the land. The FAA does counsel the off-airport property owner to conform in all respects to the requirements of any existing or proposed grant agreement(s).
- The development of aeronautical enterprises on land uncontrolled by the owner of the public airport can result in a competitive advantage for the TTF operator to the detriment of on-airport operators.
- Arrangements that permit aircraft to gain access to a public landing area from off-airport properties complicate the control of vehicular and aircraft traffic.

This is not to say that an airport should shy away from entering into these agreements; structured properly, a TTF agreement can be beneficial for both the airport and the property owner, and land constraints of the airport sponsor may present solid rationale for a TTF arrangement. The concerns outlined above can be addressed, or at least mitigated, through a well-constructed agreement between both parties. Any TTF agreement should include rates and charges presented to other users, tenants, and operators at the airport and give consideration to the following:

- Airport expenses for the construction and maintenance of airport infrastructure such as access taxiways, roads, and access gates must be reflected in the access agreement and passed on to the off-airport property owner.
- Any competitive advantages that the off-airport commercial entity realizes in relation to on-airport tenants should be accounted for in the agreement.
- Safety concerns should also be addressed within the agreement. These issues and requirements will vary based upon the location and type of activity associated with the TTF application and should be incorporated on an agreement-specific, case-by-case basis.

3.3 Minimum Standards and Rules and Regulations

Two important documents for any airport sponsor to adopt and keep updated are Minimum Standards and a set of Rules and Regulations. Minimum Standards set the facility, operational, and functional standards for the provision of aeronautical services, and Rules and Regulations

are the standards for conduct and doing business on airport lands. The combination of these two documents provides clarification on how the airport will do business and helps avoid confusion and misunderstanding about tenant activity and business operations. The balance for the airport sponsor is to have these foundational documents in place and that they are stringent enough and set the threshold high enough for the type of services it wants from aviation-related businesses, but not so stringent as to discourage airport development. These documents should ideally be developed prior to concluding a lease, and referenced in the lease agreement as an exhibit, along with language to the effect that Minimum Standards and Rules and Regulations are subject to change from time to time. Since these two foundational documents are living instruments that can change as the airport matures, and a lease may span multiple decades, it's important to both acknowledge and allow for occasional changes. The caution to change is that an increase to standards and rules is much easier than a reduction. If a tenant has made significant investment to meet a set of Minimum Standards, and then the standards are lowered to allow easier access to competitors, the tenant may conclude that the airport handled the lease in bad faith. On the other hand, increasing the standards to make the threshold for entry higher, and then grandfathering the tenant that has already made the investment, generally appeals to the sense of fairness.

Both the Minimum Standards and the Rules and Regulations documents should evolve over time, just as the ALP is changed to reflect current conditions and changing ultimate solutions. Regular updates help modify expectations for investment, operation, and service to the aviation public as the airport matures. By way of example, a set of minimum standards that requires a broad range of services for an FBO to provide (line service, avionics, flight instruction, charter operations, airframe and power plant repair) may have been quite acceptable 10 to 20 years ago, but may well preclude a new operator from coming to an airport today. Specialized aviation services have evolved over that same 10- to 20-year timeframe, so fewer FBOs are equipped for, and fewer markets can support, this broad-brushed FBO model. A more contemporary set of minimum standards is likely to list a menu of specialized aviation services and require a specific number of those services be provided in order to meet the minimum standards for an FBO, thereby allowing an operator the flexibility to focus on its own core strengths rather than subsidize below-par services that the operator may be ill-equipped to provide. Maintaining a current Minimum Standards document will adjust to a changing industry and encourage appropriate airport development when opportunities present themselves.

The two documents should also be synchronized as new or additional leases are developed. All in all, small, justifiable changes are generally more acceptable to the members of an airport's community than broad, sweeping changes that come after many years. Guidance on developing an Airport Minimum Standards document can be found in the following two publications:

- FAA Advisory Circular AC 150/5190-7, *Minimum Standards for Commercial Aeronautical Activities*; and
- *ACRP Report 16: Guidebook for Managing Small Airports*.

Routinely updating an airport's Rules and Regulations document is equally important. For example, changing insurance requirements may increase the importance of visual inspections and preclude the storage of certain solvents and materials. An airport sponsor may be taxed to include, or even anticipate, the need for specific language that addresses unforeseen issues that may occur in the future. Coordination of such language in all of its leases would be tedious, but an airport sponsor can easily reference its Rules & Regulations in its leases, and that they may be updated from time to time. This approach allows the airport to respond to contemporary issues by simply updating its Regulations and then applying the new requirements consistently to all tenants without rewriting leases.

Rules and Regulations documents provide for the safe, orderly, and efficient operation of the airport. *ACRP Report 16: Guidebook for Managing Small Airports*, provides the following list of topics that should be addressed by an airport Rules and Regulations document:

- Aircraft rules,
- Personal conduct,
- Animals,
- Smoking,
- Waste containers and disposal,
- Storage,
- Pedestrians,
- Vehicle operations,
- Fueling safety,
- On-airport traffic rules,
- Environmental restrictions,
- Airport residences,
- Hangar construction standards, and
- Fire safety.

3.4 Leasing Policy

Airports should develop a Standard Leasing Policies document and draft contract language. Specific leasing policies will vary from airport to airport depending on factors such as local and state regulations and land uses. Leases typically vary depending on the tenant and the negotiation, but thinking through a policy and committing the policy to writing will assist the airport in moving

quietly through a development process. Though these documents are not directly included within the lease document, they will govern much of what the lease agreement will and will not permit, provide guidance on lease rates, and stipulate the general use, appearance, maintenance, and scale of any leasehold improvements.

The policy established by the airport sponsor should provide guidelines to be used to establish lease rates and conventions applicable to individual tenants in a uniform manner, understanding that market rates are established at a point in time and that establishing rates can be somewhat subjective. Subjectivity can be reduced by identifying comparables of similar development type in the market, and considering the local, regional, national, and global economies of the time.

If a proposed project has an economic development component, the number of project stakeholders the airport sponsor must partner with, and the complexity of the arrangement, can grow rapidly. When the Collin County Regional Airport targeted the EDS/Hewlett Packard (HP) corporate hangar complex for relocation to its airport, it relied on the assistance of many community stakeholders. An eventual agreement was achieved through a complex arrangement between Collin County Regional Airport, the City of McKinney, EDS/HP, the McKinney Economic Development Corporation (MEDC), and Collin County Regional Investments (CCRI). The airport leases the land to CCRI, who developed the hangar complex. The facility is in turn subleased to EDS/HP. MEDC provides a rent subsidy directly to EDS/HP, based upon the estimated minimum tax impact of the facility, and the City of McKinney provided a grant to accommodate a required storm water detention facility on the leased land.

3.5 Stakeholder Coordination

There are typically multiple stakeholders involved in an airport lease agreement, beyond the principal parties of the lessor and the lessee. In order to achieve alignment with the local community, the development goals of the airport and the community must be understood and advocated by all parties in order to ensure that all interests are met by potential development and lease agreements. Stakeholders, with

interests outside the confines of the airport environment, may influence the final lease agreement between the airport and the tenant. More often than not, outside stakeholder involvement can bring added benefit, resources, and incentives. Conversely, if all outside stakeholders are not identified early and brought into the planning and development process in a timely fashion, potential partnerships can be overlooked and barriers to the desired goals of the airport and tenant can materialize when all perspectives are not considered.

Even when stakeholders do not directly impact the end product of a formal lease agreement between the airport sponsor and the tenant, they may be essential to the overall development of a given lease. Specifically, community stakeholders may provide support, advocacy, and/or incentives critical to making the development project a success. Multiple factors influence the final structure of the lease and are driven by the collective inputs of all parties that have a vested interest in the final outcome of the development project. To this end, it becomes critical that airport management recognize and understand the perspectives of stakeholders involved and manage the development process to take advantage of their contributions.

3.5.1 Airport Users and Tenants

Current and potential users of the airport (both commercial enterprises and private tenants) are key stakeholders in most airport development projects and should be engaged in any new development activities. Needless to say, not all new projects and leases will affect all airport users; nonaeronautical development on landside parcels of land, for example, will have little impact on pilots and airside aviation-related activities. However, it is important to keep the aviation community at an airport abreast of all planned development, and, if applicable, involve them early in the planning process. Simple tools such as an airport newsletter or website can be used to keep airport users up to date on any proposed development, providing for an open and accessible avenue to voice any concerns, conflicts, or constructive input. A misinformed or uninformed airport community can create unnecessary and unwanted roadblocks, while a small amount of simple communication can help avoid any such issues.

3.5.2 Economic Development Agencies

An economic development agency or corporation (EDA/EDC) can come in many sizes and forms, from local agencies (focusing on a specific city or county) to statewide and federal organizations. The EDA/EDC can be the airport sponsor's most valuable ally in promoting the airport and attracting potential tenants and its involvement should be sought in any airport business development undertaking. Assistance provided by EDA/EDC includes, but is not limited to, the following:

- Marketing assistance,
- Site selection survey response,
- Industry recruiting,
- Funding and grant advocacy,
- Tax incentive/abatement identification, and
- Development of public-private partnerships.

EDA/EDC can provide expertise in industry recruiting and marketing that the airport may not possess within its own organization. This expertise is especially crucial when it comes to marketing and leasing land and facilities for nonaeronautical uses. While the airport sponsor may take the lead in developing and marketing airside- and aviation-related land and facilities, the economic development entity may provide value by identifying and securing financial incentives, including grants, tax abatements, and public-private partnerships that may be applicable to a given project.

3.5.3 Local Government

Involvement of local government entities and community organizations throughout the planning and negotiation process is important to the successful outcome of an airport development project. Examples of these organizations are

- Mayor's office/City Manager,
- City or County Council or Board of Commissioners,
- Local Department of Transportation, and
- Metropolitan Planning Organization (MPO) or Metropolitan Transportation Planning Organization (MTPO).

The airport sponsor should develop ongoing relationships with these entities in order to achieve the full benefit for the airport. Cooperation among the governmental organizations can often lead to synergies in planning and funding that can impact airport development projects for years into the future. Open and ongoing communication between organizations can open development opportunities and revenue sources that the airport sponsor may or may not have considered in the course of normal planning.

3.5.4 Community Organizations

Involvement and partnerships with local business organizations can lead to tangible benefits for airport development projects. Airports can be essential resources for local businesses and organizations such as industrial foundations and chambers of commerce, and these organizations are often eager to help. Businesses and employers in most communities are frequent users of the airport because air travel brings the benefit of greater efficiency with respect to time. Whether their airport use consists of scheduled service at hub airports or the charter of air taxi service, local businesses and organizations are important facets of a community and can be strong allies when it comes to developing airport property. Even if tangible resources are not gained through these relationships, the understanding, support, and alignment of businesses, employers, and business organizations can be vital in galvanizing community support and achieving airport goals.

All users, both public and private, should be considered when developing airport property. The Coastal Carolina Regional Airport received support in developing the new FBO terminal from local companies that regularly conducted business at the airport. After attracting \$250,000 in state grants for site improvements and access roads, the local business community stepped in and donated over \$35,000 worth of equipment, furniture, and fixtures in support of the improved "front door" to the region. To show its appreciation, the FBO installed plaques identifying the sponsor business in each of the donated rooms.

Hospitals and emergency service providers are other examples of community organizations that may use the airport and that may be able to lend support in the development of the airport. Hospitals often rely on airports for logistical purposes: the movement of organs for transplant purposes, air ambulance for medically critical patients, and provision of blood/plasma are examples of how airports may touch the local or regional hospital. Similarly, fixed and rotor-wing law enforcement aircraft may utilize airport facilities for the support of their operations, either on a permanent basis or in times of heightened emergency or special event. In some cases these organizations require permanent facilities; in other cases they require as-needed access to facilities. Regardless, these are prominent community organizations and service providers and can be powerful allies in gaining support for airport development and the airport in general.

3.5.5 Colleges and Universities

Universities and colleges (including local community colleges) fit into the categories of both employer and community organization, as many times they are amongst the largest employers in town. These educational institutions bear further consideration within the discussion of external stakeholders and

resources because they often have so many facets and areas of influence. Having a college and/or university within the community is a tremendous benefit, for a variety of reasons, but within the context of aviation, and specifically airport development, a college or university may have an aviation curriculum or even operations at the airport itself. Flight training, airframe and powerplant, and air traffic control are examples of curricula that the college or university may offer or that they could potentially expand. Also, the movement of sports teams, and the seminars and conferences that a college or university may be engaged in, may present opportunities for the airport sponsor to consider. And finally, the ability for a college or university to provide research, or to have a relationship on a research and development level with potential tenants, should not be overlooked.

The involvement of university/college stakeholders in the airport development process can be powerful because, as is the case of many large organizations, their connectivity or lack of connectivity to the world affects their effectiveness in carrying out the various missions with which they are tasked. The local college or university may be critical in demonstrating demand for a service or new tenant, especially in the arena of air-service development. And examples do exist where universities and colleges have provided financial support for airport development. In any event, the local college or university is another prominent stakeholder that can provide support, or if handled poorly, be a powerful adversary to accomplishing a needed development project.

3.5.6 State Government

The state government is often responsible for assisting in the development of a system of airports to support the state's aviation needs. The state government also has a vested interest in promoting statewide economic development and activity, thus providing the airport sponsor and potential tenant with a venue for state assistance. Funding for airport development may be provided by the state through transportation user fees, general funds, or in the case of state block grants, the state may allocate federal funds to airports throughout the state, often accompanied by state funds. These funds are typically granted to the airport sponsor for use on designated projects and may or may not benefit a specific project, lease, or tenant. Development of airport infrastructure, such as taxiways, ramps, roadways, or utilities, may play an important role in an airport development project and often relieves the project of the fiscal burden of these required attributes. States sometimes have the flexibility to move grant funds from one project to another or adjust priorities in order to facilitate a valued airport development project that will bring jobs and economic activity to the airport.

Additional funds and incentives applicable to airport projects are available through direct funding and grants, as well as through tax abatement and credits for employment generation. These incentives may be directed to the airport sponsor or the potential tenant depending on whether the activity generated meets the defined criteria. These incentives vary state by state but typically can be applied to airport development projects, both aeronautical and nonaeronautical.

3.5.7 Federal Government

When it comes to airport development in the United States, the federal government may not be involved in day-to-day airport operations but very involved with policy direction and system planning. The federal government assists in the development of state aviation plans and provides funding for airport improvement projects through the FAA's Airport Improvement Program (AIP). The AIP is funded from aviation user fees deposited in the federal aviation trust fund for the purpose of improving the nation's aviation infrastructure.

Publicly-owned airports that receive federal AIP grants must sign and abide by federal grant assurances, which specify, among other things, that the airport will charge fair and equitable rates

and charges for the use of the public airport. In terms of land valuation under long-term lease agreements, the airport sponsor is therefore obligated to establish a fair market rental rate. User fees for aeronautical and nonaeronautical activities are also bound by the fair and equitable test, so application of incentives and abatements must be approached with eyes wide open, always asking the question of what the airport will do when the next request arrives and what the parameters for application of incentives and abatements should be (see Section 3.2: Grant Assurances and Federal Compliance for more information).

The federal government also plays a role in both navigable airspace and height hazard issues. Specifically, the latest version of FAA Form 7460, Notice of Proposed Construction or Alteration, should be submitted by the developer/tenant early in the planning process to ensure the FAA has the opportunity to review the proposed plans within the context of impact to imaginary surfaces and navigable airspace.

The FAA's Airport District Offices provide leadership in planning and development for a safe and efficient National Airspace System (NAS). Airport District Offices also award the \$3.5+ billion annually in AIP grants and approve passenger facility charge collections. In addition, the FAA manages national airport planning, environmental and social requirements, and establishes policies related to airport rates and charges, compliance with grant assurances, and airport privatization. A host of federal agencies may be able to participate in airport development projects as well, since airports tend to touch a broad range of eligibility. Department of Transportation funding, beyond FAA, in areas of highway and transit, economic development funding, and Homeland Security programs are among the federal programs that may also assist an airport sponsor in structuring an airport development project.

In terms of planning, regulatory oversight, and as a source of funding, the federal government, through the FAA, the TSA, EPA, and the Economic Development Administration has a hand in all aspects of airport operation and potential development. Contact and cooperation with these agencies should be sought directly by the airport sponsor. Depending upon the size, scope, and purpose of the potential project, airport sponsors often utilize their elected representatives (U.S. Representatives and U.S. Senators) to serve as advocates to voice local requests within the federal agencies. Local EDA/EDC officials may also provide a conduit to federal Department of Commerce EDA officials, opening additional avenues of funding and assistance for airport development projects.

3.6 Sociopolitical Considerations

The social and political makeup of a community or a region can certainly impact airport development and bears consideration in preparing the airport for potential airport development. In many cases, airport development is viewed as a job creation opportunity, with aviation often seen as paying above-average wages. Social and political pressures can also serve as the catalyst to provide incentives for development in a less than ideal or inappropriate manner.

On the other hand, the sociopolitical environment surrounding an airport can provide the opposite effect. If the airport is seen as a poor neighbor bringing unwanted or undesirable activity and/or noise, the community may place pressure to preclude airport development.

Both examples illustrate the need for an awareness of the sociopolitical climate, and the fact that airport development can be impacted one way or the other. For these reasons, involving the stakeholders early and anticipating concerns can facilitate the development process. If fears or concerns from the community are anticipated, preparation to fairly characterize the project can be made in advance. If too much enthusiasm is anticipated, enlistment of appropriate parties to provide incentives can be orchestrated proactively.

3.6.1 The Airport Role in the Community

Airports may be perceived differently from one community to the next, so the role the airport plays within its respective community may be unique. Some communities view their airports as generators of noncompatible development and a detriment to their growth, though airports are seen in most communities as valuable resources and a vital part of the infrastructure. Some communities view their airports as important attributes to attracting industry and jobs; others recognize their community airport as a link to the world's air transportation network. Perhaps the community places its airport in high esteem because it supports emergency response activities in times of natural disaster or helps provide access to time-critical medical care.

Regardless of the rationale for perspective, or the combination of perspectives and public sentiment, airports should have a solid understanding of the role they are expected to play within their respective communities before embarking on airport development. This is an important point because the airport sponsor may encounter an unexpected response when the intent to begin an airport development becomes public, especially if the airport is out of tune with the community perceptions. Participation in comprehensive planning exercises and an overall engagement in community discussion can position the airport sponsor for a solid understanding of the role it is expected to play. Regardless of the approach, the airport sponsor needs to be seen as a member of the community, not as a visitor or an adversary.

3.6.2 Community Relations

Ongoing and quality community relations can have a significant impact on airport development. An airport sponsor that has a clear vision, a well-defined set of development goals and that is adept at building community consensus to support those goals is positioned for success in carrying out its development initiatives. Community relations are vital to the mission of articulating the vision of the airport sponsor, correcting any misperceptions, and building support for the initiatives undertaken by the airport sponsor.

Elected officials, in many cases, have a role to play in an airport development project, can provide resources, and are eager to take leadership and ownership of the project. When afforded the opportunity to take a center-stage leadership role, providing support and being an advocate in the policy arena, elected officials can play a valuable role. When overlooked, avoided, or circumvented, elected officials can be an unnecessary adversary that can certainly influence the success of the project.

3.6.3 The Economic Development Role

Because the vast majority of public-use airports are owned by public entities, social and political externalities can have a significant effect on airport development. Most communities perceive their airports as an economic engine and an important thread in the economic fabric of the economy. In cases where the airport is owned by a public entity (e.g., a county, a city, a state, or a stand-alone authority that may be governed by a board appointed by some combination of the aforementioned public-sector entities), social agendas and political influences bear economic consideration. This is particularly true when a development project has the potential for providing the community with significant economic benefits (such as new employment and/or tax revenues).

Sometimes an airport development project may stimulate an abundance of enthusiasm within the sociopolitical arena, bringing those pressures to get the project done and setting the stage for inappropriate involvement or application of incentives by the airport sponsor. In these cases, it may be appropriate to enlist appropriate parties (such as state and/or local economic development agencies) to proactively provide incentives through sources such as EDA grant funds and

tax abatements to avoid the airport sponsor risking violation of grant assurances with which the airport sponsor must comply.

An abundance of enthusiasm from the stakeholder community can be good, but, in some instances, it can also detract from the goals of the airport sponsor. When involvement from any stakeholder reflects special interest agendas rather than the interest of the airport, the outcome can result in long-term damage. Specifically, undervaluation or inappropriate application of incentives for the sake of economic development or other special interests can set off a chain reaction of lost revenue for decades to come, or worse, loss of capital improvement funding because of a failure to comply with federal grant assurances.

Sociopolitical relationships, both favorable and unfavorable, between the airport and the elected officials that govern the airport, will affect the airport sponsor's ability to pursue opportunities and negotiate the complex agreements and structures that might be required to develop large or complex airport development projects. If the sociopolitical relationship has either not been developed or is simply a poor one, the airport may find the approval process to achieve a specialized airport development to be a cumbersome and lengthy endeavor. If the airport is in a competitive site-selection process, the development prospect may ultimately gravitate toward an airport with a superior socioeconomic relationship within the community.

3.6.4 Incentives and Assurances

Airport development, specifically development of facilities and improvements built on leased portions of a publicly-owned airport, can vary considerably from traditional development of property on land that is owned fee simple. Federal grant assurances generally restrict the airport owner or sponsor from selling land to the developer, especially property adjacent to aeronautical facilities such as runways and taxiways. The airport developer is, therefore, generally left with the development of improvements on leased airport-owned land. This arrangement is generally accomplished under a long-term lease of adequate time for the developer to amortize its investment.

A core principle of complying with the federal grant assurances is that the sponsor must provide nonexclusive use of the airport and equitable treatment of tenants and users. There are many ways to attract airport development: incentives, abatements, and grants, for example. However, the airport sponsor must maintain a level playing field for like-users of its facilities. Incentives used to attract one airport development should also be offered to other airport developments with the same attributes. For this reason, the airport sponsor may elect to distance itself from the sometimes subjective job of allocating incentives, abatements, and grants, and leave that role to other community stakeholders who are better positioned to provide these important tools.

Project Development Considerations

The competitive environment for on-airport development projects requires a thorough understanding of today's substantive issues. Existing agreements must be taken into account with an eye toward future land or facility development. Marketing strategies should be innovative and include input from local stakeholders. And last but certainly not least, airport sponsors must successfully manage the development process.

When it comes to the components that make up a successful airport development project, the mix varies widely. In the simplest form, the airport leases property to a tenant that develops its own improvements on airport land. From there, third-party developers, airports providing built-to-suit facilities on airport land, application of incentives to whomever develops the property, and subleases set the stage for a wide variety of successful combinations. In short, the airport will need to identify who the tenant and developer will be and determine how the project will be financed to construct a development program that meets the requirements of all involved.

At the core of this issue is the reality that improvements or rehabilitations meant to meet the needs of the tenant/user will need to be “developed” by either the airport sponsor, the tenant/user, or by a third party. And those improvements or rehabilitations will need to be financed by one of those parties. As the structure of the land lease and development project comes together, those three parties may play a variety of roles and may even share roles. The combination of airport development components is limited only by imagination and creativity, as various tools are applied to provide incentives ultimately resulting in facilities for tenants to occupy.

4.1 Existing Agreements

Existing airport lease agreements have the potential of affecting future agreements in multiple ways, thus, it becomes important to account for any tenants and agreements that may be impacted by planned development. Several factors may influence lease agreements between the airport and a potential tenant, including existing airport lease policy and noncompete agreements.

Existing airport leasing policy, if applied equitably to existing tenants, will limit the flexibility of the airport to offer discounts, incentives, and other benefits to new tenants without negatively affecting the goodwill of existing tenants. It is the goal of an airport leasing policy to assure that each tenant is treated equitably, so it becomes necessary that the airport consider potential conflict and confusion that might arise when granting lease policy waivers and exemptions to new tenants.

