
# Airport Financial Management

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# Introduction

- The vast amount of property, infrastructure, and labor that is required to operate, maintain, and improve airports requires significant levels of financial resources.
- Airport expenses may be described as falling into two types: **capital improvement expenses** and **operation and maintenance (O&M)** costs.
- Capital improvement expenses, are very large, periodic expenses which contribute to significant airport infrastructure improvement or expansion.
- Revenues from the operation of the airport are used to cover the airport's O&M expenses.

# Airport Financial Accounting

- The nature of airport expenses depends upon a number of factors including the airport’s geographic location, organizational setup, and financial structure.
- Airport accounting involves the accumulation, communication, and interpretation of economic data relating to the financial position of an airport and the results of its operations for decision-making purposes.
- Many airports have different definitions of what elements constitute operating and non-operating revenues and expenses and sources of funds for airport development.

# A Good Accounting System

1. Financial statements are needed to inform governmental authorities and the local community regarding details of the airport's operations.
2. A good accounting system can assist airport management in allocating resources, reducing costs, and improving control.
3. Negotiating charges for use of airport facilities can be facilitated.
4. Financial statements can influence the decisions of voters and legislators.

# Operating Expenses Divided Into Four Major Groupings

1. Airfield
2. Terminal
3. Hangars, cargo, other buildings and grounds
4. General and administrative expenses

# Operating and Maintenance Expenses of Airfield Area

- Runways, taxiways, apron areas, aircraft parking areas, and airfield lighting systems maintenance
- Service on airport equipment
- Other expenses in this area, such as maintenance on fire equipment and airport service roads
- Utilities (electricity) for the airfield

# Operating and Maintenance Expenses of Terminal

- Buildings and grounds—maintenance and custodial services
- Improvements to the land and landscaping
- Loading bridges and gates—maintenance and custodial services
- Concession facilities and services
- Observation facilities—maintenance and custodial services
- Passenger, employee, and tenant parking facilities
- Utilities (electricity, air-conditioning and heating, and water)
- Waste disposal—maintenance
- Equipment (air-conditioning, heating, baggage handling)—maintenance

# Operating and Maintenance Expenses of Hangars, Cargo Facilities, Other Buildings, and Grounds

- Buildings and grounds—maintenance and custodial services
- Improvements to the land and landscaping
- Employee parking—maintenance
- Access roadways—maintenance
- Utilities (electricity, air-conditioning and heating, and water)
- Waste disposal —maintenance

# Liability Insurance

- An increasingly large percentage of airport expenses are derived from required insurance to cover various areas of liability.
- Claims from such accidents can be for large amounts, but claims stemming from aircraft accidents have even greater catastrophe potential.
- Airports and their tenants are liable for all damage caused by their failure to exercise reasonable care.
- The principal areas in which litigation arises can be summarized under three main headings:
  - *Aircraft operations.*
  - *Premises operations.*
  - *Sale of products.*

# Airport liability Coverage

- The basic airport premises liability policy is designed to protect the airport operator for losses arising out of legal liability for all activities carried on at the airport.
- The basic policy can also be extended to provide coverage for the airport that sponsors an air-show or some other special event.
- Airports invest thousands of dollars in purchasing adequate insurance coverage and limits of liability to protect their multimillion-dollar assets.

# Five Major Groupings of Operating Revenues

1. Airfield Area
2. Terminal Area Concessions
3. Airline Leased Areas
4. Other Leased Areas
5. Other Operating Revenue

## ***Airfield*** or **airside** of produces revenues that are directly related to the operation of aircraft

- Landing fees for scheduled and unscheduled airlines, itinerant aircraft, military or governmental aircraft
- Aircraft parking charges in hangars and on paved and unpaved areas
- Fuel flowage fees from FBOs and other fuel suppliers

# ***Terminal Concessions*** include all of the non-airline users of the terminal area

- Food and beverage concessions
- Travel services and facilities
- Specialty stores and shops
- Personal services
- Amusements
- Display advertising
- Outside terminal concessions

# Airline Leased Areas and O*ther Operating Revenue* of Operating Revenues

- ***Airline leased areas*** include revenue derived from the air carriers for ground equipment rentals, cargo terminals, office rentals, ticket counters, hangars, operations, and maintenance facilities.
- ***Other operating revenue*** includes revenues from the operation of distribution systems for public utilities, such as electricity and steam, and contract work performed for tenants.
- Airports also generate ***non-operating revenues***
- The magnitude of non-operating income can vary considerably between airports.

