

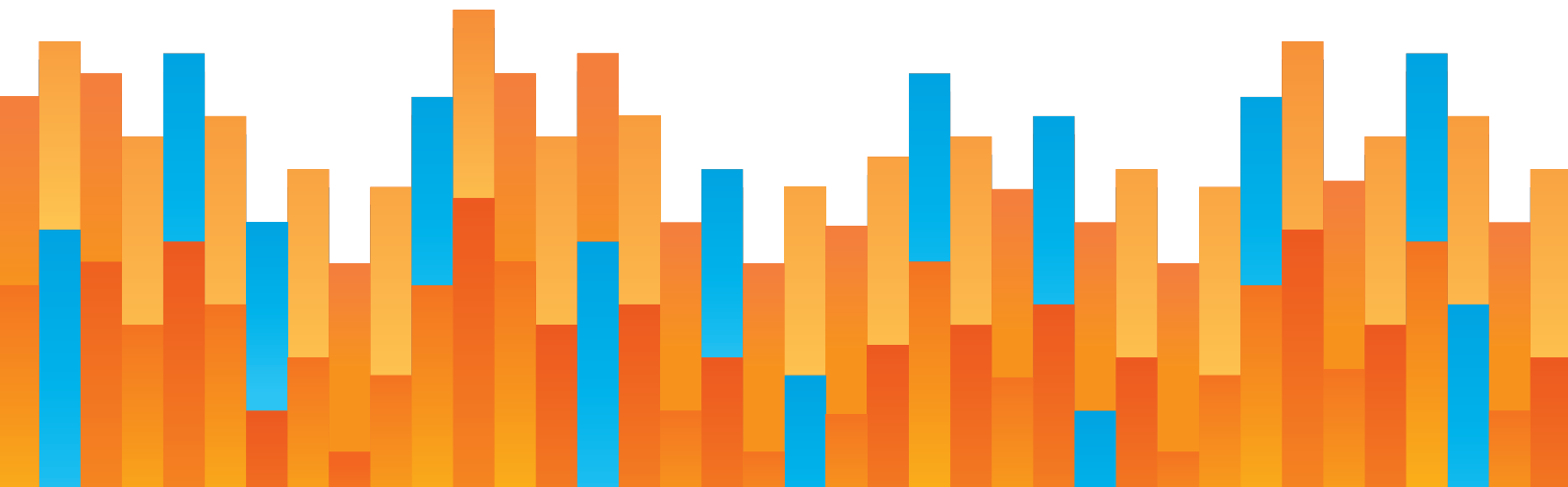


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ANNUAL AVIATION INFRASTRUCTURE REPORT: 2026

by Marc Scribner

May 2026





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PART 1

INTRODUCTION

In the second half of the 20th century, the world's airports and air traffic control (ATC) systems were essentially all departments of governments. Two events in 1987 launched an ongoing wave of organizational and government reforms: the privatization of the British Airports Authority (BAA) and the corporatization of the New Zealand government's ATC functions as Airways New Zealand.

BAA was privatized as a single entity comprising the three major London airports plus several other airports in the United Kingdom. Later government policy decisions led to selling London Gatwick, London Stansted, and two Scottish airports to new private owners. The improved performance of the privatized airports inspired a global wave of airport privatization and long-term public-private partnerships (P3s) that has resulted in over 100 large and medium-sized airports being either sold to investors or long-term leased as revenue-based P3s—in Europe, Asia, Latin America, and elsewhere. The outlier has been the United States, which has only three P3-leased airports (San Juan International, Tweed New Haven, and Avon Park Executive in Florida) and a small number of P3 arrangements for airport terminals and other individual facilities.

“

The improved performance of the privatized airports inspired a global wave of airport privatization and long-term public-private partnerships...

”

The corporatization of Airways New Zealand in 1987 also led to a global trend under which more than 60 countries subsequently separated their ATC systems from the government’s transport ministry and set them up as self-supporting corporations, regulated for safety at arm’s length from the government. Within the first decade of this trend, the leading ATC providers organized a trade association called the Civil Air Navigation Services Organization (CANSO). Today CANSO has 96 full members (providers of ATC services) and 98 associate members (mostly supplier companies).¹ CANSO is the ATC counterpart of the global organizations for airlines (IATA) and airports (ACI).

This report reviews developments in the United States and worldwide regarding private-sector participation in airports and air traffic control. While the United States remains an outlier when it comes to airport and ATC organization and governance, interest in airport privatization via long-term P3 leases continues.

¹ Civil Air Navigation Services Organization, “Member directory,” CANSO website, <https://canso.org/our-members/member-directory> (last accessed 9 Feb. 2026).

PART 2

AIRPORTS

2.1

AIRPORT PRIVATIZATION AND P3 OVERVIEW

The term “airport privatization” refers to several different types of changes compared to traditional 100% government ownership and operation. The most sweeping form is the sale of the airport’s ownership (as in the original BAA privatization) via a public offering of shares. A more common model in most of Europe is the sale of either a majority or minority stake in the airport. In Australia, much of Asia, and Latin America, the most common model is the long-term lease as a public-private partnership (P3). Lease terms typically vary from as few as 25 years to as many as 99 years (Australia). The P3 model is also used for components of an airport, such as a new terminal (or even a new runway, as occurred in Bogotá, Colombia). In the U.S., the P3 model is permitted under federal law for entire airports as well as airport components.

In 2025, trade association Airports Council International released a policy paper on worldwide airport private-sector participation.² Table 1 is re-created from that report and uses 2024 data on airport ownership structures and 2019 data on passenger traffic, the most recent available. It shows that Latin America and the Caribbean led the way in the fraction of passenger traffic (81.3%) at airports with majority or near-majority private-sector investment, with Europe closely behind at 80.6%. North America was lowest, at 7.3% of

² Airports Council International, “Airport Development Concession Agreements: Global Approaches and Guidelines for Public-Private Partnerships,” Oct. 2025.

airports. For the world overall, 49% of all passenger air traffic moves through airports with significant private investment.

TABLE 1: AIR PASSENGER TRAFFIC BY REGION AND AIRPORT OWNERSHIP

| Region | Percent Private | Percent Government |
|----------------------------|-----------------|--------------------|
| Latin America & Caribbean | 81.3% | 18.7% |
| Europe | 80.6% | 19.4% |
| Asia-Pacific & Middle East | 47.0% | 53.4% |
| Africa | 24.3% | 75.7% |
| North America | 7.3% | 92.7% |
| World | 49.0% | 51.0% |

Source: Airports Council International, 2025

More than three decades of growth in airport privatization have led to the emergence of global airport companies, some of which began with airports that were privatized early on, such as London Heathrow and Germany’s Frankfurt. When new opportunities arise to bid on shares in airport equity or to develop a new airport or terminal via a long-term P3 agreement, these companies are generally among the bidders, sometimes in partnership with infrastructure investment funds and/or public pension funds.

“
In the U.S., the P3 model is permitted under federal law for entire airports as well as airport components.
 ”

Table 2 lists the largest investor-owned airport companies, ranked according to their 2024 revenue, derived from airport group financial statements. Revenue reported in other currencies is converted to U.S. dollars using December 31, 2024 exchange rates. The total 2024 revenue of the investor-owned airport companies is \$55.4 billion, representing 28.4% of 2024 total world airport revenue of \$194.9 billion.³ This reflects a significant recovery of global airport revenue from the pandemic-caused collapse in air travel, which reached a low of \$66.3 billion in 2020. The 2024 revenue share of 28.4% is above the pre-pandemic

³ Airports Council International, “2026 Airport Economics Report,” March 2026.

share in 2019, when investor-owned airport companies collected \$48.3 billion—or 26.6%—of \$181.7 billion total global airport revenue.

TABLE 2: LARGEST INVESTOR-OWNED AIRPORT COMPANIES BY REVENUE, 2024

| Airport Company | HQ Country | Main Airport(s) | Privatiz. Status | 2024 Revenue (\$M) | 2023 Revenue (\$M) | 2022 Revenue (\$M) | 2021 Revenue (\$M) | 2020 Revenue (\$M) | 2019 Revenue (\$M) |
|-----------------------------|--------------|-----------------|------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|
| Aéroports de Paris | France | Paris—DeGaulle | Partial | \$6,374 | \$6,045 | \$5,016 | \$3,166 | \$2,611 | \$5,264 |
| Aena Aeropuertos | Spain | Madrid | Partial | \$6,032 | \$5,543 | \$4,475 | \$2,768 | \$2,740 | \$4,977 |
| Vinci Airports | France | Gatwick, Lisbon | Full | \$4,684 | \$4,342 | \$2,867 | \$1,354 | \$1,209 | \$2,947 |
| Fraport | Germany | Frankfurt, Lima | Partial | \$4,582 | \$4,400 | \$3,418 | \$2,443 | \$2,049 | \$4,150 |
| Heathrow Airport Holdings | U.K. | Heathrow | Full | \$4,454 | \$4,682 | \$3,525 | \$1,639 | \$1,606 | \$4,083 |
| Airports of Thailand | Thailand | Bangkok | Partial | \$1,974 | \$1,444 | \$480 | \$213 | \$1,039 | \$2,024 |
| Corporación América | Argentina | Buenos Aires | Full | \$1,843 | \$1,400 | \$1,379 | \$707 | \$607 | \$1,558 |
| TAV Airports | Türkiye | Istanbul | Full | \$1,718 | \$1,441 | \$1,125 | \$595 | \$368 | \$856 |
| Manchester Airports | U.K. | Manchester | Partial | \$1,680 | \$1,572 | \$1,245 | \$624 | \$256 | \$1,183 |
| New Kansai Intl. Airport | Japan | Kansai | Full | \$1,571 | \$1,327 | \$759 | \$664 | \$525 | \$2,084 |
| Flughafen Zürich | Switzerland | Zürich | Partial | \$1,461 | \$1,471 | \$1,105 | \$748 | \$694 | \$1,218 |
| Mundys | Italy | Rome | Full | \$1,444 | \$1,311 | \$994 | \$800 | \$496 | \$1,067 |
| ASUR | Mexico | Cancún | Full | \$1,364 | \$1,471 | \$1,160 | \$782 | \$451 | \$826 |
| Malaysia Airport Holdings | Malaysia | Kuala Lumpur | Partial | \$1,295 | \$1,032 | \$710 | \$402 | \$462 | \$1,259 |
| GAP | Mexico | Guadalajara | Full | \$1,283 | \$1,526 | \$1,156 | \$782 | \$474 | \$759 |
| GMR Airports | India | Delhi | Partial | \$1,218 | \$875 | \$808 | \$460 | \$494 | \$746 |
| Sydney Airport | Australia | Sydney | Full | \$1,200 | \$1,013 | \$700 | \$453 | \$619 | \$1,140 |
| Flughafen Wien | Austria | Vienna | Full | \$1,090 | \$1,025 | \$742 | \$464 | \$408 | \$961 |
| Guangzhou Baiyun | China | Guangzhou | Partial | \$1,017 | \$900 | \$576 | \$829 | \$800 | \$1,193 |
| SEA Group | Italy | Milan | Partial | \$912 | \$881 | \$822 | \$398 | \$337 | \$849 |
| Brussels Airport Co. | Belgium | Brussels | Full | \$776 | \$734 | \$552 | \$312 | \$249 | \$738 |
| Beijing Capital Airport | China | Beijing | Partial | \$752 | \$624 | \$323 | \$535 | \$549 | \$1,565 |
| OMA | Mexico | Acapulco | Full | \$722 | \$867 | \$612 | \$436 | \$207 | \$401 |
| Australia Pacific Airports | Australia | Melbourne | Full | \$715 | \$709 | \$367 | \$248 | \$629 | \$728 |
| Copenhagen Airports | Denmark | Copenhagen | Partial | \$704 | \$569 | \$508 | \$264 | \$259 | \$652 |
| Athens Intl. Airport | Greece | Athens | Partial | \$689 | \$664 | \$511 | \$443 | \$237 | \$581 |
| Brisbane Airport Corp. | Australia | Brisbane | Partial | \$620 | \$561 | \$341 | \$326 | \$570 | \$584 |
| Auckland Intl. Airport | New Zealand | Auckland | Partial | \$501 | \$388 | \$190 | \$191 | \$407 | \$490 |
| Düsseldorf Airport | Germany | Düsseldorf | Partial | \$459 | \$453 | \$375 | \$238 | \$229 | \$530 |
| Airports Co. S. Africa | South Africa | Cape Town | Partial | \$417 | \$351 | \$354 | \$234 | \$147 | \$494 |
| Perth Airport | Australia | Perth | Full | \$416 | \$401 | \$247 | \$212 | \$331 | \$346 |
| Aéroports de la Côte d'Azur | France | Nice | Partial | \$323 | \$331 | \$282 | \$195 | \$161 | \$325 |
| Hamburg Airport | Germany | Hamburg | Partial | \$295 | \$285 | \$232 | \$147 | \$146 | \$308 |
| AGS Airports | U.K. | Glasgow | Full | \$275 | \$248 | \$201 | \$117 | \$98 | \$289 |
| Gruppo SAVE | Italy | Venice | Partial | \$264 | \$259 | \$273 | \$99 | \$86 | \$270 |
| Birmingham Airport Holdings | U.K. | Birmingham | Partial | \$230 | \$193 | \$81 | \$32 | \$219 | \$214 |
| Budapest Liszt Airport | Hungary | Budapest | Full | * | \$371 | \$300 | \$164 | \$142 | \$370 |
| Edinburgh Airport | U.K. | Edinburgh | Full | * | \$357 | \$234 | \$86 | \$93 | \$294 |

