Reason Foundation April 2012



Annual Privatization Report 2011: Air Transportation

By Robert W. Poole, Jr. Edited by Leonard Gilroy and Harris Kenny



Reason Foundation



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This is an excerpt from Reason's *Annual Privatization Report,* which is available online at http://reason.org/apr2011

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Table of Contents

A. Introduction/OverviewB. U.S. Airport PrivatizationC. Global Airport Privatization	. 3 . 6
•	. 6
C Clobal Airport Privatization	
e. Global / inport / invalization	
U.S. Airport Security	11
A. Passenger and Baggage Screening	11
B. Trusted Traveler	13
Air Traffic Control	15
A. Global ATC Trends	15
B. U.S. ATC Reform	16
Endnotes	18

Part 1

Airport Privatization

A. Introduction/Overview

Since 1987, when Margaret Thatcher's government privatized (via a 100% public share offering) the former British Airports Authority (now BAA), airport privatization has become a global phenomenon. Governments in Europe, Asia, Australia and New Zealand, Latin America and the Caribbean have privatized major airports. Some of these privatized entities have subsequently acquired full or partial ownership interests in other airports (in their own country and elsewhere), as have some government-owned airports. Today's global airport industry is often characterized by airport groups, rather than just individual airports.

Table 1 is excerpted from a table of the world's 100 largest (by revenue) airport groups. Of these 100 largest airport entities, 32 are either fully or partially owned by investors (or are in the process of becoming so, as in Spain). In cases of partial privatization, either a minority or majority stake is held by the national, regional or local government entity in which the airport is located. A number of these global airport groups also manage overseas airports, on a contract basis, without actually obtaining an ownership share. Several smaller airport companies (e.g., Hochtief Airport, Infratil, Peel Airports) had 2009 revenues below the threshold for inclusion in the top 100, so are not included in the table.

Table 1: Largest Privatized Airport Groups						
Airport Group	Global	Main Airports	2009 Revenue	Privatization		
	Rank*		(\$M)	Status		
Ferrovial	1	London Heathrow and Stansted	\$4,273	Full		
Aena	2	Madrid, Barcelona	\$4,163	In process		
Aeroports de Paris	3	Paris de Gaulle and Orly	\$3,665	Partial		
Fraport	4	Frankfurt	\$2,745	Partial		
Aeroporti di Roma	21	Rome Fiumicino and Ciampino	\$ 804	Full		
Flughaven Zurich (Unique)	24	Zurich	\$ 757	Full		
Beijing Capital Intl. Airport Group	26	Beijing	\$ 727	Partial		
Flughafen Wien	27	Vienna	\$ 698	Full		
Southern Cross Airports	28	Sydney	\$ 671	Full		
Athens Intl. Airport	29	Athens	\$ 637	Partial		
Airports of Thailand	30	Bangkok	\$ 619	Partial		
Flughafen Düsseldorf	36	Düsseldorf	\$ 547	Partial		

Table 1: Largest Privatized Airport Groups						
Airport Group	Global	Main Airports	2009 Revenue	Privatization		
	Rank*		(\$M)	Status		
Copenhagen Airports	37	Copenhagen	\$ 546	Full		
Brussels Intl. Airport Company	39	Brussels	\$ 509	Full		
Guangzhou Baiyun International	42	Guangzhou	\$ 484	Partial		
Malaysia Airports Holding	43	Kuala Lumpur	\$ 465	Partial		
Airports Company South Africa	44	Johannesburg, Cape Town	\$ 449	Partial		
Abertis	50	London Luton, Cardiff	\$ 387	Full		
Australia Pacific Airports	54	Melbourne	\$ 349	Full		
Aeropuertos Argentina 2000	58	Buenos Aires EZE and AEP	\$ 323	Full		
GMR Infrastructure	62	New Delhi, Hyderabad	\$ 315	Partial		
Flughafen Hamburg	63	Hamburg	\$ 314	Partial		
Brisbane Airport	68	Brisbane	\$ 281	Partial		
Auckland International Airport	75	Auckland	\$ 255	Partial		
Grupo Aeroportuario del Pacifico (GAP)	77	Guadalajara, Tijuana	\$ 241	Full		
Aeroports de la Cote d'Azur	79	Nice	\$ 238	Partial		
Aeropuertos Del Sureste (ASUR)	80	Cancun	\$ 231	Full		
Hannover-Lengenhagen	84	Hannover	\$ 185	Partial		
Birmingham Airport Holdings	88	Birmingham	\$ 167	Partial		
Save Aeroporto Marco Polo	90	Venice	\$ 157	Full		
Westralia Airports	91	Perth	\$ 154	Full		
Operadora Mexicana de Aeropuertos (OMA)	92	Monterrey, Acapulco	\$ 140	Full		

Source: "Financial Rankings 2009," Airline Business, December 2010

There have been a number of changes in the global airports industry during 2010 and 2011. The Spanish firm ACS Infrastructure completed its takeover of German firm Hochtief in June 2011, acquiring just over 50% of the latter's shares. As part of the process, the subsidiary Hochtief Airports is being sold off. The company holds large stakes in the airports of Budapest (49.6%), Tirana (47%), Hamburg (34.8%), Athens (26.7%), Düsseldorf (20%) and Sydney (5.6%). As of August 2011, three offers had been received.