# Planning and Administering an Operating Budget

- Planning an operating budget is an integral part of airport financial management.
- Both short-term and long-term decisions require planning.
- **Budgets** are established for major capital expenditures such as runway resurfacing, taxiway construction, and new snow removal equipment as well as for operating expenses during the planning period.
- Three different forms of budget appropriation:

1. lump sum appropriations
2. appropriation by activity
3. line-item budgeting

# Budget Appropriation

- **Lump sum appropriation** is the simplest form of budget and generally only utilized by small GA airports.
- **Appropriation by activity** form of budget, appropriated expenses are planned according to major work area or activity with no further detailed breakdown.
- **Line-item budget** is the most detailed form of budgeting, used quite extensively at the large commercial airports.
- **Zero-based budget** derives from the idea that each program or departmental budget should be prepared from the ground up, or base zero for each budget cycle.

# Revenue Strategies at Commercial Airport

- **Airport use agreement** is used generically to include both legal contracts for the air carriers' use of airfield facilities and leases for use of terminal facilities.
- A few commercial airports do not negotiate airport use agreements with the air carriers, but instead charge rates and fees set by local ordinance.

# Important Implications for Airport Pricing and Investment

- **Residual cost approach**
- **Compensatory cost approach**
- **Comparing residual and compensatory approaches**
- **Net income**
- **Majority-in-interest (MIT) clauses**
- **Term of use agreements**

# Pricing of Airport Facilities and Services

- Major commercial airports are diversified enterprises that provide a wide range of facilities and services for which fees, rents, or other user charges are assessed.
- Smaller commercial airports and GA airports typically offer a much narrower range of facilities and services, for which only minimal fees and charges often are assessed.
- The combination of public management and private enterprise uniquely characteristic of the financial operation of commercial airports is reflected in the divergent pricing of airport facilities and services.

# 1.Pricing on the Airfield Area

- The major fees assessed for use of airfield facilities are landing or flight fees for commercial airlines and GA aircraft.
- Landing fees differ widely among airports, depending on the extent of the revenues derived from airline terminal rentals and concessions such as restaurants, car rental companies, and automobile parking lots.
- Under compensatory contracts, landing fees are based on calculation of the average actual costs of airfield facilities used by the individual air carriers.

# 2.Terminal Area Concessions

- The structure of terminal concessions and service contract fees is similar under both compensatory and residual cost pricing approaches.
- Restaurants, snack bars, gift shops, newsstands, duty-free shops, hotels, and rental car operations usually have contracts of this type.
- In recent years, many airports have employed a “market pricing” strategy to airport terminal area concessions.

# 3.Airline Leased Areas

- Under both residual cost and compensatory approaches, air carriers pay rent to the airport operator for the right to occupy various facilities
- Among residual cost contracts, the method of calculating airline terminal rental rates varies considerably.
- Under residual cost contracts, the rental term for leased areas generally coincides with the term of the airport use agreement with the airlines.
- Under compensatory contracts, the method of calculating terminal rental rates is based on recovery of the average actual costs of the space occupied.

# 4. Other Leased Areas

- A wide variety of arrangements are employed for other leased areas at an airport, which might include agricultural land, fixed-base operations, cargo terminals, and industrial parks.
- The methods of calculating rental rates and the frequency of adjustment differ according to the type of facility and the nature of use.
- They are generally priced on a market basis, and the airport managers have considerable flexibility in setting rates and charges in the context of market constraints and their own policy objectives.

# Variation in the Sources of Operating Revenues

- The specific mix of revenues might influence year-to-year financial performance.
- Airport size generally has a strong influence on the distribution of revenues.
- Some of the major sources of airport revenue are affected by changes in the volume of air passenger traffic, whereas others are essentially immune to fluctuations in air traffic.
- Terminal concessions can be expected to generate a greater percentage of total operating revenues as passenger enplanements increase.
- At commercial airports, parking facilities generally provide one of the largest sources of non-aeronautical revenues in the terminal area.
- The approach to financial management, because it governs the pricing of facilities and services provided to airlines, significantly affects the distribution of operating revenues.

