Deal or No Deal: Prospects for Airport Privatization in the United States
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Cover Photo: Dulles International Airport

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Abstract

Airport infrastructure investments, such as new runways, modern terminals, and improved ground access, are a top priority for governments and the traveling public. Robust revenues from parking, concessions, and landing fees pique the interest of private sector investors looking for long term, stable returns. Airport privatization proposes to bring the two together: governments give airport investment and management responsibilities to a private company that keeps excess returns, and then invests to attract more air service and passengers. While airports are commonly privatized abroad in places like Europe and Australia, only one airport is privatized in the United States. This report reviews the policies that govern airport privatization in the United States, recent history in domestic case studies, and the implications going forward. In the end, circumstances unique to the United States greatly limit the usefulness of privatization in solving airport problems. While privatization may be attractive in some circumstances, policymakers first need to clearly understand the problem they are trying to solve, and whether privatization is the best approach.
1. Introduction

There are more than 3,330 publicly owned airports as part of the national system in the United States today.¹ These airports move more than 2.5 million passengers each day safely and effectively, and they contribute $76 billion in total output to the American economy.² There is also substantial evidence that airports play a major role in regional economies.³

But there are also considerable challenges. In 2013, an Eno report showed the runway and terminal capacity at the nation’s major airports would be unlikely to accommodate projected growth in passengers over the next 20 years.⁴ The head of an airport trade group recently argued that airports are “at the breaking point” and need $75 billion of capital investments in the next few years.⁵ President Donald Trump and former Vice President Joseph Biden, who each referred to airports in metropolitan New York as “third-world”, famously buoyed this perception of major airport infrastructure deficiencies.⁶ While there is evidence many airports in the United States clearly benefit from competent public governance, critics disagree. One prominent analysis from 2008 argued that the reason for excessive flight delays is partly due to the failure of “publicly owned and managed airports” to improve their efficiency.⁷

It is no wonder that the call to privatize U.S. commercial airports has recently gotten louder. Advocates for increased privatization cite it as a means to raise one-time government revenues, increase airport investment, and remove politics from airport decision making.⁸ Commercial airports also represent an ideal potential private investment because of their consistent revenue sources from parking, landing, and concession fees. Unlike most highways and transit systems, airports regularly cover their costs with revenues from their facilities. Investment in airport infrastructure makes the facility more attractive to airlines and passengers, increasing revenues for investment return and meeting the public-sector goal of increasing airport use.⁹

² Federal Aviation Administration, “The Economic Impact of Civil Aviation on the U.S. Economy”, U.S. Department of Transportation, 2017
In addition, examples abroad show that airports often opt for mixed or full privatization. One comprehensive survey found that 41 percent of all European airports have some share of private ownership, compared with only one airport in the United States.\(^\text{10}\) However, passengers give these airports mixed reviews. According to a “the best in the world” passenger survey, 32 European airports rank in the top 100. Of those, 20 are public or run by a nonprofit, and 11 are private or mostly private. Meanwhile, all 15 U.S. top-ranked airports are fully public, but only five rank in the top 50 globally.\(^\text{11}\) While privatization is still more prevalent abroad, the U.S. context is starkly different because tax-exempt municipal debt can provide a cheaper alternative to private investment.

In other words, despite its worldwide attention, calls for airport privatization in the United States and the problems stakeholders are trying to solve are unproductively disconnected. Therefore, it is important to investigate the complexities of U.S. airport governance and lessons learned from past privatization experiences. This discussion is especially timely because of several major policy moves occurring today.

Renewed discussions about the role of the private sector in infrastructure broadly and transportation specifically are not entirely related to airport privatization. Cities, states, and metropolitan areas across the country are exploring new kinds of partnerships with private firms on everything from urban mobility, highways, to public transit.\(^\text{12}\) Most notably, the Trump administration recently proposed spinning off the nation’s air traffic control system from the federal government into a nonprofit entity separate from, but overseen by, the national government.\(^\text{13}\) But the circumstances that qualify privatization of air traffic control or a highway as sound policy are not necessarily universal to other projects or types of infrastructure. These disparate debates complicate the discussions about airport privatization.

Related is the push for airport privatization coming from Washington. In its infrastructure proposal, the administration recommended privatizing several government assets including two airports in metropolitan Washington owned by the federal government.\(^\text{14}\) It also called for the expansion of a federal pilot program on private ownership of airports. The proposal was recently taken up by Congress and incorporated by the House of Representatives into a proposal to reauthorize the Federal Aviation Administration.

\(^{10}\) Olivier Jankovec, “The Ownership of Europe’s Airports,” Airports Council International – Europe, 2016.
\(^{11}\) Skytrax, “World’s Top 100 Airports 2017,” World Airport Awards, 2017. For one other airport—Düsseldorf—the public and private shares are equally mixed.
\(^{13}\) Proposals to spin-off air traffic control date back to the Clinton Administration. See: Eno Center for Transportation, “Time for Reform: Delivering Modern Air Traffic Control,” 2017.
The purpose of this report is to analyze the outcomes of airport privatization in the United States, describe different models for the role of private firms in airports, examine the federal pilot program and its participating airports, and discuss key implications for both the public and private sectors.\textsuperscript{15} We find that while airport privatization may be attractive in some circumstances, policymakers first need to clearly understand the problem they are trying to solve and determine whether privatization is the best approach.