The former Macquarie Airports (MAp Airports Ltd.) decided in early 2011 to refocus its interests on Sydney (of which it already owned 70%). In July it announced an asset swap with the Ontario Teachers' Pension Plan whereby the latter would acquire its stakes in the airports of Brussels (39%) and Copenhagen (30.8%) while MAp acquires OTPP's 11% stake in Sydney, bringing its ownership of that airport to 81%. OTPP also has ownership stakes in British airports Birmingham and Bristol.

And in Mexico, GAP, owner of 12 airports including Guadalajara and Tijuana, is fighting a takeover bid from copper mining company Grupo Mexico, which as of August 2011 owned a 23% stake.

Ferrovial, owner of 56% of BAA, is divesting 10% of that holding (i.e., 5.6% of the total shares). The other two BAA shareholders are Caisse de Depot et Placement de Quebec (27%) and Singapore GIC (17%). Separately, BAA is fighting an order by the Competition Commission that it divest itself of Stansted Airport (estimated to be worth \$2 billion in today's market) and one of its two Scottish airports.

Despite the credit markets crunch of 2008–2009, the airport market had recovered by 2010, with transactions once again taking place, though at less aggressive multiples of airport earnings than prior to the crunch. In its "2011 Outlook: Global Transportation Infrastructure," issued in January 2011, Fitch Ratings revised its outlook for U.S. airports from negative in 2010 to stable-negative for 2011. For European airports, the outlook was revised from stable-negative to stable; the same change was made for Latin American Airports.

B. U.S. Airport Privatization

1. Airport Privatization Pilot Program

The federal Airport Improvement Program imposes economic regulation on U.S. airports in exchange for annual grant funding. Those regulations preclude airport privatization, because they require all "airport revenues"—including proceeds from a lease or sale—to be reinvested in the airport (or airport system) that generates them. Hence, a city, county or state that wishes to lease or sell its airport would receive zero financial benefits from doing so. The regulations also prohibit any airport operator (including an investor-owned airport company) from taking any profits off the airport, which means such a company would have no incentive to acquire a U.S. airport.

Due to growing interest in airport privatization from local officials, Congress in 1996 created a limited set of exceptions to these regulations. Under the Airport Privatization Pilot Program up to five jurisdictions can apply to the Federal Aviation Administration (FAA) for permission to lease an airport on a long-term basis and transfer the lease proceeds to the general government budget. And the acquirer is allowed to seek profits by operating the airport efficiently. One "slot" in the program is reserved for a general aviation (non-airline) airport, and only one of the remaining four can be used for an airport meeting FAA's definition of a "large hub." In order for an airport to be privatized under the Pilot Program, the lease agreement must receive the approval of both (1) 65% of the airlines that provide scheduled service at the airport, and (2) airlines that account for 65% of the annual landed weight (on which landing fees are based) at that airport.

Chicago's failed attempt to lease Midway Airport in 2009 (because the winning bidder was unable to finance its deal, due to the credit crunch) still added value to the prospects for U.S. airport privatization. That's because the pro-forma long-term lease agreement that Chicago negotiated with Midway's airlines achieved the required two-part 65% support from the relevant airlines. As the anchor tenant at Midway, Southwest led the negotiations with the city, and Southwest's

4 | Reason Foundation

Property Manager, Amy Weaver, has said that the terms of the deal "set the pace, process, and expectations for future U.S. privatization discussions."¹

That proved to be correct during 2011, when the Puerto Rico's Public-Private Partnerships Authority went forward with its plan to privatize San Juan's Luis Munoz Marin International Airport. After some months of discussion, the airport's leading carrier, American, agreed to the terms of the draft lease agreement, and other airlines then followed American's lead. On July 5, 2011 the Authority issued its Request for Qualifications, which led to a dozen responses. In September, the Authority announced its short-list of six potential bidders, including teams led by ASUR, Fraport, GMR and Zurich Airport. With a Request for Proposals due out in the fall and bids due around the end of the year, the Authority expects to award a 50-year lease by early 2012. The Authority's advisors are Credit Suisse Securities (finance and procurement), Leigh Fisher (technical), Mayer Brown (U.S. legal counsel) and Pietroantoni Mendez & Alvarez (local legal counsel).

Although New Orleans withdrew from the Pilot Program in 2011, the city of Chicago decided to remain a participant, requesting another extension of time from the FAA on Aug. 1, 2011. Because the city's new mayor, former White House staffer Rahm Emanuel, had previously come out against privatizing the airport, the move surprised many observers, who had expected the city to withdraw its application for the only "large hub" slot in the program.

Of the five slots in the Pilot Program, as of this writing one is unclaimed, and the remaining two are held by general aviation airports: Hendry County, Florida and Gwinnett County, Georgia. The former seeks to redevelop its Airglades Airport in Clewiston (an agricultural area on the shore of Lake Okeechobee) into an international hub for produce from Central and South America, all of which currently flows through Miami International Airport. The plan includes the development of a new, longer runway, and has strong support from the Hendry County Economic Development Council.