# Rise in Airport Financial Burdens

- Despite significant growth in the number of passengers during the past two decades, airport charges per passenger more than doubled during this period.
- The reasons for this shift are obvious: relatively few new runways being constructed versus many expensive terminal expansions and upgrades.
- At the same time that airport costs have been increasing, airline prices (yields) have continued to decline.
- That steadily increasing airport costs have been a source of contention between airlines and airports.

# The Factors of Airport Financial Burdens

- Governmental mandates, including new security, environmental, Americans with Disabilities Act, and noise-related compliance costs
- Renewal and replacement of old facilities and equipment
- Airline requirements for support facilities
- Changing airline demand patterns that require consolidation of hub facilities and reduction of activity at non-hub airports

# Three Alternative Sources of Airport Funding

1. Federal and state grant programs
2. Bond issues,
3. Pprivate investment to supplement airport revenue.

# Grant Programs

- Since the post–World War II era, the federal government has provided **grant programs** from which owners of public-use airports could acquire funds for airport development.
- This act provided for grant assistance for airport planning under the **Planning Grant Program (PGP)** and for airport development under the **Airport Development Aid Program (ADAP).**
- The source of funds for these programs was a new Airport and Airway Trust Fund, into which revenues were deposited from several aviation user taxes on such items as airline fares, air freight, and aviation gasoline.

# Airport Improvement Program(AIP)

- The successor grant program, the **Airport Improvement Program (AIP),** was established by the Airport and Airway Improvement Act of 1982.
- It provided assistance under a single program for airport planning and development through funding from the Airport and Airway Trust Fund.
- The Airport and Airway Safety and Capacity Expansion Act of 1987 allows for AIP funding of projects that significantly enhance or preserve airport capacity.
- Federal Aviation Regulations Part 150 outlines the eligibility criteria for an airport noise compatibility program.

# **AIP** Funds for Four Purposes

1. Airport planning
2. Airport development
3. Airport capacity enhancement
4. Noise compatibility programs

# AIP Grants of Trust Fund

- 10 percent airline ticket tax
- 6.25 percent tax on freight waybills
- $6.00 international departure fee assessed per passenger
- $0.15 per gallon general aviation gasoline tax
- $0.175 per gallon jet fuel tax

# Airport Improvement Program(AIP) (cont.)

- An airport must be part of the National Plan of Integrated Airport Systems (NPIAS) to be eligible for AIP funding.
- AIP funds may only be used toward specific types of projects that directly contribute to the capital improvement of airport facilities.
- Eligible airport planning projects can be conducted on either an area wide or individual airport basis.
- Eligible airport development projects may include the construction, improvement, or repair (excluding routine maintenance) of an airport.
- Funds granted to airports by the AIP are provided in three different funding categories: apportionment, set-aside, and discretionary funds

# AIP are provided three different funding categories

- **Apportionment funds** for cargo operations at these airports are based on aggregate landed weight of all cargo aircraft.
- **Set-aside funds** are available to any eligible airport sponsor and are allocated according to congressionally mandated requirements for a number of different set-aside subcategories.
- **Discretionary funds** are grants that go to projects that address goals established by the Congress, such as enhancing capacity, safety, and security or mitigating noise at all types of airports.

# Passenger Facility Charges (PFCs)

- Some years later, critical shortages of airport capacity and the associated capital to finance airport development prompted major legislative campaigns for **Passenger Facility Charges (PFCs).**
- Revenues from PFCs may be used only to fund eligible projects that satisfy statutory goals.
- PFC revenue can finance the entire allowable cost of a project or can be used to pay debt service or related expenses for bonds issued to fund an eligible project.
- PFC revenues may also be leveraged as a revenue stream to support a bond issue.
- The PFCs can be a fairly stable revenue stream, assuming that enplanements do not fluctuate greatly in the short run

# Projects for PFC funding include three criteria

- Preserve or enhance the capacity, safety, or security of the national air transportation system
- Reduce noise resulting from an airport
- Furnish opportunities for enhanced competition between or among air carriers

# Other Federal Funding Sources

- AIP and PFC programs are the primary forms of federal funding for airports
- They are the F**acilities and Equipment (F&E)** Program and **Federal Letters of Intent (LOI)**.