2. Background

For the purposes of this paper, “privatization” refers to the long-term lease or sale of an airport. But private sector involvement at U.S. airports is not binary in that they are wholly owned and operated either by a government or public authority or a for-profit company. All publicly owned airports in the United States have a high degree of private involvement for most airport operations. One expert states that, in some respects, U.S. airports are the most privatized in the world since almost all of the “finance, planning, and operating activities” are outsourced to private, for-profit companies.\textsuperscript{16}

Although not directly employed by the airport, federal public sector employees work at airports as security officers or Federal Aviation Administration (FAA) air traffic controllers, as required by federal law.\textsuperscript{17} But the remaining workers almost always employed by the airlines or private contractors. Airports’ use of private sector workforce is long established: a 1996 report by the U.S. Government Accountability Office (GAO) estimated 90 percent of the workforce at major U.S. airports is employed by the private sector.\textsuperscript{18}

A 2017 Congressional Research Service report highlights four broad types of private sector involvement in airports (Table 1). Most of the potential benefits of privatization, such as market efficiencies, outside expertise, and long-term cost control, are already captured through developer financing and typical service and management contracts. U.S. airports are already commercial enterprises run by professional managers. Even proponents of privatization admit that “U.S. airports are quite competently run,” and there is no crisis of competence in management.\textsuperscript{19} Despite general admonition of their third-world status, passenger satisfaction with North American airports overall is at an all-time high, according to a recent survey.\textsuperscript{20}

\textsuperscript{15} This analysis focuses on commercial airports, rather than general aviation since the federal pilot program is directed primarily at the former.


\textsuperscript{17} Morrison and Winston, 2010.


\textsuperscript{19} Greg Principato, “This is Why No Airport Privatization in the U.S.” NewAirport Insider, December 15, 2017.

\textsuperscript{20} J.D. Power, “North American Airports Effectively Navigating Construction, Capacity Challenges, J.D. Power
Table 1: Types of Private Sector Involvement at U.S. Airports

<table>
<thead>
<tr>
<th>Type of private involvement</th>
<th>Service contracts</th>
<th>Management contracts</th>
<th>Developer financing for capital investment</th>
<th>Long-term lease or sale</th>
</tr>
</thead>
<tbody>
<tr>
<td>Example:</td>
<td>Janitorial services Landscaping Shuttle bus operations Concessions</td>
<td>Parking facilities Airport-wide management</td>
<td>Terminal development Fuel systems Cargo Solar</td>
<td>Airport privatization pilot program</td>
</tr>
<tr>
<td>Specific case:</td>
<td>Pittsburgh Boston Washington, D.C.</td>
<td>Albany Indianapolis</td>
<td>BOSFuel La Guardia Austin rental car</td>
<td>San Juan Stewart</td>
</tr>
</tbody>
</table>

*Source: Tang, 2017.*

In addition to handing off airport operation and management, privatization may also be considered an attractive way to inject new funds into capital assets like airport terminals and runways. It can also provide a one-time payment to local governments for the privilege of a long-term lease. The United States has used private capital to fund other transportation investments such as highway, transit, and seaport expansions, with the private sector selling bonds to cover some of the upfront costs, repaid by future toll, fee, and/or tax revenues. Backed by future airport revenues, airports that need new terminals and runways could use the same private debt to improve and expand. However, several barriers limit the usefulness of private capital for public airports.

First of all, publicly owned airports can take advantage of tax-exempt public bonds, which the federal government offers to states, localities, and agencies like transportation departments and school districts. There is no federal cap on the amount of tax-exempt municipal debt governments can issue, and municipalities have broad discretion to sell them to individuals and institutions like banks. The interest received by holders of municipal bonds is exempt from federal income taxation, a perk that frees the issuing government to pay a lower premium and remain competitive. This makes the cost of borrowing for infrastructure improvements extremely cost effective for the public sector. They are generally backed by either general tax revenues or specifically the revenue generated on the airport property (e.g., airline fees, concessions, parking.).

States and localities are also allowed to issue debt for projects that have some private benefit often with the same tax privilege as municipal bonds. These private activity bonds (PABs) issued for airports are not subject to any kind of volume cap and are widely used. A recent report from the Congressional Research Service found that more than $7.8 billion in private activity bonds were issued between 2010 and 2015.

**Finds,” September 21, 2017.**


in PABs was issued for airports in 2015. PABs can only be issued by governmental authorities and not by the private sector, which must issue debt at taxable market rates that tend to be much more expensive than public bonding, although in some cases airports issues PABs in public-private partnerships (P3) for construction or on behalf of airlines for hangers.

Airports also have robust, diverse revenue streams and usually do not lack the funding or bonding authority to make improvements to their infrastructure and operations (see Table 2). These sources mean that, on average, airports in North America have net revenues that exceed their capital and operating expenses. This is naturally attractive to an investor and also a primary reason why airports are targeted for privatization.

### Table 2: Large Hub Airport Revenues, by Source

<table>
<thead>
<tr>
<th>Revenue Source</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Landing and Arrival Fees</td>
<td>38%</td>
</tr>
<tr>
<td>Cargo and Hangar Rentals</td>
<td>2%</td>
</tr>
<tr>
<td>Facility Leases</td>
<td>2%</td>
</tr>
<tr>
<td>Terminal Concessions</td>
<td>8%</td>
</tr>
<tr>
<td>Rental Cars</td>
<td>6%</td>
</tr>
<tr>
<td>Parking</td>
<td>14%</td>
</tr>
<tr>
<td>Interest</td>
<td>1%</td>
</tr>
<tr>
<td>Federal Grants</td>
<td>3%</td>
</tr>
<tr>
<td>Passenger Facility Charge</td>
<td>13%</td>
</tr>
<tr>
<td>Other</td>
<td>12%</td>
</tr>
</tbody>
</table>

*Source: Federal Aviation Administration (FAA) CATS Database, 2016, average over all large hub airports as defined by FAA.*

However, federal law requires all revenues generated by a public airport to be reinvested back into airport assets. This includes local taxes on aviation fuel, landing fees, parking revenue, and in-airport concessions. While this does not apply to service, management, and construction contracts, it makes long-term leases unappealing since a private partner cannot use that revenue to generate financial return for its investors.

Finally, a private partner might have to repay federal grants that previously went to the improvement of an airport, such as from the Airport Improvement Program (AIP), subject to the discretion of U.S Department of Transportation. They might also have to return

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25 49 U.S. Code § 47107(b)
any federal property or equipment. These grants have long-term restrictions on use, and repayment might be costly or burdensome for a hypothetical private entity managing the airport. Since there is very limited experience with airport privatization and the AIP terms vary by airport, it is unclear exactly how specific airports would be affected. Nevertheless, this requirement is clearly not conducive to privatization.