Gwinnett County, an affluent suburb on Atlanta's northeast side, seeks to improve the county's Briscoe Field, currently solely a general aviation airport. Unlike many major metro areas, Atlanta has only one commercial airport, the huge Hartsfield-Jackson International Airport. The privatization proposal was sparked by the interest of New York-based Propeller Investments in expanding the airport and attracting scheduled airline service, most likely short- to medium-haul service. There is both support and opposition to adding airline service at Briscoe Field. With three pre-qualified bidders now interested in leasing the airport, the county hired Infrastructure Management Group (IMG) to assess its options. Its report, released on Sept. 20, 2011, recommended deferring a decision on airline service and proceeding with a lease competition based on the airport in its current form. The RFP that IMG is developing for Gwinnett County would ask each bidder to set forth its long-term vision for the airport.

Another airport being considered for privatization is Ontario Airport, east of Los Angeles but owned and operated by Los Angeles World Airports (LAWA), a self-supporting entity of the city of Los Angeles. For several years the airport has been losing passengers and airline service, so LAWA requested expressions of interest from the private sector in hopes of turning the airport's fortunes around. Six airport groups and four infrastructure funds responded in March 2011, indicating considerable interest in making Ontario Airport more viable. The city of Ontario, which sold the airport to LAWA in 1985, is opposed to its privatization, and a state senator from nearby Rancho Cucamonga introduced a bill in the legislature to wrest control of Ontario Airport from LAWA and give it to a newly created regional authority. That bill passed the state senate in May but has thus far not progressed in the state assembly.

While local privatization activity continues, Congress has still not enacted a bill to reauthorize the FAA, whose current authorization expired Sept. 30, 2007. With the change in control of the House as of the 2010 election, the new House version of the bill deleted anti-privatization language from the former bill and added language that would liberalize the Pilot Program, increasing the number of slots from 5 to 10 and deleting the 65% airline approval requirement. There is no corresponding provision in the current Senate bill.

However, two opposing Senate bills address privatization of federally aided infrastructure. Sen. Dick Durbin (D, IL) in June introduced his "Protecting Taxpayers in Transportation Asset Transfers Act," which would require the repayment of previous federal grant money in the event an asset (such as a highway or airport) were privatized. That same month Sen. Mark Kirk (R, IL) introduced the Lincoln Legacy Infrastructure Development Act, which aims to eliminate federal restrictions on public-private partnerships, including removal of the cap on the number of airports in the Pilot Program. It would also increase the annual budget authority for the federal TIFIA credit-support program from the current \$122 million to \$750 million.

Reflecting on the fiscal pressures facing U.S. local governments, the president of the Airports Council International-North America, Greg Principato, was quoted in *Aviation Daily* as predicting a new wave of airport privatization. "Once a mayor cashes a \$2 billion check" from such a transaction, he said, political attitudes will shift to favor privatization. And airport managers are starting to realize that they could gain more freedom for entrepreneurial management under privatization. And former ACI-NA Executive Vice President Steve Van Beek told HNTB's *Aviation Insight* magazine (spring 2010) that "As funding sources decline, airports will increasingly consider other options for financing capital improvements, including privatization."

2. Privately Owned Airports

America's one privately developed air carrier airport serves country music haven Branson, MO. A group of entrepreneurs created Branson Airport LLC, acquired a suitable parcel of land in Branson, received airspace approvals from the FAA, and raised \$155 million. With that, they created a one-runway airport with a contractor-operated control tower and a modest terminal building. Because the airport used no federal grant funds, it is not constrained by the usual FAA grant agreements. It has offered airlines two-year exclusive rights to link specific cities to Branson, and as of mid-2011 has scheduled service to Atlanta, Chicago Midway, Denver and Houston. Despite that success,

Branson's passenger traffic by the end of 2010 was less than 50% of the forecasts on the basis of which its construction was financed. In the autumn of 2010, its revenue bonds were trading at little more than 50 cents on the dollar. But in April 2011, bondholders reached a "forbearance agreement" with Branson Airport LLC under which the company can continue to use reserve funds for working capital and debt service payments through June 30, 2012. The agreement is aimed at giving the airport time for revenues to "become sufficient to meet all operating and debt service costs."

Another would-be private airport is still trying to get off the ground—the third Chicago airport at Peotone, 40 miles south of the Loop. The local business community, outside consultants and the Illinois DOT have spent years promoting the airport as the answer to the need for additional airport capacity in the greater Chicago area. While the initial concept was more like Branson, it evolved into a public-private venture, in which the state DOT is acquiring and will own the land and be responsible for the airside (runways, taxiways, control tower) while the private sector would finance, develop and operate the landside (terminal, parking, etc.). As of May 2011, the Illinois DOT still had 59 properties to acquire to complete the initial 5,385 acres. And the FAA still has to do the required environmental study, estimated to take two years. Officials in Gary, Indiana have been trying for many years to make their airport the third one serving the greater Chicago area, thus far without success. And the continued expansion of Chicago O'Hare International Airport may reduce the potential demand for passengers of a Peotone airport. The Peotone airport does have good highway access prospects, since it is close to the route of the planned Illiana toll road, which both Illinois and Indiana have committed to build.

C. Global Airport Privatization

Financial concerns appear to be driving the latest wave of airport privatization in Europe, as overindebted governments seek to strengthen their balance sheets by selling off valuable assets. That is the case for the hard-pressed governments of Greece and Spain, both of which have launched airport (and other) privatization efforts during 2011. In Latin America and Asia, however, the spur to airport privatization continues to be that many countries' economic growth has left them with inadequately sized and poorly outfitted airports which they are increasingly asking the private sector to remedy via large-scale investments, generally under long-term concession agreements.