It is the duty of the airport to assure that new agreements are not in conflict with existing leases and airport leasing policy. A cohesive and accessible leasing policy can be a key tool in mitigating any confusion and conflicts that may arise later.

Noncompete agreements are generally in conflict with federal grant assurances and difficult to apply to commercial ventures such as an FBO or MRO operation. When seeking to execute a lease for commercial activity, the airport must be aware of current tenants in the same industry and be cognizant that grant assurances require access to new entrants at public airports. If non-compete clauses are prevalent in existing documents, changes may be required.

4.2 Marketing

Airport marketing can be instrumental in developing land and leasing airport property. The marketing targets will differ, depending on whether there is an existing facility or if the airport plans on constructing a new facility. If a facility exists on airport property, the airport will likely market that facility to potential tenants. If the airport is planning to build a new facility, it may need to market to the community and local, state, and federal agencies to garner support for the project. In either case, a good relationship with the community's economic development entity and/or chamber of commerce is always beneficial. In fact, these entities may be able to help the airport secure funding for the project. With an existing facility, the economic development entity may be able to help attract tenants, and, in some cases, even build a workforce. An example of this can be found in the PEMCO project in Tampa, FL (see Appendix A). Characteristics such as the airport's location, possible niches, history, and area demographics should be taken into account as well.

The airport professional that manages real estate within the airport's organization should typically coordinate land negotiations. Negotiations usually begin with a written offer, which should not be less than the appraised value of the property. Valuation is discussed in more detail in Section 4.5 of this chapter.

There are many ways to market and solicit proposals for project construction and for identifying land available for lease. Most common is to post the opportunity on airport websites and in association publications' business announcements, such as a monthly opportunities newsletter. Another option is to use a third party, such as the economic development entity described above. Many times, it is advantageous to use third parties for resources such as professional knowledge, time management, and financial management. Many publicly-owned airports could use third-party organizations for less cost than private organizations because these developers may be included within the local municipality. Whether it is a third party, the airport, or a consortium of entities, the most knowledgeable and able entity should be the one to manage the proposals and deploy varying means of mass communication. An important axiom to remember is that the larger the project and greater the potential for economic impact, the more competition for development.

4.3 Funding

The ability to enter into a lease agreement is often dependent upon the availability of funding or the ability to obtain project financing. Whether or not the airport sponsor is responsible for financing the development project, either in part or in total, is dependent on the type of project and the financial resources the developer/tenant brings to the table. In addition to airport-specific resources (e.g., revenue derived from existing airport leases, fees, and charges), potential funding sources for an airport development project can be found from a variety of local, federal, and state agencies. These sources may include

- AIP,
- Passenger Facility Charge (PFC) Program,
- Local or state economic development grants,

- Federal economic development agency grants,
- American Recovery and Reinvestment Act (ARRA) bonds,
- Airport issued bonds,
- General obligation bonds, and
- Private financing.

While an airport's operating revenue is generally derived from lease agreements and fees, most airports rely on capital improvement project funding from the FAA through the AIP. Many commercial service airports also levy passenger fees through the PFC Program. Other sources of project funding come in the form of economic development grants should the project meet eligibility requirements, while additional financing options are in the form of subsidized bonds. A detailed overview of available funding sources is presented in Chapter 5: Finance Overview, Section 5.6: Funding Sources.

4.4 Land and Facility Development

Airports and potential tenants have a wide variety of leasing options and examples at their disposal. The land will more often than not require certain improvements such as utilities, access, and preconstruction development. These improvements are usually negotiated in the early stages of project development, to ensure the required elements are available when needed. As development coordinator, the airport's first priority is fostering and supporting aviation. Portions of airport land may be occupied by entities that have little to no involvement with aviation when airports offer a competitive strategy for stimulating economic activity by preparing excess land for compatible nonaeronautical development. While some airports turn away from leasing or developing land for nonaeronautical use, nonaeronautical development can diversify an airport's revenue stream.

Shovel-ready is a popular term for sites that have utilities, roads, and, in some cases, initial permitting completed before ever talking to potential developers, which only maximizes the desirability of the site. Offering shovel-ready sites that include competitive rates, land entitlements, utilities, facilities, and incentives will support the development of airport property and set the stage for a sustainable revenue base.

In this regard, many airports develop their land before marketing ever begins. Out-of-the-box thinking can be extremely valuable because land/facility development can be a costly prospect. In cases of nonaeronautical development in particular, developers may have many options, most of them on property that can be purchased fee simple, so preparation on the part of the airport can pay big dividends. Aspects of land/facility development include, but are not limited to, the following:

- Utilities such as water, electricity, and sewer;
- Civil site work and soil stabilization;
- Airfield access;
- Roadways and public access;
- Development planning; and
- Maintenance and upkeep of common areas.

The scale of the project, its intended use, the impact on the community, a balance of commercial enterprise versus private use, potential job creation, and public resources needed will all determine the mix of stakeholders that need to be involved. While private-party leases tend to be straightforward, requiring limited stakeholder involvement (e.g., renting a hangar to the owner of a single-engine Cessna), commercial enterprise projects are typically more complex. Commercial enterprises require greater resources and produce a corresponding greater positive impact on

the community in terms of job creation and tax revenue. Commercial enterprises are often sought by competing communities, and, through competitive site selection processes, the commercial enterprise may consider incentives offered when choosing its ultimate location. These projects often involve the inclusion of multiple local, state, and federal entities that are needed to provide funding, tax incentives, and other applicable financial incentives, as well as regulatory oversight.

4.5 Valuation

Valuation of airport property can vary widely from one airport to the next and is often influenced by both the valuations that are placed on property at other airports and by local influence of the aviation community. In cases where airport development has not been done at the subject airport for some time, the risk of undervaluation can come into play if the airport sponsor did not negotiate appropriate escalation language in the existing leases. In those cases, applying a contemporary method of valuation may be met with resistance if the new valuation is significantly higher than the lease rates already in place. Similarly, airport sponsors that take control of improvements after they revert back to the airport at the end of the lease term may inadvertently undervalue the improved property if they don't seek the assistance of an appropriate valuation methodology.

Airport sponsors that are systematic in their approach to updating rates and charges, and that routinely update the value of both unimproved and improved property, are best prepared when a prospective airport development does present itself. As in most real estate transactions, facility and property valuation should not be too low or the airport sponsor misses a revenue opportunity, but not too high or the airport sponsor misses a development opportunity by not being competitive in the marketplace. The marketplace, in the context of airport development, can sometimes be a large geographic area, because prospective development may have the luxury of considering airports of comparable size within a region of the country, as opposed to more site-specific, nonairport development such as distribution parks, hotels, and restaurants.

The value of airport property is usually dictated by location, size, uses, and income-generating potential. Regardless of the valuation method, the airport sponsor should always remember that allowable uses, or restriction of uses, within the boundary of the leasehold being considered have a profound effect on property value. Restricting the use of airside property to aviation purposes, for example, is certainly legitimate and appropriate for the airport sponsor. However, from a real estate valuation perspective, in most circumstances, restricting allowable uses will lower the value of the airport property because the use restrictions reduce the market demand. Similarly, security requirements and the ease or lack of access to a property can impact value. Security, or lack of security, can have a positive or a negative effect on property value, depending on the needs of the tenant and the market that exists for a given piece of property with given characteristics. Other restrictions placed on airport property such as height, due to navigable airspace, smoke/emissions, due to interference with the pilots' ability to maintain visual separation between aircraft, and organics products, such as composting and landfill activities, affect uses and ultimately land values as well. This difference is perhaps more pronounced in small- to mid-sized communities than at large-hub airports, but the airport sponsor should focus on a comparison of comparable properties at comparable airports rather than focus so much on real estate parcels within the same community. The following sections provide an overview of differing valuation strategies.

4.5.1 Appraisal

The appraisal process for airport property should consider comparable land and facilities at airports of similar size throughout the region. Components of comparability include the population of the community, proximity to other modes of transportation such as highways, number

of based aircraft, types of commercial activity, and level of air service. The airports being compared should have similar levels of amenities as well; air traffic control, instrument approaches, lighting, security, and hours of operation all affect access by the aviation community, and, therefore, value of the property on that facility.

There are several real estate appraisal certifications; perhaps the most widely recognized in the commercial real estate arena is the MAI or Member of the Appraisal Institute designation. MAI appraisers are qualified to perform both residential and commercial property appraisals, and they routinely stay current in their discipline through trade association involvement. As discussed above, the challenges of appraising airport property include an understanding of the unique attributes of an airport, the federal obligations that the airport sponsor must follow, and the allowable uses of the property when establishing market value. Identifying an individual that is versed in airport real estate is every bit as important as a certification, so the airport sponsor should look for both experience and credentials when choosing someone to appraise airport property.

4.5.2 Comparable Sales Approach

The most common form of valuation is the identification of relatively similar land and the assessment of the established value. From this information, the similar land can serve as a benchmark to determine valuation based on a measurement metric such as cost per square foot. This approach involves determining the lease rates at comparable sized airports offering similar levels of services and using the findings to establish lease rates. In order to account for varying regional real estate values, lease rate data should be acquired from competing airports within the same market area. Market area, size of airport, and demographics of region should all be considered when establishing comparables, as well as the number of based aircraft, size of based aircraft, and indicators of traffic volume such as fuel-flow volumes.

4.5.3 Cost Approach

When comparable sales are lacking, another valuation method may be implemented. The second valuation approach identifies the cost of replacing all existing facilities and improvements. The cost of such replacements—less depreciation—can serve as a basis for setting a value on developed land only.

4.5.4 Income Approach

This approach identifies the possibilities for development of the land to produce and generate revenues or other values when the land is used to its highest and best use. This method proves more difficult to quantify due to the fact that the income or value must be estimated for a point in the future. Also, determining the “best use” may change as the land or surroundings change.

It is best not to attempt to actively value property unless aware of and educated on the various valuation processes. If valuation is needed, an experienced individual should be used to apply the most appropriate valuation method, thereby ensuring that lease rates are realistic.

4.6 Airport Revenue Maximization

Airport revenue maximization should be a key goal for the airport sponsor and must be a primary consideration when entering a lease agreement. The FAA, through its grant assurance documents, requires airports to establish fair and reasonable fees without discriminating against a specific aeronautical user. The FAA also recommends that airports maintain a fee and rental

structure that makes the airport virtually self-sustaining. Airports are expected to establish rents and airport user fees that generate enough revenue to meet airport funding requirements. Key considerations involve balancing the financially intangible benefits of a specific project (such as improved service offerings, job creation, and new tax revenue) with the tangible benefits of revenue to the airport.

An Airport Business Plan can prove to be a valuable tool as the airport sponsor seeks to maximize airport revenue. A properly executed business plan will provide a comparative analysis of the airport's lease rates, charges, and fees in relation to other airports, as well an analysis of the airport's lease policy. This will provide airport management with the basis to adjust rates and charges to true market rates if the findings of the analysis dictate.

4.7 External Stakeholder Resources

Coordination of airport development initiatives with community stakeholders is important, and described earlier in this *Guidebook*. Aside from coordination, external stakeholders can provide valuable resources, both tangible and intangible, to a specific airport development project. The state government, for example, is a stakeholder and is likely involved with policy direction and regulation of the airport, and in some cases may be a development partner by providing grant funds, low-interest infrastructure loans, or matching funds required for an airport to accept federal funding. The same may be true for the list of stakeholders described in Chapter 3.

In the intangible arena, external stakeholders may be able to offer tax incentives or other incentives under the auspice of economic development, when the airport sponsor might find it difficult to justify such an offering. Whether tangible or intangible, identification of an appropriate mix of external stakeholders, and bringing those stakeholders onto the airport sponsor's development team, can be a powerful strategy. Assembly of a diverse spectrum of funding sources is sometimes required to make a specialized airport development project commercially viable, especially if the project lacks feasibility without external funding sources and requires some component of debt service.

Finance Overview

Funding for and financing of an airport development project can vary widely, depending on the stakeholders that are involved, the incentives that are offered, the grant funding that's available, and the methods that are applied. In short, the variety of funding combinations is limited only by the imagination. There are multiple factors that must be considered by the airport sponsor. These considerations are dependent upon who will be developing the project in question: the airport sponsor, the tenant that will occupy the development, or a third-party developer.

The following sections will address certain financial perspectives and tools that the airport sponsor may utilize when considering an airport development project. Understanding the interrelationships between financing, valuation, and lease elements, and how these relationships affect each party entering into the lease agreement, is essential in maximizing the financial benefits and long-term health of the airport.

5.1 Airport Sponsor Perspective

The airport sponsor has the prerogative of determining who will play the role of developer and how the airport development will occur. The airport sponsor can choose to seek tenants that will develop their own capital improvements, enlist the help of a third-party developer, or the airport sponsor can decide to play the role of developer itself. With risk usually comes reward, so the airport sponsor may find interest in the reward side of the development business. And reward can come in the form of new revenues, additional aviation activity, jobs, the synergy needed to develop a business cluster, the attraction of based aircraft, or some combination thereof.

5.1.1 Funding

Should the airport choose to play the role of developer, the airport sponsor becomes responsible for securing necessary funding, which may come in the form of grants, debt, or, most commonly, a combination of funding sources.

Grant funds are present in many airport development projects and represent the most desirable financing option for an airport sponsor. However, grants are limited to certain items based upon the issuing agency and eligibility criteria. The FAA may allow, for example, AIP funds to be used to extend a taxiway that serves multiple sites and the aviation public, but not allow funds to be used for an aircraft parking ramp that serves a single tenant or that would be considered exclusive use (see Section 3.2.6: Exclusive Rights for greater detail on exclusive rights versus preferential treatment). Similarly, EDA grant funds may be eligible for facilities directly related to job creation but ineligible for a taxiway extension that might be seen as lacking connection to the stimulus of economic activity.

Grant eligibility should be discussed early on in the project with the FAA, the state aeronautical agency and with economic development organizations, because while grant funds are often an important component of the project, they typically have limitations and restrictions on their use. Grant funds, once applied to the development project, are generally viewed as equity and will satisfy only a percentage of the development cost; therefore, additional resources needed typically translate into debt.

If an airport acquires debt to fund a project (either partially or in whole), the debt repayment cost must be offset through revenue derived from the project. The airport sponsor must be reasonably certain that the revenue generated from a given development project will be sufficient to offset the expenses incurred. These considerations will not only include debt expense, but also any additional liabilities that will be incurred through the operation of the facility. Simply put, the airport sponsor needs to determine whether or not the benefits outweigh the costs.

5.1.2 Quantifying Benefits—Pro Forma Analysis

Regardless of the type of development an airport is seeking, the airport sponsor should make every attempt to ensure that the project is financially beneficial for the airport, now and into the future. By examining the financial implications and comparing the revenues versus the expenditures of the project, the airport sponsor can evaluate, through pro forma analysis of potential financing and lease agreement scenarios, how elements in the proposed lease agreement will impact the airport's financial position.

A pro forma analysis is a projection of the expected costs and revenue associated with the construction and operation of an airport facility. Before the decision as to whether the airport sponsor should play the role of developer or not, the airport sponsor should go through a pro forma analysis and determine whether the direct and indirect benefits that can be derived from such an arrangement outweigh other opportunities available to the airport sponsor. Direct benefits would typically include rents and financial gain, while indirect benefits might include increased aircraft operations that stimulate fuel-flowage revenue. Economic impact and job creation may also be considered either direct or indirect benefits, but more so from a community perspective than an airport sponsor perspective. In an unbiased pro forma analysis, a strict separation of benefits directly attributable to the airport can be considered to ensure that the best interest of the airport is served and strict compliance with grant assurances is maintained.

The level of detail of the pro forma is left to the discretion of the airport sponsor and often is dictated by the complexity of the proposed project. However, there are core elements that must be included when projecting the financial impact to the airport, including the following:

- **Financing Costs:** This represents the annual dollar figure required to service the debt associated with the project (principal and interest). Obviously, the more this number can be reduced, either through developer financing or grants, the better the financial position for the airport.
- **O&M Costs:** Depending on what is stipulated in the lease agreement, the airport sponsor may be responsible for all or a portion of facility maintenance. In addition, operation expenses such as utilities and security may be incurred by the airport to a level that is stipulated in the lease agreement. These costs are often estimated per square foot, based on benchmarks from similar facilities, increased annually with use of some widely-accepted metric such as the Consumer Price Index (CPI).
- **Lease Revenue:** This is the anticipated annual revenue that will be derived from the facility once occupied. When accounting for anticipated lease revenue, be sure to account for any escalation clauses in revenue projections.

- **Other Revenue:** In addition to rent, the airport may derive other revenue from the execution of a lease agreement; this is particularly true of a lease agreement with a commercial enterprise. The airport sponsor should, to the best of its ability, estimate these revenues and include them in the pro forma analysis. Examples of other revenue include fuel-flowage fees derived from additional aircraft activity, tie-down fees, concession fees, and percent of revenue agreements.

5.1.2.1 Consistent On-Airport Valuation

Valuation should be accomplished by comparing like facilities capable of accommodating the same type of activity. For example, a hangar that can accommodate a large business aircraft will have a greater value than a hangar that is restricted to smaller aircraft, if for no other reason than the cost of replacement is greater. So door height, the clear span within the facility, and the bearing strength of the hangar floor and adjacent movement areas will all affect the value of a development per square foot.

The discussion of debt and debt service, or the repayment of principal and interest to the lender, illustrates the importance of consistent, appropriate valuation. Valuation translates to revenue stream, which provides the means by which the debt can be serviced. Ignoring the correlation between market value and replacement value (construction cost) can quickly set the stage for a gap that cannot be bridged without revenue from another source. Wide gaps between similar facilities at the same airport, due to a scenario of undervalued existing facilities and appropriately valued new facilities that satisfy the requirements for debt service, may be seen as discriminatory from one tenant to the next.

Vigilance on the part of the airport sponsor in monitoring property valuation can help minimize that gap, and development of a methodology for justifying any gap between facility values and replacement values can avoid, or at least prepare for, scrutiny of the methodology. Age and amenities of the facility can certainly justify differing values, but a methodology and justification is important for the airport sponsor to achieve.

5.1.3 Capital Recovery Rates

The capital recovery (CAP) rate is an important part of any pro forma analysis, as it, too, speaks to risk. The faster the developer is able to recover the capital expenditures associated with constructing permanent improvements, the less exposure (associated with the shorter period of time) there is for the possibility of a tenant vacating the facility early or defaulting on a sublease. Because improvements are generally made on leased airport property in a typical airport development scenario, they are considered “wasting assets.” The improvements, and any value associated with those improvements, usually return to the airport sponsor, along with any rights to the property itself, at the end of the lease term.

The CAP rate is the sum of a straight-line recapture rate, or the annual percentage required to recover all of the investment over the term of the lease, and the discount rate, which is the rate used to convert the future receipts and/or payments from the tenant to the developer (which may be the same entity in some cases or two separate entities in other development projects) to present value. For example, if the lease term is 25 years, and the useful life of any improvements is 25 years (assuming the lease begins once improvement construction is complete and that the improvements revert to the airport sponsor at the end of the lease), the developer is faced with a 4% straight-line recapture rate (100% of the asset value divided by the 25-year term the developer has to recover its investment). The discount rate is then added to establish a CAP rate.

CAP rates are routinely in the 6% to 12% range per year and vary depending on the type of development. Because a CAP rate on the high side of that range will accelerate the amount of money that must be collected each year, and a CAP rate on the low side of that range will minimize the amount

of money that must be collected each year, CAP rates also speak to the market and level of competitiveness. If the airport sponsor requires a 10% CAP rate, 10% of the value of the land is collected each year in ground rent. CAP rates regarding improvements on leased land, however, can be significantly more complex to calculate because the CAP rates are likely to vary depending on the type of development and the markets that exist for certain types of development, especially when the development is nonaeronautical.

In the example above, the straight-line recapture rate component can be cut in half if the development takes place on a piece of property that is owned fee simple, and if the improvements have a 50-year useful life. Similarly, the discount rate, which is a function of the developer's confidence in collecting future rents and fees, can be affected by the range of allowable facility uses, the size of the market, and number of potential tenants for those improvements. Therefore, it is easy to see how CAP rates can vary so widely. On the other side of the comparison, development on leased property has its advantages as well because of the lack of property acquisition on the front end of the development project.

For an airport sponsor to be competitive with surrounding land owners that are willing to sell their property, CAP rates for a nonaeronautical airport development project must be consistent with the immediate market and conscious of the higher CAP rate driven by the lease term. The airport sponsor should understand that term length must speak to both a reasonable amortization of investment and to the market conditions that drive CAP rates and affect project competitiveness. A 25-year lease term may appear perfectly adequate, for example, to construct a hangar or other aeronautical facility, amortize the investment, and still allow for a profit. Market-driven CAP rates on other types of development, however, may be very different due to options available for a given nonaeronautical development project. In short, CAP rates for nonaeronautical development are generally lower than for aeronautical airport development projects and can affect the overall financial structure of the development project, including term length. While aeronautical uses may well accept a 10% capital recovery rate, industrial development or distribution warehousing, where the development can take place either on or off airport property, may only support a 6% to 8% CAP rate. In other words, one CAP rate does not fit all scenarios.

5.2 Developer Perspective

Financing a new project at a public airport on leased land can be challenging, especially at airports with smaller amounts of developed property and/or when there has been no recent development of land. Because development on airports is often synonymous with development on publicly-owned property, funding of the project has its challenges from a collateral standpoint. In traditional real estate development, the developer has the luxury of encumbering the title of the property for the purpose of lender security, and the lender has the ability to place a lien on the real estate to secure its financial position. Airports, specifically publicly-owned airports, are typically precluded from allowing claims, such as liens, to be placed against the title of airport property, and are unable to offer that security to the lender for a specific development. The lender is therefore left with the improvements on the property, the length of the lease term, and the strength of any sublease or pledged revenue stream to collateralize the debt.

5.2.1 Return on Investment

The financial benefits that flow from an airport development project are typically expressed as an annual percentage of the amount invested, or return on investment, representing annual cash flow. Expectations of the developer for return on investment are typically defined within the pro forma of the development project.

If the project is being developed by the airport sponsor, such an analysis should consider the opportunity cost associated with the use of its cash, debt capacity, or other resources to develop a facility for a tenant, versus its ability to utilize those same resources for the purpose of developing public infrastructure. Once airport resources are invested in facilities for a specific tenant or group of tenants, it should acknowledge that those resources are no longer available for public infrastructure improvements, an investment that is often amplified by state and federal grant funds. An analysis of the potential for missed opportunity may reveal, for example, the inability of the airport sponsor to either invest in or place debt for other public-use projects. Any cost of missed opportunity should be considered as a component of the overall airport sponsor cost of the project. Investment by a developer other than the airport sponsor, that does not encumber airport resources, will likely have no cost of missed opportunity for the airport sponsor to consider, because that same private capital is likely unavailable for investment in public infrastructure. Regardless of who the developer is, the developer should expect a return on investment. Development projects that do not reflect a reasonable return on investment only erode the market value of all improvements at a given airport.

Replacement-based valuation considers the cost of building new facilities in today's dollars, amortizing that investment, and establishing rental rates adequate to recover the investment, with a return on that investment. If hangars are developed by an airport sponsor, perhaps with the assistance of grant funds, for example, without regard for replacement-based valuation, the improvements can be undervalued and the rents charged to occupy those facilities can be too low. Once below-market rents exist, the airport is unlikely to attract private investment for additional hangar development because the market will have eroded from the undervalued development, and new development will be unable to attract the capital required to construct new facilities without market rents that will support the associated debt service. The airport sponsor will then either experience demand that exceeds supply and bring rates up to market value (hopefully in a consistent manner) so that new development can attract capital and service debt, or invest more of its own capital resources to build additional hangars that remain undervalued. In short, undervaluation of improvements is somewhat short-sighted because it leaves the airport sponsor with fewer development options.