In order to address these regulatory hurdles, Congress created the Airport Privatization Pilot Program (APPP) in 1996 as a way to provide test exemptions for these restrictions. Under the APPP, the Secretary of Transportation can approve the privatization and waive the requirements for repayment and/or for the restriction of the use of airport revenues outside of the property. Initially there were five slots in the APPP program, which was increased to 10 in 2012. Only general aviation airports can be actually “sold” under the program; commercial airports can only be leased out.

But, even though the program was created intentionally to foment privatization, the path is not easy. For one, to be granted an exemption to the use of revenues, the sponsor of the transaction needs the concurrent approval of 65 percent of all airlines using the airport. The same super-majority of airlines must also approve all fee increases charged to airlines at a higher rate than inflation, which they are not keen to do. In addition, the FAA is also allowed to audit the operations and finances of the privatized airport in order to determine if it is collecting reasonable rents, landing fees, and other charges (though the program does not define “reasonable”).

Therefore, while the APPP does allow for privatization, the current rules make it very difficult to approve and not particularly attractive to private sector bidders. In fact, in more than two decades since the inception of the program, only two airports have actually been privatized: Stewart International Airport in New Windsor, New York; and Luis Muñoz Marin airport in San Juan, Puerto Rico. (These cases are discussed later in this report.)

As part of its major infrastructure package, the Trump administration proposed expanding the existing APPP. The current cap on the number and restriction on the type of airports that can participate would be removed, and the double-supermajority requirement for airline approval of an airport’s entry into the APPP would be changed to a simple majority. Airports would be allowed to offer incentive payments for early completion of AIP projects, and oversight of AIP grants would be loosened from advance application approval to post-

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28 The actual provision is 65 percent of all airlines using the airport and airlines representing 65 percent of the annual landed weight. See: Federal Aviation Administration, “Fact Sheet – Airport Privatization Pilot Program,” U.S. Department of Transportation, December 20, 2017.
expenditure audits. Various other provisions would further encourage the use of federal credit assistance like PABs by making them eligible for brownfield projects, rather than only greenfield projects as is the case today. This change would make long-term P3 leases of existing airports less costly to finance, perhaps stimulating more private sector interest.

The administration’s plan also calls for divestiture of Dulles International and Reagan National Airports. While this proposal seems consistent with the focus on airport privatization, it is actually an anomaly as these are the only commercial airports authorized and established by Congress and owned by the federal government. FAA began owning and operating Reagan National in 1959 and then Dulles in 1962. In 1985, both airports were transferred to a newly created regional authority via a long-term lease. The authority has been running both airports ever since, but they are still owned by the federal government, and their operations are still a strong interest of Congress.

Like much of the administration’s infrastructure plan, the proposal to rid the federal government of the Washington area airports was met with resistance. However, several changes to the APPP were incorporated into the FAA Reauthorization Act of 2018 that passed the U.S. House by a wide margin in April 2018. The bill makes several significant changes to the APPP including removing the word “privatization” and renaming it the Airport Investment Partnership Program. It also removes the participant cap (at 10 airports) and makes no distinction between how many or what type of airport can participate. Importantly, it streamlines the process for obtaining the exemptions for the restrictions on how revenue is used and the requirement that federal grants are repaid. It also allows multiple airports to apply under one sponsor, such as the Metropolitan Washington Airports Authority which oversees Reagan National and Dulles Airports. As of this publication, the bill awaits action by the U.S. Senate.

32 The Reason Foundation’s Robert Poole also points to the fact that Metropolitan Washington Airport Authority has $4.5 billion in outstanding bonds, making privatizing these airports unlikely. See Robert Poole, “White House Infrastructure Plan Boosts Airport Privatization,” Airport Policy News #122, Reason Foundation, March 1, 2018.
3. Airport Privatization Experience

While only a very few number of airports have applied to participate in the APPP, their examples are illustrative and important in order to discern the narrow set of conditions in which privatization is practical. Overall, the experience in the United States is decidedly mixed. The five American case study airports in this section, and their corresponding traffic levels, can be found in Figure 1.

Figure 1: Enplanements at Select U.S. Airports

Source: Federal Aviation Administration, Passenger Boarding (Enplanement) and All-Cargo Data for U.S. Airports dataset. “Enplanements” refers to passenger boardings at airports that receive scheduled passenger service.
3.1 Stewart International Airport

The first airport in the United States to be privatized under the APPP was Stewart International, an airport located 67 miles north of New York City in Orange County. The skies around metropolitan New York are famously congested and among the busiest in the world. Using Stewart to alleviate some passenger pressures from the other major airports was a public policy ambition for the region since at least the 1950s, but the airport needed upgrades. According to the GAO, the state sought the sale or lease of Stewart to a private partner in order to increase service, provide resources to invest in the airport, and boost tax revenue. Another analysis cited then-Gov. George Pataki’s interest in being a leader in “privatization alternatives” for infrastructure assets and operations.

In 1997, the New York State Department of Transportation (NYSDOT) received five responses to its request for proposals from potential operators of the airport. The next year, the National Express Group (NEG), a major British rail, bus, and coach transit company, inked a deal with the state, which was sent along to the FAA for final review and approval. NEG was awarded the right to operate the airport for 99 years and paid the state $35 million, which was invested back into airport operations. The state would also receive 5 percent of gross income each year beginning in the tenth year of the lease. New York did not request an exemption on the use of revenues because they knew from preliminary discussions with the air carriers they would be unable to receive their required approval. However, the state did request and receive an exemption from the requirement to repay federal grants and return property.