1. Europe

The Airports Council International-Europe early in 2011 released a report called "The Ownership of Europe's Airports." It categorized 404 European airports into three categories: public-sector ownership, mixed ownership, and private (investor) ownership. While 78% of the 404 airports fell into the public-ownership group, with 13% as mixed and only 9% fully investor-owned, a potentially more relevant breakdown is by share of passengers handled. By that measure, 52% are handled by public-sector airports, which means that 48% of European air passengers are handled

by partly or fully privatized airports as of 2011. After Greece and Spain complete their current privatization efforts, that 48% will likely become a majority of passengers.

The largest of the planned European airport privatizations in 2011 is Spain's plan to privatize all of its major airports. Six teams submitted bids on Sept. 6, 2011 for 20-year concessions to operate Madrid's Barajas airport and Barcelona's El Prat airport. The government is offering just over 90% of each company, and estimates are that Madrid could be worth \$5.2 billion and Barcelona \$2.3 billion. The government also plans to offer up to a 49% stake in airports operator AENA Aeropuertos, which owns 45 airports in addition to Barajas and El Prat. Royal Bank of Scotland is the government's advisor on this privatization.

In Britain, Gatwick Airport was sold by BAA in late 2009 to Global Infrastructure Partners for \$2.47 billion. The U.K. Competition Commission had forced the sale on BAA to break up its nearmonopoly on London-area service. The company is fighting a 2011 order to divest London Stansted Airport, but has agreed to sell one of its two Scottish airports (Edinburgh and Glasgow). Gatwick purchaser Global Infrastructure Partners (GE and Credit Suisse) also owns London City Airport and a number of other infrastructure enterprises. Subsequent to GIP's purchase of Gatwick, it was able to sell minority interests to two pension funds: South Korea's National Pension Service (12%) and CalPERS from California (12.7%), and a 15% stake to the Abu Dhabi Investment Authority (a sovereign wealth fund). Elsewhere in the United Kingdom, nearly all significant airports (except Manchester) have been privatized over the past two decades, though local authorities often retain minority stakes. As those local governments struggle with fiscal problems, the possibility of selling some or all of those stakes has become a topic of discussion. Birmingham, for example, still owns 19% of its airport, and several local authorities together own 51% of the Newcastle airport.

Russia also remains in the news, first because of Fraport's \$1.6 billion deal in spring 2010 for St. Petersburg's Pulkovo Airport, Russia's fourth-largest. Under the 30-year concession agreement, Fraport and partners Copelouzos Group and Russian state bank VTB will build a new terminal capable of handling up to 25 million annual passengers by 2025, expand the terminal's apron area, and develop airport real estate. Moscow's Domodedovo airport is operated by the Eastline Group under a 75-year lease, and in May 2011 it announced plans for an initial public offering of shares, hoping to raise up to \$1.5 billion for a 20% stake. But the IPO was postponed when investors raised concerns about political risk, due to sharp criticism by the government over a January 2011 terrorist attack there that killed 37 people. Russia's Transport Ministry announced in 2009 that it intends to privatize Moscow's Sheremetyevo airport.

Elsewhere in Europe, financially troubled Greece is proceeding with a very large-scale privatization program. It includes selling the remaining 55% stake in Athens airport (the balance of which is owned by Hochtief and the Australian Infrastructure Fund). One estimate of the deal's value is $\notin 1$ billion (about \$1.4 billion as of this writing).

In Italy, SEA SpA, operator of Milan's two airports, announced that it will proceed with its planned IPO before the end of 2011, rather than postponing it until the following year. The city currently owns 84% and aims to reduce that to 51%. BAA sold its 65% stake in the Naples airport to an Italian infrastructure fund for \$206 million. Minority shareholders include the City and Province of Naples. And France announced the planned sale of up to 49% of the regional airports of Bordeaux, Lyon, Nice and Toulouse.

Hungary in June 2011 sold a 25% stake in the Budapest Airport to Hochtief, which already owned 37%. Poland announced plans to offer a 30% stake in the John Paul II International Airport serving Krakow. Recently-independent Kosovo reached a 20-year, €100 million concession deal with Aeroports de Lyon (France) and Limak Holding (Turkey) to modernize its main airport in Pristina. And Bulgaria has received approval from the European Commission to offer a concession to revamp and modernize Sofia Airport. Permission was needed because the airport was partly financed by the EU.

2. Canada

Canada is often said to have "privatized" the country's main commercial airports, but what the federal government actually did more than a decade ago was to divest them to newly created local airport authorities. Other than that, there has been no real airport privatization in Canada, apart from a public-private partnership that developed the new Terminal 3 at Toronto's Pearson International Airport in the late 1980s and contract management of the Hamilton International Airport in the suburbs of metro Toronto. In January 2010, a Hamilton city council member suggested that the city study selling the airport and using the proceeds to upgrade aging city infrastructure. That plan appears to have gone nowhere.

3. Latin America & Caribbean

Unlike Europe, where the principal mode of airport privatization has been the sale of partial or 100% ownership stakes in airports, in Latin America the long-term concession model has prevailed.