# Facilities and Equipment Program

- **Facilities and Equipment (F&E) Program** provides funding for airports for the installation of navigational aids and control towers, as necessary.
- Eligible projects under the F&E program include site preparation for navigational aids, the installation of navigational aids, and the construction of control towers.

# Federal Letters of Intent

- **Federal Letters of Intent (LOI)** represent another means of receiving government funding for airport capital improvements.
- The Airport and Airway Safety and Capacity Expansion Act of 1987 allowed the issuance of LOI.
- The FAA issues LOI for projects that will significantly enhance system airport capacity.

# The three main criteria for determining which airports will receive LOI projects

- The effect of the project on the overall capacity of the airport system
- Project benefit and cost
- Project sponsor financial commitment or timing

# Projects are prioritized according to following function

- Airport safety and security
- Preservation of existing infrastructure
- Aid compliance with governmental standards (e.g., noise migration)
- Upgrade of service
- Increase in airport system capacity

# State Grant Programs

- many individual states in the nation offer grant programs for airport capital improvements.
- In addition to individual state grant programs, some states have developed block grant programs.
- The primary requirement for block grant eligibility is a federal regulation which stipulates that an airport must be listed in the National Plan of Integrated Airport Systems (NPIAS) in order to receive federal funds.
- Several major differences exist between State Aid to Airports and block grant projects.

# Grant Assurances

- Almost all federal and state grant programs come with some measures of obligation by the airport to its funding source with respect to the operation of the airport.
- Most grant assurances include that the airport maintain overall standards of operation for a certain period of time (typically 20 years) following funding.

# Airport Bond Financing

- Since the mid-1990s the largest source of funding for capital improvements at airports has been through bond financing.
- The role of bond financing in overall investment varies greatly according to an airport's size and type of air traffic served.
- In terms of total dollar volume of bond sales, large and medium airports are by far the most prominent in the bond market.
- **Three Bonds:**
    - **General obligation bonds**
    - **General airport revenue bonds**
    - **Special facilities bonds**

# General Obligation Bonds

- **General obligation bonds (GOB)** are issued by states, municipalities, and other general-purpose governments for the purposes of financing large public works projects, including airport development.
- Fiscal pressures on local governments for all manner of activities have been especially great in recent years.
- Self-liquidating general obligation bonds are also secured by the full faith, credit, and taxing power of the issuing government body.
- There is adequate cash flow from the operation of the facility to cover the debt service and other costs of operation of the facility.

# General airport revenue bonds

- After World War II, larger airports began switching from general obligation bonds to revenue bonds as a method for financing new construction and improvements to existing fields.
- The revenue bonds are usually issued for 25- or 30-year terms, in contrast to the customary 10- or 15-year terms for general obligation bonds.
- Interest rates run slightly higher on revenue bonds than on general obligation bonds.
- In recent years, the vast majority of airport debt has been issued in the form of **General Airport Revenue Bonds (GARB).**

# Special Facilities Bonds

- Analyses may place varying emphases on these issues:
  1. Financial and operational comparables
  2. Nature of airline rates and charges
  3. Local economic base
  4. Airport current financial situation or debt level
  5. Strength of airport management
  6. Airport layout

# Bond Rating of Representative Financial and Operational Factors

- Traffic ratios, such as total origin and destination (O&D) passengers to transfer passengers
- Annual increase in originating and transfer passenger traffic
- Annual increase in cargo traffic
- Aeronautical and non-aeronautical revenue per enplaned passenger
- Local per capita income, gross product, and total employment
- Debt per enplaned originating and transfer passenger
- Debt service coverage
- Percentage of traffic generated by the airport’s two primary carriers

# Airline Rates and Charges

- Airline rates and charges generate a significant portion of total airport revenues.
- Because airport revenues are the sole backing for revenue bonds, the nature of airline rates and charges has a significant impact on an airport's credit rating.
- The rate-setting methodology affects the airport's control over its capital spending decisions.
- The debt of airports operating under such provisions is often considered less favorable by bond rating analysts.

# Community Economic Base

- The strength and diversity of the local economy in which the airport operates is a critical factor considered in airport bond rating.
- Economic strength results in greater demand for air transportation.
- Several non-aeronautical revenue sources such as parking and ground transportation (which contribute to the airport's financial viability) are closely linked to the economy in the local service area.
- Airports located in economically booming areas may receive higher ratings than those in areas suffering from an economic downturn.