Source: Author's analysis of individual airport company financial statements for FY 2024.

* To avoid double-counting, FY 2024 revenue for Budapest Liszt Airport and Edinburgh Airport is not reported separately due to acquisitions by Vinci Airports.

Many privatized airports on this list score highly on the annual Skytrax survey of airline passengers' airport preferences. The majority of the 38 companies in Table 2 have one or

more major airports selected by Skytrax passengers as among the world's 100 best airports. Among those included in the top 25 Skytrax airports are Paris de Gaulle (#7), Rome Fiumicino (#8), Zürich (#10), Istanbul (#14), Vienna (#15), Melbourne (#16), Kansai (#21), and London Heathrow (#22). By contrast, only seven U.S. airports rank in the top 50 Skytrax airports: Houston Hobby (#27), New York LaGuardia (#39), Houston George Bush (#33), Seattle-Tacoma (#38), Dallas-Fort Worth (#41), San Francisco (#45), and Cincinnati/Northern Kentucky (#49).⁴

Skytrax respondents also gave high scores to airports in Europe and Asia that have been “corporatized,” which means reorganized as a government-owned commercial entity, operating under normal accounting rules and sometimes paying taxes like any other business. Among high-scoring airports of this type were Singapore Changi (#1), Tokyo Haneda (#3), and Munich (#9).

One consequence of airport privatization has been the emergence of airport groups that manage multiple airports. A 2022 study commissioned by ACI identified 27 airport groups composed of 425 airports, which collectively handle 29% of global passenger traffic and 23% of global cargo tonnage.⁵ The report found numerous ways in which the airport group model adds value, such as economies of scale, economic resilience, and increased ability to finance capital improvements.



Recent empirical research on the impact of airport privatization found far better airport performance if private infrastructure funds lead the privatization entity.



⁴ Skytrax, “World’s Top 100 Airports 2025,” <https://www.worldairportawards.com/worlds-top-100-airports-2025/> (27 Jan. 2026).

⁵ Airports Council International, ICF, and Oxford Economics, “Value creation by Airport Groups: A study on the airport group operating model and its benefits to the aviation ecosystem,” ACI Study, July 2022.

Recent empirical research on the impact of airport privatization found far better airport performance if private infrastructure funds lead the privatization entity.⁶ The research team, led by Sabrina T. Howell of New York University’s Stern School of Business, began with a database consisting of 2,444 airports in 217 countries over a sample period from 1996 to 2019, of which 437 have been privatized. Since 102 of the airports have been owned at least once by a private infrastructure fund, the team was able to compare the performance of airports with majority infrastructure fund ownership and those with none or only a minority stake.

Among the overall results is that airports with majority infrastructure fund ownership end up with 21% more passengers per flight. Growth in passenger traffic is four times as much for those airports compared with privatized airports without majority infrastructure fund ownership, according to the study. Airports owned by infrastructure funds are more likely to have deregulated airport pricing, which leads to airlines using larger aircraft, on average. And the airport’s physical capacity expands, especially the size of its terminals. And while privatized airports of both ownership types show increases in the number of airlines and routes, the increases are larger for airports owned by infrastructure funds, including a far larger increase in service by low-cost carriers. Airports operated by entities controlled by infrastructure funds are also more likely to score higher in ACI’s annual Airport Service Quality awards.

After describing a number of tests of their data, the authors conclude that “privatization consistently leads to better performance only with [infrastructure fund] involvement.” These companies bring knowledge of global best practices, new managers with higher-powered compensation, and capital. And this leads to new strategies, including investing in capacity expansion, service improvements, and better negotiating with airlines. The authors point out that airline passengers in many cases have options, such as an alternative airport, driving, or rail travel. Hence, service quality becomes very important to infrastructure funds.

2.2

AIRPORT INDUSTRY CHANGES IN 2025

Air travel volume has recovered much more rapidly from the COVID-19 pandemic than many had initially expected. ACI’s latest traffic forecast projects global passenger volume

⁶ Sabrina T. Howell et al., “All Clear for Takeoff: Evidence from Airports on the Effects of Infrastructure Privatization,” National Bureau of Economic Research Working Paper 30544, March 2023, <https://www.nber.org/papers/w30544>.

to reach 10.2 billion passengers in 2026, 112% of the 2019 level.⁷ While the gap continues to narrow between the 2019 “business as usual” forecast and current recovery projections, even ACI’s optimistic scenario does not erase the anticipated losses from COVID-19 by the end of its medium-term forecast in 2030.

Airport P3 transactions have also rebounded from their 2020 nadir. Data from *Infralogic* are presented in Table 3, which shows 2022 surpassing 2019 in total transaction value and number of projects reaching financial close. The projects include whole-airport projects as well as airport components. Both the number and value of projects reaching financial close in 2025 were down from 2022, but 2022’s volume of closed transactions reflects the multiyear process to reach financial close for new projects as well as an uptick in project refinancings driven by pandemic-related economic factors. However, last year’s \$51.96 billion in airport P3 deal value is still well above the \$11.18 billion low point in 2020 and slightly exceeds the 2019 value of \$51.1 billion in nominal dollars.

TABLE 3: GLOBAL AIRPORT P3 CLOSED TRANSACTIONS, 2019–2025

| | 2025 | 2024 | 2023 | 2022 | 2021 | 2020 | 2019 |
|-------------|---------|---------|---------|---------|---------|---------|---------|
| Value (\$B) | \$51.96 | \$32.85 | \$17.67 | \$65.79 | \$35.54 | \$11.18 | \$51.10 |
| Projects | 79 | 56 | 51 | 69 | 57 | 43 | 67 |

Source: *Infralogic* (2026) and author’s calculations.

In addition to the projects reaching financial close, *Infralogic* data for 2025 show 13 airport P3s were launched with a total transaction value of \$9.83 billion. For P3s moving within the project pipeline, 22 projects worth \$14.84 billion selected their preferred proponents, signaling the beginning of procurement contract negotiations that more likely than not will lead to financial close.⁸

With respect to the type of transaction, “greenfield” projects, or newly constructed airport facilities, accounted for 29% of total projects and 35% of total transaction value in the pipeline. Privatization of existing government airport facilities accounted for 1% of transaction value and 3% of projects in 2025. In contrast, two partial nationalizations (2% of projects)—in which the Danish government purchased a controlling stake in Copenhagen Airport, the Bologna and Modena Chambers of Commerce increased their shareholdings in Bologna Guglielmo Marconi Airport, as well as an abandoned effort by the Mexican

⁷ Airports Council International, *World Airport Traffic Forecasts 2025–2054* 28 Jan. 2026.

⁸ Author’s calculations using *Infralogic* (2026) data.

government to acquire Toluca International Airport—represented 7% of total transaction value in 2025. Table 4 presents 2025 airport P3 transactions by type.

TABLE 4: GLOBAL AIRPORT P3 TRANSACTIONS BY TYPE, 2025

| Type | Value (\$B) | % of Total | Projects | % of Total |
|----------------------|-------------|------------|----------|------------|
| Greenfield | \$30.76 | 35% | 45 | 29% |
| Refinancing | \$24.61 | 28% | 34 | 22% |
| M&A | \$16.19 | 18% | 52 | 34% |
| Additional Financing | \$8.57 | 10% | 15 | 10% |
| Privatization | \$0.96 | 1% | 4 | 3% |
| Nationalization | \$6.54 | 7% | 3 | 2% |
| Total | \$87.63 | 99% | 153 | 100% |

Source: *Infralogic* (2026) and author's calculations. Percentages may not sum to 100% due to rounding.

2.3

GLOBAL AIRPORT PRIVATIZATIONS AND P3 CONCESSIONS

Airport privatization and P3s sharply declined in concert with global passenger traffic in 2020. Since then, rebounding air travel has spurred recovery in worldwide airport privatization and P3 activity. *Infrastructure Investor* in July 2024 ran an article headlined, “Airports are once again a favourite.”⁹ It highlighted airport investors’ rebalancing their global portfolios as passenger traffic began exceeding pre-pandemic levels, as well as interest in emerging markets.

2.3.1 EUROPE

In December 2024, **Denmark’s** government agreed to purchase a 59.4% stake in Copenhagen Airports from the Ontario Teachers’ Pension Plan and Danish pension fund ATP for approximately €4.3 billion.¹⁰ This transaction increased the Danish government’s ownership in the company to 98%. However, Denmark’s Ministry of Finance said at the time that it plans to gradually reduce state ownership to 50.1%. In January 2026, *Infralogic* reported that the Danish government is working with Rothschild to plan the sale of 49.9% of the company’s shares to outside investors.¹¹

⁹ Zak Bentley, “Airports are once again a favourite,” *Infrastructure Investor*, 25 July 2024.

¹⁰ Brendan Malkin, “Danish state takes majority stake in Copenhagen Airports,” *Infralogic*, 4 Dec. 2024

¹¹ Rory Gallivan, Brendan Malkin, and Nick Roumpis, “Denmark prepares Copenhagen Airports stake sale,” *Infralogic*, 23 Jan. 2026.

“
... Denmark’s Ministry of Finance said at the time that it plans to gradually reduce state ownership to 50.1%.”
”

In April, *Infralogic* reported that the sale of **Italy’s** Catania Airport was expected to proceed in the coming months, after several years of delay. Public-sector shareholders of concessionaire Società Aeroporto Catania are expected to sell between 51% and 66% of company shares.¹² After several more months of delay, *Infralogic* reported in January 2026 that government approvals were being finalized. If approved to proceed, this would be the first airport privatization in Italy in seven years.¹³ Zi Aeroporti, Corporación América Airports, Mundys, and SAVE Group are reportedly considering bids.

In other Italian news, in October a consortium led by infrastructure investor Ardian reached an agreement to acquire Italian airport operator SAVE, whose portfolio includes the Brescia, Venice, Verona, and Treviso airports, plus a stake in Belgian airport Charleroi. Being bought out under this transaction are infrastructure funds DWS Infrastructure and InfraVia Capital Partners. *Infralogic* estimates the deal is worth €1.1 billion.¹⁴ The transaction reached financial close in February 2026.