The biggest news in this region in 2011 is the launch of airport privatization in Brazil. A 2010 study by McKinsey estimated that the country's top 20 airports need about \$19 billion in investment to cope with projected passenger growth. Motivated by the obvious inadequacies of its major airports, and the limited amount of time before they must welcome huge numbers of visitors for the 2014 World Cup and the 2016 Olympic games, the government in May announced plans to privatize three major airports: Guarulhos and Viracopos in Sao Paulo and Kubitschek in Brasilia. Currently all the country's air-carrier airports are owned and operated by state agency Infraero (comparable to AENA in Spain). The three airports are expected to require at least \$1.6 billion in modernization investments. Bidding for a much smaller airport concession—to build and operate new terminals for the airport in Natal—took place in August. Winning consortium Infra-America

bid an upfront fee of \$106 million for the concession, beating three other contenders. Construction cost is estimated at \$575 million. Bidding for the three major airport concessions is set for February 2012. Next in line will likely be Galeao International Airport in Rio de Janeiro and the airport in Belo Horizonte. It is expected that if privatization of these initial airports goes well, the model may be rolled out to some or all of the agency's 60 other airports.

Mexico's three privatized airport companies (ASUR, GAP and OMA) now operate 35 airports. The Mexico City airport is still state-owned, but the government is reportedly considering privatization options. Tourism on the Yucatan Peninsula has outgrown the airports at Cancun and Merida, so the government has planned a new Riviera Maya airport in Tulum, Quintana Roo, 63 miles south of Cancun. Two teams have submitted proposals to design, finance, build, operate and maintain the new airport, which is to have an 11,000-ft. main runway and a terminal building capable of handling 3 million annual passengers.

Jamaica several years ago privatized its major tourist airport—Sangster International, in Montego Bay—via a 30-year build-operate-transfer concession. Jamaica now plans to do likewise for the airport serving its capital, Norman Manley International in Kingston. In August 2011 it put out a call for privatization advisors. The World Bank will pay for a two-phase study to develop the scope and structure for privatizing not only the Kingston airport but also three smaller airports: Boscobel, Negril and Ken Jones.

4. Asia/Pacific

India has embraced airport privatization gradually, with most of its air-carrier airports still owned and operated by the Airports Authority of India (AAI). The first privatization initiative allowed three new airports to be developed under long-term concessions-at Bengaluru, Cochin and Hyderabad. Their success has led to authorization of several more: at Kannur in Kerala, at Mopa in Goa, and a cargo airport near Jaipur. The privatization program's second phase involved the modernization of the outdated and congested airports at New Delhi and Mumbai. The New Delhi project included the addition of a third runway and a huge new Terminal 3, opened in July 2010. The concession is a joint venture of GMR Infrastructure, Fraport, Malaysian Airport Holdings and the AAI. The Mumbai airport concession-holder is a joint venture of GVK (India) and ACSA (South Africa). AAI hopes to soon get under way on a second airport for Mumbai, called Navi Mumbai, also developed as a public-private partnership. Over the five-year period beginning July 2012, the government aims for \$17 billion to be invested in airport development, with only about 20% coming from AAI. Tax-exempt revenue bonds and private-sector equity investment are expected to make up the rest. There are currently 14 PPP airports out of the 89 air-carrier airports with at least 1.5 million annual passengers. They are regulated by the independent Airports Economic Regulatory Authority of India.

Rapid growth in air travel continues in China, and the government has gradually lifted restrictions on foreign investment in airports (now up to 49%). Among those taking partial stakes in various airports are Changi International, Fraport and the Airport Authority of Hong Kong. The

government's latest airports plan for 2011–2015 includes 56 airports, up from 33 in the previous five-year plan. There has still been no word on a date for the public offering of shares in Hong Kong International, first announced in 2006.

Singapore's highly regarded Changi International Airport was corporatized in 2009 and continues as an active investor in overseas airport concession projects. South Korea's Incheon airport is expected to have its initial public offering by the end of 2011, if the parliament passes the enabling legislation allowing the sale of up to 49%. In August, the government also announced that a 15% stake in Incheon will be offered to lower-income individuals at a steep discount. Early in 2011 Indonesia signed a memorandum of understanding with GVK of India (developer/operator of the Bengaluru and Mumbai airports) to develop new international airports in Bali and Java. The Philippines plans to privatize the airport terminal at Caticlan, but hanging over that plan is the lingering lawsuit by Fraport over the failed Terminal 3 project in Manila, stemming from 2002. Fraport is still seeking \$425 million in compensation for the government's cancellation of its concession agreement just as the terminal was nearing its opening date.

Most of Australia's airports were long-term leased in the late 1990s, culminating with Sydney in 2002. Queensland's principal airports—Brisbane, Cairns and Mackay—were privatized in 2008–2009. Australia is known for having instituted "light-handed" economic regulation of its privatized airports. An August 2011 review by the government's Productivity Commission concluded that, overall, light-handed regulation has worked well. The airport companies are making significant investments in the airports, and the airports' "aeronautical charges, revenues, costs, profits, and investment look reasonable compared with outcomes at overseas airports."

Part 2

U.S. Airport Security

There have been two major developments in U.S. airport screening in 2011, the year of the 10th anniversary of the 9/11 terrorist attack. One concerns the future of the program under which airports are allowed to outsource passenger and baggage screening to firms certified by the Transportation Security Administration (TSA). The other concerns an apparent shift by the TSA towards a more risk-based approach to aviation security, with the launch of a Trusted Traveler program.