The airport sponsor, when fulfilling the role of developer, may consider return on investment in the form of additional airport activity or from the attraction of an enterprise that has long-term benefits to the airport. Arguments can be made for both sides of this debate and certainly one rule of thumb will not fit all development scenarios. The airport sponsor should first weigh the return against other investment opportunities, such as investment in runway and taxiway improvements, and then consider the long-term implications if undervaluation of rents is to be traded for benefits the airport considers to be returns on its investment. FAA compliance should also be considered, as achieving market value on the rents an airport sets is an important part of complying with federal grant assurances. One strategy or best practice in this regard is for the airport sponsor to include grants in the project pro forma and in the calculation of return on investment. Once all project equity is accounted for, a rate that yields a positive return on investment will insure a replacement-based valuation of improvements.

A typical return on investment might be on the order of 5% to 10%, especially in the case of a facility that is developed for a single tenant who signs a long-term agreement and who asks for very few specialized improvements. Generally speaking, the less specialized the improvements are, the larger the market will be for the developer to lease a given property to a different tenant if need be. Return on investment can vary as the development project wanders from the parameters described above. Specifically, in the scenario mentioned above where undervaluation on the part of the airport sponsor, and/or lack of consideration regarding grant funding, takes place in lieu of other desirable benefits the airport development might bring, the return on investment

may be zero or even less. Conversely, in the case of a private development that includes construction of speculative lease space, without a specific tenant, the project may require a higher return on investment as deemed appropriate for the reward of that speculative risk. Speculative development may be a goal of the airport sponsor, and, in those cases, the return on investment may well be in excess of 10%. In all cases, though, the airport sponsor will need to judge the appropriateness of the return on investment expected from the developer, and base its endorsements and approvals on its own evaluation of the proposed balance between risk and reward.

5.2.2 Financial Effects of Lease Components

The terms of the agreement or agreements that govern an airport development project can have a profound effect on project financing. Agreement terms speak directly to risk, and can affect the rate of return required by the developer and the developer's lender to take on a given risk. The terms of the agreement(s) define the flexibility of the developer to satisfy all of the project requirements, including the expected return on investment and profit, even if the project has setbacks. Because setbacks include vacancy of the tenant or subtenant, built-to-suit facilities may represent more risk than perhaps an aircraft storage facility that falls within a general grouping of facilities with similar attributes. This is especially true in the case of a third-party developer that borrows a portion of the project funds based on the security of its tenant, but also applies to a tenant that borrows money to build its own facility, or to the airport sponsor that will need to service its own debt. The developer and the lender must be comfortable that the project terms are generous enough to allow for recovery if a vacancy does occur. They must also be convinced that the terms include ample enough time necessary for the replacement of a tenant or subtenant to still meet the objectives of the project pro forma.

5.2.2.1 Lease Term

The lease term must be long enough to allow the developer/tenant to fully amortize their initial investment in the proposed improvements. If the lease term is too short, interested tenants may not see the financial benefit from entering into an airport development project. Flexibility in the length of the lease term can be achieved through extension provisions written into the lease. These can be 5- to 10-year extension clauses that effectively extend the lease term to a length that is mutually beneficial for both the airport sponsor and the tenant. This is a particularly beneficial tool when an airport sponsor is limited by statute (state or local) from issuing lease terms for a period long enough to allow a tenant to amortize its facility investment.

5.2.2.2 Maintenance Requirements

Appropriate maintenance, and more importantly, who is responsible for that appropriate maintenance, is an important term of the agreement(s). Maintenance is important to ensure that the full useful life is achieved, that tenant health and safety is maintained, and for the protection of the investment through the term of the agreement(s) and beyond. Because maintenance is costly, a description of who is responsible for maintenance, in great specificity, both inside and outside of the building, is important to include within the language of the lease.

5.2.2.3 Allowable Use

An understanding of the facility uses that the airport sponsor will allow is an important agreement term and definitely speaks to project financing. As discussed above, the developer's risk is affected by the market for replacing a tenant or subtenant. So the more specialized the facility, or the more restrictive the allowable uses, the smaller the market for tenants and the greater the risk to the developer/lender. Greater risk may require a longer lease term, higher expectations for return on investment, and can affect the amount of money the developer can afford to pay the airport sponsor.

A common trap is to restrict uses of airside facilities to aeronautical activities. While preservation of airside property and facilities for aircraft operations and movement seems appropriate on the surface, prudent closer examination acknowledges that some commercial aeronautical activities require interface with nonaeronautical functions. Cargo consolidator, expeditor, and sorting activities are examples of how nonaeronautical operators can justifiably occupy airside facilities. Large cargo operators require this support network to carry out their mission.

5.3 Bank/Financier Perspective

The bank or financial institution that lends money against an airport development project will typically have a slightly different perspective than the developer or the airport sponsor. The bank must consider the possibility of the airport losing the tenant that will occupy the improvements they are being asked to finance, and/or losing the developer that is counting on a mutually beneficial business arrangement in a given airport development project. Many of the metrics that can be compared between the perspectives of the developer, the bank, and the airport sponsor are the same, but the bank/financier must always look at the worst-case scenario and be comfortable with the business arrangement and its ability to cure, should an unpleasant scenario arise despite all efforts.

5.3.1 Debt/Equity Coverage

An airport development project's debt-to-equity ratio is determined by dividing the total long-term debt of the project by the developer's/sponsor's equity in the project. Equity will include cash, as well as soft-costs paid up front such as for design, planning, and/or consulting services needed to establish feasibility of the venture. The cash portion of the project may also include grant funds that are immediately available, which usually come through the airport sponsor. Existing improvements may also be considered as equity in the project.

The developer of a given airport project is likely to require a portion of the development costs to come by way of debt from a bank or lending institution. The bank, financier, or lending institution will consider the debt-to-equity ratio as one metric in establishing the developer's ability to pay off the claims of its creditors in the event of default and/or liquidation. The lower the debt-to-equity ratio, the better the debt coverage or security to the bank in the development project. In the event of default or liquidation, the primary lender will typically have the first right of claim against any equity in the project. Therefore, the lender will be focused on the likelihood of recovering the principal amount loaned in a liquidation scenario, even if the lender must discount the value of the improvements to recover its money. So the lower the ratio, the larger the margin between what is owed and what the project is worth, and, therefore, the more room a bank or lender has to work a new deal and cure its position in a distressed situation should the developer default on its obligations.

As part of a lender's evaluation of the developer's ability to repay the debt service (principal and interest), the lender will consider the ratio of debt to equity. Or, debt-to-equity ratios can be used to set standards for lending. If, for example, a bank requires a debt-to-equity ratio on a given project, after considering the pro forma of the project and the creditworthiness of the developer, of 1.5:1, and the completed development project is \$1,000,000, the

The Lynxs Group entered into an agreement with Ted Stevens-Anchorage International Airport to construct and operate the Alaska CargoPort (ACP) air cargo complex for use by commercial carriers and freight forwarders. To ensure the financial viability of the ACP, the airport and the developer were willing to consider out-of-the-box ideas. The Lynxs Group secured financing for the \$35 million project, but financing costs needed to be minimized to be viable. As a public entity, the airport was able to obtain tax exempt financing for the project, resulting in an estimated \$1 million savings in debt service. Under IRS rules, the airport was required to actually take ownership of the improvements and lease the facilities back to the developer. This public-private financing partnership provided for the ultimate construction and profitable operation of this thriving facility.

bank has an equity requirement of at least \$400,000 in cash, grants, soft-costs, capital improvements, and/or other equity to satisfy the debt coverage requirements of that bank or lending institution.

5.4 Debt Vehicles

There are differing types of debt that are applicable to financing airport projects; their applicability and availability are dependent on the type of airport project being considered and whether the airport sponsor or a private developer is funding the development. The following sections provide a brief description of differing types of debt and how they can impact airport development projects.

5.4.1 Tax-Exempt Debt

Tax-exempt debt is generally applied to development projects that satisfy a public purpose or need, and generally comes from or through a public-sector entity or a government, such as a city, a state (such as an EDA or infrastructure bank), or the federal government. Private lending institutions can also offer a tax-exempt product, carrying an obvious benefit to the lending institution's customers and owners.

Tax-exempt funding can be complex and usually involves the need for bond counsel to give opinion on the taxable status of the project. Simply put, the project must provide a public purpose to receive the tax-exempt status, so detailed analysis is usually required to determine whether the project, or a portion the project, has a public purpose. For example, facilities that support public air transportation may satisfy the legal test, so a review of whether or not a project meets the objectives for some facet of tax-exempt financing is generally prudent. Public financing often carries with it an attractive interest rate that can have significant impact on debt service over time.

Another hybrid of tax-exempt funding is the special airport facility bond, whereby the credit rating of the airport sponsor is extended to a development, again offering favorable rate attributes and access to attractive financing. This funding generally does not count against the airport sponsor's debt capacity because the project offsets debt with revenue. Again, bond counsel is a prudent first step to determine whether the project would qualify for tax-exempt funding.

5.4.1.1 Alternative Financing Structures

A contemporary strategy for financing a project, and found in one of the case-study examples, is for the airport sponsor to assist a private developer in financing a project with tax-exempt debt by assuming the debt and ownership of the improvements and recovering the future payment liabilities through a leaseback agreement with the developer. Since tax-exempt financing is typically available to government agencies only, eligibility for such funds require that the airport (a public entity) actually take ownership of the proposed facility and lease 100% of those facilities back to the private developer. Such an agreement can save the private developer substantial financing cost, to the benefit of both the developer and the airport sponsor. A similar strategy has been applied in other circumstances whereby the tax-exempt debt flows through the public entity, directly to the private development. Alternative and hybrid financing structures can be complex, but, more importantly,

In order to create a leasable airport asset, New Bedford Regional Airport subleased a vacant facility to the New Bedford Redevelopment Authority for the development of Bridgewater State College's new aviation training facility. This allowed the Authority to utilize redevelopment bonds, which provided subsidized financing for the project. This arrangement exemplifies the deft utilization of available local resources with bond issuance authority to provide financing options for an airport development project. In this case, not only was the local community improved through the addition of the new training facility, the airport was able to convert a vacant liability into a revenue-producing asset.

vary from airport to airport, from state to state, and from situation to situation. In addition, alternative funding structures must stand the test of perception within the community, regarding the appropriateness of using tax-exempt funding for private development.

5.4.1.2 *Alternative Public Debt Options*

Issuing bonds is an option for financing airport projects for airports with such bond issuing authority. Most airport bonds are issued by large- and medium-hub airports operated by independent airport authorities, and are secured by current and future airport revenue (i.e., airport revenue bonds). Smaller commercial service airports and GA airports, however, often do not have the authority or the financial strength to independently issue bonds. This condition, however, does not necessarily mean that these smaller airports cannot issue debt for airport development. If issuing debt for a specific project is deemed the appropriate course of action, the airport's owner (e.g., the city, the county, an authority, or the state) can issue a general obligation bond that is secured by the taxing authority of that entity. Since these bond payments are guaranteed by tax dollars, issuing these bonds is often a difficult undertaking if the underlying revenue stream associated with the project cannot be guaranteed.

In 2009, the Federal Government passed into law the ARRA with the intent of stimulating the economy through infrastructure and business investment. Within this Act are two bonding programs that may be applicable to airport development: Recovery Zone Facility (RZF) bonds and Recovery Zone Economic Development (RZED) bonds. These programs are representative of federal and nonfederal programs that are available from time to time, and may include eligibility for a specific airport development project. In short, the airport sponsor may benefit from both traditional approaches and emerging or one-time opportunities when considering debt vehicles.

Recovery zone bonds are targeted to areas particularly affected by job loss and help local governments obtain financing for economic development projects, such as public infrastructure development. The ARRA included \$25 billion for these two new types of recovery zone bonds: \$10 billion for RZED bonds and \$15 billion for RZF bonds. The following provides brief descriptions of each:

- RZED bonds are one type of taxable Build America Bonds that allow state and local governments to obtain lower borrowing costs through a new direct federal payment subsidy, for 45% of the interest, to finance a broad range of qualified economic development projects, such as job training and educational programs.
- RZF bonds are a type of traditional tax-exempt private activity bond that may be used by private businesses in designated recovery zones to finance a broad range of depreciable capital projects.

Note that funding for these bond programs runs through the end of 2010, and at the time of the writing of this *Guidebook*, it is unknown if these programs will be renewed in future years.

5.4.1.3 *Debt Payment Options*

Payment of debt obligations is typically funded through revenue derived from the project for which the debt was issued. If the airport development project is approved for funding through PFC collection, bond-associated debt associated with allowable costs can be repaid with PFC funds, per 14 CFR Part 158 and FAA Order 5500.1. Debt obligations can also be satisfied by another stakeholder within the community with an interest in bringing the airport development project to a successful completion.

5.4.2 **Private Financing**

Private funding is that which originates from traditional banks and commercial lending institutions or from private investment. Private funding is often characterized as being more expensive

than public funding, though the legal requirements and costs, especially on smaller projects, may be significantly less and save the development project other expenses. Again, tax-exempt funding can also originate from private-funding sources. It is not at all uncommon to see a mix of public- and private-funding sources for the same project. Some costs of the development, such as feasibility studies, marketing, and start-up, may be difficult to finance through traditional public or private sources because they are difficult to collateralize. Those development costs are routinely either paid for with the developer's cash or are funded with venture capital, which typically comes with a higher interest rate. The equity portion of the development project may fall into a similar category in that equity is generally required to come from cash. The developer must either have cash to satisfy the equity portion or borrow money from another source, often venture capital, to satisfy that portion of the development cost.

5.5 Incentives, Abatements, and Deferrals

Incentives can assist in the overall financial pro forma as well by lowering the operating cost of the project. For example, a third-party developer may construct buildings and improvements on a piece of airport real estate and sublet to a tenant. An incentive such as ground rent abatement or deferral of airport fees may improve the cash position of the developer for a period of time while marketing occurs or during the period of time that the developer passes incentives along to the tenant as an enticement for the tenant to occupy facilities. Beyond grants and incentives, the developer is left with cash and debt to satisfy the development costs and operating expenses of the new facility.

Incentives, abatements, and deferrals can come from a variety of stakeholders. As described above, the airport sponsor can provide incentives and abatements but other stakeholders often contribute as well. In some cases, cities, counties, states, school districts, and other governmental and/or quasi-governmental authorities can offer abatement of certain taxes. Economic development agencies may have the ability to offer cash, low or no-cost financing, relocation assistance for employees, or job training. Also, local industry and businesses often step up to the plate to provide incentives, cash, or in-kind services. In fact, a broad pallet of incentives, abatements, and deferrals exist, but will vary from community to community. The best strategy for the airport sponsor is to meet with all of the stakeholders within the community, early in the development project, to explore how appropriate assistance might be applied.

5.6 Funding Sources

Because development on airports is often synonymous with development on publicly-owned property, funding of the project has its challenges from a collateral standpoint. In traditional real estate development, the developer has the luxury of encumbering the title of the property as collateral and the lender has the ability to place a lien on the real estate to secure his/her financial position. Airports are typically precluded from clouding the title of airport property and are unable to offer that security to the source of funds for a specific development. The lender is therefore left with the improvements on the property, the length of the lease term, and the strength of any sublease or revenue source to collateralize the debt. Funding challenges represent one reason that incentives or grants are used to assist the development of a project. For example, a grant can mitigate the need for borrowing and effectively improve the coverage ratio on the loan. In other words, the grant can be used as equity and satisfy a percentage of the development cost, thus reducing the need for both cash and debt.

Incentives can assist as well by lowering the operating cost of the project. For example, a third-party developer may construct buildings and improvements on a piece of airport real estate and sublet to a tenant. An incentive such as ground rent abatements or deferred airport fees may improve the cash position of the developer for a period of time while marketing occurs, or the developer may be able to pass those incentives along to the tenant as an incentive for the tenant to occupy the facilities. Beyond grants and incentives, the developer—whether the tenant, the airport itself, or a third party—is left with cash and debt to satisfy the development costs and operating expenses of the new facility. While cash is mostly straightforward, debt can vary and come in a variety of types but generally falls into one of two areas: public and private. The following sections list available funding sources, both grant and debt, and provide an overview of each.

5.6.1 Airport Improvement Program

The AIP provides grants to public agencies for the planning and development of public-use airports. AIP funds are typically not available for revenue generating projects, so it may be difficult, though not impossible, for the airport sponsor to use these funds for projects designated for commercial activity (e.g., GA terminals, aircraft hangars, FBOs). AIP funds are apportioned in the following categories:

- Primary Entitlement,
- Cargo Entitlement,
- State Apportionment,
- Non-primary Entitlement, and
- Discretionary.

The following provides a brief overview of each of the above and how the funds can be used. A more detailed overview of these programs can be found in the *Airport Improvement Program (AIP) Handbook*, Order 5100.38C, and *ACRP Report 16: Guidebook for Managing Small Airports*.

- **Primary Entitlement Funds:** These funds are given to commercial service airports with annual enplanements of 10,000 or more. Distribution is based on a formula that takes into consideration the total number of passengers an airport serves, with a \$650,000 minimum annual entitlement.
- **Cargo Entitlement Funds:** Entitlement funds are given to cargo service airports that handle a landed weight of at least 100 million pounds per year. Landed weight is the total weight of the aircraft and cargo, and is inclusive of all-cargo aircraft only (not passenger aircraft that may also be carrying cargo).
- **Non-primary Entitlement Funds:** General aviation airports listed in the National Plan of Integrated Airport Systems (NPIAS) are eligible for \$150,000 a year. They can accumulate this money over a 4-year time frame without penalty. If this money isn't used by the 5th year, that year's money is forfeited and cannot be obtained.
- **State Apportionment:** The FAA will allocate AIP funds to be used within designated states based upon the population and area of the state. The airport sponsor must apply directly to the FAA for these funds unless the airport is in a block grant state. If in a block grant state, the airport sponsor will apply to the state aviation authority for state apportionment funding.
- **Discretionary:** After all AIP obligations under the entitlement funding formula are met, remaining funds can be distributed to any NPIAS airport at the discretion of the FAA. The airport sponsor must apply directly to the FAA to obtain discretionary funding.

It is important to note that under Order 5100.38C (*Airport Improvement Program Handbook*), several arrangements allow use of entitlement funds at a different location than the entitled airport so unused amounts are not carried over each year for airports with no planned project. In

addition, sponsors may have other reasons for using entitlements at a different airport than would be allowed under the law. A sponsor may enter into an agreement with the FAA to waive receipt of all or part of its entitlement funds provided the waived amounts are made available to the sponsor of another eligible airport. Transfer of entitlement funds from one airport to another must adhere to these basic guidelines:

- Funds included in a transfer should be primary, cargo service, or non-primary entitlements. State apportionments are not transferable. Each agreement should specify entitlements of only one airport.
- The receiving airport must be in the same state or geographic area as the airport of the sponsor making a waiver. In this instance, a “geographic area” means a multi-state area where the receiving airport is in the same or an adjacent standard metropolitan area as the airport of the sponsor making a waiver.

5.6.2 PFC Program

The PFC program allows the collection of PFC fees up to \$4.50 for every enplaned passenger. PFC revenue may be used only to finance the allowable costs (e.g., total project cost, debt service, and/or financing costs) of approved projects at any airport the public agency controls. In addition to full funding from PFCs, a public agency may combine PFC revenue and airport grant funds to carry out an approved project. However, the FAA may provide an exception to the rule requiring the use of PFC revenue to pay for debt service for approved projects only. The FAA may authorize a public agency under Part 158.18 to use PFC funds for debt service on noneligible projects if the FAA determines that such use is necessary because of the financial need of the airport. Additional detail on the PFC Program can be found in Title 14 CFR Part 158-Passenger Facility Charges and FAA Order 5500.1.

It is important to explore and understand the economic development funds that may be available from state and local sources before project initiation. The Albany Airport Authority, after being selected by HondaJet for their Northeast headquarters, held several meetings with the New York State Senate Majority Leader Joseph Bruno and with HondaJet officials to secure State funding for the planned development. The Airport applied for two grants on behalf of HondaJet East. They include a grant of \$500,000 from the New York State Economic Development Assistance Program, and a grant of \$180,000 from the New York State Transportation Bond Act AIR '99. In addition to the State-funded financial package, the Albany Airport Authority is also providing a \$45,000 match to be used towards HondaJet's facility construction costs.

5.6.3 Alternative Grant Sources

Most airport sponsors are familiar with the FAA funding mechanisms discussed in the previous section. However, discovering the multitude of local, state, and federal grants that may be applicable to airport development is often a daunting task. These grants are channeled through numerous, and often fragmented, EDAs at the local, state, and federal levels, and have stringent requirements that dictate how and where these funds must be used. When seeking EDA funds for an airport development project, the local EDA, or similar organization, should be the primary resource for the airport sponsor. The local agency will be able to identify all local, state, and federal grant sources and incentives that may be applicable to an airport development project and can act as a point of contact in efforts to obtain these grants.

State and local grants are tied to specific economic development and job creation goals and vary on a state-by-state or region-by-region basis. They may be restricted to defined geographic areas or to targeted industry classifications. The airport sponsor should work closely with EDA officials to identify which potential grant or incentive applies to a given airport development project, and how to position said airport project in economic development terms in order to maximize the potential of receiving the targeted grant.

The requirements for obtaining federal EDA funds that may be applicable to airport development projects are standard throughout the nation. Federal EDA grants are also typically tied to job creation or projects that increase a

region's economic and business competitiveness. If the airport development project can meet the requirements for enhancing the economic competitiveness of the surrounding community, or its need is framed in such a manner, the facility may be eligible for funds more completely described in the Catalog of Federal Domestic Assistance (CFDA). If any of the prospective tenants of the facility can ensure a level of private-sector employment that meets program requirements, the facility may be eligible for funds under CFDA 11.307. Details for each program are provided below:

- *CFDA 11.300 Public Works and Economic Development Program:* Public works and economic development investments help support the construction or rehabilitation of essential public infrastructure and facilities necessary to generate or retain private-sector jobs and investments. These investments attract private-sector capital and promote regional competitiveness, including investments that expand and upgrade infrastructure to attract new industry, support technology-led development, redevelop Brownfield sites, and provide eco-industrial development.
- *CFDA 11.307 Economic Adjustment Assistance Program:* The Economic Adjustment Assistance Program provides a wide range of technical, planning, and infrastructure assistance in regions experiencing adverse economic changes that may occur suddenly or over time. This program is designed to respond flexibly to pressing economic recovery issues and is well suited to help address challenges faced by U.S. regions and communities.

5.6.4 Private Capital

Needless to say, from the airport sponsor perspective, private financing by the developer/tenant for any improvements on airport leasehold is the ideal scenario. In this scenario, the airport sponsor is not responsible for the funding of any of the proposed improvements, but does have the requirement to conduct due diligence on the financial soundness of a potential developer prior to entering into a lease agreement. The ability of the developer to meet the financial obligations dictated by the financing arrangement for the specific airport project should be verified to the extent possible. Though the airport sponsor will not be financially liable should the developer default, such a case could cause problems for the sponsor and management, including the need for the airport to assume the operation and maintenance functions for the facility, potential reversion of the facility to the airport, and issues with third-party tenants should sublease agreements be in effect.



CHAPTER 6

Summary of Best Practices

Regardless of an airport's size, location, or market, certain best practices prevail and provide a common thread through development projects at airports of all types. The airport sponsor must strive to meet the demands of the airport's users, the needs and desires of the surrounding community, the financial concerns of potential developers, and the regulatory requirements of the FAA, all while ensuring that the current and future financial and operational health of the airport remains intact. This can be a difficult task to accomplish, particularly when these goals may often be seen as being at odds with each other. It is, therefore, imperative that the airport sponsor evaluate the potential financial, economic, and regulatory impacts of the agreement prior to entering into a lease. While it is important to consider the benefits to the community, the developer, and ultimately the tenant in the lease arrangement, it is important to remember that the financial sustainability of the airport is the primary goal. The following sections will review lease and development best practices discussed throughout this *Guidebook*, and provide the airport sponsor with procedures that achieve both the desired development and the necessary sustainability.