Montenegro’s government in December 2024 published a long-awaited request for proposals for two airports, one in the capital Podgorica and the other serving the seaside resort town of Tivat.¹⁵ The concession would entail redevelopment and management of both airports over a 30-year term and is valued at €300 million. In May, the government opened bids and received two responses: South Korea’s Incheon Airports and Corporación América Airports.¹⁶ Incheon Airports was selected in August, with *Infralogic* reporting that

¹² Antonio Fabrizio and Stefano Berra, “Bidders circle Catania Airport privatisation ahead of summer launch,” *Infralogic*, 1 Apr. 2025.

¹³ Stefano Berra et al., “Catania Airport privatisation ready for take-off as strategics circle,” *Infralogic*, 26 Jan. 2026.

¹⁴ “Ardian team to buy Venice airport operator SAVE,” *Infralogic*, 15 Oct. 2025.

¹⁵ Alexander MacLeod, “Montenegro issues RFPs for long-awaited airport concessions,” *Infralogic*, 27 Dec. 2024.

¹⁶ Press Release, “Tender Commission: Two bids received for airports, evaluation report to follow within 30 days,” Government of Montenegro, 9 May 2025.

Corporación América Airports plans to challenge Montenegro's decision.¹⁷ The two-airport concession was initially launched in 2019 and narrowed to the current three bidders in early 2020 before being put on hold due to the COVID-19 pandemic.

In the **United Kingdom**, Paris-based infrastructure fund Ardian in July bought out Ferrovial's remaining stake, as well as the shares of two tag-along investors, in London Heathrow Airport for £870 million. It now owns 32.6% of Heathrow and is the airport's largest owner.¹⁸ Ferrovial had been seeking to sell most of its previous 25% stake in London Heathrow Airport. But after announcing its intentions in early 2024, other Heathrow shareholders Caisse de dépôt et placement du Québec (CDPQ) and Universities Superannuation Scheme (USS) exercised their tag-along rights to sell a combined 35% stake in the airport.¹⁹ This meant Ferrovial needed to find a buyer for the 35% stake before it could reduce its 25% stake. This led to a complex series of transactions among various parties. Under a deal completed in December, infrastructure investor Ardian and Saudi Arabia's Public Investment Fund (PIF) respectively purchased 22.6% of shares and 15%. The deal valued London Heathrow at \$10.6 billion. This left Ferrovial holding just 5.25% of shares and tag-along shareholders only 4.75% until Ardian's acquisition.



Under a deal completed in December, infrastructure investor Ardian and Saudi Arabia's Public Investment Fund (PIF) respectively purchased 22.6% of shares and 15%. The deal valued London Heathrow at \$10.6 billion.



Infralogic reported in July that Australia-based Macquarie Asset Management paid \$1.36 billion to acquire stakes in three British airports from Ontario Teachers' Pension Plan (OTTP).²⁰ It acquired a 25% stake in London City Airport, a 55% stake in Bristol Airport, and a 26.5% stake in Birmingham Airport. The London City Airport investment valued that airport at 20 times its earnings before interest, taxation, depreciation and amortization

¹⁷ Antonio Fabrizio, "Corporacion America to challenge Montenegro airports decision," *Infralogic*, 14 Aug. 2025.

¹⁸ Rory Gallivan, "Ardian pays GBP 870m for extra Heathrow stake," *Infralogic*, 26 Feb. 2025

¹⁹ Alan Dron, "New Names Join London Heathrow Shareholders," *Aviation Daily*, 16 Dec. 2024.

²⁰ Stefano Berra and Brendan Malkin, "Macquarie pays GBP 1.36bn for OTTP's UK airport portfolio," *Infralogic*, 27 June 2025.

(EBITDA). In October, Macquarie announced it had agreed to purchase an additional 50% stake in London City Airport from Alberta Investment Management Corporation and OMERS, bringing its total ownership of the airport to 75%.²¹

Also in July, the U.K.'s Cheltenham Borough Council and Gloucester City Council announced they had agreed to sell Gloucestershire Airport to Horizon Aero Group, a joint venture of U.K.-based Vayu Aviation Services and India's Vensa Infrastructure.²² In addition to modernizing the airport to facilitate future growth, Horizon also plans to expand two adjacent business parks.

AviAlliance, wholly owned by Canada's Public Sector Pension Investment Board, completed acquisition of AGS Airports in January in a deal valued at £1.54 billion, or 23 times earnings before interest, taxation, depreciation, and amortization (EBITDA).²³ AGS Airports—which operates Aberdeen, Glasgow, and Southampton airports in the United Kingdom—was previously owned by Ferrovial and Macquarie, which each held 50% of the company's shares. In March, AviAlliance sold 22% of AGS Airports to Blackstone.²⁴

In December, investment fund InfraBridge had agreed to sell its 51% stake in Leeds Bradford Airport and its 49% stake in Newcastle Airport to Spain's Aena for £270 million.²⁵ Aena will now own 100% of Leeds Bradford and currently owns 51% of London Luton Airport. The deal is expected to close in the second quarter of 2026.

2.3.2 CANADA, LATIN AMERICA, AND CARIBBEAN

In **Brazil**, airport operator Motiva announced in October that its Brazilian airport concessions were for sale, with a value estimated at \$1.8 billion–\$2.2 billion.²⁶ Twelve airport groups initially expressed interest, including the world's second-largest (Aena

²¹ Press Release, "Macquarie agrees to acquire additional stake in London City Airport," Macquarie, 15 Oct. 2025.

²² Press Release, "Horizon Aero Group Ltd named as company set to take Gloucestershire Airport to new heights," Cheltenham Borough Council, 9 July 2025.

²³ Nick Roumpis, "AviAlliance to pay GBP 1.54bn EV for AGS Airports," *Infralogic*, 13 Nov. 2024.

²⁴ Press Release, "Blackstone Infrastructure to Acquire Minority Stake in AGS Airports and Invest Behind the Growth of the United Kingdom," Blackstone, 28 March 2025.

²⁵ Press Release, "Aena expands its presence in the United Kingdom with the purchase of 51% of the new holding company that owns and manages 100% of Leeds Bradford Airport and 49% of Newcastle Airport respectively," Aena, 18 Dec. 2025.

²⁶ Robert Poole, "Airport P3 Activity in Brazil," *Aviation Policy News*, 9 Dec, 2025.

Aeropuertos) and fourth-largest (Vinci Airports). In early November, Aena announced that it was working on a \$986 million bond issue for its Brazilian airport P3 concessions. It also announced that its partially owned Mexican airport company GAP would merge with its strategic partner AMP. These transactions suggested growing interest in Brazilian airport P3s. Sure enough, in February 2026, *Aviation Daily* reported that Brazil's Ministry of Ports and Airports would soon hold an auction for the 49% government stake in Galeao International Airport in Rio de Janeiro.²⁷



In November, Canada's newly elected Prime Minister Mark Carney released his government's first budget, which provided notice that it will "consider options for the privatization of airports" in order to "unlock more of the economic potential of Canada's airports and consider new ways to attract private sector investment."



In November, **Canada's** newly elected Prime Minister Mark Carney released his government's first budget, which provided notice that it will "consider options for the privatization of airports" in order to "unlock more of the economic potential of Canada's airports and consider new ways to attract private sector investment."²⁸ This is the first time airport privatization has been seriously considered in Canada in more than a decade. In recent decades, Canadian pension funds have become major investors in airport concessions around the world, so there is certainly homegrown financial interest if Prime Minister Carney opts to move forward.

In October, the 30-year concession to operate Félix Eboué Airport in **French Guiana** reached financial close.²⁹ French infrastructure developer Egis leads the winning consortium and is expected to invest approximately €85 million to upgrade the passenger terminal. The airport is in the capital city of Cayenne and recorded nearly 500,000 passengers in 2023.

²⁷ Aaron Karp, "Rio De Janeiro Galeao Airport Sale Auction Set For March 30," *Aviation Daily*, 5 Feb. 2026.

²⁸ Barbara Shecter, "Federal budget reveals Carney government is considering privatizing airports," *Financial Post*, 4 Nov. 2025.

²⁹ Gabriel Higgins, "Egis and partners begin 30-year concession to transform Cayenne Félix-Éboué Airport with €85m investment," *International Airport Review*, 2 Oct. 2025.

Mexico saw significant airport developments in 2025. First, in February, airport company Grupo Aeroportuario del Pacifico (GAP) announced plans to invest \$1.3 billion to modernize and expand its two airports in Jalisco state, with a particular focus on Guadalajara International Airport, where it plans to build a second terminal.³⁰ Second, in early July, the government abandoned a plan to purchase investment fund Aleatica's 49% stake in Toluca International Airport, because the price Aleatica wanted was too high.³¹ The State of Mexico already owns a 26% stake in Toluca. And on July 25, *Infralogic* reported that GAP announced its interest in buying the airport assets of CCR, a Brazilian company that has ownership in or operating relationships with 20 airports across Latin America.³²

Turks and Caicos Islands' planned redevelopment of Howard Hamilton International Airport attracted significant interest in the 30-year P3 concession being offered by the government.³³ Bidders included major players Ferrovial, Bouygues, Vinci, Manchester Airports, and GAP. The 30-year project called for building and operating a replacement of the existing airport, at an estimated construction cost of \$400 million. The airport would be designed to handle 2.5 million annual passengers. In February 2026, the government announced it would retain full ownership of Howard Hamilton International. It is unclear when or if the airport will be modernized.

2.3.3 ASIA AND PACIFIC

In April 2025, Ferrovial made an offer for 100% of the shares in **Australia's** Perth Airport, the country's fourth largest.³⁴ The current owners of Perth Airport include Future Fund, Utilities Trust of Australia, Australian Super, and Macquarie's The Infrastructure Fund. The airport company has a 99-year P3 lease, awarded in 1997. Ferrovial aims to renew its airports portfolio after selling its stakes in London Heathrow and the AGS airports in the U.K.

³⁰ Edgardo Gimenez Mazó, "GAP Announces \$1.26 Billion Investment for Jalisco Airports, Led by Major Guadalajara Expansion," *Aviacionline*, 12 Feb. 2025.

³¹ Roberto Valadez, "México ya no comprará parte de Aleatica en Aeropuerto de Toluca," *Milenio*, 9 July 2025.

³² Eva Llorens, "Grupo Aeroportuario del Pacífico confirms interest in CCR airport assets," *Infralogic*, 25 July 2025.

³³ "The redevelopment of the Howard Hamilton International Airport," *Turks and Caicos Weekly News*, 13 March 2026.

³⁴ Javier Mesones, "Ferrovial se lanza a comprar el Aeropuerto de Perth, en Australia, tras desinvertir en Reino Unido," *El Economista*, 7 Apr. 2025.

In other Australian news, *Infralogic* reported in October 2024 that the three owners of North Queensland Airports (NQA) were planning to sell the company in 2025.³⁵ NQA owns Cairns and Mackay airports under a 99-year concession it acquired from the Queensland government in 2008. In August, the *Australian Financial Review* reported that JPMorgan Asset Management had purchased the remaining 33.9% of NQA shares from Macquarie's The Infrastructure Fund and the family of late Australian billionaire Stan Perron for \$424 million, becoming the sole owner of NQA.³⁶

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In April 2025, Ferrovial made an offer for 100% of the shares in Australia's Perth Airport, the country's fourth largest.

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India had an eventful year in airport P3s. In February, the government announced that a privatization process will proceed for 13 more airports, as air travel continues to boom in that country.³⁷ On March 7, India-based GMR Airports announced it had completed the purchase of Fraport's 10% stake in Delhi International Airport for \$126 million, increasing GMR's share to 74%.³⁸

In October, the *Business Standard* reported that India's Adani Group plans to invest \$3.48 billion in Navi Mumbai International Airport, primarily for the new airport's second terminal, which is planned to open in 2029.³⁹ This was put in context in a December article in Bloomberg, which reported that Adani plans to invest \$15 billion in its airport concessions over the next five years.⁴⁰ Adani is also planning to take its airport group public.