A. Passenger and Baggage Screening

When Congress enacted the Aviation & Transportation Security Act (ATSA) in November 2001, it had to reconcile two very different approaches. The Senate bill called for complete "federalization" of airport screening, in which a new federal agency (the TSA) would take over all passenger and baggage screening at all air-carrier airports, using a new federal workforce of well-trained people. The House bill called for replacing the former system (in which the FAA required airlines to hire screening firms for each airport concourse) with a new system in which the airports would be responsible for screening, which they would do under federal supervision, either with a workforce of their own (meeting federal training and performance standards) or from security contractors that met federal training and performance standards. Because the White House had announced it would not veto a bill based on the Senate's highly centralized approach, the final bill was mostly the Senate's approach. In a concession to the House, it permitted five airports to opt out initially, as a pilot program. After 2004, all other airports in theory would be allowed to opt out.

In the years since then, no airport that already had a large TSA screener workforce in place chose to "kick out" the TSA screeners—though all five original opt-out airports (including San Francisco and Kansas City) have chosen to remain with contract service. The only airports that have taken advantage of the post-2004 opt-out provision have been small airports—either ones just beginning to offer scheduled air service at the level that requires airport screening or a few where TSA had difficulty matching its screener workforce levels to large seasonal variations in passenger traffic.

In Canada, after 9/11 airport screening became the responsibility of a new crown corporation called CATSA. Rather than hiring and training a large force of civil servants, CATSA contracts with a dozen private security companies that must meet defined performance standards. This enables the

numbers of screeners to be easily adjusted upward or downward, as threat levels dictate. And should terrorists turn their attention to other sectors at some point in the future, it would be relatively easy to scale back the extent of passenger and baggage screening in Canada. In most EU countries, screening is the responsibility of the airport, under national government regulatory oversight. In most cases, the screening operations are outsourced to private security companies, operating under performance contracts. Even more so than in Canada, the level and extent of such screening operations can be tailored to the circumstances of each airport. And the system retains the flexibility to increase or decrease the numbers employed for this purpose.

Several studies, by the Government Accountability Office and others, found the performance of TSA screening contractors to be as good as or better than that of TSA's own screeners. A 2008 report called the "Catapult study" was commissioned by TSA. It found that contract screeners performed somewhat better than TSA screeners and probably did so at no higher cost than TSA screeners. The company recommended that TSA reduce its administrative costs at the airports with contract screeners (those costs unfairly inflate the cost of contract screening) and that it take the initiative to expand contract screening to several types of airports: those with low-performing TSA screeners, those with large seasonal swings in passenger throughput, and those where TSA finds it difficult to hire and retain screeners. It also suggested giving screening contractors additional "degrees of freedom" to foster innovation, superior performance and cost controls. Instead of taking these findings and recommendations seriously, TSA did not release the Catapult study and instead did a quick study of its own downplaying the performance comparison and portraying the contract firms' cost in a less-positive light.

Late in 2010, as public outrage over TSA's introduction of body scanners and aggressive patdowns became a political issue, Rep. John Mica (R, FL), who had chaired the House Aviation Subcommittee that drafted the 2001 House bill, urged airports nationwide to take advantage of the outsourcing option in order to have more passenger-friendly screening. A number of large and medium-sized airports expressed interest in doing so—including Albuquerque, Charlotte, Indianapolis, Minneapolis/St. Paul, and both Orlando International and Orlando Sanford.

But in January 2011, new TSA Administrator John Pistole rejected all pending applications for the Security Screening Partnership (SSP) program and announced that no more airports could participate (other than the original five plus the dozen other small ones already in the program). This decision appears to be contrary to the language of the ATSA legislation that supposedly permits all airports that wish to opt out of TSA-provided screening to take part in the SSP program. The Senate reacted in February, unanimously enacting a bill in support of SSP. The measure is an amendment to the FAA reauthorization bill that later passed the full Senate. It mandates that TSA act on SSP applications within 30 days and to approve the six applications that were pending when Pistole announced his January decision. And it requires the TSA administrator to report back to Congress on any applications it rejects, giving the reason for such rejection.

In the House, where Mica now chairs the Transportation & Infrastructure Committee, that body released a major report on June 3rd, "TSA Ignores More Cost-Effective Screening Model." It

presents the result of a detailed comparison of screening costs and effectiveness at two major airports: San Francisco (SFO) with outsourced screening and Los Angeles (LAX) with TSA screening. Based on large differences in cost, driven by higher productivity and lower turnover and training at SFO, the study estimates that the cost of screening at LAX would be 42% lower if its screening were outsourced (\$52 million per year instead of nearly \$91 million per year). The report also notes the conflict of interest in TSA's dual roles as both the aviation security regulator and as the provider of most airport screening.

As of fall 2011, legislation to reauthorize TSA is slowly moving forward in both houses of Congress. Whether it will seriously reform airport screening remains an open question.

B. Trusted Traveler

The other major development in aviation security is the revival of the idea of a Trusted Traveler program. Shortly after 9/11, aviation experts Michael Levine and Richard Golaszewski suggested the idea. Based on the idea that someone holding a government security clearance should not have to go through the whole passenger-screening process (since he or she had already been found trustworthy), they suggested that it would be far more cost-effective to permit frequent flyers (who constitute a large fraction of all those showing up at airports each day) to volunteer for some kind of pre-clearance. If they passed, and could prove when they got to the airport that they are the person who was cleared (via a biometric identity card), they would go through an expedited line, no more burdensome than pre-9/11 screening. Subsequent analysis by operations researchers showed that the concept could cut passenger and baggage screening costs dramatically, while permitting screening resources to be focused on higher-risk passengers. Congress included a Trusted Traveler provision in the 2001 ATSA legislation, authorizing TSA to implement such a program.

