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Aviation Infrastructure Financing: Focus on the United States Case

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Agenda

- Background: Nature and Extent of the Problem**
- Methods to Deal**
 - Short-Medium Term: *Let major airports to use PFC for financing expansion; aircraft movement charge (not weight-based) and peak period pricing*
 - Long term – **Privatization**
 - Effects of Privatization
- Summary and Recommendations**

Nature and Extent of the Problem

- ❑ FAA identified: **14 airports in 10 metropolitan regions** will face significant capacity constraint by 2025, even if all currently planned capacity improvements are completed;
- ❑ Planned improvements includes **airport construction projects**, full implementation of **NextGen technologies**; without these improvements, **27 major airports will have serious capacity shortages** (2010, GAO report)
- ❑ In 2011, **National Aviation System Delay: 5.8%** of all flights (352,695 out of total 6,085,281 flights all US airports handled)
- ❑ **11.9% (725,898 flights)** of all flights are delayed for the reasons within Airlines' control

Airports and Metropolitan regions needing additional capacity by 2025 if the planned capacity expansion projects are not completed ?



US Airports Capital Needs 2011-2015

- **ACI-NA estimates \$80 billion total capital needs** (\$75.5 in constant 2010 \$) over the 2011-2015 period, *an average 16 billion per year*, out of which \$52 billion is AIP-subsidy eligible;
- **FAA National Plan of Integrated Airport Systems (NPIAS) budgets forecast is \$52.2 billion** in development costs from 2011-2015;
- but **Annual Capital Budget for the same period (for subsidies to airport capacity expansion) is only \$10.4 Billion**, an average of 2.08 billion per year;

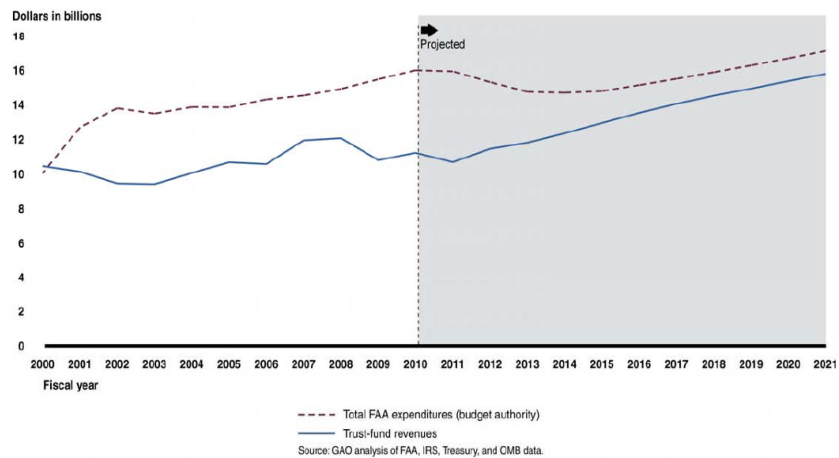
ACI-NA: **large hubs** need \$40 billion , 2011-15; while rely only 9.2% of their capital funding from **AIP**

Airport Category	Total number of airports by category in national airport system	Total 2011- 2015 capital development costs in millions of current year dollars	Percentage of Total
Large Hub	29	\$ 39,945	49.9%
Medium Hub	36	8,920	11.1%
Small Hub	72	8,057	10.1%
Nonhub	231	6,281	7.8%
Commercial service	127	1,071	1.3%
Reliever	269	3,964	5.0%
General aviation	2,560	11,835	14.8%
Total	3,324	80,073	100.0%