6.1 Project Development

The project development phase encompasses all of the planning, collaboration, and decision-making processes that occur prior to the negotiation and execution of the appropriate agreements. For this reason, it is important to focus on setting the groundwork that will be required for a successful relationship that, in turn, will benefit both the airport and the tenant.

6.1.1 Airport Planning

The airport sponsor must have a vision as to how the airport will be developed and those goals must be clearly defined and aligned with those of the community and potential tenants. Using the Airport Master Plan and any land use studies as a starting point, the basis of any potential development project should be evaluated for its desirability and impact on the airport. The Master Plan should define land appropriate for aeronautical and nonaeronautical use, as well as the types of development intended for the respective land uses (such as corporate hangars on land designated for aeronautical use or warehousing for nonaeronautical use). However, the airport will need to maintain flexibility when it comes to its overall vision for future airport development. The demands of the market dictate flexibility on the part of the airport sponsor and will often require deviation and exceptions to the airport's Land Use Plan in order to secure a tenant agreement. (Airport Vision discussion in Section 3.1 provides additional information on this topic).

6.1.2 Stakeholder Engagement

In any development project or lease agreement, the identification and inclusion of all affected stakeholders early in the process is crucial to a successful outcome. An airport sponsor operating in a vacuum may overlook valuable resources or encounter unexpected hurdles if he or she has not actively engaged the stakeholder groups that have vested, or even ancillary, interests in the airport.

Throughout the case study research process, it was evident that economic development agencies or corporations (EDA/EDC), both local and state, were able to provide airports with valuable assistance. It is essential that any project or lease agreement, particularly one with a commercial component or that will result in job creation, involve EDAs. Airport sponsors should consider the local and state EDA/EDC as key partners in achieving overall airport development goals. These resources should be engaged in a continuing relationship versus a project-specific role. EDA/EDC should be regularly involved in airport planning and in policy discussion to keep airport development goals in the forefront of their own priorities. The EDA/EDC may be able to provide the airport with resources to market the airport to potential tenants, secure new funding and/or grants, identify tax incentives, be an advocate in the political arena, and/or assist with the grant application processes.

6.1.3 Financial and Economic Considerations

When attempting to secure either aeronautical or nonaeronautical development, the airport must offer competitive packages. Offering competitive commercial real estate packages is always a challenge when comparing leased property, with a defined term length, to a property that can be owned fee simple. Both leased and owned parcels are likely to have similar tax implications, with the exception of Foreign Trade Zone scenarios that may only be offered on leased airport property. Airport development, therefore, must be creative in its approach to compete on a level playing field with traditional development scenarios; the equalizer is often applying grants and incentives to perform some level of development on behalf of the project. Lease rates, placement of infrastructure required of airport development, planning, entitlement (the ability to develop property within a given jurisdiction), and location all play a role in the case of the tenant evaluating site options.

While the airport sponsor must maximize revenues for the airport to ensure sustainability, there are often other economic and financial factors outside the confines of the airport that may affect the desirability of a particular airport lease agreement. Economic considerations such as job creation and tax revenue generation may provide a positive impact for the local community while offering little direct financial benefit to the airport. When working in conjunction with an EDA/EDC, states, and local governments, the airport may be pressured to enter into leasing arrangements that do not directly benefit the airport but provide other benefits to the community as a whole. In this scenario, the airport sponsor should seek to protect the airport's financial interests to the extent possible. Financial incentives for a potential lessee should be provided in the form of EDA/EDC grants (state and local) and tax incentives rather than reductions in base rent. If it is deemed that lease rate reductions are necessary to secure the potential lessee, alternate forms of revenue, such as a percent of gross sale arrangements or additional fees based upon the lessee's business operations (such as fuel-flowage fees), should be actively sought prior to executing the agreement and coordinated with the FAA prior to completing negotiations.

6.1.4 Economic Impact Considerations

Quantification and description of a project's economic impact can be a powerful message and justification for project support. This *Guidebook* has already described the economic development

aspects of airport development from a variety of perspectives. The most important consideration of economic impact is the impact the project will have on the airport and on the airport sponsor. The airport development project should have a net positive impact on the airport and positively benefit the airport's financial position. Economic impact can be direct, as in the case of net revenue to the airport (the difference between revenue and costs of the airport development to the airport), or indirect, as in the case of new activity that directly causes new revenue from other tenants. An example of a direct benefit is the revenue paid to the airport for a ground lease for which the airport has no new additional expense associated with operating the airport. An example of an indirect benefit is a new development project on land already being leased to a tenant, which results in no new direct revenue to the airport but provides a new activity that generates additional revenue. This additional revenue can be increased fuel-flowage fees or perhaps new landing fees that would not exist without the new airport development project.

6.1.5 Regulatory Compliance in Development

Ensuring that any proposed project is in compliance with all applicable FAA, NEPA, state, and local regulations is the responsibility of the airport sponsor, and, as such, the sponsor must remain engaged throughout the project planning, development, and execution phases. While it can be anticipated that a third-party developer will bring an understanding of the regulatory requirements pertaining to its area of expertise (e.g., design, construction, operation), the third party may not be familiar with the regulations that guide on-airport land use and development. The airport sponsor must ensure that any proposed land use does not conflict with the airport's FAA-approved ALP, that any development does not encroach into any safety areas, or that the structures and associated operations do not inhibit the safe and efficient operation of the airport.

6.2 Lease Execution

A lease agreement may take on various forms and include differing stipulations based upon the function, location, and tenants involved (land lease versus facility lease, or aeronautical versus nonaeronautical leases, for example). Many leases will be unique in their development and execution while others will adhere to a standard airport lease policy that can be uniformly applied to multiple tenants, such as in the case of T-hangar leases. The airport sponsor must determine whether the circumstances of a specific lease negotiation are unique enough to deviate from standard terms and contract language, whether deviation from leasing policy in order to accommodate a tenant is appropriate, and/or whether similarity prevails and consistency is more important than accommodating one tenant.

Regardless of whether the anticipated lease agreement is for existing facilities or new development, or for aeronautical versus nonaeronautical use, the best practices of project development discussed below should be applied.

- While ensuring reasonable rates, leasing policies should also state the need to comply with all state, local, and federal building codes.
- Lease terms should be as consistent as possible and clearly understood by all parties.
- An airport may decide to pursue a solicitation process, but in some cases airport property may be leased without seeking competitive proposals when it is in the best interest of the airport or community and described/offered through a visioning document such as an Airport Master Plan. If a solicitation process is required, the process and criteria for approval should be stated clearly in the policy.
- The leasing policy should state whether the transfer of a lease or subletting will be permitted.

Finally, the airport should establish policy for rent increases. For example, an airport may decide to increase rents on some periodic basis, assuming rents are at fair market value, to keep pace with inflation.

6.2.1 Airport Leasing Policy

A recommended best practice is that airport sponsors develop a standard Airport Leasing Policy that applies to both facility and land leases. The Leasing Policy must be flexible enough to allow for unanticipated development opportunities while being comprehensive enough to account for multiple tenant types and operations. A standard, comprehensive Leasing Policy provides for the equitable treatment of all airport tenants and will minimize questions, concerns, and potential conflict between the airport and its tenants. The Leasing Policy should include, at a minimum, the following provisions:

- Land lease rates (per square foot), differentiated by area. Aeronautical versus nonaeronautical, for example, and consideration of the land's proximity to infrastructure.
- Hangar lease rates (per square foot), with consideration to the gauge of aircraft that the hangar will accommodate in terms of hangar doors size, height, and clear span distance.
- Building and facility lease rates (per square foot).
- Standard lease terms that are compliant with state and local law.
- FBO/SASO lease requirements, which are consistent with an airport's Minimum Standards.
- Process for adjusting rents and fees (living clause).
- Insurance requirements, preferably in one document and adopted by official action, of the governing body. Consolidation of all insurance requirements applicable to the airport allows an airport to review, update, and have them reconsidered by the governing body from time to time.
- Obligations of lessee, covered in a Rules and Regulations document.
- Routine inspection provisions for safety and compliance of airport tenants and users.
- Construction and improvement standards that outline pre-approval by the landlord and the airport sponsor, local permitting agency requirements, and FAA notification of proposed construction once all other approvals are secured.
- Subletting policy.

6.2.2 Minimum Standards

As with the Airport Leasing Policy document, the airport sponsor should have Minimum Standards that apply to all lessees. This document is necessary to ensure that lessee improvements conform to the operational standards set forth by the airport, and that the level of services provided to the aviation community is appropriate. Minimum Standards are especially relevant to leasing and developing airport property because they speak to what facilities are required for a specific activity. For example, if a parcel of land is less than one acre in size and surrounded by other development, and the Minimum Standards require more than an acre of land for FBO and other commercially-intense business activities, the value of that property, and any improvements on the property, may be affected by the fact that only certain activities will be allowed on a parcel of that size. Therefore, comparables used to value the property and improvements should only include examples with uses that would be allowed on the airport where the subject land resides. (Section 3.3 offers additional detail regarding the elements of a Minimum Standards document.)

6.2.3 Lease Rate Determination

It should always be the goal of the airport sponsor, in line with FAA guidance, to maximize revenue for the airport. An appraisal of airport property should be conducted in order to determine

the base value of airport assets. Land leases for commercial nonaeronautical uses should be based on current market rate comparables. Airside land, aeronautical facilities, and hangar rates should be based on comparable facilities at surrounding airports with similar attributes. In order to accurately value land and facilities, benchmarking of airports of similar size and with similar infrastructure (runway length, instrument approaches, security, and air traffic control for example), should be used in a consistent manner. The same benchmarked airports are tracked over time for comparative purposes. The appraisals and benchmark rates should be used as guidelines for the airport to determine baseline rates that can be subsequently adjusted as new information becomes available.

The airport may vary its lease rates depending upon size, function, location, and level of improvements to the land and the facilities being leased. For example, the rental price of a building or hangar may vary based on size, amenities, location, access, condition, construction, and allowable use by the airport. Likewise, the airport may want to vary land lease rates based upon factors such as the magnitude of the project, the synergistic effect the project may have on other tenants and/or future development, airside versus landside location, availability of utilities, and access (from both the airside and the landside).

The airport may also adjust lease rates below established baseline rates if the tenant provides additional airport revenue through other sources, such as fuel sales or percentage of gross revenue. The airport should consider modifications to rental rates that include a percentage of gross sales, depending on the type of business being conducted. Similarly, the airport might consider land leases that require a percentage of any profit be paid to the airport on the sale of leasehold improvements or equity. Regardless of the rate-setting methodology used, the airport sponsor should create a transparent process for all stakeholders to see and understand. Once transparency is established, the airport sponsor can clearly outline the rationale and justification for its rates and charges, placing itself in a defensible posture that will either hold up to stakeholder criticism or that can be adjusted for broad acceptance by the aviation community.

6.2.4 Lease Term Determination

The Airport Leasing Policy document should consider appropriate lease lengths. Land leases are routinely set at 20- to 30-year terms; lease terms beyond this length may be limited by local or state statutes. Provisions for the extension of a land lease should be included in the lease agreement and outline the requirements that must be met before the lessee is allowed to extend the lease, preferably contingent upon the lessor's concurrence and approval, by periods of 5 to 10 years. These extensions of the lease are considered addendums to the original lease document with all covenants and provisions of the original remaining in effect. The length of a lease and the ability to extend the lease term is an important consideration for potential tenants who will be making substantial investment in improvements that will need to be amortized over a number of years. It is important to consider the useful life of the improvements and the size of the tenant's investment when negotiating length of term.

Risk and reward should also be given due consideration. If improvements are very specialized, the developer may need a longer lease term than normal. Without knowing the exact functional life of the improvements, or how the niche industry might change and make the improvements functionally obsolete, the developer may require a buffer of term length to ensure that sufficient time exists to repay the debt and make a reasonable profit.

6.2.5 Reversion

Best practices for leasing and developing airport property include reversion of improvements back to the airport sponsor at the termination of the lease. Therefore, the lease must be long enough

for the developer to be able to amortize the investment the company makes in improvements, but not so long as to unnecessarily restrict the options available to the sponsor to develop and improve the airport in the future. The savvy airport sponsor will be prepared to balance these sometimes competing goals so as to attract development without impeding future options, all the while securing market-rate fees that will support the operational costs of the airport in a sustainable fashion.

6.2.6 Regulatory Compliance in Leasing

As discussed in Chapter 3 (Section 3.2: Grant Assurances and Federal Compliance), the airport sponsor must be careful when crafting the lease agreement that federal grant assurances are not violated. Within the lease document, there are four common issues that the sponsor must be aware of: lease term length, economic nondiscrimination, airport sustainability, and the granting of exclusive rights. The following addresses these points in greater detail:

- The lease term should not be longer than 50 years for land that has actual or potential aeronautical uses. The FAA may consider lease terms greater than 50 years as a disposal of land and require fair market value payment from the airport sponsor.
- The lease must ensure economic nondiscrimination; all tenants must be treated equitably when assessing rates, charges, and terms, and, to the extent possible, any provisions and rights afforded to one must be available to all.
- The airport sponsor must maintain a fee and rate structure that will make the airport as self-sustainable as possible. This requires the airport sponsor to know and negotiate market-value rate for airport property.
- The airport sponsor cannot grant a tenant exclusive rights within the lease agreement. The inclusion of noncompete clauses that strictly prohibit the airport sponsor from leasing to a competitor of a tenant can be considered a violation of this grant assurance.

6.3 Airport Sponsor Checklist

The *Guidebook* has presented multiple issues, concerns, and considerations that the airport sponsor must account for prior to entering into a lease agreement. These considerations encompass a wide range of issues that are dependent upon the type of development, anticipated uses, location on the airport, financing, funding, required financial return, grant assurances, regulatory compliance, and community impacts. The airport sponsor must be aware of each and account for their effects, financial and otherwise, when structuring and implementing a lease agreement.

The following sections will provide the airport sponsor with general checklists of items that must be considered in the project development analysis (applicable to new or redevelopment projects) and when structuring a lease agreement (applicable to all airport lease agreements). The checklists should be used to prepare the airport sponsor for negotiations by stimulating the thought process and considering the long-term implications of a proposed airport development. The checklists may also be used to prepare for community discussion or to prompt further research.

6.3.1 Project Analysis Checklist

New development or redevelopment of existing facilities provides the greatest challenge for the airport sponsor, as multiple planning, stakeholder, and financial variables may exist. These variables, which are often absent in the case of existing facilities such as hangars, need to be considered throughout the project planning process. The airport sponsor's role in the development process is to ensure the airport's financial sustainability, consider the highest and best use of

airport land resources, and ensure the project complies with regulatory requirements and grant assurances. To help achieve these goals, the sponsor must consider all facets of the development process and be ready to address the following questions in order to determine whether a potential project is a fit for the airport:

Planning:

- Does the project fit within the stated goals listed in the airport visioning documents (Airport Master Plan, Land Use Plan, and Airport Business Plan)?
- Does the project comply with community land use plans, zoning ordinances, and other applicable planning documents?
- Is the proposed development in compliance with the FAA-approved Airport Layout Plan?
- Does the proposed use of the property violate any grant assurances?
- Is the proposed use of the property in compliance with security and environmental regulation?
- Does this project represent the highest and best use of the property?
- Is the proposed project in conflict with any current airport agreements such as noncompete or right-of-first-refusal clauses that may be in effect with an existing tenant?
- If the property is airside, or has airside access, does the proposed use of the property conform to desired aeronautical uses (airside land being used for aviation purposes, for example)?

Stakeholder Involvement:

- Have all of the potential stakeholders in the project been identified?
- Have the perspectives, concerns, and resources (potential funding sources, marketing resources, and development expertise, for example) of the stakeholders been identified?
- Are plans in place to reach out to the identified stakeholders, and are mechanisms such as public meetings, round-table discussions, and focus groups planned to facilitate communications and dialogue?

Finance and Funding:

- What will the project cost in terms of immediate outlay of resources, and what ongoing operational, maintenance, and financing costs are anticipated in the future?
- Where will the project funding come from, and what entity/stakeholder is responsible for securing the funding?
- Will the airport sponsor's debt capacity and/or creditworthiness be impacted by financing this project?
- Does the airport have the ability to issue debt, either through the airport sponsor organization or through another applicable public-sector entity such as the city, county, or state government?
- Does the project qualify for EDA/EDC grants or bonds (either local, state, or federal)?
- Will the airport revenue anticipated from the leasing of the property be sufficient to cover debt obligations and recurring operational costs assigned to the sponsor?
- Will the airport sponsor recognize revenues in line with the valuation estimates or appraised market value of the property?
- Has a pro forma financial analysis of the project, from the airport sponsor perspective, been conducted that will forecast the project-specific financial implications for the airport?

6.3.2 Lease Agreement Checklist

When an airport sponsor plans to enter into a lease agreement, it is imperative that each potential aspect of the agreement, or lease element, be carefully considered. The potential impact on the airport's financial health, regulatory compliance, and future development potential must

be considered. The following list of questions represents a checklist of considerations that the sponsor must address within the framework of the lease agreement:

- Are the lessor and lessee clearly identified in the lease document? This element of the lease agreement should include a lessee point-of-contact, a statement requiring updated contact information should that information change during the lease term, and any identification of a dba (doing business as).
- Are the premises (also referred to as the “property”) clearly defined in the lease agreement? This element must detail the land and improvements subject to the lease agreement and will typically consist of an “Exhibit” referred to in the lease document. The premises exhibit should contain a drawing delineating the boundaries of the leased land and a listing of all the pertinent features and improvements subject to the lease agreement.
- Does the lease agreement stipulate the approved use of premises? For a lease with a business entity, this element should identify if and what type of business and commercial operations may take place at the leasehold. Approved uses should be listed in the Airport Minimum Standards and Rules and Regulations documents, and the lease needs to reference these documents in the use of premises section.
- Is the length of the lease stated with a clear “commencement date” on which the lease agreement will take effect? The lease term element of the lease agreement will also include any extension options, if included in the agreement.
- Does the lease term violate any local or state statutes regulating the maximum term that may be offered by a public agency? The airport sponsor must ensure that the lease term does not exceed what is allowable by law.
- Does the lease agreement clearly state the rent due to the lessor, the schedule of payment, acceptable method of payment, and penalties for late payment?
- Is there an escalation clause that will allow the airport sponsor to adjust the lease rent? The escalation clause within the rent element must clearly state when an adjustment will be made (every 5 years from the commencement date of the lease agreement, for example), and what factors the rent escalation will be based on, such as annualized CPI or appraised value.
- Is the division of responsibility for leasehold operation and maintenance clearly stated for the lessee and lessor? The operation and maintenance section of the lease should list the specific responsibilities of the lessee for leasehold maintenance and upkeep, and should reference the Airport Minimum Standards document.
- Is the process for the construction of improvements by the lessee clearly spelled out? The lease agreement should detail the required approval process regarding any repairs, renovations, improvements, and alterations to the leasehold. Since improvements must comply with the Airport Rules and Regulations and Minimum Standards, these documents should be referenced in the construction of improvements lease element.
- Does the lease clearly state how and when ownership of the leasehold improvements will revert to the airport? The reversion clause should state that at the termination of the lease agreement all improvements revert to the ownership of the airport. Termination of the lease is not limited to expiration of the lease term, but may also include the following:
 - Failure to pay rent,
 - Violation of Airport Rules and Regulations,
 - Failure to comply with the Airport Minimum Standards,
 - Violation of a lease-specific clause within the agreement,
 - The triggering of a noncompete clause, and
 - Airport purchase of the leasehold improvements.
- Are the rights, reservations, and obligations of both the lessor and lessee addressed in the lease agreement? These rights and reservations may vary depending upon the lease type and activity conducted on the property but will typically reference the Airport Rules and Regulations and

Minimum Standards documents as well as require compliance with any environmental and security regulations that may be applicable.

- Does the lease agreement allow for the inspection of the premises by the airport sponsor? This right may be deemed necessary by airport management in order to ensure lessee compliance with Airport Rules and Regulations.
- Are the insurance obligations of the lessee clearly spelled out in the lease agreement? Insurance requirements, at a minimum, should outline coverage types and amounts so that the airport is protected from financial liability. If the primary lessee is subleasing all or a portion of the property, the lease agreement must stipulate that the sublessee be in compliance with the insurance requirements outlined within the lease.
- Does the lease agreement include a hold-harmless provision or indemnity clause that will protect the airport sponsor from any legal action, suits, proceedings, claims, damage, loss, or liability resulting from the actions of the lessee?
- Will the lease agreement allow the primary lessee to sublease all or a portion of the property? If the lessee will have the right to sublease the property, the lease agreement must specify the responsibilities of the lessee in relation to the sublessee. Detailed provisions should be spelled out in the lease agreement and any operating agreement to avoid conflict between the parties in a long-term lease agreement.
- Does the lease agreement include any potential grant assurance violations relating to lease-term length, economic nondiscrimination, airport sustainability, and the granting of exclusive rights? If there is a potential cause for concern, has the FAA been consulted and approval sought?

The airport sponsor checklists provided are by no means intended to represent an exhaustive list of issues that can be expected to arise when an airport sponsor enters into a lease agreement. The list of variables—when dealing with the diverse types of development that occur within the confines of an airport, coupled with a multitude of potential stakeholders and their divergent interests present in each project and lease—will ensure that a single, standard lease agreement and project development approach will never be achieved. Due to the many variables that exist, there is simply no one standard for leasing and/or project development that will fit all scenarios, though the checklists provided will serve as an excellent starting point and can be applied to many scenarios that the airport sponsor might encounter.

As with the *Guidebook* in its entirety, the checklists should serve as the foundation for structuring a lease agreement that is beneficial to the airport, the tenant, and the community, while protecting the airport sponsor from financial, regulatory, and legal ramifications of a poorly constructed lease agreement. The questions asked within the checklist should serve to raise awareness of the airport development issues and responsibilities on the part of the airport sponsor. The subjects discussed and addressed were ultimately designed to help guide the airport sponsor through the many facets of airport project planning, development, and leasing policy.

Case Studies

Questionnaire To Airport Sponsors

The survey below was distributed to airport sponsors of nominated case study airports.

Dear Airport Sponsor,

On behalf of the Transportation Research Board of the National Academies, RW Armstrong is compiling a Guidebook on the Best Management Practices for Leasing and Developing Airport Property. Our objective is to develop a Guidebook for airport management and other relevant stakeholders to implement leasing guidelines, property management and development benchmarks, and sample development agreements in the context of airport improvement and expansion. This Guidebook will be applicable to airports of all sizes. One or more projects at your airport have been nominated based on the following criteria: project(s) completed within the past 5 years, diversity and innovative alliance(s) of stakeholders, financing model(s), and those that optimized public and private investments.

In order to further evaluate the nominated project(s), we ask that you describe the project(s) in the following manner:

1. What was the name of the project?
2. When was the project completed?
3. Please describe the stakeholders involved (cities, counties, states, the FAA, and economic development entities are examples of stakeholders you might consider).
4. How did this project stimulate economic activity in terms of job creation and/or other impact to the local economy?
5. To what extent does this project produce revenue for the Airport Sponsor?
6. What, if any, innovative financial tools, grants, abatements, and/or incentives were employed in this project?
7. How, if applicable, was public and private investment leveraged in this project to entice new economic activity worthy of benchmarking by other public airports?