In the application, NEG affirmed that it had “extensive experience in owning, managing and operating airports” due to its acquisition of East Midlands and Bournemouth International Airports in the United Kingdom earlier in the decade. NEG also highlighted its management of Philippines’ Subic Bay International Airport in 1997 “during which time it became familiar with FAA procedures.” Per the parameters of the APPP, New York retained the right to inspect the airport operations and the financial records of NEG at any time. The lease stipulated that the transaction would have no impact on the fee structure for air carriers whose rates and charges would be unchanged, unless approved by the

37 U.S. GAO, 1996.
39 The operator was technically SWF Airport Acquisition, Inc., a wholly-owned subsidiary of National Express Corporation, which is a wholly-owned subsidiary of NEG.
41 Ibid.
airlines.

Unfortunately, the deal struggled from the outset, and by 2006, NEG sought to sell the lease to run the airport. The next year, Stewart returned to public hands when the Port Authority of New York and New Jersey purchased the remaining 91 years of the lease from NYSDOT in 2007. The Port Authority continues to run Stewart along with other major airports in the region.

There are several likely reasons why the deal with NEG collapsed. One is related to the severe downturn in aviation passengers that followed the terrorist attacks of September 11. According to the International Air Transport Association (IATA), from 2000 to 2001 national air passenger traffic fell 5.9 percent and another 1.4 percent the next year. Federal data shows that enplanements at Stewart dropped by 27.8 percent and another 11 percent during the same timeframe. For a private business model built on increasing revenue from non-aeronautical sources, such as new retail and restaurants in the terminal and car rental and parking concessions, traffic drops are difficult for any private partner to handle.

Yet in this case, it is clear that NEG was already reconsidering its strategy to expand from mostly public transit operations into aviation. Just one year after the state approved it, NEG asked NYSDOT to terminate the lease, which the state declined to do. That was right around the time NEG had sold off its three U.K. airport operation interests in order to concentrate on its bus and rail business. It is clear that NEG was concerned about its ability to generate a satisfactory long-term financial return and, according to the GAO, “was not interested in investing in the airport.” They also may not have been able to invest as the company nearly went bankrupt during this time when it overbid for a U.K. rail line.

Stewart represents a clear policy failure to successfully privatize a U.S. airport through the APPP process. It may not, however, have been a business failure for NEG. Two different reports cite the “significant return on investment” for the firm despite its desire to terminate the lease. The case of Stewart is useful as an example of the challenges that can arise when a private operator experiences significant internal transitions and the unpredictable role that external events can have on the revenues and operations of an airport.

43 Eno analysis of FAA data “Passenger Boarding (Enplanement) and All-Cargo Data for U.S. Airports.”
44 Ernico and others, 2012.
49 Daniel Reimer, “Airport Privatisation in the USA: Recent Legal Developments and Future Outlook,” Journal
3.2 San Juan Luis Muñoz Marín Airport, Puerto Rico

Today, the only privatized airport in the United States is Luis Muñoz Marín (LMM) Airport in San Juan, Puerto Rico. It is currently owned by the Puerto Rico Ports Authority (PRPA) and leased to Aerostar Airport Holdings (Aerostar), owned by ASUR and PSP Investments, under a 40-year lease that began in 2013. LMM is currently the 43\textsuperscript{rd}-busiest U.S. airport and, by far, the busiest in the Caribbean and the largest air cargo hub serving as an international gateway for the Americas.

Puerto Rico is a national leader in its efforts to work with private partners on a range of infrastructure projects. Through 2009 legislation, it established one of the earliest entities to regulate and facilitate such partnerships, the Puerto Rico Public-Private Partnerships Authority (P3A).\textsuperscript{50} These initiatives were done partly out of necessity accompanying a very challenging and well-known economic situation characterized by extremely high public debt loads, among other financial threats. Notably, the Commonwealth had been running out of cash since its economy began to contract in 2006. As a result, it failed to invest in important infrastructure assets like its airports.\textsuperscript{51}

The PRPA, in particular, had serious financial difficulties, and LMM needed significant investment and modernization. One comprehensive commentary noted the airport’s crumbling ceilings and floors, poorly maintained instrument landing system, and many inconveniences like unpleasant corridors, balky air conditioning, long delays at baggage claim, and insufficient retail and catering options.\textsuperscript{52} Perhaps most perniciously, it criticized the PRPA’s “unwieldy bureaucracy,” political patronage, and general lack of responsible management and oversight.\textsuperscript{53}

LMM was further battered when, in response to security threats, the U.S. Department of Homeland Security suspended two programs in 2003 that allowed travelers to transit through U.S. airports without a visa. The suspension of these programs severely impacted LMM as many flights eventually shifted to airports in the Dominican Republic and resulted in a loss of landing fees, maintenance, and repairs for many airlines.\textsuperscript{54} Passenger traffic declined precipitously: enplanements fell by 21.6 percent from a high of 5.3 million in

\textsuperscript{53} The PRPA also managed Puerto Rico’s 10 other airports and maritime port facilities. One study found that the institutional model of airports managed by authorities with jurisdiction of multiple air and maritime ports is almost always the least efficient. Tae H. Oum and others, “Ownership Forms Matter for Airport Efficiency: A Stochastic Frontier Investigation of Worldwide Airports,” Journal of Urban Economics, Vol. 64 (2), 2008.
\textsuperscript{54} “Report by the President’s Task Force on Puerto Rico’s Status,” 2011.
2005 to 4.1 million in 2009.\textsuperscript{55} The loss of revenue contributed to the PRPA’s two-third debt increase from 2004 to 2008, and its BBB-bond rating was just above junk bond status by 2009.\textsuperscript{56} By 2012, it was $60 million in debt to the electric utility, which threatened to cut off power to the airport.\textsuperscript{57}

Saddled with over $800 million in debt and unable to tap into the municipal bond market to make necessary investments in the LMM—even for basic upkeep and maintenance—Puerto Rico’s P3A studied whether a privatization model would address the airport’s massive challenges.\textsuperscript{58} In 2009, the PRPA applied to participate in the APPP, and in 2012, it eventually agreed to lease the airport to Aerostar for $615 million upfront, plus a share of revenues over the life of the lease.\textsuperscript{59} The airlines servicing the airport approved the privatization plan.