Source: ACI-NA Airport Capital Development Costs 2011-2015

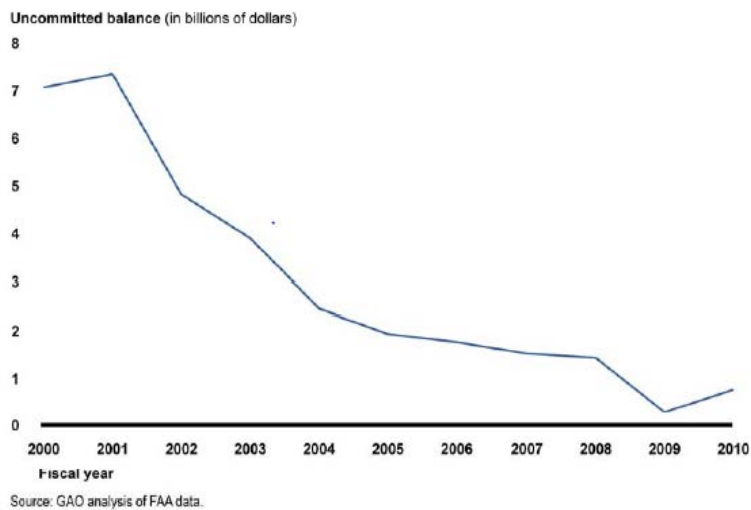
FAA Expenditure & AATF Trust Fund: past trend and forecast to 2021 (FAA over-forecasted AATF revenue by \$9.74 billion last 10 years)

Figure 7: Actual and Forecast Trust-Fund Revenues