Name of Airport:

Contact Information:

Case Study Summaries

The following sections contain summaries of the 10 case studies used in the compilation of this *Guidebook*. The summaries provide a project overview, identification of the key stakeholders in the development and execution of the project, a listing of the key lease elements, considerations for the tenant, and identification of the benefits for the airport and community.

Collin County Regional Airport (TKI)

Airport Type:	General Aviation
Tenant:	EDS/Hewlett Packard
Tenant Type:	Corporate Hangar Complex
Project Type:	New Facility
Facility Location:	Airside



SOURCE: Collin County Regional Airport.



SOURCE: RW Armstrong, 2009.

Project Overview

Collin County Regional Airport is owned by the City of McKinney and is located in the north-east corner of the Dallas-Fort Worth Metroplex. It is the only airport capable of handling business class aircraft in the county and was looking to attract EDS/Hewlett Packard's (EDS/HP) corporate flight department. EDS's corporate headquarters are located in Plano, TX, approximately 15 miles from the Airport. Collin County Regional Airport encouraged the McKinney Economic Development Corporation (MEDC) to assist in attracting the flight department by providing financial incentives.

Through public records, the Airport and MEDC were able to estimate a minimum tax impact that EDS/HP could bring to the Airport (based aircraft are taxed on approximately 50% of their value). They used this estimate to determine the financial incentives that could be offered to EDS/HP to assist in the pursuit. An agreement was achieved through a complex arrangement between the Collin County Regional Airport, the City of McKinney, EDS/HP, MEDC, and Collin County Regional Investments (CCRI). The Airport leases the land to CCRI, who developed the hangar complex. The facility is in turn subleased to EDS/HP. MEDC provides a rent subsidy directly to EDS/HP, and the City of McKinney pays EDS/HP for the land leased to accommodate a required storm water detention facility. Tax abatements and other incentives (detailed in the following sections) were also involved in reaching a successful agreement.

Key Stakeholders

The following is a list of key stakeholders responsible for the development and ultimate execution of the lease arrangement:

Airport Sponsor: The City of McKinney was interested in attracting EDS/HP's corporate flight department and was able to offer some incentives to appeal to the company. The City also pays to accommodate a required storm water detention facility.

Collin County Regional Investments: CCRI, a private developer, agreed to construct the facility and sublease it to EDS/HP. They also purchased two 15,000 gallon, above ground fuel storage tanks for EDS/HP's exclusive use. The FBO manages EDS/HP's fuel system for \$0.08/gallon.

McKinney Economic Development Corporation: MEDC was instrumental in bringing EDS/Hewlett Packard to TKI. MEDC pays EDS/HP's facility rent payments and purchased a fuel truck for EDS/HP's exclusive use.

Texas Department of Transportation (TxDOT): TxDOT matched an amount provided by the City to pay for the taxi lane constructed adjacent to the EDS/HP hangar complex.

Key Lease Elements

The end product of this corporate hangar project is a comprehensive agreement between the City of McKinney, MEDC, CCRI, and EDS/HP. It is a complex deal, but it brought these entities together to benefit the Airport, the City, Collin County, McKinney Independent School District, and Collin County Community College District (the four taxing entities).

Agreements: The lease consists of agreements between the City and CCRI and between CCRI and EDS/HP.

- City leases the land to CCRI.
- Lease term is 40 years with a fixed rate for 10 years. Rate is adjusted on the 10th anniversary, and adjusted every 5 years, thereafter.
- A portion of applicable ad valorem taxes are abated for 10 years:
 - \$31 million appraised value (2005) = 25% abatement,
 - Amounts exceeding \$31 million = 40% abatement, and
 - Required amount decreases by \$1 million to \$22 million in 2015 (10th anniversary).
- CCRI subleases the land and the facility to EDS/HP for 10 years.
- Lease default would result in loss of future tax abatements and force repayment of abated taxes for preceding years.

Financial Considerations for the Tenant

The City of McKinney and MEDC were able to offer EDS/HP incentives based on a minimum tax impact. EDS/HP receives a rent subsidy of \$34,650 per month directly from MEDC. The City pays \$7,040 per year for the land leased to accommodate CCRI's storm water detention center, and constructed a taxi lane to allow EDS/HP aircraft to access the hangar facility from the Airport's Air Operations Area. Finally, MEDC provided EDS/HP up to \$100,000 to purchase a fuel truck for the exclusive use of fueling EDS/HP aircraft.

Airport Benefits and Revenue

Because of the creative incentive package the City of McKinney and MEDC were able to offer EDS/HP, the Airport succeeded in bringing the EDS/HP corporate flight department to TKI. The Airport collects \$0.22 per square foot for the ground lease from EDS/HP. Additionally, the Airport collects a fuel-flowage fee of \$0.09 per gallon on approximately 350,000 gallons per year. The Airport's FBO receives \$0.08 per gallon of fuel delivered to EDS/HP as a fuel system use fee for storage of EDS/HP fuel in their fuel farm. The City also receives the benefit of a tax base increase from basing business aircraft on airport property.

EDS/HP is expected to generate approximately \$681,500 per year in Business Personal Property and Real Estate tax. The local community reaps a large share of the benefits resulting from this project. There is little public expense or risk involved in the project, and part of the taxes received from EDS/HP help fund educational entities. The McKinney Independent School District receives \$1.517/\$100 and the Collin County Community College District receives \$.086/\$100.

Monroe County Airport (BMG)

Airport Type:	General Aviation
Tenant:	Multiple
Type of Business:	Aircraft Storage
Facility Location:	Airside



SOURCE: Monroe County Airport.



SOURCE: Monroe County Airport.

Project Overview

After an economic recession in the early 1980s, development at Monroe County Airport (BMG) was stagnant and public funds were not available for development of hangars and aircraft storage facilities at the Airport. The Airport decided to look into means of enticing private development. The Airport Board approached local business and aviation partners and was able to attract tenants for an eight-unit, 29,000 square foot hangar complex, which was completed in 1994.

The lease term for this facility was 20 years with a 10-year option for renewal, after which it would revert back to the Airport. Seeking ways of providing the tenant with incentive to maintain the facility, the Airport decided to allow the tenant to retain a portion of ownership in the facility. The Airport would become vested in the facility at a rate of 2.5% per year. At the end of 30 years, the tenant would still own no less than 25% of the improvements they developed. The Airport intends to be able to purchase the remaining portion of ownership in circumstances where the tenant intends to vacate at the end of the lease with money from an account created with revenue from lease payments.

This methodology has been extremely successful at BMG. In 1998 a flight-training center with seven offices was constructed, and in 2000 a corporate flight department relocated to the airport and constructed a 13,000 square foot complex. The corporate flight department cited BMG's unique lease structure as a determining factor in their decision to relocate to the Airport.

Key Stakeholders

Following is a list of key stakeholders responsible for the development and ultimate execution of the lease arrangement:

Airport Sponsor: Monroe County works closely with the Economic Development Association to identify development opportunities. The County also approves land acquisition efforts to prepare the Airport for future development.

Monroe County Board of Aviation Commissioners: The four-person County Board persisted in finding ways to bring revenue to the Airport, after the Airport suffered from a lack of development as the result of a down economy. When it was clear that public funds would not be available for development, the board approached private aviation business partners.

Private Developers: Private organizations develop and own their facilities until the end of the lease term, or until they sell their portion of ownership to the Airport or a new tenant.

Economic Development Association: Works closely with the Airport Sponsor to seek development opportunities.

Key Lease Elements

Initial lease terms at the Airport are for 20 years with a 10-year extension option. If tenants wish to vacate the facility, they have the option of transferring the lease to a new tenant or selling their portion of ownership in the facility to the Airport.

Ownership Structure: The most important element of the leases at BMG is the ownership structure. Private entities develop and own their facilities, and the Airport becomes vested in the facility at a rate of 2.5% per year. At the end of the 20-year lease term, the tenant still owns 50% of their improvements; if they choose to exercise the 10-year option, they still own 25% at the end of 30 years.

Fair Market Value Appraisal: Appraisals will be conducted by both the Airport and the tenant. If the values of the two appraisals are within 8%, the average of the two appraisals will be considered fair market value. If the values are not within 8%, a third, independent appraisal will be conducted. The highest and lowest of the three appraisals will be rejected, and the mid value will be considered fair market value.

Rent Adjustments: Ground rents and facility rents should be adjusted per an agreed-upon frequency and methodology identified in the lease agreement. Adjustments are typically made every 3-5 years, and might be tied to the Consumer Price Index (CPI), whereby rental adjustment will be equal to the percentage change in CPI for the period prior to the last changes in rental rate.

Financial Considerations for the Tenant

Aviation-related businesses at Monroe County Airport do not pay property taxes. Further, tenants receive the benefit of retaining a stake of ownership in their improvements. When the lease has expired, the tenant is left with a transferable asset. The Airport will purchase the remaining portion of ownership for fair market value, or the tenant may transfer the lease to a new tenant at any time throughout the lease term.

Benefits to the Airport

Allowing the tenants to retain ownership in their improvements relieves the Airport from the duties of property management, and retention of tenant equity provides the tenant with incentive to keep facilities in good condition. With the construction of the hangar complex and the implementation of the tenant ownership incentives, BMG had reason to raise their rental rates, which were previously lower than some similarly sized airports. The Airport now invests the extra revenue created by the rate increases in its Building Fund, set aside for the purchase of equity at the end of a tenant's lease.

Since the inception of this development project, based aircraft and air traffic at BMG have increased significantly. In 1994, there were 79 based aircraft; there are currently 101 based aircraft. The Airport estimates that over 100 jobs have been created by companies relocating to BMG. The Airport has since acquired additional land and secured AIP funding for future development.

Coastal Carolina Regional Airport (EWN)

Airport Type:	Non-Hub
Tenant:	Tidewater Air
Type of Business:	Fixed-Base Operator
Facility Location:	Airside



SOURCE: RW Armstrong, 2009.



SOURCE: RW Armstrong, 2009.

Project Overview

Coastal Carolina Regional Airport (EWN) is a small commercial service airport located in New Bern, North Carolina. The physical appearance of the existing Fixed-Base Operator (FBO), Tidewater Air, created concern within the local business community, airport board members, and airport representatives. It was felt that the existing FBO did not adequately represent the image of New Bern to the general aviation public that uses an FBO as a portal to the community. The Airport Authority visited other airport FBOs and conducted surveys in order to identify possibilities for a new FBO facility and to guarantee a first-class facility that would best represent their community.

In 2005 construction began on the new FBO facility, while the existing facility was still in use. Construction costs were divided into Vertical elements (structure), privately funded by Tidewater Air, and Horizontal elements (land preparation, paving), paid for by the Airport Authority. The Airport and FBO approached local businesses to discuss the donation of fixtures, furnishings, and other required items. Each room in the new facility was furnished using donations from local businesses.

The existing FBO lease was amended to include a term extension for the new Tidewater Air FBO facility. Craven County waived property taxes on the facility, and the airport collects monthly rental payments at the new facility, as well as a fuel-flowage fee on each gallon of fuel sold.

Key Stakeholders

Following is a list of key stakeholders responsible for the development and ultimate execution of the lease arrangement:

Airport Sponsor: Coastal Carolina Regional Airport Authority provided the land, infrastructure, access, and utilities for the project. The Authority was also responsible for the design and construction of all Horizontal elements for this project and for the demolition of the existing terminal.

Airport Board: The Airport Board initiated the request for a new facility and researched facilities at similar airports.

Committee of 100 Economic Development Corporation: Communicated with members of Congress to gain support for the project.

State of North Carolina: Provided \$250,000 for the Horizontal elements of the construction.

Tidewater Air (Tenant): Funded the Vertical elements of construction.

Local Businesses: The inside of the building was furnished using donations made by local businesses, and totaling \$35,000.

Key Lease Elements

Lease Term: Tidewater Air privately funded a large portion of this project. In return, Tidewater Air's lease agreement with the Airport was extended for 25 years. Land rent paid to the airport increases by 15% every 5 years.

This project was divided into two portions:

- **Vertical elements (funded by Tidewater Air):**
 - Foundation and Building pad and
 - All above ground improvements which comprise the structure.
- **Horizontal elements (funded by the Airport Authority):**
 - Entrance roadway,
 - Parking lot,
 - Site preparation,
 - Drainage,
 - Sedimentation and erosion control,
 - Landscaping,
 - Potable water,
 - Sanitary sewer/septic system,
 - Electrical utilities, and
 - Phone lines and cable service.

Considerations for the Tenant

Tidewater Air was encouraged by the support from the community and the Airport Authority. The Airport Authority amended Tidewater Air's current lease to include a 25-year extension, allowing Tidewater Air to recoup its investments in the new facility. The Authority also funded the Horizontal elements of the new facility and paid for parking lot improvements. The building was furnished with funds donated by local businesses. Finally, Tidewater Air benefits from having property taxes waived at the Airport.

Benefits to the Airport

The previous FBO facility at EWN was in disrepair and functionally limited. The building was unable to accommodate the number of pilots transporting business travelers to and from New Bern. The new facility is a significant upgrade that will meet the needs of the aviation community. The Airport receives land rent for the real estate on which the facility is located. Tidewater Air pays the Airport a fuel-flowage fee on their fuel sales each month.

New Bedford Regional Airport (EWB)

Airport Type:	Non-Hub
Tenant:	Bridgewater State University
Type of Business:	Flight Training
Facility Location:	Airside



SOURCE: <http://www.flickr.com/photos/chchchacos/2968580859/>



SOURCE: <http://www.bridgew.edu/aviation/>

Project Overview

The City of New Bedford in southeastern Massachusetts is home to New Bedford Regional Airport (EWB) and Bridgewater State University. The college and the airport collaborated to convert a former Delta Air Lines pilot training facility (originally a plumber training facility) into a modern flight training facility.

This collaboration was the result of mutually-vested interests by both parties. New Bedford's mayor made a strong commitment to ensure a solid aviation management program at Bridgewater State University. The New Bedford Regional Airport was an attractive location for its flight-training center due to its close proximity to campus, and the operating air traffic control tower. The conversion of the building was a collaborative effort between the city and the airport. The airport funded the upgrades to the building, while the city and university staff provided most of the labor in-house.

Bridgewater's program caters to a broad base of students and has positively impacted the airport and gained solid FAA support. At least 18 direct jobs have been created, and several businesses have been positively affected through new fuel and maintenance contracts.

Key Stakeholders

The following is a list of key stakeholders responsible for the development and ultimate execution of the lease arrangement:

Airport Sponsor: The City of New Bedford paid approximately \$50,000 to update the facility after Delta's departure and provided labor at no cost.

Tenant: Bridgewater State University's operations are funded through the regular operating budget of the school. The University also provided labor in-kind to assist in preparing the facility for use as a training center.

Division of Capital Asset Management: Negotiated the lease between the City and the University.

New Bedford Redevelopment Authority (RDA): After Delta left EWB, the facility reverted back to the Airport when the RDA lease expired.

Key Lease Elements

The lease was negotiated by the Division of Capital Asset Management and Maintenance. In the agreement, the Commonwealth of Massachusetts is the tenant, and Bridgewater State University is the “user agency.” The lease term is 5 years, the maximum allowed for state entities in Massachusetts, and rent is paid monthly in equal installment.

Considerations for the Tenant

New Bedford Regional Airport was a perfect fit for Bridgewater State University’s aviation program. The Airport is located near the school, and its air traffic control tower makes it a good location for a flight training program. Bridgewater State University has a strong education program and wanted a building that would identify with their educational reputation. After the Airport renovated the building at EWB, it was a facility the University could show to prospective students with pride.

Benefits to the Airport

Because the Airport acquired the flight training facility from the Plumber’s Union through a short-term financing arrangement with the Redevelopment Authority at no cost, all rent received from Bridgewater State University now goes to operational support. The Airport also receives revenue through fuel-flowage fees.

The flight training center has created at least 18 jobs, including associate dean, flight instructors, dispatchers, and support staff. It has indirectly affected several businesses at the airport through fuel and maintenance contracts, building maintenance contracts, and building incidentals. The upgraded and modernized building will have a positive and significant impact on airport operations, impacting overall FAA support.

Albany International Airport (ALB)

Airport Type: Small-Hub
 Tenant: HondaJet East
 Type of Business: Factory Service and Sales Center
 Facility Location: Airside



SOURCE: www.Honda.com



SOURCE: Business Images, New York’s Tech Valley, November 5, 2008

Project Overview

Note: The research and interviews for this case study were conducted in early 2009. Since then, the circumstances have changed and the project is being structured differently. However, the initial conditions of this case study and its main tenants still illustrate a solid foundation that other airports could apply to their own plan for development of airport property.

In February 2007 Albany International Airport (ALB) sent a letter to Honda Aircraft Company informing them of the Airport's desire to be the northeastern location for the new HondaJet location. In response to this letter, ALB spoke to representatives of HondaJet East and expressed interest in receiving the Request for Proposals (RFP) when it was released. During a site visit, the Authority was able to revise its initial RFP submittal to offer HondaJet East a parcel of land directly adjacent to the fixed-base operator. In April 2008 HondaJet announced that they had chosen Albany for the site of their new facility.

During negotiations, the Authority attended several meetings with the senate majority leader of the State of New York, and with HondaJet East officials to request an economic development grant. The Albany Airport Authority applied for two grants on behalf of HondaJet East from the New York State Economic Development Assistance Program, and the New York State Transportation Bond Act (AIR '99). Additionally, the Authority provided a match toward the cost of construction, reducing HondaJet East's direct costs. The incentive to attract HondaJet East was a grant package close to 10% of the capital cost to build the new facility. The incentive package, along with a good fit of culture, future vision, and proximity to major northeastern markets, made Albany International Airport the perfect fit.

The new HondaJet facility will create strong economic activity in the greater Albany community, as well as the surrounding region. The new facility is estimated to generate at least 29 professional and skilled jobs, in addition to attracting a broader base of customers to the airport. The facility is expected to open in the fourth quarter of 2010.

Key Stakeholders

The following is a list of key stakeholders responsible for the development and ultimate execution of the lease agreement:

Airport Sponsor: The Albany County Airport Authority initiated the conversation between the Authority and HondaJet East, with a letter stating their interest in bringing HondaJet's facility to the Airport. The Authority also applied for grants on HondaJet's behalf and paid a \$45,000 match to reduce HondaJet's construction costs, to entice the company to locate at the Airport.

New York State Economic Development Assistance Program (EDAP): With support from the New York State senate majority leader, the EDAP provided a \$500,000 grant to the Albany County Airport Authority to benefit the HondaJet East project.

New York State Department of Transportation (NYSDOT): Processed the application that resulted in the award of an \$180,000 Transportation Bond Act (AIR '99) grant, provided on behalf of HondaJet East.

Key Lease Elements

The lease for this project consists of an agreement between Flight Jets East, Inc., dba HondaJet East and the Albany County Airport Authority. The Authority leases the Airport from Albany

County, and the current lease extends through 2036. The land lease with HondaJet East, at the writing of this report, was scheduled to begin on the earlier of either January 1, 2011, or the date a certificate of occupancy is issued. The initial lease term is for 25 years, to end when the Authority's lease with the County ends, but HondaJet East will have the option of two renewals at the end of the initial term, each for 7.5 years.

Right of First Refusal: The land lease covers 87,294 square feet of land that will be occupied by HondaJet East. There is an additional parcel of land totaling 45,150 square feet adjacent to the primary parcel and available under option. This adjacent parcel could be used as an expansion site for HondaJet East, who will have the right of first refusal during the first 10 years of the lease.

Construction Requirements: The lease agreement requires that HondaJet construct, at their own expense, a 12,000-square-foot hangar, a 1,567-square-foot service space, and a 5,406-square-foot non-FBO space.

Approval of Plans: HondaJet East must provide detailed construction plans, specifications, and architectural renderings of any improvements, to the Authority, for approval before moving forward with construction of improvements.

Lease Extension: If HondaJet East wishes to exercise its option for a lease extension, they must begin negotiations for upgrades to their improvements 23.5 years after the commencement date of the lease agreement.

Rent: HondaJet's total rent is the sum of the base rent and a maintenance rent. Rent will be adjusted each year in accordance with the Consumer Price Index.

Considerations for the Tenant

Location was an important factor in selecting a site for HondaJet's new facility; Albany International Airport proved to be an ideal location. Albany's geographical proximity to large cities like New York and Boston was attractive to HondaJet, as visitors of larger cities might choose to arrive and depart from Albany since it is less congested than larger airports. Logistically, the location of the specific parcel of land was appealing because it was directly adjacent to the Fixed-Base Operator. Additional space for expansion was also a favorable attribute. Finally, the perfect fit of culture, vision, and quality of life in Albany appealed to HondaJet East.

The HondaJet facility will cost approximately \$6 million to construct and will be financed with bonds. As such, the funding from the State of New York and the Airport Authority was very enticing.

Benefits to the Airport

The HondaJet facility is a high profile development project that is expected to bring numerous benefits to Albany International Airport, and to the greater community. A local construction management company has been selected for the construction of this \$6 million project. An annual tax impact of \$906,000 is expected, along with the creation of 52 jobs. The facility will house maintenance and sales operations, attracting a variety of customers and increasing aviation activity. Finally, the project is expected to foster economic activity in terms of tourism through hotel stays and restaurant visits while customers' aircraft are being serviced.

Baton Rouge Metropolitan Airport (BTR)

Airport Type:	Small-Hub
Tenant:	Coca-Cola®
Type of Business:	Nonaeronautical
Facility Location:	Landside



SOURCE: RW Armstrong, 2009.



SOURCE: RW Armstrong, 2009.

Project Overview

Baton Rouge Metropolitan Airport (BTR) purchased a 498-acre parcel of undeveloped land east of the airport in order to realign a four-lane road to meet FAA Runway Safety Area (RSA) requirements. Once the road was realigned, the remaining 450-acre parcel was cut off from airside access by the new roadway. The portion of property not needed for RSA purposes had good development potential since it was in a desirable location with excellent highway access, but because the new road separated that portion of the parcel from the airfield, it had no potential for future aeronautical purposes.

Baton Rouge experienced a population boom after Hurricane Katrina in 2005, causing Coca-Cola to outgrow its former bottling and distribution facility. Shortly after the Airport purchased the land, the City of Baton Rouge and the State of Louisiana learned that Coca-Cola was interested in consolidating three of its Gulf Coast facilities to serve the entire Gulf Coast Region. Baton Rouge was in competition with Hattiesburg, Mississippi, for the location of the plant and both cities had deep roots with the company. The City of Baton Rouge and its mayor approached Coca-Cola, and made their desire to keep Coca-Cola in Baton Rouge very clear.

The City offered a 112-acre tract that no longer had airside access to Coca-Cola for consideration. The lease was signed in March 2007, and construction commenced shortly thereafter, in April. The 781,000 square foot facility was built at a total cost of \$176,000,000. It was the first Leadership in Energy and Environmental Design (LEED)-certified manufacturing facility in Louisiana.

The reader should note two important points within this case study. First, construction of non-aeronautical improvements on property purchased for RSA enhancement is quite unusual. Had

the roadway not been realigned for purposes of expanding the RSA, thereby bisecting the parcel and rendering a large portion of the parcel nonaeronautical because it did not have airside access, the opportunity to lease land for the Coca-Cola development would not have presented itself. Second, the lease term exceeds the 50-year threshold generally considered to be a disposal of property. Even though the state may have a different definition for disposal of public property, coordination with the FAA's Airports District Office is crucial in avoiding conflict with federal grant assurances. In fact, both of these scenarios warrant close collaboration with the FAA, should the airport sponsor wish to explore such a strategy. Further discussion of term lengths can be found in Section 3.2.4: Land Releases.

Key Stakeholders

The following is a list of key stakeholders responsible for the development and ultimate execution of the lease agreement:

Baton Rouge Metropolitan Airport Authority: Worked with the office of the mayor to develop a package that would attract Coca-Cola to the Airport.

State of Louisiana: Arranged for \$27 million in Gulf Opportunity Zone Bonds.