³⁵ Shaun Drummond, "North Queensland Airports auction kicks off," *Infralogic*, 21 Oct. 2024.

³⁶ Sarah Thompson, Kanika Sood, and Emma Rapaport, "JPMorgan moves to 100pc ownership of \$3b Cairns, Mackay airports," *Australian Financial Review*, 22 Aug. 2025.

³⁷ Arindam Majumder, "Govt puts airport privatisation plan in flight mode again," *India Times*, 25 Feb. 2025.

³⁸ T. Venkat Ramana, "Regulation 30 of SEBI (Listing Obligations and Disclosure Requirements) Regulations, 2015 ("Listing Regulations") – Update on acquisition of stake in Delhi International Airport Limited," GMR Airports, 7 March 2025.

³⁹ Dev Chatterjee, "Adani Group to invest ₹30,000 cr more in Navi Mumbai airport expansion," *Business Standard*, 6 Oct. 2025.

⁴⁰ Mihir Mishra and P R Sanjai, "Adani Group Plans \$15 Billion India Airports Expansion by 2030," Bloomberg, 2 Dec. 2025.

Malaysia Airports in February was taken private by Gateway Development Alliance, a consortium consisting of Malaysia's sovereign wealth fund Khazanah Nasional, Malaysian public pension fund Employees Provident Fund Board, the Abu Dhabi Investment Authority, and BlackRock's Global Infrastructure Partners.⁴¹ The deal involved a 57.45% stake in Malaysia Airports at a price of \$2.7 billion, or 5.5 times EBITDA.

The **Philippines** Department of Transportation announced in October that it plans to offer two bundles containing nine regional airports for bidding as P3s.⁴² The Department hired the World Bank's International Finance Corporation to advise on the package containing the Davao, Dumaguete, and Siargao airports. It hired the Asian Development Bank to advise on the other package containing the Laoag, Bicol, Busuaga, Bacolod, Tacloban, and General Santos airports. The intent behind offering the airports in packages rather than individual investment opportunities is to raise the total value of the transactions.

2.3.4 MIDDLE EAST AND AFRICA

Angola's government announced in January 2026 that it had awarded the 20-year concession to operate and develop the newly opened \$3 billion airport—Antonio Agostinho Neto International Airport—to a consortium led by Argentina-based Corporación América Airports.⁴³ The first phase of development includes a terminal capable of serving 15 million passengers annually and a cargo terminal for 130,000 metric tons per year.

In November, the government of **Iraq** selected a consortium led by Argentina's Corporación América Airports to operate and upgrade Baghdad International Airport under a 25-year concession.⁴⁴ The deal is valued at \$500 million and Corporación América will be expected to develop a new passenger terminal capable of increasing airport capacity from nine million passengers annually to 15 million. The Iraqi government had hired the International Finance Corporation as its transaction advisor, which will negotiate final terms with Corporación América.

⁴¹ James Guild, "Why Malaysia Airports Holdings Berhad Is Going Private," *The Diplomat*, 25 Feb. 2025.

⁴² Elijah Felice Rosales, "DOTr: 9 regional airports to be bundled into 2 PPPs," *The Philippine Star*, 9 Oct. 2025.

⁴³ Ella Nethersole, "Angola Announces Operator Of Luanda's New Airport," *Aviation Daily*, 8 Jan. 2026.

⁴⁴ Press Release, "Corporación América Airports Signs Award Agreement to Operate Baghdad International Airport," Corporación América Airports, 5 Nov. 2025.



*In February, **Saudi Arabia**'s aviation authority Matarat and National Center for Privatization received 90 expressions of interest for a 30-year concession to develop the Taif International Airport.*



In February, **Saudi Arabia**'s aviation authority Matarat and National Center for Privatization received 90 expressions of interest for a 30-year concession to develop the Taif International Airport.⁴⁵ The new airport is expected to handle four million passengers per year at the start of operations and to increase to seven million by the end of the concession. In January 2026, Saudi authorities shortlisted four consortia and one standalone company for the project, which is intended to be operational by 2030.⁴⁶

In December, *Engineering News-Record* reported that **Syria**'s General Authority of Civil Aviation had signed a \$4 billion contract to rehabilitate and modernize Damascus International Airport.⁴⁷ The winning consortium is led by Qatar's UCC Holding. The deal is structured as a long-term build-own-operate P3 concession, under which existing terminals will be upgraded and expanded to be capable of eventually serving 32 million annual passengers. Work on Terminal 2 and a five-star airport hotel is already underway, with developers aiming for completion of this first phase by mid-2026.

2.4

U.S. AIRPORT PRIVATIZATION AND PUBLIC-PRIVATE PARTNERSHIPS

European-type sale of government-owned airports is not legal in the United States (except for general aviation airports that serve private planes). The original 1996 federal Airport Privatization Pilot Program permitted a limited number of long-term P3 leases of commercial airports while also exempting the sponsors from certain federal requirements that would otherwise make privatization impractical. Under that law, only two airports were leased. Stewart Airport 60 miles north of New York City was leased in 2000 to a U.K.

⁴⁵ "abrdn, Bouygues among firms vying for Saudi's Taif airport PPP," *Infralogic*, 13 Feb. 2025.

⁴⁶ "Saudi Arabia shortlists TAV, Daa consortia for Taif airport PPP," *Infralogic*, 7 Jan. 2026.

⁴⁷ Gary Lakes, "Qatar-led Consortium Signs on for \$4B Rebuild and Expansion of Damascus Airport," *Engineering News-Record*, 22 Dec. 2025.

company that failed to make that airport financially viable; Stewart was subsequently acquired by the Port Authority of New York and New Jersey in 2007. The P3 lease of San Juan's Luís Muñoz Marín International Airport in 2013, however, was a success, leading to large-scale refurbishment and increased airline satisfaction.⁴⁸

As recommended in the White House's 2018 infrastructure proposals, Congress replaced the pilot program with a new Airport Investment Partnership Program (AIPP) as part of the Federal Aviation Administration (FAA) reauthorization law enacted in October 2018. Rather than the limit of 10 airports in the pilot program, long-term P3 leases are now available to all commercial airports. In addition, the AIPP provides for planning grants of up to \$750,000 for any jurisdiction that wants to make use of the program to lease its airport. But the original pilot program's provision requiring super-majority approval from an airport's incumbent airlines remains in place.

2.4.1 WHOLE-AIRPORT PRIVATIZATION AND P3 LEASES

In September 2021, the New Haven Board of Elders approved a new 43-year lease of the city's **Tweed New Haven Airport**.⁴⁹ In August 2022, the Tweed New Haven Airport Authority approved an agreement with its longtime management company Avports to enter into a 43-year design-build-finance-operate-maintain (DBFOM) P3 concession.⁵⁰ The FAA completed the required environmental assessment for the project in December 2023, all mitigations were accepted, and Tweed New Haven will become the first commercial airport on the U.S. mainland to operate under a long-term P3.⁵¹ Interestingly, the Tweed New Haven Airport Authority and Avports structured the agreement so that it does not require approval under the FAA's Airport Investment Partnership Program.

Other than the San Juan, Puerto Rico airport's entry into the pilot program in 2013, only two airports have been approved to enter AIPP. **Avon Park Executive Airport** in the south-central Florida city of Avon Park is the most recent airport to receive approval to enter

⁴⁸ John Tierney, "Making New York's Airports Great Again," *City Journal*, Winter 2017.

⁴⁹ Eugene Gilligan, "Connecticut City Board Supports Airport P3," *Infralogic*, 28 Sep. 2021.

⁵⁰ Liam Ford, "Board OKs First Full P3 for US Commercial Airport," *Infralogic*, 18 Aug. 2022.

⁵¹ Sophia Muce, "Feds Give Okay to Tweed Expansion with 'Finding of No Significant Impact,'" *Connecticut Examiner*, 22 Dec. 2023.

AIPP, with the FAA issuing its record of decision in November 2024.⁵² The general aviation airport is under a 30-year P3 lease from the city to Florida Airport Management (FAM), which had previously managed the airport under contract with the city. If FAM performs well according to agreed-upon metrics, it will have the option to extend the lease by up to 19 additional years. As part of the concession, the company will complete 13 improvement projects in the airport master plan that were estimated to cost \$14.3 million in 2015.

The other airport that has received approval to enter AIPP is **Airglades Airport** in south Florida. The general aviation airport received final FAA approval in October 2019 but the concession failed to reach financial close by the required October 2020 deadline, which was an explicit condition in the record of decision granting the airport's acceptance into AIPP.⁵³ The Airglades sponsors were granted an extension by FAA but failed to meet the new July 2021 deadline. In 2024, Airglades hired Goldman Sachs as financial advisor and Clyde and Co. as legal advisors, both experienced firms in airport P3 transactions, suggesting there is still strong interest in realizing the Airglades "logistics city" concept.⁵⁴



Aside from long-term leases of existing airports under AIPP, there is also potential for new commercial airports to be developed under P3s.



Aside from long-term leases of existing airports under AIPP, there is also potential for new commercial airports to be developed under P3s. In August 2024, the Illinois Department of Transportation (IDOT) issued a request for qualifications (RFQ) for what could become the long-anticipated third Chicago airport, known as **South Suburban Airport**.⁵⁵ Responses were due in July 2025. IDOT had spent years acquiring 4,500 acres adjacent to Bult Field, a small general aviation airport located southeast of Chicago in fast-growing Will County. IDOT's

⁵² Airport Investment Partnership Program, *Notice of availability of the Record of Decision for the participation of Avon Park Executive Airport, Highlands County, Avon Park, Florida, in the Airport Investment Partnership Program (AIPP)*, Federal Aviation Administration, 89 Fed. Reg. 89690 (13 Nov. 2024).

⁵³ Airport Investment Partnership Program, *Notice of availability of the record of decision for the participation of Airglades Airport, Hendry County, Clewiston, Florida in the Airport Investment Partnership Program*, Federal Aviation Administration, 84 Fed. Reg. 53808 (8 Oct. 2019).

⁵⁴ Jonathan Carmody and Eugene Gilligan, "Goldman Sachs helping private Florida airport develop 'logistics city,'" *Infralogic*, 13 Aug. 2024.

⁵⁵ Liam Ford, "Illinois issues South Suburban Airport P3 RFQ," *Infralogic*, 19 Aug. 2024.

RFQ focuses on the Inaugural Airport Program, which would be procured under a DBFOM P3 and include a 9,500-foot runway with a full-length taxiway, passenger terminal, cargo facilities, and additional general aviation infrastructure. IDOT has hired KPMG as financial advisor, but one-on-one meetings with potential bidders were still ongoing in late 2025.

There is continued speculation about why the United States is such an outlier compared with most of the rest of the world on airport privatization and long-term P3s. The Congressional Research Service released a report on the subject in early 2021. After comparing the global trend with the very limited use of the recent and current federal program, CRS analysts suggested that unequal tax treatment of revenue bonds (tax-exempt municipal bonds for existing airports versus taxable revenue bonds for private partners) could be a causal factor.⁵⁶

An August 2025 study published by the American Enterprise Institute and Brookings Institution, and authored by Reason Foundation's Robert Poole, examined this question in more detail. Poole proposed two policy changes to bring parity to public and private airport financing.⁵⁷ First, Congress should allow tax-exempt airport bonds to finance project activities carried out by the private sector (i.e., a long-term concession), much like they do for surface transportation P3s and publicly developed projects. Second, the Department of Treasury should amend its rules on bond "changes of use" to allow previously issued bonds to remain tax exempt if a government-owned asset is leased to private investors who then continue to operate the asset for a public purpose. The current "change of use" rules require bonds to be "defeased" if a government owner enters a concession agreement, which requires interest-income on the bonds to be repaid for the entire life of the issue.



