Welcome to...
Introduction to Airport Economics

Presentation Overview

- General Overview
- Airport Operating Revenues / Expenses
- Airport Capital Funding Sources
- Q&A

Vocabulary for Today's Session

Terms / Acronyms to Know	
AIP	AOM
NPIAS	LOI
PFC	GARB
CFC	ACIP
CAFR	ALP
MII	FMV
GAAP	MAG

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Airports as Enterprises

Airports – unusual since the operate as both governmental entity & business enterprise

Primary Goal – financial self-sufficiency

Assets managed by setting fair rates & charges for use of facility

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Airport Activity

Passengers generate…

Airline travel
Concession purchases
Parking

* *measured by enplanements*

Aircraft generate…

Landing Fees
Parking/Ramp Fees
Hangar Rentals
Fuel Sales

* *measured by operations*

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Airport Operating Expenses

Operating Expenses – costs associated with airport's administration, operation, or maintenance (AOM)

- Personnel (salaries & wages, fringe benefits)
- Services
- Supplies & Materials
- Communications
- Utilities

Cost Centers – costs organized by facility type & usage
(Ex. airfield, terminal, equipment)

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Airport Cost Centers

Cost Centers - activities that have direct AOM expenses associated with operation and maintenance of facility

Examples of airport cost centers include:

- Airfield Facilities - runways, taxiways & apron
- Terminal Facilities - building & equipment
- Landside Facilities - access roads & parking
- Other – ARFF building & equipment, security

All expenses (including labor) important to track & allocate to activity

Airport Revenue

Aeronautical revenue – directly associated w/aviation activity

- landing fees
- terminal & hangar rents
- fuel tax, & fuel sales

Non-aeronautical revenue – includes rent on non-aviation facilities & concession fees (% of sales)

- rental car operations
- parking
- concession sales

Non-operating revenue – includes passenger facility charges, interest income & grants

Aeronautical Revenue

Landing Fees - most common aeronautical user charge for commercial service airports

A/C operators – pay for use of airfield to compensate for:

- RW/TW operations, maintenance, & utilities
- snow removal (SRE)
- aircraft rescue & fire fighting (ARFF)
- Non-TSA security

Fee basis determined on accumulated costs of aeronautical use areas / activities & changes annually *(sometimes more)*

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Aeronautical Revenue

Terminal Space

- airline administration/operation space
- ticket counters
- departure gate & equipment (loading bridge)
- baggage make-up & claim areas & equipment
- maintenance areas

Aircraft Hangars

- a/c storage – conventional stand-alone or T-hangars
- a/c parking – ramp, daily/monthly tie-downs

Fuel Flowage Fees (AvGas / Jet A)

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Non-Aeronautical Revenue

Non-Aeronautical Revenue – incidental or unrelated to aviation activity

<u>Examples</u>

- terminal space rentals
- concessions (privilege fee for retail merchandise & services)
- rental cars counters, parking & servicing areas
- vehicle parking
- advertising space
- Vacant land & facilities not adjacent to airfield*

Non-Aeronautical Revenue

Notes on Non-Aeronautical Revenue

Does not have to be treated like Aeronautical Revenue

- Leases
- Concession Fees
- Rents & charges

Established on Fair Market Value (FMV)

Price at which willing seller (lessor) would sell & willing buyer (lessee) would buy *(neither being under undue pressure)*

Based on appraisals, supportable data, etc.

Non-Operating Revenues

Non-operating Revenues – passive income from sources not directly associated with airport operations

- Interest Income (investments of reserve accounts, etc.)
- FAA/State Grants (AIP Entitlements/Discretionary Funds)*
- Passenger Facility Charges (PFCs)*
- Customer Facility Charges (CFCs)*

* *restricted capital funds*

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Airport Rate-Making Policies

Problem: How do your recover operating expenses?

1. Do you know what they are?
2. Do you have a relationship with the users?
3. Do you have a methodology that can demonstrate what you should charge for use?

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Airport Rate-Making Policies

Residual - Airport/Airlines in "break-even" partnership

- Legacy method from regulated airline environment
- Airlines shares risk/rewards with airport
- Seeks to recover net airline costs after non-airline revenues
- "Signatory" airlines agree to pay for revenue shortfall (usually in landing fees)
- Airlines have say in airport's budget including "acceptable" capital improvements

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Airport Rate-Making Policies

Residual Characteristics

- Airlines assumed financial risk of supporting airport's operation & development
- In return all non-airline revenues (concessions, other leases, etc.) are credited against operating & maintenance expenses, debt service payments & reserve fund deposits
- Airlines pay the net airport shortfall (residual) by adjusting pro-rata share of rates & charges