# Current Financial Status and Debt Level

- Credit analysts evaluate airports in the context of their capital plans and financial forecasts.
- An airport’s overall level of indebtedness and need to generate future revenues affects its credit quality.
- Although there is usually a strong relationship between airport size and indebtedness, even this relationship can be skewed by the airport’s stage in capital planning, debt issuance, and use of debt financing.
- Thus, although figures such as “debt per enplaned passenger” can be calculated, they are not always useful.

# Airport Management's Ability

- Analysts review the managerial and administrative performance of airport operators and believe that well-run airports are generally better risks.
- Airport management's ability to negotiate favorable rates, charges, and tenant agreements is a positive indication of managerial control, as is general ability to manage financial and other resources during traffic declines.

# Interest Costs

- Interest costs represent the payments by airports to attract investors relative to what other municipal enterprises pay.
- Airport bonds are sold and traded at prices that reflect both general economic conditions and the credit quality of the airport or the creditworthiness of the issuing government.
- In deciding the price of a particular bond issue, underwriters identify a “ballpark” interest rate on the basis of general market conditions and then refine this estimate according to the credit standing of the airport in question.
- larger airports pay lower interest costs than smaller airports, allowing for differences in types of security and average maturities of issues.

# Private Investment

- Airport capital projects have been funded by private investment.
- Many of these investments are focused on the construction of terminal and ground access facilities such as passenger and cargo terminal buildings, rental car facilities, and aircraft service facilities.
- Many investments are made either through public-private partnerships or complete privatization.
- Two major financial issues must be examined:
  1. Profitability of the arrangement
  2. Ultimate costs of the arrangement and risks

# Private Investment (cont.)

- In assessing the costs of the arrangements, it may be found that government outlays and subsidies are not required, and therefore government costs are reduced and the government’s exposure to financial risk is removed.
- The risk may not fall to zero if the public sector takes ultimate responsibility for the success of the venture.
- Both internationally and domestically, privatization has become a popular way for government entities to finance new and existing infrastructure projects.
- All of these factors have made privatization an attractive option for financing infrastructure projects, including the building and operating of airports.

# Build, Operate, and Transfer (BOT) Contracts

- **Build, Operate, and Transfer (BOT)** contract, private investment is used to construct and operate a facility for a period defined in the terms of the contract.
- At the end of the contract period, the ownership of the facility is transferred to the airport owner.

# Lease, Build and Operate (LBO) Agreements

- The lease arrangement allows a government entity to realize many of the benefits associated with complete privatization without losing control over the airport assets.
- In a long-term lease (usually lasting from 20 to 40 years), the government allows the private sector company or consortium to build and manage an airport facility, while leasing the property and facility from the airport.
- The private builder/operator has much of the authority over the facility, including operations, strategic decisions, and development.
- In addition to a lease payment, the government is able to capture the efficiencies and innovation of the private sector.
- The private sector entity has the advantage of complete control over the airport; yet in many cases, the private sector firm also has the added benefits of access to tax-free financing and exemption from property taxes.

# Full privatization

- The final basic form of airport **privatization** is the sale of the entire airport or partial interest in the airport.
- This form of privatization is prominent internationally but has not occurred domestically.
- Under the terms of complete sale, the government gives up all rights of ownership to the private entity; the government often maintains its regulatory authority.

# Concluding Remark

- Financial planning of an airport is not a static activity.
- Continuous planning and management is required to adapt to the changing levels in demand, needs for maintaining and improving facilities, and especially the changing levels of revenues and other funding available to the airport.

# Key Terms

- Capital improvement expenses
- O&M (operation and maintenance) costs
- Lump sum appropriation
- Appropriation by activity
- Line-item budget
- Zero-based budget
- Airport use agreement
- Residual cost approach
- Compensatory cost approach
- Signatory carrier
- MII (majority-in-interest) clauses
- grant programs

# Key Terms (cont.)

- PGP (Planning Grant Program)
- ADAP (Airport Development Aid Program)
- AIP (Airport Improvement Program)
- PFC (passenger facility charge)
- F&E (facilities and equipment) program
- LOI (federal letter of intent)
- GOB (general obligation bond)
- GARB (general airport revenue bond)
- BOT (build, operate, and transfer) contracts
- LBO (lease, build, and operate) agreements
- Privatization