The FAA granted all necessary exemptions in order to apply $500 million of the upfront payment to PRTA debt relief. The remainder went to an early retirement program for PRPA employees, an air travel promotion program, and upgrades at regional airports. Aerostar also received an exemption from having to pay back federal grants that supported LMM and from restrictions from earning compensation from use of the airport. Aerostar held the rates charged fixed for five years, after which only increased at the rate of inflation. At no additional cost to the airlines, the company was also responsible for improving and modernizing the airport through an accelerated capital program.\textsuperscript{60} Unlike with Stewart in New York State, the airlines serving LMM generally supported the privatization efforts, given the poor management and substandard condition of the airport.

Importantly, the privatization plan made explicit efforts not to disenfranchise workers at the airport. Existing workers were promised that they would keep their jobs, and the then-U.S. Transportation Secretary guaranteed the plan would be rejected if the collective bargaining agreement were violated.\textsuperscript{61} Aerostar asserted that the $200 million in upgrades to the terminals created 3,000 jobs by 2014.\textsuperscript{62}

\begin{enumerate}
\item Eno analysis of FAA data “Passenger Boarding (Enplanement) and All-Cargo Data for U.S. Airports.”
\item Federal Aviation Administration, “FAA response to comments regarding the participation of Luis Muñoz Marin International Airport,” 2013.
\item In addition to the $615 upfront payment, the PRPA received $2.5 million for lease years one through five, 5 percent of gross revenues for years six through 30, and 10 percent of revenues in years 31 through 40. Moody’s Investors Service, “Privatization of Puerto Rico’s Main Airport Gets Final Approval, a Credit Positive,” March 2, 2013.
\item U.S. Department of Transportation, “Record of Decision for the Participation of Luis Muñoz International Airport, San Juan, Puerto Rico, in the Airport Privatization Pilot Program,” Federal Aviation Administration Docket 2009-1144.
\item Bipartisan Policy Center, “Infrastructure Case Study: San Juan Airport,” 2016.
\item Danica Coto, “Puerto Rico Airport to Unveil $200M in Upgrades,” USA Today, July 2, 2014.
\end{enumerate}
The privatization of LMM is widely considered to be a success. In addition to the debt relief brought to the PRPA, the LMM is now better managed, and the $260 million that Aerostar expected to spend in capital investments was critically needed. The private sector was well suited to address the mounting challenges that the airport faced, and there was widespread support from stakeholders, including the airlines. Some have asserted the ultimate deal for LMM was undervalued because the transaction was not negotiated in the public’s interest and undercut workers. Nevertheless, from 2013 through 2016, enplanements increased by nearly 6 percent, and average passenger fares decreased from $324 in 2013 to $290 in 2017. Aerostar officials testified that the privatization would ultimately create $2.6 billion in total economic value for Puerto Rico.

The devastating effects of Hurricane Maria in September 2017 could upset the apparent progress at LMM. Normal management and airport operations did not resume until the end of the year. The damage to the airport is currently being evaluated, but traffic is down nearly 20 percent over last year, which could have significant ramifications for the private partner to repay debt and maintain high quality operations.

### 3.3 Midway International Airport

Chicago Midway International Airport is one of the busiest airports in the Midwest and was briefly the busiest in the world shortly after it was acquired by the city in 1927. It is considered the “first great airport” in the United States. After O’Hare International Airport was built 16 miles to the north in 1955, Midway’s passenger traffic declined precipitously, but has since recovered thanks in large part to the arrival of Southwest Airlines in 1985 and internal renovations. In fact, 2016 was its busiest year ever with over 11 million passenger enplanements.

With this recent success it may seem odd that twice in the last decade, Chicago applied to the APPP program to privatize Midway. Yet, similar to the support of privatization in

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64 Eno analysis of FAA data “Average Domestic Airline Itinerary Fares.” Figures are for Inflation Adjusted Average Fares. Hurricane Maria made landfall in September 2017 and certainly has had a major impact on passenger demand and airfares but the figures from 2017 and 2016 are nearly identical. We also recognize that since 2005 airlines have begun to unbundled charges for things like checked bags, seat selection, meals, and drinks from the total ticket price. See: Eno Center for Transportation, “Is Air Travel Becoming Pricier for Travelers?” 2017.


66 PRNewswire, “ASUR 1Q18 Passenger Traffic Increased 9.3% YoY in Mexico and Declined 19.2% in San Juan, Puerto Rico and 5.2% in Colombia,” CISION PR Newswire, April 23, 2018.


68 Eno analysis of FAA data “Passenger Boarding (Enplanement) and All-Cargo Data for U.S. Airports.”
Puerto Rico, Chicago is experiencing its own fiscal challenges and is considered the “most aggressive instigator of infrastructure asset leases” in recent years.69

The first Midway application, in 2006, was strongly supported by then-Mayor Richard M. Daley who had already overseen the privatization of a range of city services and several highly visible transportation asset leases. Examples include the Chicago Skyway, an 8-mile toll road leased to a consortium in 2005 for $1.8 billion and four downtown parking garages leased in 2006 for $583 million. Both deals were for 99 years and are generally considered to be successful.70 However, another deal leasing the city’s 36,000 street parking meters to a private firm for 75 years at $1.2 billion is an infamous disaster due its lack of transparency, analysis, and prioritization of short-term payments over long-term taxpayer protections. Chicago’s Inspector General found the city received nearly $1 billion less than it would have earned without the deal.71

The impetus for Midway was consistent with the Chicago’s assertive efforts to transact with the private sector on infrastructure.72 The city received approval from the airlines operating at the airport, led by Southwest, to select a private operator to lease the airport, and in 2008, the City agreed to a 99-year, $2.5 billion lease with the Midway Investment and Development Corporation (MIDCo) consortium.73 The deal would have lowered airline-landing fees for six years, with increases at no greater than the rate of inflation. The entire payment would be made up front with a little more than $1 billion going for infrastructure improvements in the city, about another billion for pension contributions, and the remainder unrestricted.74 It appeared as if Midway would be the first privatized major U.S. airport. However, largely due to the financial strain brought on by the Great Recession the deal was cancelled in 2009 when MIDCo was unable to secure the financing and had to pay a $126 million penalty to the city.