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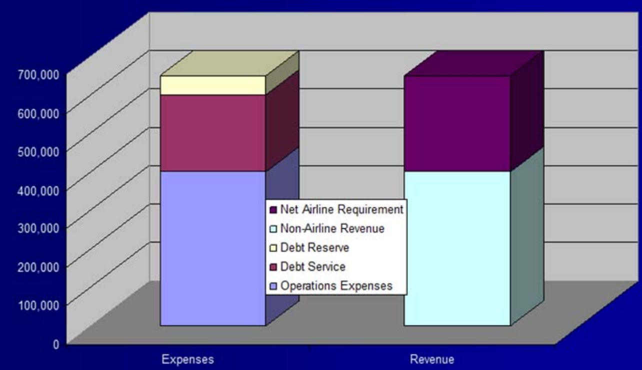
Airport Rate-Making Policies

Residual Rate Schematic



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Airport Rate-Making Policies

Residual Rate Example

	Base Case	**Bad Times**	**Good times**
	Scenario 1	Scenario 2	Scenario 3
Operating Expenses	*1,150,000*	*1,350,000*	*1,000,000*
Debt Service	200,000	200,000	200,000
Debt Reserve	50,000	50,000	50,000
Total Expenses	1,400,000	1,600,000	1,250,000
Non-Airline Income	**500,000**	**400,000**	**650,000**
Net Airline Requirement	900,000	1,200,000	600,000
Est. Landed Weight (x1,000)	100,000	100,000	100,000
Landing Fee (per 1,000)	**9.00**	**12.00**	**6.00**

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Airport Rate-Making Policies

What's wrong with this picture?

- Airlines would support major capital improvement projects by acting as guarantor for debt (i.e., bonds)
- Airlines that sign agreement are considered "signatory" (others are "non-signatory")
- Signatory airlines are also provided opportunity to approve or disapprove major construction projects or other expenses as "majority-in-interest" (MII) airlines if it would affect rates & charges (leading to "Fortress Hubs")

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Airport Rate-Making Policies

Northwest v Kent County (Supreme Court 1993)

Grand Rapids (GRI) wanted to transitioned from Residual to "Compensatory" Rate

Airline argued Airport…

- failed to allocate concession revenues surpluses to airfield
- rates generated a surplus implying airlines were overcharged
- failed to charge general aviation 100% of allocated costs

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Airport Rate-Making Policies

U.S. Supreme Court found GRR's rates were reasonable since there was approximation of charges for direct use of facilities and established a "test" for future policy

Rates must be:

1. Fair and reasonable
   - based on fair approximation of facility's use
   - not excessive in relation to benefits conferred
2. does not interfere with interstate commerce
3. non-discriminatory

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Airport Rate-Making Policies

Compensatory - Users charged "allocated costs"

- Airport assumes financial risk
- Seeks to recover full allocated costs or FMV* of the facility
- Users pay only for what is used
- Airport keeps all non-airline derived revenues (no need to share with airlines)

* *Fair Market Value - based on appraisals, market rates & other objective data*

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Airport Rate-Making Policies

Compensatory Characteristics

- Seeks to maximize revenues by Airport assuming financial risk for operations and development
- AOM & development costs are allocated to facilities as cost center to establish rate base
- Unlike residual strategy, debt service payments, reserve fund deposits, etc., are sole responsibility airport

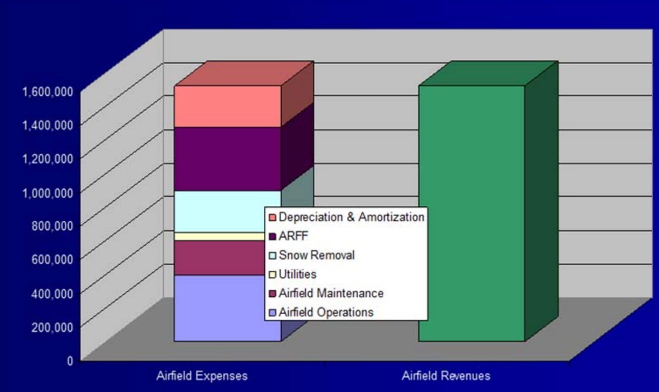
Airport Rate-Making Policies

Compensatory - Users charged "allocated costs"

- Airlines "compensate" airport by paying their fair share for facility use by paying landing fee set on rate base set by recovering expenses
- Non-airline revenues (concessions, other leases, etc.) are kept by airport & do not contribute toward reducing rate base

Airport Rate-Making Policies

Compensatory Rate Schematic



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Airport Rate-Making Policies

Compensatory Rate Example

	Base Case Scenario 1	**Bad Times** Scenario 2	**Good times** Scenario 3
Airfield Operating Expenses			
Operations (Part 139)	350,000	350,000	350,000
Maintenance & Repairs	150,000	150,000	100,000
Utilities	50,000	50,000	50,000
Snow Removal	250,000	450,000	150,000
A/C Rescue & Firefighting	350,000	350,000	350,000
Net Airline Requirement	1,150,000	1,350,000	1,000,000
Est Landed Weight (x1,000)	100,000	100,000	100,000
Landing Fee (per 1,000)	**11.50**	**13.50**	**10.00**

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Airport Rate-Making Policies

Hybrid Methodology

Generally compensatory but retains certain residual features

Direct operational cost centers set up for facilities which generate revenue airfield, terminal, & equipment (loading bridges, bag claim)

In return, a portion of some non-aeronautical revenues shared with airlines (rental cars, secured side concessions, etc.)