What emerged from TSA was something it called Registered Traveler (RT). TSA allowed start-up company Verified Identity Pass to develop the technology and try it out at Orlando Airport. After several years, TSA opened the program to all airports and allowed other companies to develop inter-operable systems. By early 2009, there were three companies in the market, but nearly all the 22 participating airports were offering VIP's "Clear" program for expedited screening. Unfortunately, in June 2009, VIP declared bankruptcy, terminating all services. In the absence of other airports at which members could use their interoperable ID cards, the other two companies ceased operation as well.

The major flaw was that the TSA still required all RT members to go through exactly the same routine once they reached the checkpoint—removing shoes, jackets, liquids, laptops, etc. Thus, the only real benefit of a \$199/year membership was bypassing the unpredictably long lines that sometimes occur. This simply did not create a large enough value proposition to generate enough membership revenue to cover fixed and variable costs. TSA justified this approach by noting that RT members had not passed a background check. But that was only because the agency itself

refused to submit RT members' background information to the FBI for the kind of criminal history background checks used for airport workers who must have access to secure portions of the airport.

By early 2011, partially in response to continued outrage over newly intrusive passenger screening, industry organizations ramped up support for the creation of a true Trusted Traveler program. This was a principal recommendation of the Blue Ribbon Panel for Aviation Security convened by the U.S. Travel Association. It is also being championed on a global basis by the International Air Transport Association representing nearly all the world's airlines, and by the U.S.-based Business Travel Coalition.

By the time these groups' recommendations all appeared, in the first quarter of 2011, TSA Administrator John Pistole began endorsing risk-based screening and a Trusted Traveler approach in speeches and interviews. By summer 2011, TSA announced it would be launching a pilot program before the end of the year, initially aimed at premium-level frequent flyers of American and Delta using two each of their major hub airports: Dallas/Ft. Worth and Miami for American and Atlanta and Detroit for Delta.

Critics had been pointing out for several years that TSA's sister agency within the Department of Homeland Security, Customs & Border Protection, operates what amounts to an international RT program called Global Entry. Would-be members pay a \$100 fee and must pass both a background check and an interview. Then, when returning to the United States, they can bypass regular passport control and go to a kiosk where they scan their passport and biometric ID card. Global Entry is now in regular use at some 20 U.S. airports with international service, and reciprocal programs exist with Germany and the Netherlands. There are similar programs for frequent border-crossers between the United States and Canada and Mexico.

While two firms in mid-2011 began offering revived Registered Traveler (head-of-the-line) programs to airports (without background checks), the future role of such firms in the new TSA Trusted Traveler program remains unclear. The whole subject of risk-based screening is another topic one hopes Congress will address in TSA reauthorization legislation.

Part 3

Air Traffic Control

A. Global ATC Trends

During the past two decades, 51 governments have "commercialized" their air traffic control systems. That means they have organizationally separated the ATC function from their transport ministry (putting it at arm's length for safety regulation), removed it from civil service, and made it self-supporting from fees charged to aircraft operators for ATC services. The association for air navigation service providers, CANSO (the Civil Air Navigation Services Organization) as of mid-2011 lists 63 full members, i.e., entities that provide air navigation services. Of those, 51 are commercialized; these include the ANSPs of Australia, New Zealand, Thailand, India, Canada, the U.K., Ireland, Germany, Spain, Portugal, Austria, Switzerland, most of the rest of the E.U. countries, and South Africa. The 12 governmental ANSPs include Cyprus, Luxembourg, Greece, the Maldives, and the FAA's Air Traffic Organization (which is still embedded within that agency and funded by annual appropriations from the federal budget).

In early December 2010 CANSO published its first-ever Global Air Navigation Services Performance Report. Twenty-nine ANSPs provided data for the report, which covers 2005–2009. Most are from Europe, but others include FAA's ATO, Nav Canada, SENEAM (Mexico), AAI (India), ATNS (South Africa) and Airways New Zealand. The highest productivity, measured as IFR flight hours per controller, was recorded by the FAA ATO, followed closely by Nav Canada. On cost per IFR flight hour, the least costly were Mexico, Turkey, New Zealand, Estonia and Canada. The highest-cost and least cost-effective were AENA (Spain) and LVNL (Netherlands).

Speaking of Spain's AENA, that provider has been much in the news during 2010–11. For years, Eurocontrol's ANSP performance reports had highlighted AENA as by far the highest-cost provider in Europe, and when the agency announced a rate increase for 2010, the airlines went ballistic. In response, the Spanish government rescinded the rate increase and promised to reform the system. At the same time, negotiations to reform hours of work and overtime collapsed, leading to an illegal strike by controllers that December. In February 2010, the government issued a Royal Decree mandating revised working hours for controllers, increasing the number of regular hours in order to decrease the huge amounts of overtime that had led to an average controller compensation (including overtime) of close to \$300,000. It also reformed controller recruitment and training and deregulated the provision of control tower services, opening them to non-AENA competition.