Despite these current tax policy disadvantages facing airport P3s, some retain a more optimistic outlook on whole-airport leases in the United States.



⁵⁶ Congressional Research Service, "Airport Privatization: Issues and Options for Congress," Report R43545, 11 March 2021.

⁵⁷ Robert Poole, "Incentivizing US Airport Privatization," American Enterprise Institute and Brookings Institution, Aug. 2025.

Despite these current tax policy disadvantages facing airport P3s, some retain a more optimistic outlook on whole-airport leases in the United States. A 2021 report from investment advisors PJ Solomon found that U.S. airport managers are unable to operate efficiently “due to inefficient procurement policies, lack of flexibility in credit raising, and the bureaucracies that often come from a system with a large and not-always-directly-aligned set of stakeholders.”⁵⁸ They suggest that the interests of risk-averse municipal bondholders generally prevail over those of airlines, who will be at risk for ensuring airports’ financial viability. Hence, they suggest that it is in the interest of airlines to support private capital investment in airports via mechanisms such as AIPP. This is in addition to this program being “the only mechanism for an airport sponsor to realize substantial financial benefits that may be used outside the airport environment.”

A study released by Reason Foundation in August 2021 suggests there is good cause for continued investor interest.⁵⁹ The study used valuations from the sale and lease of airports worldwide in recent decades to estimate the potential market value of major U.S. airports owned by city, county, and state governments. It estimated the potential market value of 31 large and medium U.S. airports at \$131 billion, including Los Angeles International (\$17.8 billion), San Francisco International (\$11.9 billion), Dallas/Ft. Worth International (\$11.9 billion), and Atlanta’s Hartsfield-Jackson (\$9.2 billion). And these estimates are possibly too conservative. The report’s high-end valuations are based on 20 times earnings before interest, taxes, depreciation, and amortization (EBITDA), a widely used measure of annual cash flow. Following the COVID-19 pandemic, several major airport transactions outside the United States have seen valuations that exceed 20 times EBITDA.

2.4.2 P3S FOR INDIVIDUAL AIRPORT PROJECTS

While whole-airport P3 leases have not become a U.S. phenomenon, recent years continue to see projects that use long-term DBFOM agreements to add large, costly facilities to airports. Among these are new or expanded terminals, parking facilities, consolidated rental car centers, and in one case, an automated people mover. These projects are financed in one of two ways. If there is an ongoing revenue stream generated by the project itself, the airport owner can base the P3 financing, in whole or in part, on that revenue stream, generally with the P3 company at risk if the revenue comes in below forecast. If there is not such a revenue stream (as in the case of an automated people mover), then the project can

⁵⁸ Tim Bath and Shawn Kinder, “Unlocking Value in the Airport-Airline Ecosystem,” PJ Solomon, Jan. 2021.

⁵⁹ Robert Poole, “Should Governments Lease Their Airports?” Reason Foundation Policy Study, Aug. 2021.

be financed by a guaranteed stream of payments from the owner to the P3 entity over the life of the agreement. This kind of DBFOM is typically called an “availability-payment” structure, since the payments are generally somewhat variable based on the facility’s uptime.

New Terminals

Long-term P3s for new airport terminals have a several-decade U.S. history. Among the earliest are the passenger terminals at Orlando Sanford Airport and Terminal 4 at Kennedy International in New York City. More-recent projects include the \$8.9 billion Terminal One project and \$4.2 billion Terminal 7 project at JFK, both of which reached financial close in 2022. The replacement of the outdated central terminal at New York’s LaGuardia Airport opened to great fanfare in December 2021 and won the 2021 UNESCO’s best new airport facility competition, as well as being featured in a glowing profile of “the team that fixed LaGuardia” in an October 2022 article in *The Wall Street Journal*.⁶⁰ These projects are generally financed based on revenues generated by the terminal, so they are considered revenue-risk DBFOM P3s.

In November, the Port Authority of New York and New Jersey proposed using a P3 to develop a new Terminal B at Newark Liberty International as part of the agency’s \$45 billion capital plan.⁶¹ This followed continued advocacy by infrastructure investment funds for the use of a P3 to upgrade Terminal B, similar to the long-term DBFOM P3s used for new terminals at LaGuardia Airport and John F. Kennedy International.

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In December, the U.S. Department of Transportation issued a Request for Information on plans to “revitalize” Washington Dulles Airport’s aging passenger terminals and associated infrastructure.

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⁶⁰ Ben Cohen, “LaGuardia Airport Is No Longer the Worst. This Team Fixed It.” *The Wall Street Journal*, 15 Sep. 2022.

⁶¹ Eugene Gilligan, “Port Authority proposes P3 for Newark airport terminal,” *Infralogic*, 13 Nov. 2025.

infrastructure, which is owned by the federal government and leased to the Metropolitan Washington Airports Authority.⁶² The RFI suggested P3s and innovative financing would be considered, like those that have been used to replace aging terminals at LaGuardia and Kennedy airports in New York. Initial responses were due in January 2026 and included P3 proposals from Ferrovial and Macquarie, among others.⁶³

Smaller-scale terminal P3s are also showing promise. In May, Snohomish County, Washington announced it will enter “formal discussions” with Paine Field’s airport terminal developer/operator Propeller Airports to consider a further P3 to expand the terminal that Propeller financed, built, and operates at the airport.⁶⁴ Propeller’s current passenger terminal allowed the formerly general-aviation-only airport to be served by Alaska and Frontier Airlines. But the small size of the terminal limits air travel growth.

In October, *Infralogic* reported that the Town of Islip on Long Island, New York, announced it had shortlisted three teams for a P3 terminal project at MacArthur Airport.⁶⁵ The project would involve either modernizing and expanding the existing terminal or building a new replacement terminal. Town officials hope to select the winning bidder and execute a pre-development agreement in 2026.

Consolidated Rental Car Facilities

In January, the Sacramento County Department of Airports released a procurement timeline for a new ConRAC at Sacramento International.⁶⁶ Responses were due in March 2025. Shortlisted teams received the RFP for the project in the second quarter of 2025, with a deadline to submit proposals in the third quarter. The planned multi-level facility is expected to cost \$390 million. The agency plans a “hybrid private financing approach” for the project. Customer facility charges will be the revenue source for the project’s financing.

⁶² Revitalizing Washington Dulles International Airport, *Request for Information*, U.S. Department of Transportation, Docket No. DOT-OST-2025-1887, 90 Fed. Reg. 56,270, 5 Dec. 2025.

⁶³ Robert Poole, “Will Dulles Airport Makeover Be America’s First Major Airport P3?” *Public Works Financing*, Jan. 2026.

⁶⁴ Eugene Gilligan, “Washington county to consider P3 for airport expansion,” *Infralogic*, 21 May 2025.

⁶⁵ Eugene Gilligan, “New York county shortlists three for airport terminal P3,” *Infralogic*, 3 Oct. 2025.

⁶⁶ Eugene Gilligan, “California airport unveils procurement timeline for new rental car facility,” *Infralogic*, 9 Jan. 2025.

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Separate from whole-airport P3 leases is contracting out airport operations and management.
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Contract Management

Separate from whole-airport P3 leases is contracting out airport operations and management. This approach has been used for decades, with FAA’s blessing, most often for general-aviation airports but also for small to medium-size air carrier airports such as Albany, New York and Burbank, California.

In February, infrastructure investment fund Ardian announced it had agreed to acquire Goldman Sachs’ stake in Airport Facilities Company (AFCO).⁶⁷ AFCO manages 29 properties at 15 airports in the United States and U.K., mainly cargo and specialized hangars at airports. AFCO is also the developer and contract manager of Branson Airport in Missouri.

⁶⁷ Press Release, “Ardian Signs An Agreement for the Acquisition of Goldman Sachs Alternatives’ Stake in AFCO,” Ardian, 19 Feb. 2025.

PART 3

AIR TRAFFIC CONTROL

3.1 AIR NAVIGATION SERVICE PROVIDERS (ANSPS)

Historically, most of the world's governments provided air traffic control (ATC) services as part of the transport ministry, whose aviation division served as both the aviation safety regulator and the operator of the ATC system. That remains the organizational form in the United States, with the FAA providing both of those functions, as part of the U.S. Department of Transportation (DOT).

That model has undergone major change since 1987 outside of the U.S., starting when the reformist government of New Zealand removed its ATC system from the transport ministry by “corporatizing” it as Airways New Zealand, a self-supporting government corporation. Within 10 years, more than a dozen other countries had done likewise, and the fledgling industry created a trade association, the Civil Air Navigation Services Organization (CANSO) as its counterpart to the global organizations representing airlines (IATA) and airports (ACI). CANSO introduced a new term to describe these providers: air navigation service provider (ANSP), which has become standard terminology worldwide.

The revenue source for ANSPs is globally accepted ATC user fees, based on the airport and ATC charging principles promulgated by the International Civil Aviation Organization (ICAO), a United Nations agency. Prior to ATC corporatization, those revenues were nearly always paid by airlines and other airspace users to the respective national governments. In most cases, once an ANSP has been corporatized, the user-fee revenue flows directly to the

ANSP as its primary source of revenue. This makes it possible for the corporatized ANSPs to issue revenue bonds based on their projected revenue streams, just as airports and toll roads do.⁶⁸

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In most cases, once an ANSP has been corporatized, the user-fee revenue flows directly to the ANSP as its primary source of revenue.

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Table 5 provides a list of ANSP members of CANSO, separated into organizational categories. The first three are the ones outside of government. Nav Canada is a nonprofit private corporation to which the Canadian government has delegated all ATC responsibilities for both domestic and oceanic airspace. ENAV is the partly privatized ANSP of Italy, with 46.7% of its shares traded on stock markets. And NATS is the partly privatized ANSP of the U.K., with 42% of its shares owned by airlines and pension funds, 4% by Heathrow Airport, and 5% owned by employees—with the balance of 49% owned by the government. Not included in the table are private companies that provide ATC services to airports and national governments on a contractual basis, which include the U.K.’s Serco and CANS from the United Arab Emirates. These ATC contract providers often collect user fees.