and FAA Expenditures, Fiscal Years 2000 through 2021



Recently Uncommitted Balance of AATF became dangerously low

Figure 3: End-of-Year Trust-Fund Uncommitted Balance, Fiscal Years 2000 through 2010

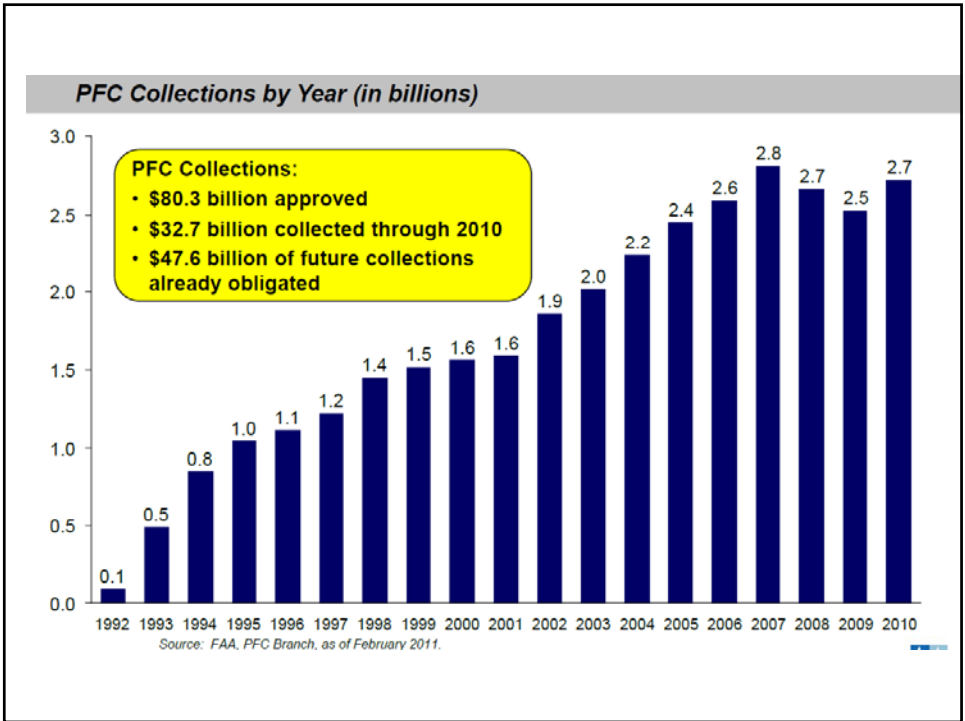
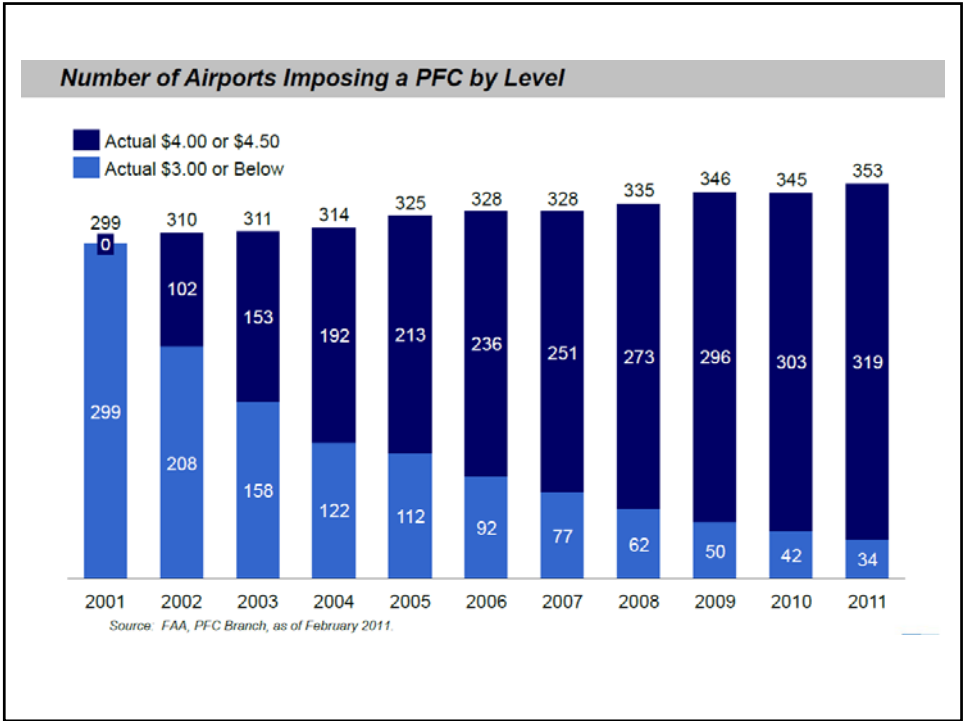