16 | Reason Foundation

Parliament enacted the decree into law in May 2010, including a provision that will reduce AENA's rates by 15% over the 2010–2012 period. Control tower outsourcing began with an initial 13 small and medium towers in the second half of 2011, with another 47 to be outsourced in 2012. In September 2011 AENA announced that the team of Ferrovial and NATS (the UK's ANSP) won the contract for 10 domestic towers, with SERCO winning the bidding for three towers in the Canary Islands.

Britain's Conservative/Social Democrat coalition government announced that as part of addressing the government's large deficits, it will sell some or all of its 49% share ownership of NATS, which was commercialized as a public-private partnership in 2001. The Airline Group, made up of UK-based airlines, holds 42% of the shares and has announced its opposition to the sale, for which the government has hired Merrill Lynch as its financial advisor. Among those expressing interest are Global Infrastructure Partners (owner of Gatwick and London City Airports), Lockheed Martin and SERCO. Though the decision was announced in late 2010, no specifics about the share offering had been released by fall 2011.

Nav Canada, the commercialized ANSP for our NAFTA partner to the north, continues to exemplify high performance and cost-effectiveness. Three times it has won the annual Eagle award from the International Air Transport Association as the world's best ANSP—in 2001, 2010, and 2011. A Dec. 24, 2010 article in Canada's *National Post* provided a good overview of the changes the company has made since the former ATC division of Transport Canada was reborn as Nav Canada, and CNN published an April 2011 feature article and video on Nav Canada's successful transformation.²

B. U.S. ATC Reform

Despite a number of national commissions and other bodies having recommended ATC commercialization for the United States dating back to the mid-1980s, there has been little movement in that direction. The most recent official study was the Mineta Commission report in 1997 (*Avoiding Aviation Gridlock & Reducing the Accident Rate*), which recommended the creation of a user-fee-funded ANSP within the U.S. DOT. In 2000, Congress authorized the consolidation of all ATC functions of FAA within a new organizational unit within that agency, to be called the Air Traffic Organization (ATO). But Congress ignored the user-fee funding recommendation, keeping the ATO dependent on annual appropriations from Congress. In 2007 the FAA proposed funding reform that would shift largely from user taxes (mostly the tax on airline tickets) to user fees based on the en-route and terminal-area ATC services provided. With that revenue stream, the ATO would be allowed to issue revenue bonds for modernization programs. The proposal was basically ignored by Congress.

But the ATO does make use of its authority to outsource some services. Its longest-standing program of this type purchases control tower services, on a competitive bid basis, from tower operations companies. As of 2011 there are 246 control towers in the program, begun by the

Reagan administration in the wake of the illegal controllers' strike in 1981. Three companies currently run these mostly low-activity towers: Midwest ATC, Robinson Aviation and SERCO. Studies by the GAO and the DOT Inspector General have found that contract towers deliver performance as good as or better than comparable FAA-run towers, but also cost about half as much to operate. In August 2011, the U.S. Court of Appeals for the 6th Circuit dismissed a legal challenge to the contract tower program first filed in 1994 by controllers' union NATCA; the court ruled both that the administration has the legal authority to outsource tower operations and that the union lacked standing.

A more recent example of outsourcing is the Flight Service Station program. This set of facilities that provide flight plan filing and weather briefing services to private pilots was technologically outdated and very costly to operate. In 2005 Lockheed Martin won a competitive contract to modernize and consolidate FSS facilities. Thanks to a significant investment in automation and displays, this labor-intensive and facility-intensive program has been reduced from 58 sites to just six (three hubs and three satellite facilities) and from around 2,000 people to just over 600. FAA's monitoring reports find that the program is meeting or exceeding all 20 customer service performance metrics.

The most recent example of service outsourcing concerns one of the key building blocks of the NextGen ATC modernization program. Called ADS-B, it's a way of keeping track of aircraft locations using GPS position information, which is far more accurate than radar for this purpose. Rather than simply purchasing, installing and operating the hardware for the nationwide network of ADS-B ground stations, the ATO put out to bid the service of procuring, installing, operating and maintaining the entire network. The winning bidder was ITT, and the installation of the ground stations nationwide is proceeding on schedule.

Finally, ATC governance reform seems to be going into reverse as of 2011. In fall 2010 the FAA commissioned Monitor Group to do an organizational review of the entire FAA. Perhaps because the ATO's creation has never been fully accepted within some quarters of the FAA, the report picked up on differences within the organization and ended up recommending creation of "One FAA Culture." It also identified areas of "duplication" between the ATO and the rest of FAA, and its number-one recommendation was to "optimize shared services"—which would strip the ATO of its own information technology, finance and acquisitions functions. That, in effect, would dismantle the ATO as the platform from which a self-supporting ANSP could be created, as envisioned by numerous commission and consulting reports, including two from the Clinton administration plus the Mineta Commission. Since the consolidation of functions that created the ATO was authorized by Congress, undoing it will also require congressional approval—which may or may not be forthcoming.

Endnotes

¹ Amy Weaver, "Southwest Airlines Says Midway Indicates Privatization Can Fly in the United States," *HNTB Aviation Insight*, Spring 2010.

² See Scott Deveau, "Nav Canada as Beacon," *National Post*, December 24, 2010, http://goo.gl/NtZoP (accessed November 9, 2011), and Paula Newton, "Canada flies on top air safety record," CNN, April 28, 2011, http://goo.gl/8BSHP (accessed on November 9, 2011).



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