TABLE 5: AIR NAVIGATION SERVICE PROVIDERS, BY TYPE OF ORGANIZATION

| Country | ANSP | Organization Type | Notes |
|----------------------|-----------------------|-----------------------|----------------|
| Canada | Nav Canada | Nonprofit corporation | |
| Italy | ENAV | Part investor-owned | |
| United Kingdom | NATS | Part investor-owned | |
| Albania | ALBCONTROL | State-owned company | |
| Algeria | ENNA | State-owned company | |
| Angola | ENNA-EP | State-owned company | |
| Argentina | EANA | State-owned company | |
| Armenia | ARMATS | State-owned company | |
| Australia | Airservices Australia | State-owned company | |
| Austria | Austro Control | State-owned company | Also regulates |
| Belgium | Skeyes | State-owned company | |
| Bosnia & Herzegovina | BHANSAs | State-owned company | |
| Botswana | CAAB | State-owned company | |

⁶⁸ Robert Poole, “Air Traffic Control as a Quasi-Private Corporation,” eds. Robert Clark and Simon Hakim, *Public-Private Partnerships*, Springer: 2019.

| Country | ANSP | Organization Type | Notes |
|---------------------|-----------------------------|---------------------|----------------|
| Bulgaria | BULATSA | State-owned company | |
| Cabo Verde | ASA | State-owned company | |
| Cambodia | CATS | State-owned company | |
| Croatia | Croatia Control | State-owned company | |
| Cuba | ECNA | State-owned company | |
| Curaçao | DC-ANSP | State-owned company | |
| Czech Republic | ANS CR | State-owned company | |
| Denmark | Naviair | State-owned company | |
| Egypt | NANSC | State-owned company | |
| Estonia | EANS | State-owned company | |
| Fiji | Fiji Airports | State-owned company | |
| Finland | Fintraffic | State-owned company | |
| Georgia | Sakaeronavigatsia | State-owned company | |
| Germany | DFS | State-owned company | |
| Hungary | HungaroControl | State-owned company | Also regulates |
| Iceland | Isavia ANS | State-owned company | |
| India | Airports Authority of India | State-owned company | |
| Indonesia | AirNav Indonesia | State-owned company | |
| Iraq | GCANS | State-owned company | |
| Iran | Iran Airports Company | State-owned company | |
| Ireland | AirNav Ireland | State-owned company | |
| Israel | Israel Airports Authority | State-owned company | |
| Kazakhstan | Kazaeronavigatsia | State-owned company | |
| Latvia | LGS | State-owned company | |
| Lithuania | Oro Navigacija | State-owned company | |
| Maldives | Maldives Airports Co. | State-owned company | |
| Malta | MATS | State-owned company | |
| Moldova | MoldATSA | State-owned company | |
| Mongolia | NCAC | State-owned company | |
| Morocco | ONDA | State-owned company | |
| Mozambique | Aeroportos de Moçambique | State-owned company | |
| New Zealand | Airways New Zealand | State-owned company | |
| Nigeria | NAMA | State-owned company | |
| North Macedonia | M-NAV | State-owned company | |
| Norway | Avinor | State-owned company | |
| Papua New Guinea | NiuSky Pacific | State-owned company | |
| Peru | CORPAC | State-owned company | |
| Portugal | NAV Portugal | State-owned company | |
| Romania | ROMATSA | State-owned company | |
| Russia | State ATM Corporation | State-owned company | Also regulates |
| Saudi Arabia | SANS | State-owned company | |
| Serbia & Montenegro | SMATSA | State-owned company | |
| Slovakia | LPS SR | State-owned company | |
| Slovenia | Slovenia Control | State-owned company | |
| South Africa | ATNS | State-owned company | |
| Spain | ENAIRES | State-owned company | |
| Sri Lanka | AASL | State-owned company | |
| Sweden | LFV | State-owned company | |
| Switzerland | Skyguide | State-owned company | |
| Tajikistan | Tajikairnavigation | State-owned company | |
| Thailand | AEROTHAI | State-owned company | |

| Country | ANSP | Organization Type | Notes |
|----------------------|-----------------------|--------------------------|------------------------|
| Türkiye | DHMI | State-owned company | |
| Uganda | UCAA | State-owned company | |
| Ukraine | UkSATS | State-owned company | |
| Uzbekistan | Uzaeronavigation | State-owned company | |
| Vietnam | VATM | State-owned company | |
| Zambia | NACL | State-owned company | |
| Bahamas | CAA-B | Civil aviation authority | |
| Bangladesh | CAAB | Civil aviation authority | Financially autonomous |
| China | CAAC/ATMB | Civil aviation authority | |
| Cyprus | DCA Cyprus | Civil aviation authority | |
| Dominican Republic | IDAC | Civil aviation authority | |
| Eswatini | Eswatini CAA | Civil aviation authority | |
| Ghana | Ghana CAA | Civil aviation authority | |
| Jamaica | JCAA | Civil aviation authority | |
| Japan | JCAB | Civil aviation authority | |
| Jordan | CARC | Civil aviation authority | Financially autonomous |
| Kenya | Kenya CAA | Civil aviation authority | |
| Myanmar | DCA Myanmar | Civil aviation authority | |
| Nepal | CAAN | Civil aviation authority | |
| Oman | CAA of Oman | Civil aviation authority | |
| Philippines | CAA Philippines | Civil aviation authority | |
| Singapore | CAAS | Civil aviation authority | |
| Taiwan | CAA | Civil aviation authority | |
| Tanzania | TCAA | Civil aviation authority | |
| Trinidad & Tobago | Trinidad & Tobago CAA | Civil aviation authority | |
| Tunisia | OACA | Civil aviation authority | |
| United Arab Emirates | GCAA | Civil aviation authority | |
| United States | FAA | Civil aviation authority | |
| Venezuela | INAC | Civil aviation authority | |
| Azerbaijan | AZANS | Government department | |
| Brazil | DECEA | Government department | |
| France | DSNA | Government department | |
| Greece | HASP | Government department | |
| Kosovo | ANSA | Government department | |
| Mexico | SENEAM | Government department | |
| Netherlands | LVNL | Government department | Financially autonomous |
| Poland | PANSA | Government department | |
| United States | DOD PBFA | Government department | Military |
| Belgium | MUAC | Intergovernmental | |
| Honduras | COCESNA | Intergovernmental | 6 countries |
| Liberia | Roberts FIR | Intergovernmental | 3 countries |
| Senegal | ASECNA | Intergovernmental | 17 countries |
| Dubai | DANS | uncategorized | |
| Haiti | OFNAC | uncategorized | |
| Hong Kong | CAD Hong Kong | uncategorized | |
| Luxembourg | ANA | uncategorized | |
| Sudan | Sudan ANS | uncategorized | |

Source: Civil Air Navigation Services Organization (2024) plus author analysis

Next in the table are 67 ANSPs that are wholly owned government corporations, such as Airservices Australia, Germany's DFS, and the pioneering Airways New Zealand. Three of these corporations also have aviation regulatory responsibilities, which conflicts with ICAO's 2001 recommendation that calls for the organizational separation of ATC provision and aviation safety regulation.⁶⁹ These entities can take a variety of corporate forms and include joint-stock companies governed by private law that have not made shares available for private purchase, such as Switzerland's Skyguide. The most recent addition to this group is Mongolia's NCAC, which was separated from the country's civil aviation authority in 2025.

Next in the table are 23 of the old-style civil aviation authorities, usually part of the transport ministry and with aviation safety regulation in the same entity as provision of ATC services. These are nearly all developing countries such as Bangladesh, Kenya, Myanmar, and the Philippines. But also included are several developed countries that have not corporatized ATC, including Japan, Singapore, and the United States. Another nine are self-described as government departments, the largest of which are in Brazil and France. The last six in the table were not categorized.

In addition to those are four intergovernmental entities that operate as multi-jurisdictional ANSPs for specific airspaces. Roberts Flight Information Region (FIR) provides air navigation services for Guinea, Liberia, and Sierra Leone in those countries' combined airspace above 3,000 feet. Maastricht Upper Airspace Control Center (MUAC) provides ATC services at altitudes above 24,500 feet for Belgium, Luxembourg, the Netherlands, and northwestern Germany. COCESNA provides ATC services for six Central American countries. And ASECNA provides ATC services for 17 countries in Africa and two overseas departments and regions of France: Réunion and Mayotte. All four charge ICAO-based user fees and operate as corporatized ANSPs.

Table 5 answers the question: How many ANSPs operate as corporations funded by user fees? The usual answer is 74, consisting of the non-governmental first three, the 67 government corporations, and the four intergovernmental ANSPs. In terms of *countries* served by such ANSPs, however, the total is higher; adding the three countries served by Roberts FIR, the six served by COCESNA, and the 17 countries served by ASECNA brings the net total to 96.

⁶⁹ ICAO, *Safety Oversight Manual: Part A*, Doc. 9734, 3rd edition, Paragraph 3.3.4.2, 2017.

3.2 GLOBAL SPACE-BASED ATC SURVEILLANCE

A basic function of an ATC system is *surveillance*—keeping track of where planes are in real time. Historically, air traffic control over most populated countries has, since World War II, relied largely on radar, later supplemented by transponders that report altitude and other basic information in real time. But there is no radar in the oceans, in mountainous terrain, and in polar regions, all of which are traversed by aircraft, including airliners. Surveillance there has long been carried out by “procedural” methods, which means periodic reports from pilots to ATC of their estimated positions based on the plane’s inertial navigation system. Since those updates are both imprecise and only periodic, ATC protocols require very large spacing between oceanic flight tracks and between planes flying the same flight track.

This began to change in 2019, when an investor-owned company—Aireon—started offering near-real-time global surveillance via satellite. The company contracted with satellite company Iridium to place its transponders on all 66 satellites in its new Iridium-Next constellation that was launched mostly in 2018. Since most ANSPs are now implementing ground-based surveillance using a system called ADS-B (automatic dependent surveillance-broadcast), business jets and airliners flying oceanic, mountainous, and polar routes are generally equipped with ADS-B transponders that broadcast the plane’s identity, GPS position, speed, and other data every three seconds. That signal is detected by the new satellites and retransmitted to domestic ANSP control centers that subscribe to Aireon’s services. The space-based information then shows up on controllers’ screens, just as do ADS-B transmissions in domestic airspace.

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Aireon’s service, which went live in March 2019, can now offer radar-like surveillance to the 70% of the globe where this has been lacking. But it is only available to ANSPs that subscribe to the service.

”
Aireon’s service, which went live in March 2019, can now offer radar-like surveillance to the 70% of the globe where this has been lacking. But it is only available to ANSPs that subscribe to the service. With the addition of the Port Moresby Flight Information Region of Pacific airspace in March 2021, Aireon reported that its system is in use in over 248 million

sq. km. of the earth's surface—nearly 49% of the total.⁷⁰ Subsequent additions brought Aireon's subscriber coverage to more than half of the world's airspace as of March 2024.⁷¹ Subscribers include the ANSPs of Azerbaijan, Cabo Verde, Canada, Denmark, the Dutch Caribbean, France, Hong Kong, Iceland, India, Ireland, Malaysia, the Philippines, Portugal, Singapore, South Africa, Trinidad and Tobago, the U.K. and three multi-country providers: Eurocontrol's MUAC, the six COCESNA countries of Central America, and the 17 African countries of ASECNA.

Aireon is a joint venture of Iridium and five ANSPs: ENAV, AirNav Ireland, NATS, Nav Canada, and Naviair (Denmark). The first to implement oceanic ADS-B service were Nav Canada and NATS across the North Atlantic. While that was technically a trial, ICAO agreed that the two ANSPs could reduce the lateral spacing (between tracks) and longitudinal spacing (nose to tail on a given track) for the period of the trial, with further reductions likely once performance has been measured and analyzed. Results during 2019 showed significant savings in time and fuel (and hence CO₂ emissions), as well as safety benefits from controllers able to quickly identify deviations from assigned tracks or assigned altitudes. Significantly reduced traffic levels during 2020 enabled NATS and Nav Canada to experiment with "free route airspace" rather than restricting traffic to the traditional North Atlantic Organized Track System (OTS). In 2021, the two ANSPs operated without OTS for 20 days, on which airlines submitted their preferred flight tracks for approval.⁷² The next step is to eliminate OTS completely.

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Aireon's competition until recently has come from Inmarsat, which operates a communications mechanism known as ADS-C.

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Aireon's competition until recently has come from Inmarsat, which operates a communications mechanism known as ADS-C. Among other communications services, it has long provided airlines with position reporting at 10- to 14-minute intervals, by contract (the

⁷⁰ Press Release, "NiuSky Pacific Begins Operational Usage of Aireon Data," Aireon, 20 March 2021.

⁷¹ Emily Feliz, "Aireon to Begin Development of Space-Based VHF Communications Services to Augment its Industry-Leading Surveillance System," Aireon, 7 March 2024.

⁷² Tony Osborne, "ANSPs Start Scaling Back North Atlantic Organized Track Structure," *Aviation Daily*, 9 Feb. 2022.