The Challenges FAA and US Airports face

- Airport and Airport and Airway Trust fund (AATF) will not be sufficient to cover airports' capacity expansion;
- Given the US fiscal situation, the General Fund (US Treasury) to finance the FAA operation will not increase; **and thus, FAA's reliance on AATF would increase;** Also, the NextGen and other facilities and equipment budget would have to rely on AATF;

Methods to deal in Short/Medium Term

- Deregulate Passenger Facility Charges (PFC) *especially at large hub airports* and adopt an efficient regulation on the level of fees;
- AATF (7.5% passenger ticket tax and cargo tax) could be separated from the AIP (Airport Improvement Program) financing needs, certainly for hub airports
- Rationalize landing charges at congested airports;
 - *Per flight movement charge* (like London Heathrow)
 - *Peak-off peak charges* (Boston's Logan, Gatwick, Stansted, Manchester)



PFC Outlook: Future Collections Obligated to Past Projects

New Denver International Airport
\$3.1 billion through 2026



DFW Skylink and Terminal D
\$4.5 billion through 2034



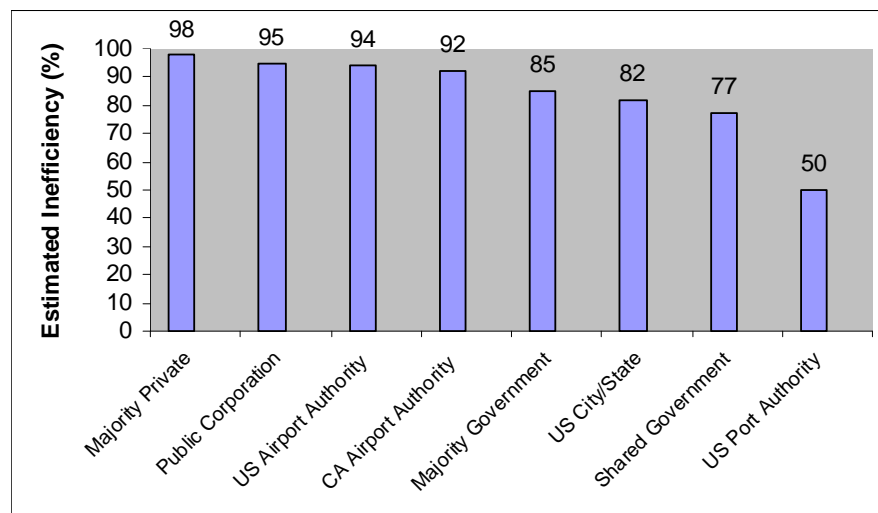
A Long-Term Solution: Privatization

- ❑ **Privatized Airports under proper regulatory protection of users** (airlines, passengers, shippers, and others) works quite well elsewhere; in Europe, Australia and Asia; see the next slides for the fully and/or partially privatized airports
- ❑ *US airport regulatory system needs overhaul any way; Current system of city/state-owned airports regulated by FAA has not been effective in putting capacity expansion in place when needed;*
 - ➔ *Time to modernize the system to improve efficiency*

Airport Privatization Elsewhere Successful

- All major airports in Australia have been privatized;
- Majority of UK airports have been privatized (recently, Ferrovial, Spanish infra firm bought BAA plc for \$17+ billion)
- Many major airports in Europe are being privatized or being considered for privatization
- Some Asian airports are being considered privatization: Hong Kong, Narita, Bangkok, etc.
- *There are enough interest in financial community (especially, Pension funds, Infrastructure funds, etc.) to invest in airports*

Average Relative Efficiency of airports by Ownership Form (Oum, Yan, Yu, 2008)



Effects of Privatization on Productive Efficiency

- ❑ Productive efficiency comparisons compared to the frontier technology (100% efficiency):
 - Majority private owned airports: 98% on average
 - US airport authority owned/managed airports: 94% (e.g., Hillsborough county airport authority)
 - US city/state owned and managed airports; 82% (e.g., LAX, Chicago ORD, etc)
 - US port authority owned/managed airports: 50% (NY area airports)

- ❑ Majority private ownership appears better for efficiency

US Privatization Pilot Program

- ❑ Enacted in 1996, in response to interest of mayors and governors in selling airport (stimulated by BAA privatization in 1987); only give airports selected;
- ❑ Provides exemptions from several FAA grant assurances that would otherwise discourage privatization (e.g.. Allowed cities to take sale/lease proceeds from airports; removed requirement to repay previous AIP grants)
- ❑ ***Strong airline approval requirement (both 65% airlines and 65% of annual landed weight)***

Privatization Pilot Program - cont'd

- Stewart NY is the only completed transaction (2000), but the company sold lease to Port Authority, 2007
- *Chicago Midway deal (\$2.5 billion bid price) could not be financed, due to credit market clash in 2008;*
- *Today, pending proposals for four of the five airports;*

Conclusion

- Since AIP will be not sufficient to help finance airport expansion projects, deregulating PFC (subject to an incentive regulation) appears to be sensible option for major US airports in the short to medium run;
- **ATM-based runway pricing with peak-offpeak** price differentials would improve capacity efficiency;
- In the long run, **the privatization of airports** would solve the investment needs; But, study results show that the **majority shares of airports should be sold to private sector** owners;
- Given UK experience, privatizing airports in a large metropolitan areas like New York, Chicago, LA, the multiple airports **should be privatized to different owners** (subject to a regulation to protect airport users);

Thank You

2012 ATRS world conference (27-30 June: Tainan, Taiwan)

The ATRS Global Airport Performance Benchmarking
Reports – 10th Year

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