Chicago renewed the effort to lease Midway in 2013 under Mayor Rahm Emanuel claiming the airport no longer provided “any direct financial benefit to the taxpayers.”75 By this time the city had the experience of the first application as well as the high-profile parking meter fiasco and took a more conservative approach to the transaction. The city limited the lease to no more than 40 years and intended to ask the FAA for the revenue and repayment exemptions. However, the second application was abandoned later in the year when one of

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70 However, the city recently had to pay $62 million to settle a dispute with the private partner in the parking garage deal over a provision that it would not allow new garages to be built. Dan Mihalopoulos, “City Hall’s $62 Million Blunder,” Chicago Sun-Times, May 23, 2015.
73 Tang, 2017.
74 Airports Council International - North America, “Fact Sheet: Chicago Midway Airport – Long-Term Concession and Lease,” undated. The exact splits are vague because the deal was never completed.
the two bidders withdrew their proposal. The city then suspended its efforts to privatize the airport and pulled out of the APPP altogether.

The bids to privatize Midway are clear failures, but for different reasons. On the first attempt, despite support from the airlines, the city, and other stakeholders, the concessionaire was unable to raise the capital needed for the upfront payment. The parties could not execute the deal, with added difficulty from the effects of the recession, and the transaction was not completed. The second deal was also not executed, but mostly because the city did not structure its parameters in a way that was palatable for investors. The rigidity is at least partially attributable to Chicago’s focus on protecting taxpayers and avoiding a deal like the one on its parking meters.76

3.4 St. Louis Lambert International Airport

In the late 1990s, the St. Louis Lambert International Airport was the nation’s 15th-largest, with more traffic than Seattle-Tacoma, New York LaGuardia, or Charlotte Douglas. Lambert was once the home of Trans World Airlines (TWA), but after a 2001 merger with American Airlines, many flights were moved to other larger airports in Chicago and Dallas. Daily operations by air carriers averaged about 1,000 takeoffs and landings per day in 1997, compared with just 350 in 2016. The airport now suffers from excess capacity.

Despite the traffic decline, Lambert is generally considered to be a very well-run airport, and enplanements have steadily risen since the 2009 nadir.77 Nevertheless, in 2017, the city applied to include Lambert in the APPP. (As of this writing, the city is still working to select a private partner and submit a final application to the FAA.) According to the application, the reasons for the change are not unlike other applications to the APPP. The city believes a private partner would help bring in more revenue from non-aeronautical, cargo and adjacent land which would boost the regional economy.78

In addition, the city explicitly wants to secure an upfront payment from a private partner and then use that revenue for projects elsewhere in the city, a process known as asset recycling. The city’s application stated that it expected to “free up more than one billion in capital” for non-airport uses. St. Louis Mayor Francis Slay specifically mentioned the North-South MetroLink light-rail expansion as a project that could be funded with proceeds from the lease.79 The city still needs to clear several hurdles, including securing support

77 Principato, 2017.
from the city boards and selecting a private sector deal to lease the airport.

Detractors say that recent bond rating upgrades indicate that the airport is already well operated, and the city could lose control over how the airport is run under a privatized lease. The city will have to determine whether the one-time infusion of cash is worth ceding control, and airlines operating in St. Louis have not yet indicated their support. Critics are also concerned about transparency and a conflict of interest since a non-profit organization—Grow Missouri Inc.—put up over $100,000 for the preliminary application to the FAA, and local leaders were largely unaware of the application. Grow Missouri was recently selected as an advisor to the city on the privatization initiative, further rankling local officials since the organization will only be paid if the deal is executed.

It is unknown if the city will go forward with a final application to privatize Lambert or if the airlines serving it would approve (Southwest carries almost 60 percent of Lambert’s passengers). However, it does appear that the primary impetus for the effort is to extract airport value for other city infrastructure projects rather than solving any specific airport-related problem. While asset recycling has proven effective in Virginia, Illinois, Indiana, and throughout Australia, it is still relatively untested in the United States. That does not mean St. Louis should not experiment with such new approaches, but it is unclear if such an arrangement would address the airport’s problems any better than the current arrangement.

### 3.5 Westchester County Airport

The Westchester County Airport is located about 60 miles, or a one-hour drive, south of Stewart Airport in New York. The airport is owned by the county and is served by five commercial airlines. While categorized as a “small” hub by the FAA, the airport serves five times as many passengers as Stewart and more than comparable small hubs in Fresno, Akron, or Colorado Springs. Only 16 percent of traffic at Westchester is commercial aviation. The vast majority of traffic is general aviation, making it one of the busiest

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85 For its part, the region has made several attempts to position itself as a hub for air cargo, particularly from China. One prominent initiative failed in 2013, and officials are working to launch another shortly. Leah Thorsen, “Air-cargo Facility at Lambert Named in Report of Trump-Backed Projects,” St. Louis Post-Dispatch, January 24, 2017.
86 Eno analysis of FAA data “Passenger Boarding (Enplanement) and All-Cargo Data for U.S. Airports.”
business aviation hubs in the United States.\textsuperscript{87} A private contractor has run Westchester since the mid-1940s, specifically AvPorts since 1977.