Office of the Mayor: Originally approached BTR to discuss the availability of the land adjacent to the airport.

Louisiana Economic Development: Provided a \$1.4 million performance grant through the Economic Development Award Program in order to pay for new water wells.

Key Lease Elements

The land lease between the City of Baton Rouge/Parish of East Baton Rouge and Coca-Cola consists of a 99-year lease term, with eight 10-year options to renew, and one 9-year option to renew. Note that this lease term is deemed acceptable by the FAA only because the land being leased has no practical aeronautical use due to its location and separation by a four-lane highway. Had this land been potentially usable for aeronautical purposes, a 99-year lease term would have been considered a violation of grant assurances.

Considerations for the Tenant

Louisiana Economic Development provided a \$1.4 million Economic Development Award Program grant. Coca-Cola will receive industrial property tax exemptions on buildings, machinery, and equipment; and rebates were granted on state income and sales taxes through the Enterprise Zone tax credit program for areas that meet low- to moderate-income requirements. Another rebate was granted on local sales taxes through the Enterprise Zone program.

The new, larger facility allowed Coca-Cola to expand its operations as well. Bottling capacity increased from 25 million cases to 43 million cases per year.

Benefits to the Airport

The acquisition of the 498-acre parcel of land, and its subsequent lease to Coca-Cola, have allowed the Airport to meet FAA Runway Safety requirements while making use of, and generating revenue from, Airport-owned land with no airside access. The Airport receives revenue from monthly rental payments of \$18,667.

Additionally, the high profile LEED-certified facility generated a good amount of positive publicity for the Airport. The plant also employs over 540 employees, and is expected to create another 113 jobs by 2012.

Pittsburgh International Airport (PIT)

Airport Type:	Medium-Hub
Tenant:	Knepper Press
Type of Business:	Industrial
Facility Location:	Landside



SOURCE: RW Armstrong, 2009.



SOURCE: RW Armstrong, 2009.

Project Overview

Pittsburgh International Airport (PIT) is located in southwestern Pennsylvania and represents 8,840 acres of land in area. Although 3,000 acres were identified for nonaeronautical development, only 1,200 acres were easily developable because of their rolling topography. The airport prioritized various sites on airport property as to desirability for development. One of the top sites became the Clinton Commerce Park due to its proximity to a major interstate highway and desirability from a commercial real estate perspective and potential for warehousing and distribution. The project is in Phase I of five anticipated phases. At the writing of this report, three buildings totaling more than 700,000 square feet are either completed or are under construction.

Knepper Press, a printing company, is one of the tenants in the commerce park. The company was looking to expand and chose PIT because of the location, and because the site was shovel ready. Knepper Press built a 100,000-square-foot facility. They have utilized the initial facility and are leasing an additional 60,000 square feet in a neighboring building.

Community support was essential to successfully funding this project. An assortment of funding sources was utilized, including the State of Pennsylvania, Allegheny County, Findlay Township, the school board, and a federal earmark. The equity value of the land itself was used as a match for the state grant. The project and the larger commercial park are expected to be a significant source of economic development for the state.

Key Stakeholders

The following is a list of key stakeholders responsible for the development of the Clinton Commerce Park project:

Airport Sponsor: The Allegheny Airport Authority prioritized sites on airport property, one of which became Clinton Commerce Park. The Authority was also able to secure a grant using the value of the airport land for \$3 million as debt coverage.

Allegheny County: Collaborated with Findlay Township and West Allegheny School District to create a Tax Incremental Financing (TIF) District. Consequently, the Airport was able to issue debt of \$5.5 million for project funding.

Knepper Press: An anchor tenant of the Commerce Park.

State of Pennsylvania: The state awarded the Airport a \$7 million grant to help fund project and provided Knepper Press with tax breaks for new employees as an incentive.

Federal Government: The federal government earmarked \$100,000 to fund the Clinton Commerce Park Project.

Key Lease Elements

Leases at Clinton Commerce Park are strictly land leases. Each company owns its respective facility. So as not to compete with local developers, the Airport does not construct buildings. Because companies cover the cost of constructing their facilities, the land leases allow for companies to recoup the costs of their investments.

The lease term is for 29 years with two 10-year options to renew. Throughout the term, the Airport is responsible for funding improvements to the commerce park, and the companies are responsible for maintenance and insurance. The lease agreements contain clauses ensuring that the companies' operations will not interfere with aviation operations, and will preserve the environment.

Considerations for the Tenant

Because Knepper Press pays ground rent only, and owns its facility, it is able to lease part of the facility to third parties. Knepper Press has leased enough land to expand the facility up to 175,000 square feet, enabling it to increase operations. Knepper Press also receives a tax break from the state for new employees, and was not charged ground rent during the construction period.

Knepper Press was looking to relocate from its previous facility, and Clinton Commerce Park was an attractive location. The Airport is not far from its previous location, offering a prominent and recognizable facility, convenient for out-of-town clients due to its proximity to the passenger terminal.

Benefits to the Airport

The Airport collects revenue on the land leases within Clinton Commerce Park. There is currently \$48 million in private investment, and as the project matures, revenue is expected to grow significantly. Because the companies located in the commerce park have a large number of fixed assets, it is anticipated that the businesses will remain at the Airport long term and have a positive impact on Pennsylvania's economy by bringing more business to the area. Fifteen new jobs have been created, and 110 jobs were retained at Knepper Press. Clinton Commerce Park is expected to afford additional employment opportunities at the Airport.

Ted Stevens Anchorage International Airport (ANC)

Airport Type:	Medium-Hub
Tenant:	Alaska CargoPort™ LLC
Type of Business:	Cargo Handling
Facility Location:	Airside



SOURCE: RW Armstrong, 2009.



SOURCE: RW Armstrong, 2009.

Project Overview

The Anchorage International Airport, the fifth busiest cargo airport in the world, recognized that the level of private-sector interest was high enough to offer property by competitive bid. The Airport offered a 20-acre parcel of land for development and required the winning bidder to provide a financial guarantee. Alaska CargoPort LLC, a subsidiary of the Lynxs™ Group, LLC was the winning firm, and a long-term lease was executed. Because of regulatory restrictions, the lease is structured as a 35-year lease with four 5-year options, effectively creating a 55-year lease.

The Airport was able to use AIP funds for creating a runway and taxiway in preparation of the facility site. Alaska CargoPort secured approximately \$30 million in financing, but required more for the development project. The Airport and Alaska CargoPort agreed on a unique situation in which the Airport would act as a conduit for Alaska CargoPort. The Airport took ownership of the facility, which consisted of approximately 200,000 square feet of warehouse, maintenance buildings, offices, and crew quarters, as well as all-weather aircraft parking for 12,747 freighters and was able to obtain tax exempt financing. The Airport then leased the facility back to Alaska CargoPort. Later, there was an additional 10-acre expansion of the facility.

In order to secure prime tenants, the Airport and Alaska CargoPort worked together to utilize creative marketing tactics. In addition to the Airport's ongoing efforts to facilitate the airport-wide marketing of international air cargo activity, it sponsored the Top of the World Air Cargo Summit, where Northwest Airlines CEO Richard Anderson (now Delta Air Lines CEO) was the keynote speaker. Alaska CargoPort and Northwest Airlines held meetings which ultimately resulted in Northwest Airlines relocating its Asia freighter hub to Alaska CargoPort's facility, providing the desired prime tenant.

Key Stakeholders

The following is a list of key stakeholders responsible for the development and ultimate execution of the lease agreement:

Airport Sponsor: The State of Alaska agreed to assist Alaska CargoPort in securing tax-exempt financing by taking ownership of the facility, and, in turn, leasing it back to Alaska CargoPort. The Airport prepared the facility site with a runway and taxiway using AIP funds.

Tenant: Alaska CargoPort won the competitive bid process to build a cargo facility on the valuable 20-acre parcel of land at ANC. Alaska CargoPort requested that the Airport assist with financing in order to lower costs by approximately \$1 million.

Subtenant: Northwest Air (now part of Delta Air Lines) decided to relocate from Narita Airport in Tokyo to ANC. This gave Alaska CargoPort a prime tenant and greatly increased operations at the facility.

Alaska Industrial Development Authority: Issued tax-exempt bonds to the Airport to finance the cost of building the cargo facility.

Key Lease Elements

Lease Rate and Term: The land lease between the Airport and Alaska CargoPort is a 35-year lease with four 5-year options to renew. The lease requires a bid deposit of 1 year's rent submitted with the bidder's registration. Annual rent is \$0.06 per square foot. After June 1, 2000, the Airport may increase the rent. The Airport may also increase rent at its discretion every 5 years thereafter. Rent increases will not exceed fair market value, as determined by an appraiser.

Improvements: Alaska CargoPort is required to substantially complete development and improvements within 3 years. The minimum value of improvements is \$10 million, and the facility must be no less than 100,000 square feet with five wide-body aircraft parking positions. The Airport will provide access, water, and sewer to Alaska CargoPort.

Performance Bond: Prior to any demolition or construction, but by no later than July 1, 1998, Alaska CargoPort was required to submit proof of a \$10 million performance bond to guarantee performance, completion, and payment of the required improvements.

Considerations for the Tenant

Ted Stevens Anchorage International Airport was an attractive site for Alaska CargoPort because of the high amount of cargo traffic between Asia and North America. There are 33,000 operations between the two continents annually, most of which make stops at ANC to either transfer, sort, clear customs, or refuel. The financial guarantee required by the Airport was an unusual requirement, but the creative financial partnership between the Airport and Alaska CargoPort made the project feasible. The tax-exempt financing lowered costs by approximately \$1 million.

Benefits to the Airport

The Airport had a valuable but undeveloped 20-acre parcel of land available. By requiring bidders to provide a guarantee, the Airport ensured that the land would be developed. Using creative marketing tactics, the ANC facilitated meetings between Alaska CargoPort and airline executives. These meetings resulted in Northwest Airlines relocating their Asia freighter hub to Anchorage, bringing weekly over 90,747 freighters.

This was a high profile project and reinforced ANC's strategy of encouraging market-driven activity. Alaska CargoPort brought approximately 500 jobs to the Airport and hundreds of millions of dollars in economic activity to the community from cargo activity, and has been operated successfully for over 10 years.

George Bush Intercontinental Airport/Houston (IAH)

Airport Type:	Large-Hub
Tenant:	Consolidated Rental Car Facility
Type of Business:	Rental Car
Facility Location:	Landside



SOURCE: RW Armstrong, 2009.



SOURCE: RW Armstrong, 2009.

Project Overview

George Bush Intercontinental Airport/Houston (IAH) is one of three airports that comprise the Houston Airport System (HAS). The mid-1990s represented an era of undeveloped land and growing concerns of smog, providing a fertile environment for consideration and development of a consolidated rental car facility (CRCF). Dallas-Fort Worth International Airport (DFW) opened its CRCF in 2000, and IAH was able to apply lessons learned at DFW to ensure a high quality and successful facility at IAH. In 2003, the facility located on 250 acres of land opened at IAH.

Financing for the CRCF was initiated in April 2001 with the Airport issuing bonds of \$130,250,000. When the bonds were issued, a customer facility charge (CFC) of \$3.00 was imposed at the airport as well to pay the debt service on the bonds. A Facility Improvement Fund for capital improvements and a Stabilization Account for funding any shortfalls associated with the economy were also created at that time out of excess CFC collections.

There are currently eight rental car operators located within the CRCF with Master Leases with the City of Houston. This consortium of operators was required by HAS to form a Limited Liability Corporation (LLC). The LLC is responsible for governing maintenance and operations, including bus operations between the facility and the airport, utilities, and insurance. The entire facility covers 250 acres, with 33,960 square feet of exclusive use area, 30,500 square feet of common space, a lobby/shuttle bus area, and a two-level parking garage.

Because of issues with rental company bankruptcy in both 2001 and 2009, the Airport learned that there should be separate trust account provisions and/or a financial guarantee provided to protect from bankruptcy.

Key Stakeholders

The following is a list of key stakeholders responsible for the development and ultimate execution of the consolidated rental car facility lease.

Airport Sponsor: The City of Houston is the Airport owner and is the lessor in the lease agreements.

Houston Airport System (HAS): The City of Houston's Department of Aviation considered lessons learned from Dallas-Fort Worth's facility to ensure the facility at IAH was efficient and successful. The HAS issued \$130,250,000 in bonds to finance the CRCF project. The bond issuance provided funding for the physical development plus the initial purchase of 26 buses that are used by the rental car operators to transport customers between the airport's terminals and the CRCF.

Rental Car Operators: The following rental car operators formed a Limited Liability Corporation:

- Alamo (rejected lease in 2001 bankruptcy, but dual marketing with National),
- Avis,
- Budget,
- Hertz,
- Thrifty,
- Enterprise,
- Dollar,
- National (dual marketing with Alamo since 2001 bankruptcy), and
- Advantage (left due to bankruptcy in 2009).

Key Lease Elements

Each rental car operator enters into two agreements with the City associated with the CRCF: a Master Lease Agreement and a Concession Agreement and into the LLC with the other operators.

Elements of Master Lease:

- The operator is required to be part of the LLC.
- Operators pay the LLC for operational expenses. The LLC, in turn, is responsible for maintaining and operating the CRCF, including bus operation.
- Ground rent is paid by operators pro rata (based on the number of parking spaces and the square footage of the area each operator occupies):
 - Rate of \$0.23 per square foot per year initially; currently \$0.2645 per square foot per year.
 - Escalation by 15% at every 5-year interval after the 5th year.
- A Special Facilities Rent is paid by the rental car operators to pay debt service and administrative expenses of the bonds and for use of the facility: Customer Service Building, Parking Garage, Shuttle facilities, Shuttle Bus Maintenance, Storage facilities, and the initial buses.
- Contains provisions for new entrants.
- Stipulates CFC must be charged for each transaction and remitted to the Airport.
- Allows for CFC adjustment annually (or more often under certain conditions).
- Provides for a Rate Stabilization Account to deal with seasonal or economic adjustments throughout the year.

Elements of Concession Agreements:

- Provides a Scope of Services required by operators.
- Stipulates the greater of a Minimum Annual Guarantee (MAG) versus a percentage fee to be paid to the City:
 - MAG is calculated as 85% of the total amount of concession fees for the preceding 12 months but cannot be less than \$100,000.
 - Percentage Rent:
 - 8.5% of first \$3 million and 10% above \$3 million for the first 5 years.
 - 10% of all gross revenues for years 6 through 10.

- Thereafter, percentage fees shall be based upon the average comparable percentage fees at the 10 largest airports in the US, except the Port Authority of New York/New Jersey.

Financial Considerations for the Tenant

The introduction of the CRCF brought numerous benefits to the rental car operators. In addition to the advantages of being located in a new, high-quality facility, the operators have the benefit of shared operational costs. The Airport purchased the buses used by the operators, and since the buses are shared, transportation to and from the airport is much more efficient. The number of buses used by rental car operators was reduced from 125 buses to 26.

Tampa International Airport (TPA)

Airport Type: Large-Hub
 Tenant: PEMCO World Air Services
 Type of Business: Maintenance and Repairs
 Facility Location: Airside



SOURCE: RW Armstrong, 2009.



SOURCE: RW Armstrong, 2009.

Project Overview

The 5-bay, 150,000-square-foot maintenance facility was built in 1993 for use by US Airways, but sat vacant for nearly 6 years after US Airways entered bankruptcy and closed the facility in November 2002. The closure of the facility resulted in the loss of 300 jobs, as well as a significant reduction in revenue for the Airport. Initial efforts to market the facility to new tenants were handled by US Airways; however, those responsibilities, along with maintenance and upkeep of the facility, were soon transferred to the Hillsborough County Aviation Authority (the Airport Sponsor). The Authority invested \$500,000 in the upkeep of the hangar, ensuring that the facility was in excellent, move-in condition for any prospective tenants.

The Authority enlisted the support of the Hillsborough County Economic Development Corporation (formerly the Greater Tampa Chamber of Commerce Committee of 100) to assist in the marketing of the facility, and to identify a package of available financial incentives to help lure prospective tenants. In addition to the quality of the available facilities, the Tampa metropolitan area had a built-in, trained, and available labor force of skilled aircraft maintenance profession-

als resulting from the closure of the US Airways facility, the closure of the Delta maintenance facility at TPA in 2005, and the airport's proximity to MacDill Air Force Base.

The first contact with PEMCO World Air Services occurred in March 2005, with PEMCO expressing interest in operating a third-party MRO facility servicing commercial aircraft. PEMCO, working with the Airport Authority and the Tampa Hillsborough EDC, began to evaluate the facility, the labor force within the community, and the available incentives that would assist in making the venture financially viable. Through negotiations and coordination with key stakeholders in the community, a package of lease terms and incentives (detailed in the following sections) was put together that met the needs of the Airport Sponsor and PEMCO, and offered significant economic benefit to the surrounding community. A lease agreement was signed in early 2008, with operations at the facility starting shortly thereafter.

Key Stakeholders

Following is a list of key stakeholders responsible for the development and ultimate execution of the PEMCO lease arrangement:

Airport Sponsor: Hillsborough County Aviation Authority maintained the facility in move-in condition, took the lead in marketing the facility after initial efforts by US Airways yielded little result, and enlisted the support of the Tampa Hillsborough Economic Development Corporation (EDC).

Tampa Hillsborough EDC: The Tampa Hillsborough EDC assisted the Airport Sponsor in marketing the facility and identifying available incentives to entice and assist prospective tenants to the vacant facility. Tampa Hillsborough EDC is officially recognized by Enterprise Florida as Hillsborough County's primary business recruitment/retention team, and part of an economic development alliance with Hillsborough County and the cities of Tampa, Plant City, and Temple Terrace, as well as various private investors.

Governor's Office of Tourism, Trade and Economic Development (OTTED), Enterprise Florida (EFI), Hillsborough County, and City of Tampa: PEMCO qualified for and was awarded Enterprise Florida's Qualified Target Industry Tax Refund Program (QTI) inducement. QTI is a performance-based program based on the creation of high-paying jobs in target industries, of which aviation is one. The tax refund will be paid out over several years by the state, Hillsborough County, and the City of Tampa, provided eligibility requirements are maintained.

Workforce Florida: A Quick Response Training grant was awarded to PEMCO by this state agency, in partnership with the Hillsborough County School District. The grant funded a customized training program to assist the company with its ramping-up efforts.

Florida Agency for Workforce Innovation (AWI) and Tampa Bay Workforce Alliance: Provided labor market statistics specific to the skills and occupations the company required.

PEMCO World Air Services: PEMCO was able to successfully negotiate with the Hillsborough County Aviation Authority and strike an agreement that proved beneficial to its own interests, those of the Airport, and those of the surrounding community. The lease is structured in a way, through revenue sharing, that ties the Airport's financial success to PEMCO's, while ensuring consistent revenue to the Airport Sponsor through base land and facility rents.

Key Lease Elements

TPA and PEMCO were able to construct a lease favorable to both parties. The Airport kept the initial parcel rent low, with incremental ground lease increases, and offered a facility rent structure based on the financial success of the tenant (percentage of gross revenue).

Lease Term: The lease is for an initial 15-year term, with two 5-year extension options that can be executed under the same terms as the initial agreement, and without a formal amendment to the lease agreement.

Rent and Escalation: Rent is accounted for in two parts: ground rent and facility rent.

- Ground rent is set at \$0.15 per square foot annually, based on the 717,492-square-foot parcel that encompasses the PEMCO facility. This equates to \$107,624 annually. At the 5-year anniversary of the execution of the lease, and on every third year after (including lease extensions, if applicable), ground rent will increase by 10%.
- Annual facility rent is based on 1.3% of PEMCO's gross receipts (i.e., gross revenue from the operation of the facility), with a minimum annual facility rent clause that guarantees the Airport Sponsor \$300,000 annually (\$25,000 paid on a monthly basis). Every 3 months, 1.3% of revenue is calculated for the preceding 3-month period. Should the 1.3% of revenue surpass the 3-month minimum of \$75,000 (3 months times \$25,000 per month), PEMCO will pay the Airport the difference. Should the 1.3% of revenue not exceed the \$75,000 minimum, the Airport Sponsor will credit the surplus paid to the next period's minimum facility rent. If at the end of the 12-month period the 1.3% of gross revenue exceeds the \$300,000 minimum, the Airport Sponsor retains the funds.

Noncompete and Right-of-First-Refusal Clause: PEMCO had expressed interest in the vacant US Airways maintenance hangar for potential expansion of its operations, but was concerned that further competition at the airport (another MRO entering the same market) would render its business plan obsolete and hinder PEMCO's ability to operate profitably at TPA. In order to address this concern, a clause was inserted into the Lease Agreement that gives PEMCO the right to cancel its Lease Agreement within 30 days if another MRO enters the market. This was a creative approach to attract new business activity, re-use a significant facility on the airport, and replace the aeronautical activity and aviation jobs that were lost.

The noncompete clause is a bit tricky, however, in that the airport sponsor is precluded from granting exclusive rights to a single operator, a clear violation of Grant Assurance 23. The fact that the airport sponsor is simply granting the operator the option of terminating its lease if a competing MRO comes onto the airfield is important, because the airport sponsor can, and should, allow and encourage competition. In this case, the operator is occupying existing facilities so the airport sponsor has more flexibility to release PEMCO if a better business deal presents itself than it would if the development project carried debt that was secured by a long-term tenant lease. As discussed previously, the airport sponsor should collaborate closely with the FAA's ADO to ensure that grant assurance violations do not occur, and that the perception of noncompliance does not prevail. This topic is discussed further in Section 2.3.1, Noncompete Clause.

Considerations for the Tenant

The structure of rent payments directly ties PEMCO's facility rent to the company's success at the Airport. The base ground rent and minimum facility rent clause set the initial outlays for PEMCO low enough to make the facility attractive to start operations, while guaranteeing the airport sponsor a base revenue stream with significant upside potential.

In addition to a favorable lease payment structure, PEMCO was awarded a performance-based tax inducement by Enterprise Florida, through the Qualified Target Industry Tax Refund Program. The program stipulates that at least 100 new jobs must be created, and provides a tax refund of between \$3,000 and \$5,000 per employee, based upon the annual average wages paid (the higher the wage, the greater the tax credit). PEMCO was also awarded a Quick Response Training grant by Workforce Florida. Additionally, the Florida Department of Revenue offers

sales and use tax exemptions on aircraft parts, modification, maintenance and repair, sale, or lease of qualified aircraft.

Airport Benefits and Revenue

In 2009 (the first full year of the lease arrangement), the Airport realized a minimum revenue of nearly \$408,000 annually from this facility, a figure that could increase significantly as PEMCO's operations and revenue grow. Maintenance and upkeep costs that were once the responsibility of the Airport are now the responsibility of the tenant, as stipulated in the lease agreement. Another benefit is the additional aircraft activity driven by the MRO, boosting fuel sales and fuel flowage at the airport, activity that benefits both fuel providers and the Authority.

In addition to the direct financial benefits to the Airport Sponsor, this project has had a positive impact to the surrounding community, through the restoration of 300 quality jobs, and the potential addition of another 110 jobs should PEMCO achieve its employment target of 410.