C in ADS-C). Inmarsat has proposed an “enhanced” version that would transmit reports every 3.2 minutes (compared with every three *seconds* for space-based ADS-B).⁷³ Inmarsat was originally an international satellite communications agency, but its commercial services were privatized in 1999, and it was listed on the London Stock Exchange in 2005. In 2019, it was acquired by a joint venture of infrastructure investment funds: Apax Partners and Warburg Pincus plus two Canadian pension funds, CPPIB and OTPP.⁷⁴ In 2023, Inmarsat was sold to U.S. satellite communications company Viasat.⁷⁵

The competitive landscape may be changing. Canberra-based Skykraft reached an agreement with Airservices Australia to launch and operate a 200-satellite constellation to improve ADS-B coverage in Australia and its oceanic airspace. The first five satellites were launched via a SpaceX Falcon 9 launch vehicle from Cape Canaveral in January 2023 and were successfully activated in LEO later that month.⁷⁶ Skykraft launched a second batch of satellites on a Falcon 9 from California’s Vandenberg Space Force Base in June 2023, bringing the total to 10.⁷⁷ A subsequent launch in July added five more satellites, with space-based ADS-B service expected to go live in 2026.⁷⁸ The service will include controller-pilot VHF communications in addition to ADS-B surveillance. In August 2024, Skykraft announced an agreement with Niusky Pacific to offer its space-based ADS-B and VHF services throughout Papua New Guinea’s domestic and oceanic airspace.⁷⁹ Niusky is a current subscriber to Aireon’s space-based ADS-B service. In May 2025, Aireon began planning for the launch of a new 20-satellite constellation that will provide subscribers with both ADS-B data and VHF communications worldwide, especially in oceanic and remote airspace.⁸⁰

In addition, it was announced in May 2021 that Spain’s ANSP Enaire had teamed with Spanish technology and defense contractor Indra in creating a new company called Startical, whose aim is to develop a space-based system to provide both ADS-B surveillance

⁷³ GAO-19-532, “FAA’s Analysis of Costs and Benefits Drove It Plans to Improve Surveillance in U.S. Oceanic Airspace,” Government Accountability Office, July 2019.

⁷⁴ “Inmarsat Acquired by Private Equity Consortium for \$3.4bn.” *Air Traffic Management*, 25 March 2019.

⁷⁵ Kerry Reals, “Viasat completes Inmarsat acquisition,” *FlightGlobal*, 5 June 2023.

⁷⁶ Press Release, “Australia’s largest ever satellite constellation now active,” Skykraft, 12 Jan. 2023.

⁷⁷ Press Release, “Skykraft lifts off with another Air Traffic Management satellite stack for 2023,” Skykraft, 13 June 2023.

⁷⁸ Press Release, “Skykraft Announces Successful Launch of Skykraft4 Mission,” Skykraft, 24 July 2025.

⁷⁹ Press Release, “Skykraft and Niusky Pacific to transform Papua New Guinea’s airspace using space-enabled technology,” Skykraft, 14 Aug. 2024.

⁸⁰ Press Release, “Aireon to Begin Next Phase of Space-Based VHF Deployment” Aireon, 13 May 2025.

and VHF communications between pilots and controllers.⁸¹ The plan would make use of a constellation comprising more than 200 satellites in low-Earth orbit. The company announced in June that it had successfully launched its second demonstrator satellite.⁸²



In May 2025, Aireon began planning for the launch of a new 20-satellite constellation that will provide subscribers with both ADS-B data and VHF communications worldwide, especially in oceanic and remote airspace.



In 2019, FAA signed a research agreement with Aireon aimed initially at exploring the use of its ADS-B data in the Caribbean. This focused on using a modified version of the En Route Automation Modernization (ERAM) system at Miami Center to control traffic between Miami and San Juan, but FAA also modified the Advanced Technologies and Oceanic Procedures (ATOP) software used in its New York, Oakland, and Anchorage Oceanic Centers for experimental use in their oceanic airspaces. In January 2020 *Aviation Daily* reported that FAA was developing a one- to three-year roadmap to expand its use of space-based ADS-B. And in November 2020, FAA and Aireon announced an agreement under which the agency will use the company's ADS-B data to analyze possible uses in managing both domestic and oceanic air services.⁸³ FAA has so far declined to subscribe to Aireon's space-based ADS-B service.

3.3

DIGITAL REMOTE AIR TRAFFIC CONTROL TOWERS

In 2007, the FAA research center in Atlantic City, New Jersey, conducted a demonstration project on a new kind of airport control tower. Instead of a tall building with a staffed control cab on top, FAA evaluated carrying out tower functions using cameras and other sensing devices at various airport locations, with the control cab and large display screens on the ground. Besides saving the cost of constructing and maintaining the tall building, the

⁸¹ Graham Warwick, "Spain Plans Space-Based Surveillance Communications Constellation," *Aviation Daily*, 2 June 2021.

⁸² Press Release, "Startical Successfully Launched Its Second demonstrator satellite, IOD-2, Advancing Space-Based Air Traffic Management," Startical, 24 June 2025.

⁸³ Robert Poole, "FAA to Use Aireon Space-Based ADS-B Data," *Aviation Policy News*, Nov. 2020.

demonstration showed that controllers would have increased visibility (especially at night and in rain or fog when infrared cameras provided better views) and decreased workload.⁸⁴ Despite these very positive results, the FAA declined to pursue remote tower deployments.



Besides saving the cost of constructing and maintaining the tall building, the demonstration showed that controllers would have increased visibility (especially at night and in rain or fog when infrared cameras provided better views) and decreased workload.



Drawing on these findings, technology companies and corporatized ANSPs overseas began developing and testing remote tower concepts. LFV in Sweden and Avinor in Norway were among the first to implement remote tower programs, and the first remote tower to be certified for operational use was developed for LFV by Saab-Sensis Corporation and became operational in 2015. In the years since then, remote towers have been planned or implemented in Australia, Belgium, Canada, Denmark, Estonia, Finland, Germany, Hungary, Iceland, Italy, the Netherlands, Romania, and the U.K., among others. ANSPs have subsequently implemented remote tower *centers* in which controllers can manage air traffic at a number of airports from a single location, providing additional cost savings. Such centers are already in operation in Germany, Norway, and Sweden and are in the planning stages in other countries. An August 2025 market forecast from Future Market Insights projected the global remote tower market to grow from \$537 million in 2025 to \$3.3 billion by 2035.⁸⁵

During the past year, there were several new remote and digital tower developments in Asia, Europe, the Middle East, and North America.

- In March, Italy's ANSP ENAV approved its four-year strategic plan that calls for converting the Brindisi and Padua control centers into remote tower centers that are expected to manage 26 remote towers at low-volume airports by 2033.⁸⁶

⁸⁴ Daniel Hannon, et al., "Feasibility Evaluation of a Staffed Virtual Tower," *Journal of Air Traffic Control*, Vol. 50, No. 1, Winter 2008.

⁸⁵ "Remote Towers Market Size and Share Forecast Outlook 2025 to 2035," Future Market Insights, Aug. 2025.

⁸⁶ "ENAV releases four year plan for upgrades and expansion," *Air Traffic Technology International*, 3 Apr. 2025.

- Also in March, Thailand’s ANSP Aerothai announced plans to begin implementing digital towers at the country’s larger airports and remote towers at lower-volume airports.⁸⁷
- In April, Belgian ANSP Skeyes launched its Digital Tower Test Center in Steenokkerzeel.⁸⁸ It is a prototype for the RTC being set up by Skeyes and the Walloon airport operator in Namur. By 2026, air traffic at both Charleroi and Liege airports are to be managed by the new center in Namur. The Namur RTC will be responsible for air and ground traffic at both airports.
- In May, a groundbreaking ceremony took place for a new air traffic control operations center in Seru Mahuma, Curaçao, which will incorporate remote/digital tower technology.⁸⁹ This will allow the Seru Mahuma center to manage traffic for both Curaçao and Bonaire airports.
- In September, Nav Canada broke ground on its first remote/digital tower facility.⁹⁰ Located in Kingston, Ontario, the ANSP describes it as both an operational digital tower and a transitional facility for a nationwide system of air traffic services hubs. It is planned to be operational by summer 2026 and will serve as the foundation for Nav Canada’s first digital hub, which will host remote traffic management services for up to 20 airports.
- In October, the Saudi Arabian General Authority of Civil Aviation approved the country’s first remote tower system.⁹¹ The remote tower is located at Al-Ula International Airport and will be managed from a remote tower center at Jeddah’s King Abdulaziz International Airport more than 400 miles away. The system was operational in February 2026 and uses Indra’s digital tower technology.⁹²
- Also in October, Italian ANSP ENAV, through its subsidiary Techno Sky, was awarded a contract to supply and implement a remote/digital tower solution at Senai Airport in Malaysia, the country’s first.⁹³

⁸⁷ “Thailand unveils \$106M investment in aviation technology,” *VNExpress International*, 4 Mar. 2025.

⁸⁸ Press Release, “Launch of Digital Tower Test Centre by skeyes,” Skeyes, 25 Apr. 2024.

⁸⁹ Robert Poole, “Curaçao Developing Remote Tower Center,” *Aviation Policy News*, 23 June 2025.

⁹⁰ Press Release, “Innovation Takes Flight – NAV CANADA Breaks Ground on Canada’s First Digital Air Traffic Facility in Kingston,” Nav Canada, 10 Sept. 2025.

⁹¹ Elsie Clark, “Saudi regulators approve Middle East’s first virtual ATC tower,” *Aerospace Tech Review*, 1 Oct. 2025.

⁹² Press Release, “Al-Ula, Saudi Arabia, becomes the Middle East’s first airport to be operated remotely, powered by SANS and Indra’s Digital Tower,” Indra Group, 11 Feb. 2026.

⁹³ Press Release, “An ENAV Digital Control Tower in Malaysia,” ENAV, 20 Oct. 2025.

- In December, Searidge Technologies announced the certification of the first remote/digital tower in Spain, located at Vigo Airport.⁹⁴ Initial operations will take place during low-traffic periods, with a conventional tower controller on standby. The digital tower is located in a building adjacent to the airport, at ground level.



Two U.S. remote tower projects entered the FAA certification process, one in Leesburg, Virginia, and the other at Loveland, Colorado, near Fort Collins. They were funded by a combination of state funds and private investment, not by the FAA.



Compared to Europe and Asia, remote tower progress in the United States has been very slow. In the 2018 FAA reauthorization, Congress authorized a pilot program under which the agency would develop and test five remote towers at five different locations, but did not provide funding. Two U.S. remote tower projects entered the FAA certification process, one in Leesburg, Virginia, and the other at Loveland, Colorado, near Fort Collins. They were funded by a combination of state funds and private investment, not by the FAA.⁹⁵ In addition to these two projects, three others are in preliminary planning stages. In Selma, Alabama, local officials have proposed a remote tower center at Craig Field, a former Air Force base. The Selma Economic Development Authority reached agreements with Advanced ATC, Inc., a firm founded by former FAA air traffic control managers, and Spain's Indra. Selma officials held a ribbon-cutting event for the deployment of a mobile remote tower at Craig Field in January 2023.⁹⁶ Construction of a permanent remote tower and center is planned.

⁹⁴ Press Release, "Searidge Powers Spain's First Regulator-Certified Digital Control Tower at Vigo Airport," Searidge Technologies, 10 Dec. 2025.

⁹⁵ Robert Poole, "Remote Towers: Europe Many, U.S. Zero," *Aviation Policy News*, 21 May 2021.

⁹⁶ Todd Prater, "Officials cut ribbon for mobile control tower, first step in bringing growth in for a landing at Craig Field Airport," Black Belt News Network, 21 Jan. 2023.

In North Carolina, the city of Concord signed a P3 agreement with Norwegian technology provider Kongsberg in April 2022 to replace the aging conventional control tower at Concord-Padgett Regional Airport with a modern remote tower.⁹⁷ Kongsberg stated that it planned to begin the FAA certification process in 2023, although the company has not entered system design approval as of 2025.