In 2016, the county applied to participate in the APPP. The primary motivation was to balance the county’s 2017 budget by redirecting resources used to operate the airport to other county services. Soon after, a $130 million, 50-year deal was announced then subsequently retracted by the county after concerns about the lack of transparency were voiced.\textsuperscript{88} A formal request for proposals was released in 2017, and later that year, Macquarie Infrastructure Corporation’s $1.1 billion, 40-year bid was chosen. A little less than half the money would support airport capital improvements with the remainder coming in as a payment to the county, of which $300 million would be upfront and applied directly to the county’s general fund. The county board has yet to approve the deal, and there are indications that the new county executive will reconsider the initiative.\textsuperscript{89}

Though not as nationally prominent as the others, the proposal to privatize Westchester’s airport is highly controversial locally. In addition to concerns about transparency, citizen groups have formed to protest the feared increases in aircraft traffic and concerns about damage to an adjacent reservoir. The former county executive who championed the privatization proposal stated publicly that the goal was to monetize it for budgetary purposes. He said that AvPorts was “doing a good job” operating the airport and that the airport was in good condition.\textsuperscript{90} The drive to privatize the airport appears to be a difficult proposition in this case.

### 3.6 International Examples

There is considerable academic literature from experts who maintain that privatization will create additional competition and lower prices for travelers.\textsuperscript{91} The best examples for this argument largely lie overseas. While the role of the private sector in infrastructure is very different in the United States, it is useful to understand some of the key lessons and experiences with airport privatization in other countries. A recent Reason Foundation privatization report notes that the outright sale of an airport (or part of it) may be common in Europe, but the model for the rest of the world is a long-term lease or concession, as allowed under the APPP.\textsuperscript{92} Rules and regulations may differ, but the main motivations for considering different models of privatization persist: improving management, generating revenue for governments, securing private capital for infrastructure improvements, and

\textsuperscript{88} Curt Epstein, “Major NYC Bizav Hub to Seek Privatization,” AIN Online, November 14, 2016.
\textsuperscript{90} Transcript of Rob Astorino’s Telephone Town Hall, September 27, 2017.
\textsuperscript{91} See e.g., Clifford Winston and Gines de Rus, Aviation Infrastructure Performance: A Study in Comparative Political Economy, Brookings Institution, 2008.
leveraging airport amenities like catering and parking. Other issues like access to capital markets are less relevant.

For example, as with San Juan and Chicago, some countries—including Japan, Spain, and Portugal—are intentionally pursuing airport privatization as an effort to manage very high levels of sovereign debt.\(^{93}\) Most prominently, Greece privatized more than a dozen mostly tourist airports for $1.3 billion in 2015, specifically intending to curb their national economic crisis.\(^ {94}\) Financially strained national and state authorities in Brazil embarked on a large-scale initiative to privatize many public assets, including airports, in order to cover costs like payroll and pensions.\(^ {95}\) If the key metric for success is government debt relief, these experiences were certainly successful. But in Brazil, for example, one concessionaire recently returned its airport to the government, and overall seat capacity is down.\(^ {96}\) Of course, part of the problem is Brazil’s severe economic downturn, but this outcome reinforces the limitations of what privatization can accomplish.

Other nations continue to lean heavily on private investors to both build out their infrastructure and operate certain assets. India is a prime example of a rapidly expanding country that turned to the private sector to bring in new capital for its airports. In 2009 and 2011, the government allowed the private operators of the Mumbai and Delhi airports to assess a special development fee on passenger tickets to help cover the cost of modernization.\(^ {97}\) The result was a sharp increase in passenger fares.\(^ {98}\)

The United Kingdom has always been on the forefront of infrastructure privatization and led the global effort on airports with its $2.5 billion sale of the British Airports Authority and its seven airports in 1987. In doing so, it allowed the airports to impose market pricing and to charge airlines higher landing fees during peak travel times at the London airports. While these charges increased operational efficiencies, they also increased costs for passengers.\(^ {99}\)

In many cases, the international experience is not unlike that in the United States in that a myriad of factors beyond governance—such as location, size, market, regulations, competition—determine the success of an airport’s operations, the cost of passenger tickets,

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and the quality of non-aeronautical services like catering, parking and other amenities. For this reason, one analysis of major airports in the United States and Europe found no significant relationship between airport productivity and the ownership model.\footnote{Bijan Vasigh and Javad Gorjidooz, “Productivity Analysis of Public and Private Airports: A Causal Investigation,” Journal of Air Transportation, Vol. 11 (3), 2006.} Another study found that fully or partly privatized airports are among the most productive, while those operated by multi-purpose port authorities are the least.\footnote{Tae Oum, and others, “Ownership Forms Matter for Airport Efficiency,” Journal of Urban Economics, 2008.} Whether airports are natural monopolies is hotly debated over the world. Even less clear is whether the ownership and governance model have any significant influence over that debate.

### 4. Policy and Practice Implications

Despite the prevalence of airport privatization around the world, there is only one successful example in the United States. While there has been stated interest from time to time, only eight commercial airports have even applied to participate in the APPP and only two are large hubs (see Table 3).\footnote{One analysis asserts that private equity firms will be the ones most interested in small airports with one terminal and less than 5 million passengers that are poised to grow in a short period. Pension funds would likely seek large, stable assets that produce returns over time. See: Chow and Smith, 2013.} This analysis demonstrates that there are several likely reasons for this lack of activity along with key implications for policy and practice.

<table>
<thead>
<tr>
<th>Airport Name</th>
<th>Application Date</th>
<th>Status</th>
<th>Hub Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>St. Louis Lambert International Airport</td>
<td>2017</td>
<td>Preliminary application accepted</td>
<td>Large</td>
</tr>
<tr>
<td>Westchester County Airport</td>
<td>2016</td>
<td>Preliminary application accepted</td>
<td>Small</td>
</tr>
<tr>
<td>Chicago Midway International Airport</td>
<td>2006 and 2013</td>
<td>Preliminary application withdrawn</td>
<td>Large</td>
</tr>
<tr>
<td>Luis Muñoz Marin International Airport</td>
<td>2009</td>
<td>Final application approved</td>
<td>Medium</td>
</tr>
<tr>
<td>Louis Armstrong New Orleans International Airport</td>
<td>2009</td>
<td>Application withdrawn</td>
<td>Medium</td>
</tr>
<tr>
<td>Stewart International Airport</td>
<td>2003</td>
<td>Final application approved. No longer participates.</td>
<td>Nonhub</td>
</tr>
<tr>
<td>Rafael Hernández Airport</td>
<td>2000</td>
<td>Application withdrawn</td>
<td>Nonhub</td>
</tr>
<tr>
<td>Niagara Falls International Airport</td>
<td>1999</td>
<td>Application withdrawn</td>
<td>Nonhub</td>
</tr>
</tbody>
</table>