Project Attributes Matrix

	Development Attributes			
	Airport Size Category	Developer of the Property	Incentives Involved	Funding Elements
Albany International Airport - HondaJet Development	Small Hub	HondaJet	Land provided adjacent to FBO; Airport Authority worked to secure funding	Grants awarded by EDA and state of New York; Funding match from Airport Authority
Baton Rouge Metropolitan Airport - Coca-Cola Development	Small Hub	Coca-Cola	Industrial tax exemptions and rebates on state income and sales tax	State Economic Development grant
Coastal Carolina Regional Airport - Tidewater Air	Non-Hub	Coastal Carolina Regional Airport and Tidewater Air	Property taxes waived	Grant from state of North Carolina; Private funding from Tidewater Air; Donations from local businesses
Collin County Regional Airport - EDS Development	General Aviation	Collin County Regional Investments (CCRI)	Rent subsidy; City paid for and constructed taxi lane for easy access to facility; Purchased fuel truck for exclusive use	CCRI financed the project for 20 years; Minimum tax impact was estimated to determine amount EDS/Hewlett Packard would pay for facility
Monroe County Airport - Aircraft Storage Hangars	General Aviation	Monroe County Airport (BMG)	Tenants become vested in facilities and have a stake of ownership at the end of lease terms	BMG uses percentage of rent payments for a "building fund," used for buyback of facilities
George Bush Intercontinental Airport - CRCF	Large Hub	Houston Airport System	Share buses for greater efficiency	Bonds and Customer Facility Charge issued
New Bedford Regional Airport - Bridgewater State University Training Facility	Non-Hub	New Bedford Regional Airport	Provided building at no cost; In-kind labor from City and the Airport	Cooperative venture between BMG and Bridgewater State College
Pittsburgh International Airport - Clinton Commerce Park	Medium Hub	Pittsburgh International Airport	No ground rent charge during construction period; Prominent location	Grant from State of Pennsylvania; Federal earmark; Created TIF District and issued debt; Leveraged value of land
Tampa International Airport - PEMCO Development	Large Hub	Tampa International Airport	Low rent with incremental increases; Airport invested in upkeep of hangar; Available work force	Qualified Target Industry Tax Refund grant
Ted Stevens - Anchorage International Airport - Lynxs Alaska CargoPort	Medium Hub	Alaska CargoPort	Applied AIP funds for site improvements; Helped secure prime tenants	Alaska CargoPort secured \$30 million; Conduit financing - ANC took ownership to obtain tax exempt financing, then leased facility to Alaska CargoPort

Type of Development	Use of Airport Property	Lease Term	Visioning Documents
Aeronautical	Maintenance Facility and Sales Facility	25 years	Yes
Non-Aeronautical	Coca-Cola Bottling Facility	99 years with eight 10-year options to renew	Yes
Aeronautical	FBO Facility	25 years	Yes
Aeronautical	Hangar Facility	40-year ground lease; 10-year facility lease	Yes
Aeronautical	Hangar Complex	30 years	Yes
Aeronautical and Non-Aeronautical	Consolidated Rental Car Facility	30 years	Yes
Aeronautical	Flight Training Center	5 Years	Yes
Non-Aeronautical	Industrial/Commercial Park	29-year land lease with two 10-year options to renew	Yes
Aeronautical	Maintenance Facility	15 years with 10-year option to renew	Yes
Aeronautical	Cargo Transfer Facility	35 years with four options to extend for 5 years	Yes

Project Stakeholder Matrix

	Stakeholders Involved		
	Airport Sponsor	Airport Users	Local City and/or County Government
Albany International Airport - HondaJet Development	X		
Baton Rouge Metropolitan Airport - Coca-Cola Development	X		X
Coastal Carolina Regional Airport - Tidewater Air	X		X
Collin County Regional Airport - EDS Development	X		X
Monroe County Airport - Aircraft Storage Hangars	X		X
George Bush Intercontinental Airport - CRCF	X	X	X
New Bedford Regional Airport - Bridgewater State University Training Facility	X	X	X
Pittsburgh International Airport - Clinton Commerce Park	X		
Tampa International Airport - PEMCO Development	X		
Ted Stevens - Anchorage International Airport - Lynxs Alaska CargoPort	X	X	

Department of Transportation or MPO/MTPO	Economic Development Entity	State Government	Federal Aviation Administration (FAA)	Federal Agency and/or Program Other than FAA
	X	X		
	X	X		
	X	X		
	X		X	
	X	X		X
	X	X		
		X	X	



APPENDIX B

Acronyms

AC	Advisory Circular
ACIP	Airport Capital Improvement Plan
AGL	Above Ground Level
AIP	Airport Improvement Program
ALP	Airport Layout Plan
AOA	Air (or Aircraft) Operations Area
APO	FAA Office of Aviation Policy and Plans
APP	FAA Office of Airport Planning and Programming
ARC	Airport Reference Code
ARRA	American Recovery and Reinvestment Act
AWOS	Automated Weather Observing System
CAM	Common Area Maintenance
CDFA	Catalog of Federal Domestic Assistance
CFR	Code of Federal Regulations
CIP	Capital Improvement Plan
COG	Council of Governments
CPI	Consumer Price Index
CRCF	Consolidated Rental Car Facility
dba	Doing Business As
dBA	Weighted Sound Level
DNL	Average Day-Night Sound Level
DOD	Department of Defense
DOT	Department of Transportation
EA	Environmental Assessment
EDA/EDC	Economic Development Agency/Economic Development Corporation
EIS	Environmental Impact Statement
EPA	Environmental Protection Agency
FAA	Federal Aviation Administration
FAR	Federal Aviation Regulations
FBO	Fixed-Base Operator
F&E	Facilities and Equipment
FHWA	Federal Highway Administration
FMV	Fair Market Value
FTA	Federal Transit Administration
GA	General Aviation
GIS	Geographic Information System
HUD	Housing and Urban Development
ILS	Instrument Landing System

INM	Integrated Noise Model
LCDC	Land Conservation and Development Commission
LEED	Leadership in Energy and Environmental Design
LLC	Limited Liability Corporation
LOI	Letter of Intent
MAI	Member of the Appraisal Institute
MPO	Metropolitan Planning Organization
MRO	Maintenance, Repair, and Overhaul
MSL	Mean Sea Level
NAS	National Airspace System
NAVAID	Navigational Aid
NCP	Noise Compatibility Plan
NEM	Noise Exposure Map
NEPA	National Environmental Policy Act
NLR	Noise Level Reduction
NPIAS	National Plan of Integrated Airport Systems
NPS	National Priority System
O&M	Operation and Maintenance
PFC	Passenger Facility Charge
RFP	Request for Proposal
RPC	Regional Planning Council or Regional Planning Commission
RPZ	Runway Protection Zone
RSA	Runway Safety Area
RTP	Regional Transportation Plan
R/U	Rentable/Usable
RZED	Recovery Zone Economic Development
RZF	Recovery Zone Facility
SASO	Specialized Aeronautical Service Operator
TAC	Technical Advisory Committee
TAF	Terminal Area Forecast
TDR	Transfer of Development Rights
TERPS	United States Standard for Terminal Instrument Procedures
TIA	Tenant Improvement Allowance
TSA	Transportation Security Administration
TTF	Through-the-Fence
UBC	Uniform Building Code
UGB	Urban Growth Boundary



APPENDIX C

Glossary

A

Abatement: Often and commonly referred to as free rent or early occupancy, may occur either outside or in addition to the primary term of the lease.

Above Building Standard: Upgraded finishes and specialized design necessary to accommodate a tenant's requirements.

Absorption: The rate, expressed as a percentage, at which available space in the marketplace is leased during a predetermined period of time. Also referred to as market absorption.

Accrued Interest: Interest that is earned but not paid, adding to the amount owed.

Ad Valorem: Means "according to value." This is a tax imposed on the value of property (general property tax) and is typically based on the local government's valuation of the property.

Add-on Factor: Often referred to as the Loss Factor or Rentable/Usable (R/U) Factor. Represents the tenant's pro rata share of the building common areas, such as lobbies, public corridors, and restrooms. It is usually expressed as a percentage that can then be applied to the usable square footage to determine the rentable square footage upon which the tenant will pay rent.

Air (or Aircraft) Operations Area (AOA): Restricted ground areas of the airport, inclusive of taxiways, runways, and aircraft parking areas contained within the airport's security fencing and/or boundary.

Aircraft Parking Line Limit: A line established by the airport sponsor beyond which no part of a parked aircraft should protrude.

Airport Environ: The area surrounding an airport that is considered to be directly affected by the presence, and operation, of that airport.

Airport Layout Plan (ALP): A scale drawing of existing and proposed airport facilities, their location on an airport, and the pertinent clearance and dimensional information required to demonstrate conformance with applicable standards.

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 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.

Allowance Over Building Shell: Most often used in a yet-to-be constructed property, the tenant has a blank canvas upon which to customize the interior finishes to its specifications. This

arrangement caps the landlord's expenditure at a fixed dollar amount over the negotiated price of the base building shell. This arrangement is most successful when both parties agree on a detailed definition of what construction will be included, and at what price.

Amortization: The repayment of principal, through scheduled mortgage payments. The scheduled payment, less the interest, equals amortization.

Appraisal: An estimate of opinion and value based upon a factual analysis of a property, by a qualified professional.

Approach Protection Easement: A form of easement that conveys all of the rights of an aviation easement and limits the type of development and uses of the property.

Apron: The portion of the AOA set aside for parking, loading, and unloading aircraft.

“As-Is” Condition: The acceptance, by the tenant, of the existing condition of the premises at the time the lease is consummated. This would include any physical defects.

Assessment: A fee imposed on property, usually to pay for public improvements such as water, sewers, and streets, made by a municipality or improvement district.

Assignment: The transfer of ownership of an asset from one person to another.

Attorn: To agree to be a tenant to a new owner or landlord of the same property. To agree to recognize a new owner of property and to pay the new landlord rent. In a lease, when the tenant agrees to attorn to the purchaser, the landlord is given the power to subordinate the tenant's interest to any first mortgage or deed of trust lien subsequently placed upon the leased premises.

Avigation Easement: A type of easement that typically conveys the following rights:

- A right-of-way for free and unobstructed passage of aircraft through the airspace over the property, at any altitude above a surface specified in the easement (usually set in accordance with FAR Part 77 criteria).
- A right to subject the property to noise, vibrations, fumes, dust, and fuel particle emissions associated with normal airport activity.
- A right to prohibit the erection or growth of any structure, tree, or other object that would enter the acquired airspace.
- A right-of-entry onto the property, with proper advance notice, for the purpose of removing, marking, or lighting any structure or other object that enters the acquired airspace.
- A right to prohibit electrical interference, glare, misleading lights, visual impairments, and other hazards to aircraft flight from being created on the property.

B

Base Rent: A set amount, used as a minimum rent in a lease, with provisions for increasing the rent over the term of the lease.

Base Year: Actual taxes and operating expenses are computed for a specified base year, most often the year in which the lease commences.

Building Classifications: Building classifications in most markets refer to Class “A,” “B,” “C,” and sometimes “D” properties. While the rating assigned to a particular building is very subjective, Class “A” properties are typically newer buildings with superior construction and finish, in excellent locations with easy access, attractive to credit tenants, and that offer a multitude of amenities such as on-site management or covered parking. These buildings, of course, command the highest rental rates. As the “Class” of the building decreases (to Class “B,” “C,” or “D”) one component or another (such as age, location, or construction of the building) changes.

Building Code: Sets forth the requirements for protection of public health, safety, and general welfare, as related to the construction and occupancy of buildings and structures. Building Code establishes minimum acceptable conditions for matters found to be in need of regulation. Example topics include exits, fire protection, structural design, sanitary facilities, lighting, and ventilation. Sound insulation may also be a topic of Building Code.

Building Standard: A list of construction materials and finishes that represents what the tenant-improvement (finish) allowance/work letter is designed to cover, while also serving to establish the landlord's minimum quality standards with respect to tenant finish improvements within the building. Examples of standard building items are type and style of doors, lineal feet of partitions, quantity of lights, and quality of floor covering.

Building Standard Plus Allowance: The landlord lists, in detail, the building standard materials and costs necessary to make the premises suitable for occupancy. A negotiated allowance is then provided for the tenant to customize or upgrade materials.

Building or "Core" Factor: Represents the percentage of net-rentable square feet devoted to the building's common areas (such as lobbies, restrooms, and corridors). This factor can be computed for an entire building or a single floor of a building. Also known as a loss factor or rentable/usable (R/U) factor, it is calculated by dividing the rentable square footage by the usable square footage.

Building Restriction Line: A line established with respect to the runway centerline, to assure that structures will not project above the imaginary surfaces required by Federal Aviation Regulations, Part 77 (FAR Part 77).

Build-to-Suit: An approach taken to lease space by a property owner whereby a new building is designed and constructed per the tenant's specifications.

C

Capital Lease: A lease that is classified by a lessee as a purchase and by the lessor as a sale or financing. It must meet at least one of the following criteria: (a) the lessor transfers ownership to the lessee at the end of the lease term; (b) the lease contains an option to purchase the asset at a discounted price; (c) the lease term is equal to 75% or more of the estimated economic life of the property; or (d) the present value of minimum lease rental payments is equal to 90% or more of the fair market value of the leased asset, less related investment tax credits retained by the lessor.

Capital Recovery Rate: The rate at which invested capital is regained over the life of an investment.

Capitalization: A method of determining the value of real property, by considering net operating income divided by a predetermined annual rate of return.

Capitalization Rate: The rate that is considered a reasonable return on investment (on the basis of both the investor's alternative investment possibilities and the risk of the investment). Used to determine and value real property through the capitalization process. This terminology also refers to a "free and clear return."

Capitalization Ratio: Ratio that expresses each component of a firm's capital (common stock or ordinary share, preferred stock or preference shares, other equities, and debt) as a percentage of its total capitalization. These ratios are used in analyzing the firm's capital structure.

Carrying Charges: Costs incidental to property ownership, other than interest, such as taxes, insurance costs, and maintenance expenses that must be absorbed by the landlord during the initial lease-up of a building and thereafter during periods of vacancy.

Certificate of Occupancy: A document presented by a local government agency or building department certifying that a building and/or the leased premises (tenant's space), has been satisfactorily inspected and is suitable for occupancy.

Common Area: There are two components of the term "common area." If referred to in association with the Rentable/Usable or Load Factor calculation, the common areas are those areas within a building that are available for common use by all tenants and their invitees, such as lobbies, corridors, and restrooms. The cost of maintaining parking facilities, sidewalks, landscaped areas, public toilets, truck, and service facilities is also included in the term "common area" when calculating the tenant's pro rata share of building operating expenses.

Common Area Maintenance (CAM): The amount of Additional Rent charged to the tenant, in addition to the Base Rent, to maintain the common areas of the property shared by the tenants, and from which all tenants benefit. Examples include snow removal, outdoor lighting, parking lot sweeping, insurance, and property taxes. Most often, this does not include any capital improvements that are made to the property.

Comparables: Lease rates and terms of properties similar in size, construction quality, age, and use, typically located within the same market, and used as comparison properties to determine the fair market lease rate for another property with similar characteristics.

Compatibility Plan: A plan that sets forth policies for promoting compatibility between airports and the land uses that surround them. Compatibility Plans are often referred to as Comprehensive Land Use Plans.

Condemnation: The process of the taking of private property, without the consent of the owner, by a governmental agency, for public use through the power of eminent domain.

Conforming Use: Structures, trees, objects of natural growth, and/or use of land that complies with all applicable provisions of the applicable Zoning Ordinances, to include any amendment(s) to the ordinances.

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.

Contiguous Space: (1) Multiple suites/spaces within the same building, and on the same floor, which can be combined and rented to a single tenant; (2) A block of space located on multiple adjoining floors in a building, if a tenant were to lease floors six through 12 in a building for example.

Contract Documents: A complete set of design plans and specifications required for the construction of a building, or of a building's interior improvements. Working drawings include specific directions for the contractor for which a project is to be constructed.

Conveyance: Refers to the transfer of title to property between parties by deed.

Cost Approach: A method of appraising real property whereby the value of a structure is calculated using current costs of construction.

Covenant: A written agreement inserted into deeds or other legal instruments stipulating performance or non-performance of certain acts, or uses or nonuse, of a property and/or land.

D

Deed: A legal instrument transferring title to real property from the seller to the buyer upon the sale of property.

Default: The general failure to perform a legal or contractual duty or to discharge an obligation when due. Some specific examples are (1) failure to make a payment of rent when due or (2) the breach or failure to perform any of the terms of a lease agreement.

Demising Walls: The partition wall that separates one tenant's space from another, or from the building's common areas such as public corridors.

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.

Development Impact Fee: Fees placed on the development of land, or conditions required for the approval of a development project, such as the conveyance of certain land or money to specific public uses. Development Impact Fees are typically justified as an offset to the future impact that the development will have on existing infrastructure.

Distraint: The act of seizing personal property, based on the rights and interest the landlord has in the property of a tenant in default.

Dollar Stop: An agreed dollar amount of taxes and operating expense (expressed for the building as a whole or on a square foot basis) over which the tenant will pay its pro rata share of increases. This terminology may be applied to specific expenses such as property taxes or insurances.

E

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.

Easement: A right of use over the property of another, created by grant, reservation, agreement, prescription, or necessary implication. An easement is typically granted either for the benefit of adjoining land ("appurtenant"), such as the right to cross A to get to B, or for the benefit of a specific individual ("in gross"), such as a public utility easement.

Economic Feasibility: A building or project's feasibility in terms of costs and revenue, with excess revenue establishing the degree of viability.

Economic Rent: The market rental value of a property at a given point in time, even though the actual rent may be different.

Effective Rent: The actual rental rate to be achieved by the landlord after deducting the value of concessions from the base rental rate paid by a tenant, usually expressed as an average rate over the term of the lease.

Efficiency Factor: Represents the percentage of Net Rentable Square Feet devoted to the building's common areas (such as lobbies, restrooms, and corridors). This factor can be computed for an entire building or a single floor of a building. Efficiency Factor is also known as a Core

Factor or Rentable/Usable (R/U) Factor, calculated by dividing the rentable square footage by the usable square footage.

Egress: The right of a person to leave a property.

Eminent Domain: A power of the state, a municipality, private person, or corporation authorized to exercise functions of public character, to acquire private property for public use by condemnation, in return for just compensation.

Encroachment: The intrusion of a structure that extends, without permission, over a property line, an easement boundary, or a building setback line.

Encumbrance: Any right to, or interest in, real property held by someone other than the owner, but which will not prevent the transfer of title. Examples of encumbrances include claims, liens, charges, or liabilities attached to real property.

Equity: The fair market value of an asset, less any outstanding indebtedness or other encumbrances.

Escalation Clause: A clause in a lease that provides for increase in rent to reflect changes in expenses paid by the landlord, such as real estate taxes and operating costs. Escalation may be a fixed periodic increase, an increase tied to the Consumer Price Index, or adjustments based on changes in expenses paid by the landlord in relation to a dollar-stop or base-year reference.

Escrow Agreement: A written agreement made between parties, setting forth basic obligations, a description of the monies (or other things of value) to be deposited into escrow (a fiduciary third party for safe keeping), and instructions as to how and when the escrow agent is to dispose of the monies or things of value deposited.

Estoppel Certificate: A signed statement, certifying certain facts are correct as of the date of the statement, which can be relied upon by a third party, including a prospective lender or purchaser.

Expense Stop: An agreed dollar amount to be paid for taxes and operating expense, which can be expressed for either the building as a whole, or on a square foot basis, over which the tenant will pay its pro rata share of increases. This terminology may be applied to specific expenses such as property taxes or insurances.

F

Face Rental Rate: The “asking” rental rate published by the landlord.

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 Regulations (FAR) Part 77: Objects Affecting Navigable Airspace - Part 77 (a) establishes standards for determining obstructions in navigable airspace, (b) defines the requirements for notice to the FAA Administrator of certain proposed construction or alteration, (c) provides for aeronautical studies of obstructions to air navigation, to determine their effect on the safe and efficient use of the airspace, (d) provides for public hearings on the hazardous effect of proposed construction or alteration on air navigation, and (e) provides for establishing antenna farm areas.

Fee Simple Land Acquisition (Purchase): The full purchase by the airport sponsor of land and improvements. The land is usually maintained for airport purposes or leased for uses that are compatible with airport operations. Alternatively, the airport sponsor can resell the land with

an aviation easement and deed restrictions that specify compatible land uses permitted. The resale option has the benefit of returning the land to the tax rolls.

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.

First Generation Space: Generally refers to new space that is currently available for lease and that has never before been occupied by a tenant.

First Mortgage: A mortgage that has a first-priority claim against property, in the event the borrower defaults on the loan secured by property.

First Refusal (Purchase): A lease clause giving a tenant the first opportunity to buy a property, at the same price and on the same terms and conditions as those contained in a third-party offer that the owner has expressed a willingness to accept.

First Refusal (Adjacent Space): A lease clause giving a tenant the first opportunity to lease additional space that might become available on a property at the same price and on the same terms and conditions as those contained in a third-party offer that the owner has expressed a willingness to accept. This right is often restricted to specific areas of the building such as adjacent suites or other suites on the same floor.

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.

Flex Space: A building that provides its occupants with the flexibility to utilize space in a variety of manners. The building is usually constructed in a manner that allows the ratio of finished space to unfinished space for uses such as manufacturing, laboratory, and warehouse distribution to vary. To accomplish flexibility, the building is typically constructed so that overhead doors can be easily relocated, there is little or no common area, clear-span roof systems are incorporated, the floors are load bearing, and the facility has high ceilings.

Floor Area Ratio: The ratio of the gross square footage of a building to the land on which it is situated. FAR is calculated by dividing the total square footage within the building by the square footage of the land area within the leasehold.

Force Majeure: A force that cannot be controlled by the parties to a contract and that prevents said parties from complying with the provisions of the contract. This includes acts of God such as floods, hurricanes, or acts of man such as a strike, fire, or war.

Full Recourse: A loan on which an endorser or guarantor is liable in the event of default by the borrower.

Full Service Rent: An all-inclusive rental rate that includes operating expenses and real estate taxes for the first year. The tenant is generally still responsible for any increase in operating expenses over the base year amount.

Future Proposed Space: Space in a proposed commercial development that is not yet under construction or where no construction start date has been set. Future Proposed projects include all those projects waiting for a lead tenant, financing, zoning, approvals, or any other detail necessary to begin construction. Also may refer to the future phases of a multi-phase project not yet built.

G

General Aviation (GA): That portion of civil aviation that encompasses all facets of aviation, except air carriers.

General Contractor: The prime contractor, who contracts for the construction of an entire building or project rather than just a portion of the work. The general contractor may hire subcontractors (such as plumbing, electrical, and mechanical, for example), coordinates all work, and is responsible for payment to subcontractors.

Graduated Lease: A lease that includes variable terms. The variable terms are triggered to change after a specific event takes place, such as periodic appraisals, the tenant's gross income changes, or simply the passage of time.

Grant: To bestow or transfer an interest in real property, by deed or other instrument.

Grantee: One to whom a grant is made.

Grantor: The person making the grant.

Gross Area/Acreage: An area measurement, in acres, of the entire site, parcel, or zone.

Gross Building Area: The total floor area of the building measured from the outer surface of the exterior walls and windows and including all vertical penetrations (such as elevator shafts) and basement space.

Gross Lease: The tenant pays a flat rental rate, out of which the landlord must pay for all expenses including taxes, insurance, maintenance, and utilities.

Ground Rent: Rent paid to the owner for the use of land, normally on which to build a building. Generally, the arrangement is that of a long-term lease (at least 20 to 30 years in the case of airport property), with the lessor retaining title to the land.

Guarantor: One who makes a guaranty.

Guaranty: A contract agreement, whereby the guarantor undertakes collateral to assure satisfaction of the debt if and when the guarantor fails to satisfy the terms of the agreement. A guaranty differs from a surety agreement in that there is a separate and distinct contract rather than a joint undertaking with the principal.

H

Hard Cost: The cost of actually constructing the improvements (construction costs).

Hardstand: Reinforced concrete pads on the apron for parking large aircraft.

Highest and Best Use: The use of land and/or buildings that will bring the greatest economic return over a given time, which must be physically possible, appropriately supported, and financially feasible.

Hold Harmless Clause: Provision in an agreement under which one or both parties agree not to hold the other party responsible for any loss, damage, or legal liability.

Hold Over Tenant: A tenant retaining possession of the leased premises after the expiration of a lease.