In Florida, Bartow and Winter Haven announced plans in May to pursue remote towers at both of those cities' airports, which would be managed from a remote tower center located at Bartow Executive Airport. Frequentis is supplying the technology and overseeing construction.

In November 2021, the FAA issued an “operational viability decision” on the Saab Remote Tower System at Leesburg authorizing it to continue managing traffic without a backup mobile tower.⁹⁸ This was not official certification, but it did trigger the type certification process between Saab and the FAA, which would allow the Leesburg remote tower to be approved as a non-federal system within the National Airspace System. Congress included \$4.9 million in FY 2022 appropriations to fund contract controllers for type certification at Leesburg, as well as fund operational viability testing at Fort Collins.⁹⁹

However, in February 2023, FAA announced it would terminate the operations of the Leesburg remote tower on June 14.¹⁰⁰ Saab had sent a letter to the FAA in 2022 announcing that it was pulling out of the project after nine years. The company told *The Washington Post* that it “determined there is no reasonable path for approval” under the FAA’s shifting certification requirements.¹⁰¹ The FAA’s primary internal advocate of the technology, its former vice president of air traffic services, had also been reassigned to another role within the agency in 2022.

⁹⁷ Press Release, “Kongsberg and the City of Concord Complete First Milestone Toward Air Traffic Management Modernization,” Kongsberg Gruppen, 20 Apr. 2022.

⁹⁸ Robert Poole, “More on FAA and Remote Towers,” *Aviation Policy News*, 22 Nov. 2021.

⁹⁹ Consolidated Appropriations Act, 2022, H.R. 2471, Division L Explanatory Statement, 15 March 2022.

¹⁰⁰ Robert Poole, “Is FAA Giving Up on Remote Towers?” *Aviation Policy News*, 23 March 2023.

¹⁰¹ Lori Aratani, “This air traffic control system helped to grow flights. Now it’s being shut down.” *The Washington Post*, 11 Apr. 2023.

Following the news out of Leesburg, it was reported that the Fort Collins remote tower project was “on life support.”¹⁰² Vendor Searidge pulled out of the Colorado tower project in October 2023. The local project sponsors have brought in Frequentis and RTX (formerly Raytheon) in an attempt to salvage progress made to date and complete system design approval, but FAA is no longer supporting the project.¹⁰³



Friedman Memorial Airport in Hailey, Idaho also reconsidered a remote tower after running into problems at FAA.



Friedman Memorial Airport in Hailey, Idaho also reconsidered a remote tower after running into problems at FAA. The board of Friedman Memorial announced in April 2021 that it planned to develop a request for proposals for a digital remote tower and seek FAA approval to enter its pilot program. In January 2022, Friedman Airport selected a Frequentis/RTX partnership as the main technology vendor. But the airport ultimately decided to pursue a conventional brick-and-mortar tower, citing FAA’s costly requirement to obtain certification at the Tech Center in Atlantic City and federal funding made available only to conventional tower projects.¹⁰⁴

These latest setbacks suggest the FAA bureaucracy is resistant to remote and digital tower technology. The FAA Reauthorization Act of 2024 included provisions in Section 621 aimed at breaking the FAA logjam on remote/digital towers.¹⁰⁵

First, the law requires FAA to create a clearly defined system design and operational approval process, and to publish milestones for achieving testing and deployment approval, within 180 days of enactment on May 16, 2024.¹⁰⁶ The lack of clear formal standards and FAA’s ad hoc approach to system design approval bedeviled airport sponsors and

¹⁰² David Hughes, “Colorado Airport’s Remote Tower on Life Support,” *Aviation International News*, 11 Apr. 2023.

¹⁰³ Bill Carey, “Colorado Advances Digital Tower Effort Dropped by FAA,” *Aviation Week*, 6 March 2024.

¹⁰⁴ Emily Jones, “Friedman reports ‘very healthy’ revenues ahead of major capital projects,” *Idaho Mountain Express*, 17 Jan. 2024.

¹⁰⁵ Marc Scribner, “FAA Reauthorization Boosts U.S Remote Towers,” *Aviation Policy News*, 19 June 2024.

¹⁰⁶ 49 U.S.C. § 47124(h)(1).

technology vendors, and deterred interest in remote/digital towers in the United States. This provision would also require FAA to “assess the safety benefits of a remote tower against the lack of an existing tower,”¹⁰⁷ which will hopefully help the agency better understand the risks and costs that arise from inaction.

Second, Sec. 621 partially reverses a 2022 FAA decision to force vendors to install their systems at the FAA Technical Center in Atlantic City, New Jersey for evaluation rather than allow those systems to be evaluated at the airports at which they would be operated, a costly deviation from international best practices. Specifically, the law requires that FAA expand system design approval to at least three locations outside the Technical Center by the end of 2024.¹⁰⁸



... Sec. 621 states that FAA should not interpret anything in the new law as invalidating prior system design approval activity and that existing work toward this goal should be preserved.



Third, despite the many setbacks, the new law recognizes the significant progress made toward achieving system design approval by Northern Colorado’s project, and that forcing them to restart from square-one under the new mandated process would be cost-prohibitive. To that end, Sec. 621 states that FAA should not interpret anything in the new law as invalidating prior system design approval activity and that existing work toward this goal should be preserved.¹⁰⁹

Fourth, to allow for better congressional oversight of FAA’s efforts to implement the new remote tower law, Sec. 621 requires the FAA to brief legislators within 180 days of enactment and every six months thereafter through September 2028.¹¹⁰ These regular briefings should help bring needed transparency to FAA’s work on remote towers, where opaqueness was a common complaint among external stakeholders.

¹⁰⁷ 49 U.S.C. § 47124(h)(2)(E).

¹⁰⁸ 49 U.S.C. § 47124(h)(3).

¹⁰⁹ 49 U.S.C. § 47124(h)(4).

¹¹⁰ FAA Reauthorization Act of 2024, Pub. L. 118–63, 138 Stat. 1235, 16 May 2024. § 621(b).

Finally, the law amends the FAA Contract Tower Program’s and Contract Tower Cost Share Program’s enabling statutes to explicitly add eligibility for remote towers.¹¹¹ This provision aims to level the playing field between conventional brick-and-mortar towers and remote towers. These changes should both increase the ability of small airports to add tower service and reduce per-airport expenses through lower-cost remote towers. Sec. 621 also orders FAA to prioritize testing and deployment of remote towers at those airports that currently lack air traffic control towers, wish to provide small and rural community air service, or are new entrants into the Contract Tower Program.¹¹²



... FAA has not made progress in expanding this process to at least three airports outside the Technical Center as required by Congress.



FAA is currently evaluating the Colorado-sponsored RTX/Frequentis remote tower system at its Atlantic City Technical Center. Internal FAA documents obtained by Reason Foundation state, “For a system to become operational in the [National Airspace System], the vendor system must obtain [system design approval] at the Tech Center,” which shows FAA has not made progress in expanding this process to at least three airports outside the Technical Center as required by Congress.¹¹³ FAA also indicated that its sudden publication of new draft technical requirements in June 2024 delayed the RTX/Frequentis installation at the Tech Center by at least four months.

Following the conclusion of flight testing in 2025 at Atlantic City, optimistic observers anticipate that FAA could issue system design approval (SDA) for the RTX/Frequentis system as early as summer 2026. The SDA should specify which runway configurations can utilize this technology. Some jurisdictions and potential vendors are preparing to submit applications to enter FAA’s remote tower program once the RTX/Frequentis SDA is published, which is viewed as an indicator of FAA’s support for the underlying technology. Importantly, these jurisdictions may be able to leverage new 2024 FAA reauthorization

¹¹¹ Ibid. § 621(c).

¹¹² 49 U.S.C. § 47124(h)(5).

¹¹³ Marc Scribner, “FAA Misses Congressional Targets on Remote/Digital Towers,” *Aviation Policy News*, 24 Feb. 2025.

provisions, such as the requirement that FAA allow the SDA process to take place at no fewer than three airports outside the Atlantic City Technical Center.

In May, Reason Foundation published a report that offered four recommendations to advance near-term deployment of remote/digital towers in the United States.¹¹⁴

Specifically, FAA should consider:

- Developing a new remote tower center to manage multiple small airports;
- Testing and certification of multiple technology vendors;
- Conducting field pilots, including system design approval, at sponsor airports as required by the FAA Reauthorization Act of 2024; and
- Reviewing European Union standards for (partial) applicability in the United States.

3.4

U.S. AIR TRAFFIC CONTROL REFORM

Efforts to have the United States corporatize its ATC system, joining the global trend, began in earnest during the Clinton administration. The idea was proposed by Vice President Al Gore's National Partnership for Reinventing Government and then studied in depth by a task force in the Office of the Secretary of Transportation. That effort failed due to lukewarm support from airlines, strong opposition from the private-plane community, and the lack of a champion in Congress. Various partial reforms were attempted during the George W. Bush administration, but they got no further.

In 2012 the Business Roundtable organized an ATC reform group to develop a business plan for a nonprofit, user-funded, stakeholder-governed ATC corporation, similar to Nav Canada (the world's second largest ANSP, after FAA's Air Traffic Services division).¹¹⁵ That effort found a congressional champion in Rep. Bill Shuster (R, PA), then chairman of the House Transportation & Infrastructure Committee. The committee held hearings on the subject in 2014, with strong support from Airlines for America and the National Air Traffic Controllers Association. The bill drafted by the Republican majority was approved by the committee in 2016, but it was strongly opposed by private-plane groups Aircraft Owners and Pilots Association (AOPA) and National Business Aviation Association (NBAA), as well as all federal employee unions except the air traffic controllers.

¹¹⁴ Ginger Evans and Marc Scribner, "Advancing Remote Tower Deployment in the United States," Reason Foundation Policy Brief, May 2025.

¹¹⁵ Robert Poole, "Air Traffic Control as a Public Utility," Reason Foundation Policy Study, 15 June 2023.

The bill was revised in 2017 to address concerns raised by small airports and private-plane groups, and it was approved by the T&I Committee in 2018. But House Republican leadership did not bring it to the floor, lacking the votes to ensure passage, due in part to an unfilled White House commitment to lobby wavering Republican members.¹¹⁶ There was also no companion ATC provision in the Senate bill, due to intense lobbying of rural-state senators by the anti-corporatization coalition led by private-plane groups AOPA and NBAA. FAA reauthorization was enacted later in 2018 with no ATC reform title. ATC governance reform was also not included in Congress' 2024 reauthorization of the FAA.

Following a fatal crash between a commercial airliner and military helicopter in January 2025 near Washington, D.C., Congress approved \$12.5 billion in funding to initiate technology updates of FAA's air traffic control infrastructure for what the Department of Transportation has called a "Brand New Air Traffic Control System."¹¹⁷ While Congress ordered FAA to consider facility consolidation and other organizational improvements, the focus to date has been on a small subset of aging facilities and equipment.

Governance reform was not considered and there is currently no plan to complete a full overhaul of FAA air traffic management infrastructure. Most troubling is that FAA has adopted a procurement method similar to the one used for the failed Advanced Automation System project in the 1980s and 1990s.¹¹⁸ Independent experts have expressed skepticism that the "Brand New Air Traffic Control System" will deliver what its name promises.¹¹⁹

¹¹⁶ Lauren Gardner, "How ATC Got Grounded," *Politico*, 2 April 2018.

¹¹⁷ Robert Poole, "Who Should Pay for Air Traffic Control Modernization?" *Aviation Policy News*, 23 July 2025.

¹¹⁸ Robert Poole, "Cautions on 'Brand-New ATC System,'" *Aviation Policy News*, 18 Sept. 2025.

¹¹⁹ Rick Castaldo, "Why DOT's 'Brand New Air Traffic Control System' Will Not Work," *Aviation Policy News*, 23 June 2025.

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