Regulatory hurdles. As discussed, there are significant restrictions on the use of airport revenue and potential concerns about paying back federal money invested in privatizing airports. The changes to the APPP incorporated in the U.S. House of Representatives’ pending FAA reauthorization may address this somewhat by combining all the possible exemptions, however the bill’s language does not remove the hurdle completely. The FAA still has the ultimate authority to approve or deny all applications, and the process is long and time-consuming. According to the GAO, Midway and LMM airports took 83 and 38 total months, respectively, to navigate the privatization process. While this also includes time the airports spent negotiating with their airlines, the regulatory path is challenging.

Negotiations with labor. Organized labor monitors many aspects of infrastructure privatization closely in order to ensure both their public and private sector members are protected. The potential effects of privatization on airport workers are largely dependent on the state and local laws for a particular airport. U.S. Code protects any collective bargaining agreement in place before lease negotiations, and the U.S. House’s FAA reauthorization proposal does not attempt to change that. But this means private firms have to navigate different sets of rules for different airports and the political climate around labor on a case-by-case basis. The GAO references Chicago and San Juan where airport public officials voiced strong support for allowing workers to keep their jobs, or similar ones, although the APPP does not require it. At the same time, labor has its hands full monitoring existing private contracts.

Financial considerations. Most airports are owned by municipal governments, have robust revenue streams, and can borrow money at tax-free government rates. Private owners or concessionaries do not always bring “new” money to the table, would borrow at higher rates, and would not be able to take advantage of federal grant programs as publicly owned airports can. Of course, in certain instances where the public authority is saddled by severe debt loads, private capital is very attractive—especially as an upfront payment that the government may be able to repurpose through asset recycling. However, asset recycling has no direct benefit for the airport itself, and few cities and states have the expertise to execute such complex transactions.

Concerns about transparency. Another common element between the United States and other countries is the call for greater transparency and collaboration in decision-making. While this is not by itself particularly insightful, it seems to be a particularly acute problem for airport privatization. In St. Louis and San Juan, local officials expressed concern about
being left out of early deliberations. Chicago was particularly saddled with concerns for how both the parking meter and first Midway deals were prearranged. The recommendations from that city’s Inspector General are a good framework for future deals, including considering alternatives that solve short-term budget problems.107

Perceptions of problems. Since most state and local governments in the United States have access to money and many airports are well run as public assets, it not clear whether the APPP is relevant to most airports. The biggest problems stem from passenger frustration with disruptions caused by major construction and expansion projects at large airports such as Chicago O’Hare, Los Angeles International, and all three major airports in metropolitan New York City. This suggests that addressing travelers’ concerns is more a question of working with private partners on aviation infrastructure, rather than operations and management—the two functions that are often contracted out already. Instead, public-private partnerships (P3) to build, renovate, and modernize new facilities and operate terminals are an alternative means for capital investment. New York’s LaGuardia’s $4 billion project is the largest P3 for new transportation infrastructure ever in the United States and will transform the much-maligned airport.108 Other P3 projects in Denver, Austin, and New York’s JFK are also underway.

Limitations on market incentives. Privatization broadly promises to bring greater competition along with a better product and lower prices for consumers.109 While this works in many aspects of transportation, airports are problematic because they are inherent monopolies in regional markets, limiting the incentives for efficiencies.110 Few cities have more than one airport, and for those that do, the airports are far apart enough to serve distinct parts of the region. Studies as to whether international examples of airport privatization abuse their market power are at best inconclusive and even contradictory in some cases.111

110 Ellis Juan, “Privatizing Airports – Options and Case Studies,” The Word Bank, Note No. 82, June 1996.
5. Conclusion

U.S. airports face a host of challenges, yet full privatization and long-term leases are not likely to solve them. Instead of starting with the question of whether an airport should be privatized, policymakers and regional leaders need to ascertain the root problem or problems they are trying to solve and assess all potential solutions. Privatization can make sense for an airport in dire straits. If an airport has an intractable problem with poor management or is so heavily debt-laden that it is unable to invest, privatization might directly address those problems as it did in San Juan.

But if seeking to increase competition, decrease costs, and improve management, airports already have a host of tools at their disposal that fall short of navigating a complex regulatory and legal process. Airports regularly engage the private sector through service and management contracts as well as private financing and construction of terminals and runways. Most privatization efforts today are either ideological or are rooted in asset recycling efforts for one-time government cash infusions for other priorities. The latter can be a positive net gain, but does not solve any specific airport problem nor does it give airport owners flexibility and control in the long term. Privatization for its own sake is bad public policy. But airports should have it available as a tool and evaluate it along with all other options.

Even so, airport privatization in the United States currently faces a number of major practical, financial, political, and programmatic hurdles. Even with the recent changes to the tax code and efforts to make private borrowing for public infrastructure more attractive, public authorities and governments still have access to tax-exempt revenue bonds. The restrictions on revenue use repayment may be addressed by amendments to the APPP, but regulatory barriers inherent in the program remain difficult to overcome. One privatization expert pointedly referred to the perception that the APPP itself is not so much a pathway, but is rather an “obstacle course” for privatization due to its limiting and cumbersome process.112 Even with Congress’ proposed changes in the FAA reauthorization bill, those impediments may not be overcome any time soon. In the meantime, the aviation industry should build on their structural strengths, including robust revenues, access to tax exempt borrowing, and experience engaging with the private sector, to improve airport conditions using P3s and other tools.