HVAC: The acronym for "heating, ventilation, and air conditioning."

I

Improvements: In the context of leasing, the term typically refers to the improvements made to or inside a building but may include any permanent structure or other development, such as street, sidewalks, and utilities.

Indirect Costs: Development costs, other than material and labor costs that are directly related to the construction of improvements, including administrative and office expenses, commissions, and architectural, engineering, and financing costs.

Infill: Development that takes place on vacant property largely surrounded by existing development.

Ingress: The right of a person to enter a property.

Inventory: The total amount of rentable square feet of existing and any forthcoming space (whether it be a tenant vacating space or new buildings coming on the market) in a given category (warehouse space for example). Inventory refers to all space within a certain prescribed market, without regard to its availability or condition. Categories can include all types of leased space, such as office, flex, and warehouse space.

Inverse Condemnation: An action brought by a property owner, seeking just compensation for land taken for a public use, against a government or private entity having the power of eminent domain. This is a remedy peculiar to the property owner, and is exercisable when it appears that the taker of the property does not intend to bring eminent domain proceedings.

J

Judgment: The final decision of a court, resolving a dispute and determining the rights and obligations of the parties. Money judgments, when recorded, become a lien on real property of the defendant.

Judgment Lien: An encumbrance that arises when a judgment for the recovery of money attaches to the debtor's real estate.

Just Compensation: Compensation, which is fair to both the owner and the public, when property is taken for public use through condemnation (eminent domain). The theory is that in order to be "just," the property owner should be no richer and no poorer than before the taking.

L

Land Banking: Entering into a land lease agreement to reserve land for unstated future development.

Land Lease: A long-term land lease, generally for the purpose of erecting a building or buildings, or for constructing improvements to the land to be used by lessee. At the end of lease, the land and all structures and enhancements revert to the owner. Land leases should follow the basic format of the hangar lease and include all of the same references to the airport's rules, regulations, and minimum standards. The land lease price per square foot could vary by location, and possibly by the length of the term, and may also be connected to a business permit or an FBO lease.

Landlord's Lien: A lien that can be created either by contract or by law. Examples include (1) a contractual landlord's lien as might be found in a lease agreement; (2) a statutory landlord's lien; and (3) landlord's remedy of distress (or right of distraint), which is not truly a lien but has a similar effect.

Land Use Compatibility Assurance: Documentation provided by an airport sponsor to the FAA. The documentation is related to an application for an airport development grant. Its purpose is to assure that a reasonably appropriate action, including the adoption of zoning laws, has been taken, or will be taken, to restrict the use of land adjacent to the airport or in the immediate vicinity of the airport. Such uses are limited to activities and purposes compatible with normal airport operations, including the landing and takeoff of aircraft. This assurance is required of airport sponsors by Section 511 (a) (5) of the Airport and Airway Improvement Act of 1981.

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 Agreement: The formal legal document entered into between a landlord and a tenant, to reflect the terms of the negotiations between them.

Leasehold Improvements: Improvements made to the leased premises by or for a tenant. Generally, especially in new space, part of the negotiations will include, in some detail, the improvements to be made in the leased premises, by the landlord. See also TENANT IMPROVEMENTS.

Lease Term: A fixed, noncancelable period of time for which a lease agreement is in force. This terminology refers to the lease period and is sometimes referred to as the lease tenure.

Legal Description: A geographical description identifying a parcel of land by government survey, metes and bounds, or lot numbers of a recorded plat, which includes a description of any portion thereof that is subject to an easement or reservation.

Legal Owner: Term used in technical contrast to equitable owner. The legal owner has title to the property, although the title may actually carry no rights to the property other than as a lien.

Lessee: The user of leased property, or tenant.

Lessor: The owner of the leased property, or landlord.

Letter of Attornment: A letter from the grantor to a tenant stating that a property has been sold and directing rent to be paid to the grantee (buyer).

Letter of Credit: A commitment by a bank or other person, made at the request of a customer, that the issuer will honor drafts or other demands for payment upon full compliance with the conditions specified in the letter of credit. Letters of credit are often used in place of cash, deposited with the landlord to satisfy the security deposit provisions of a lease.

Letter of Intent (LOI): A preliminary agreement stating the proposed terms for a final contract. LOI can be “binding” or “nonbinding.”

Levy: To impose taxes or special assessments for the support of governmental activities.

Lien: A claim or encumbrance against property used to secure a debt, charge, or the performance of some act. This definition includes liens that are acquired by contract or by operation of law.

Lien Waiver: A waiver of mechanic’s lien rights, signed by a general contractor and his subcontractors, that is often required before the general contractor can receive a draw under the payment provisions of a construction contract. A lien waiver may also be required before the owner can receive a draw on a construction loan.

Limited Partnership: A type of partnership, created under state law, composed of one or more general partners who manage the business and who are personally liable for partnership debts and one or more special or limited partners who contribute capital and share in profits, but who take no part in running the business and incur no liability over and above the amount contributed.

Lot: One of several contiguous parcels of land making up a fractional part or subdivision, the boundaries of which are shown on recorded maps and “plats.”

M

Market Rent: The rental income that a property would command on the open market, with a landlord and a tenant ready and willing to consummate a lease in the ordinary course of business.

Market Study: A forecast of future demand for real estate with certain attributes, which generally includes an estimate of the square footage that can be absorbed and the rents that can be charged. Marketability Study is another terminology used for this activity.

Market Value: The highest price a property would command in a competitive and open market under all conditions requisite to a fair sale, with the buyer and seller each acting prudently and knowledgeably in the ordinary course of trade.

Master Lease: A primary lease that controls subsequent leases, and which may cover more property than subsequent leases. An Executive Suite operation is a good example, in that a primary lease is signed with the landlord and then individual offices within the leased premises are leased to other individuals or companies.

Mechanic’s Lien: A claim created by state statutes for the purpose of securing priority of payment for the price and value of work performed and materials furnished in constructing, repairing, or improving a building or other structure, and which attaches to the land as well as to the buildings and improvements thereon.

Metes and Bounds: The boundary lines of land with their terminal points and angles, described by listing the compass directions and distances of the boundaries. Originally, metes referred to distance and bounds referred to direction.

Mortgage: A written instrument creating an interest in real estate that provides security for the performance duty or the payment of a debt. The borrower retains possession and use of the property.

N

Net Absorption: The number of square feet leased in a specific geographic area, over a fixed period of time, after deducting space vacated in the same area during the same period.

Net Lease: A lease where the payments to the lessor do not include insurance and maintenance expenses, which are usually paid by the lessee separately.

Noncompatible Land Use: Residential, certain public (such as libraries), medical, and certain other noise-sensitive land uses that are designated as unacceptable within specific ranges of cumulative noise exposure as set forth in Table 2 of Appendix A of FAR Part 150.

Noncompete Clause: A clause that can be inserted into a lease to specify that the business of the tenant is exclusive to the property, and that no other tenant operating the same or similar type of business can occupy space at the airport without the consent of the tenant(s) exercising a noncompete clause.

Nonconforming Use: An existing land use, which does not conform to subsequently adopted or amended zoning or other land use development standards.

Nondisturbance Clause: (1) Provision in a tenancy or lease agreement whereby the tenant or lessee will continue to occupy the property under the current terms, even if that property is sold or is taken over from the current landlord or lessor by his or her creditors; and (2) provision in a land sale contract whereby the seller retains mineral rights to that land, but does not interfere with the surface development rights of the buyer.

Normal Wear And Tear: The deterioration or loss in value caused by the tenant's normal and reasonable use. In many leases, the tenant is not responsible for "normal wear and tear."

O

Obstruction: Any object or natural growth, terrain, or permanent or temporary construction or alteration, including equipment or materials used therein, the height of which exceed the standards established in Subpart C of Federal Aviation Regulations Part 77, Objects Affecting Navigable Airspace.

Off-Airport Property: Property that is beyond the boundary of land owned by the airport sponsor.

Operating Cost Escalation: Although there are many variations of escalation clauses, all are intended to adjust rents by reference to external standards, such as published indexes, negotiated wage levels, or expenses related to the ownership and operation of buildings.

Operating Expenses: The actual costs associated with operating a property, including maintenance, repairs, management, utilities, taxes, and insurance. A landlord's definition of operating expenses is likely to be quite broad, covering most aspects of operating a building or facility.

Overflight Easement: An easement, which describes the right to overfly the property above a specified surface, and which includes the right to subject the property to noise, vibrations, fumes, and emissions. An overflight easement is used primarily as a form of buyer notification.

P

Parking Ratio/Index: Provides a uniform method of expressing the amount of parking available. Dividing the total rentable square footage of a building by the building's total number of parking spaces provides the amount of rentable square feet per each individual parking space (expressed as 1/xxx or 1 per xxx). Dividing 1,000 by the previous result provides the ratio of parking spaces available per each 1,000 rentable square feet (expressed as x per 1,000).

Partial Taking: The taking of part (a portion) of an owner's property under the laws of eminent domain.

Pass Throughs: Refers to the tenant's pro rata share of operating expenses (such as taxes, utilities, and repairs) paid in addition to the base rent.

Percentage Lease/Percent of Revenue: A lease whose rental is based on a percentage of the monthly or annual gross sales made on the premises.

Performance Bond: A surety bond posted by a contractor, guaranteeing full performance of a contract, with the proceeds to be used to complete the contract or compensate for the owner's loss in the event of nonperformance.

Plat (Plat Map): A map of a specific area, such as a subdivision, which shows the boundaries of individual parcels of land (lots), together with streets and easements.

Possessory Interest Tax: A private property interest in government-owned property, or the right to occupancy and use of any benefit in government-owned property that is granted through lease, permit, license, concession, contract, or agreement.

Practical Difficulty or Unnecessary Hardship: When the property in question cannot be put to a reasonable use under conditions allowed by an airport zoning ordinance, and the plight of the landowner is due to circumstances unique to the property not created by the landowner, and the variance, if granted, will not be contrary to the purpose and intent of the ordinance. Economic considerations alone shall not constitute a “practical difficulty or unnecessary hardship” if reasonable use of the property exists under the terms of the zoning ordinance.

Preleased: Refers to space in a proposed building that has been leased before the start of construction or in advance of the issuance of a Certificate of Occupancy.

Premises: The land and improvements that, in total, constitute the property subject to the lease agreement.

Pro Rata: Proportionately, according to measure, interest, or liability. In the case of a tenant, the proportionate share of expenses for the maintenance and operation of the property.

Proprietary Use Restrictions: Restrictions by an airport sponsor on the number, type, class, manner, or time of aircraft operations at the airport. The imposition of a curfew is an example of a proprietary use restriction.

Punch List: An itemized list, typically prepared by the architect or construction manager, documenting incomplete or unsatisfactory items after the contractor has notified the owner that the tenant space is substantially complete.

Q

Quiet Enjoyment: Possession and use of an asset or property, without interference from a superior title holder.

R

Ramp: The area surrounding the hangars, cargo-sort buildings, and terminals, excluding the taxiways and runways, where aircraft and airport vehicles operate.

Raw Land: Unimproved land that remains in its natural state.

Raw Space: Unimproved shell space in a building.

Real Estate Owned: Real estate that has come to be owned by a lender, including real estate taken to satisfy a debt. Includes real estate acquired by lenders through foreclosure or in settlement of some other obligation.

Real Property: Land, and generally whatever is erected or affixed to the land, such as buildings, fences, light fixtures, plumbing and heating fixtures, or other items that would be personal property if not attached.

Reliever Airport: An airport designated as having the function of relieving congestion at a commercial service airport, and providing more general aviation access to the overall community or region.

Renewal Option: A clause giving a tenant the right to extend the term of a lease, usually for a stated period of time, and at a rent amount provided for in the option language.

Rent: Compensation or fee paid, usually periodically (monthly rent payments, for example), for the occupancy and use of any rental property, land, buildings, and/or equipment.

Rent Commencement Date: The date on which a tenant begins paying rent. The dynamics of a marketplace will dictate whether this date coincides with the lease commencement date, or if it commences months later (sometimes in a weak market, the tenant may be granted several months free rent). Rent Commencement Date will never begin before the lease commencement date.

Rentable/Useable Ratio: That number obtained when the Total Rentable Area in a building is divided by the Usable Area in the building. The inverse of this ratio describes the proportion of space that an occupant can expect to actually utilize/physically occupy.

Rental Concession: Concessions a landlord may offer a tenant in order to secure tenancy. While rental abatement is one form of concession, there are many others, such as increased tenant improvement allowances, signage concessions, lower than market rental rates, and moving allowances. See also ABATEMENT.

Rent-Up Period: That period of time, following construction of a new building, when tenants are actively being sought.

Request for Proposal (RFP): The formalized Request for Proposal represents a compilation of the many considerations that a tenant might have and should be customized to reflect their specific needs. Just as the building's standard form lease document represents the landlord's "wish list," the RFP serves in that same capacity for the tenant.

Reversionary Clause: Provision in a transfer deed under which the transferred property reverts to the grantor if any deed condition is violated. This clause may also speak to the reversion of improvements to the landlord at the end of the lease agreement.

Right-of-First Refusal: A contractual right that gives its holder the option to enter into a business transaction with the owner of something, according to specified terms, before the owner is entitled to enter into that transaction with a third party.

Runway Protection Zone (RPZ): A trapezoid-shaped area off the runway end that enhances the protection of people and property on the ground.

Runway Safety Area (RSA): A defined surface surrounding the runway, prepared or suitable for reducing the risk of damage to airplanes in the event of an undershoot, overshoot, or excursion from the runway.

S

Second Generation Space: Refers to previously occupied space that becomes available for lease, either directly from the landlord or as sublease space.

Second Mortgage: A mortgage on property that ranks below a first mortgage in priority. Properties may have two, three, or more mortgages, deeds of trust, or land contracts as liens at the same time. Legal sequence priority, indicated by the date of recording, determines the designation of first, second, and third.

Security Deposit: A deposit of money paid by a tenant to a landlord, to secure performance of a lease. This deposit can also take the form of a Letter of Credit or other financial instrument.

Setback: The distance from a curb, property line, or other reference point, within which building is prohibited.

Site Development: The installation of all necessary improvements (such as utilities and grading) made to a site before a building or project can be constructed on the site.

Site Plan: A detailed depiction of proposed improvements to a given parcel of land, to include a description of how the proposed site development will comply with zoning ordinances.

Slab: The exposed wearing surface laid over the structural support beams of a building that forms the floor(s) of the building, or laid slab-on-grade in the case of a nonstructural ground-level concrete slab.

Soft Cost: That portion of an equity investment, other than the actual cost of improvements themselves, such as architectural costs, engineering fees, and commissions, which may be tax-deductible in the first year.

Space Plan: A graphic representation of a tenant's space requirements, showing wall and door locations, room sizes, and which sometimes includes furniture layouts.

Specific Performance: A requirement compelling one of the parties to perform or carry out the provisions of a contract into which he has entered.

Speculative Space: Any tenant space that has not been leased before the start of construction on a new building.

Step-up Lease: A lease specifying set increases in rent, at set intervals, during the term of the lease.

Straight Lease: A lease specifying the same, fixed amount of rent to be paid periodically during the entire term of the lease.

Subordination Agreement: As used in a lease, the tenant generally accepts the leased premises subject to any recorded mortgage or deed of trust lien and all existing recorded restrictions, and the landlord is often given the power to subordinate the tenant's interest to any first mortgage or deed of trust lien subsequently placed upon the leased premises.

Surface Rights: A right or easement granted with mineral rights, enabling the possessor of the mineral rights to drill or mine through the surface.

Survey: The process by which a parcel of land is measured, and its boundaries and contents ascertained.

T

Taking: A common synonym for condemnation or any actual or material interference with private property rights. Physical seizure or appropriation is not essential to a taking.

Tax Lien: A statutory lien, existing in favor of the state or municipality, for nonpayment of property taxes attached only to the property upon which the taxes are unpaid.

Tax Roll: A list or record containing the descriptions of all land parcels located within the county, the names of the owners or those receiving the tax bill, assessed values, and tax amounts.

Tenant Improvements: Improvements made to the leased premises by or for a tenant. Generally, especially in new space, part of the negotiations will include in some detail the improvements to be made in the leased premises by the landlord.

Tenant Improvement Allowance (TIA): Defines the fixed amount of money contributed by the landlord toward tenant improvements. The tenant pays costs that exceed the TIA, which is also commonly referred to as Tenant Finish Allowance.

Tenant (Lessee): One who rents real estate from another and holds an estate by virtue of a lease.

Tenant at Will: A tenant that has possession of premises, with the permission of the owner or landlord, for an undetermined period of time, whereby either party has the right to terminate the relationship once proper notice is given.

Terminal Area: A general term used to describe airspace in which approach control service or airport traffic control service is provided.

Through-the-Fence (TTF): An arrangement where the public airport sponsor permits access to the public landing area, by independent operators undertaking aeronautical activities, from privately-owned land adjacent to, but not a part of, the airport.

Title: The means whereby the owner of lands has the just and full possession of real property.

Total Inventory: The total amount of square footage of a type of property within a geographical area, whether vacant or occupied. This computation normally includes owner-occupied space.

Trade Fixtures: Personal property that is attached to a structure (typically on the walls of the leased premises) and used for a purpose unique to that business. Since this property is part of the business, and not deemed to be part of the real estate, it is typically removable upon lease termination.

Triple Net Rent: A lease in which the tenant pays, in addition to rent, certain costs associated with a leased property, which may include property taxes, insurance premiums, repairs, utilities, and maintenance. There are also “Net Leases” and “NN” (double net) leases, depending upon the degree to which the tenant is responsible for operating costs.

Turn Key Project: The construction of a project in which a third party, usually a developer or general contractor, is responsible for the total completion of a building (including construction and interior design), or the construction of tenant improvements to the customized requirements and specifications of a future owner or tenant.

U

Under Construction: When construction has started but the Certificate of Occupancy has not yet been issued.

Under Contract: A property for which the seller has accepted the buyer’s offer to purchase is referred to as being “under contract.”

Unencumbered: Describes title to property that is free of liens and any other encumbrances. Free and clear.

Unimproved Land: Most commonly refers to land without improvements or buildings, but can also mean land in its natural state.

Usable Square Footage: The area contained within the demising walls of the tenant space. Total Usable Square Footage equals the Net Square Footage multiplied by the Circulation Factor.

Use: The specific purpose and authorized activity for which a parcel of land or a building is utilized, or for which it has been designed or arranged.

V

Vacancy Factor: The amount of gross revenue that pro forma income statements anticipate will be lost because of vacancies, often expressed as a percentage of the total rentable square footage available in a building or project.

Vacancy Rate: The total amount of available space compared to the total inventory of space and expressed as a percentage. Vacancy rate is calculated by multiplying the vacant space by 100, then dividing it by the total inventory.

Vacant Space: Refers to existing tenant space currently being marketed for lease. This excludes space available for sublease.

Variance: Refers to permission given to a property owner to depart from the literal requirements of a zoning ordinance that, because of special circumstances, cause a unique hardship.

W

Warranty of Possession: Provides a warranty by the landlord that the landlord has the legal ability to convey the possession of the premises to the tenant.

Wasting Asset: An asset that tends to decline in value over time as its expected life is used.

Weighted Average Rental Rates: The mean proportion or medial sum made out of the unequal rental rates in two or more buildings within a market area.

Wildlife Hazards: Species of wildlife, including feral animals and domesticated animals not under control, that are associated with aircraft strike problems, are capable of causing structural damage to airport facilities, or act as attractants to other wildlife that pose a strike hazard.

Working Drawings: The set of plans for a building or a project that comprises the contract documents and indicates the precise manner in which a project is to be built. This set of plans includes a set of specifications for the building or project.

Workletter: A list of the items that the landlord will contribute, as part of the tenant improvements. The Workletter often carries a dollar value, but is contrasted with a fixed-dollar tenant improvement allowance that can be used at the tenant's discretion.

Z

Zoning Ordinance: Laws and regulations, generally at the city or county level that controls the use of land, allowable construction, and improvements to property within a given area or zone.

Zoning: A police power measure, enacted primarily by units of local government, in which the community is divided into districts or zones, within which permitted and special uses are established. Regulations governing lot size, building bulk, placement, and other development standards are examples of zoning criteria. Requirements vary from district to district, but they must be uniform within districts.

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Nominated Airport Projects

Alabama

Albertville Municipal Airport
 South Alabama Regional Airport
 Gulf Shores Airport—Jack Edwards Field
 Fairhope Airport
 Madison County Executive Airport

Alaska

Anchorage International Airport

Arizona

Tucson International Airport
 Phoenix Sky Harbor Airport
 Flagstaff Pulliam Airport
 Mesa Falcon Field Airport
 Phoenix/Mesa Gateway Airport

Colorado

Centennial Airport
 Front Range Airport
 Garfield County Regional Airport
 Grand Junction Regional Airport
 Gunnison-Crested Butte Regional Airport
 Rocky Mountain Metropolitan Airport

Delaware

New Castle County Airport/Delaware Airpark
 Sussex County Airport
 Summit Airport

Idaho

Coeur d'Alene Airport
 Caldwell Industrial Airport
 Lewiston-Nez Perce County Airport

Indiana

Columbus Municipal Airport
 Monroe County Airport

Kansas

Salinas Municipal Airport
 Johnson County Executive Airport
 Wichita Mid-Continent Airport

Maine

Portland International Jetport, City of Portland Jetport

Maryland

Hagerstown Regional-Richard A. Hensen Field

Massachusetts

New Bedford Regional Airport
Westover Metropolitan Airport
Orange Municipal Airport
Beverly Municipal Airport
Plymouth Municipal Airport

Minnesota

Anoka County Blaine Airport
Duluth International Airport
Rochester International Airport
Minneapolis-St. Paul International Airport

Missouri

Spirit of St. Louis Airport

Montana

Helena Regional Airport

Nebraska

Lincoln Municipal Airport
Omaha Eppley Airfield
Kearney Regional Airport

Nevada

Minden-Tahoe Airport
Yerington Municipal Airport
Reno Stead Airport

New Jersey

Morristown Municipal Airport

New York

Albany International Airport
Dutchess County Airport
Francis S. Gabreski Airport
Griffiss Airpark
Plattsburgh International Airport
Republic Airport

Ohio

Knox County Airport
Butler County Regional Airport
Ohio State University Airport
Cuyahoga County Airport
Akron Fulton International Airport

Oklahoma

Tulsa International Airport

Oregon

Independence State Airport

Aurora State Airport
Redmond Municipal Airport/Roberts Field
Ogilvie Field/Grant Co. Regional Airport

Pennsylvania

Arnold Palmer Regional Airport
Bradford Regional Airport
Indiana County Airport
Lancaster Regional Airport
Pittsburgh International Airport
Reading Regional Airport
St. Mary's Municipal Airport

Texas

Sugar Land Regional Airport
Collin County Regional
Mineral Wells Airport
Mount Pleasant Regional Airport
Gillespie County Airport

Virginia

Manassas Regional Airport

Washington

Snohomish County Airport
Chehalis-Centralia Airport

Wisconsin

Dane County Regional Airport
Wittman Regional Airport

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	Air Transport Association
ATA	American Trucking Associations
CTAA	Community Transportation Association of America
CTBSSP	Commercial Truck and Bus Safety Synthesis Program
DHS	Department of Homeland Security
DOE	Department of Energy
EPA	Environmental Protection Agency
FAA	Federal Aviation Administration
FHWA	Federal Highway Administration
FMCSA	Federal Motor Carrier Safety Administration
FRA	Federal Railroad Administration
FTA	Federal Transit Administration
HMCRP	Hazardous Materials Cooperative Research Program
IEEE	Institute of Electrical and Electronics Engineers
ISTEA	Intermodal Surface Transportation Efficiency Act of 1991
ITE	Institute of Transportation Engineers
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