Revenue from non-signatory airlines also help reduce allocated costs

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Airport Capital Improvement Programs

Generally needed to plan and program future development – usually 5-6 years out*

Intended to prioritize development needs in order to identify & assess financial needs

CIPs should include:

- Prioritized Project Needs & Schedule
- Project Justification
- Detailed Project Cost Estimates
- Realistic Picture of Potential Funding Sources

* *Note: ACIP required for FAA AIP funding*

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Federal Funding

Airport Improvement Program (AIP)

Funds come from ticket & fuel taxes, & other fees

Federal share of project 90% of total

Certain assurances must be agreed to (“strings”)*

- FAA Advisory Circulars become mandatory
- Agree to protect & maintain airport – 20 years
- Abide by other federal mandates
  (DBE, Davis-Bacon, etc.)

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Federal Funding

Eligible Projects

Priorities based on national priorities

- Safety
- Security
- Design Standards
- Reconstruction
- Capacity

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State Funding

Many states will split non-federal share (10%) of projects (50/50) with sponsor

Florida has separate program to fund projects not normally federally eligible or high priority (ex, T-hangars, fuel farms, etc.)

- 80/20 for aviation needs
- 50/50 for economic development projects

Local Funding

<u>Local Capital Budget</u>

- FAA/State contributions yield 95% of project cost
- $1,000,000 project only costs $50,000
- Even so, some smaller airports may have to be subsidized by municipal (tax) funds or other contributions

Passenger Facility Charge (PFC)

Allows airports to collect maximum of $4.50 per Enpax

Must be set aside for FAA-approved project
- AIP eligible
- Noise mitigation
- Enhanced competition

PFC's are treated as local funds
- Federal requirements are not necessary
- may be used for sponsor share of FAA projects
- may be used to fund stand-alone projects
- may be used to pay finance costs (debt service)

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Customer Facility Charge (CFC)

Method to collect funds for financing non-federal facilities

Not managed or controlled by FAA
- Projects that are not AIP-eligible
- CFC rate set locally (usually by ordinance)
- CFC rate basis includes total amount to be recovered

Typical uses involve Consolidated Rental Car Facilities
- CFC covers operations (shuttle), debt service, etc.
- collected by rental car company as part of total rental cost
- usually collected on a "per day" basis (days car rented)
- CFC generally $4 - $5 per day

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Airport Debt

Used primarily for LARGE capital projects

too large/risky for any single investor

debt "syndicated" among many investors

based on airport's creditworthiness

bonding capability based on a number of factors

- Airline service & traffic characteristics
- Airport rates & charges
- Community's economic base
- Current finances and debt
- Current senior airport management

Airport Debt

General Obligation (G.O.) Bonds

- issued by municipalities for variety of public works
- based on community's full faith, credit & taxing power
- generally pay lower interest rates (10-15 yr terms)
- sometimes limited to fraction of taxable property

General Airport Revenue Bonds (GARB)

- backed by airport revenue
- guaranteed by airlines to make up short-falls (usually in form of increased landing fees)
- higher interest rates & longer terms (25-30 years)

Airport Debt

PFCs can be used as pledged revenues for Airport debt

"Double-barreled" PFC bonds (general practice)
- secured by first lien on PFCs & subordinate lien on net airport revenue

"Stand-alone" PFC bonds
- secured solely by PFC revenues
- Stand-alone PFC debt typically must demonstrate historical coverage of future debt service of 1.35x – 2.00x coverage

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Airport Debt

Special Revenue (or Facility) Bonds

- issued by airport to build special facility
- (terminal, hangar, maintenance facility)
- secured by revenue from facility (corporate guarantee)
- uses creditworthiness of airport vs benefactor
- higher risk = higher interest
- primary incentive – **employment**, tax base, etc.

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Private Sector Financing

Fairly common for revenue-producing facilities
- hangars & other buildings

Public-private partnership
- Public provides infrastructure (land, utilities, etc.)
- Private sector provides financing for development
- Public takes over at end of term

For larger infrastructure needs – full privatization
- Private sector leases whole terminal (or airport)
- Fully responsible for development & operation
- Public receives guaranteed income plus % of profit

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Summing It All Up

Revenues can come from a variety of sources
- Important to ensure understanding how the rates are set
- Revenue from aeronautical sources do not have to be based on the same methods as non-aeronautical sources
- Revenue made at the airport must stay at the airport

Expenses should be allocated to cost centers
- Useful for assessing rates to recover appropriate costs
- Ability to demonstrate rate basis
- "What gets measured gets managed"

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Bottom Line

[The Airport] ...will 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."

FAA Grant Assurance No. 24

For More Information

Reference material for this program available at:

AVF 8700 - Airport Finance 101

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