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NOTE

FIXING OUR AGING INFRASTRUCTURE: HOW TO PAY FOR AIRPORT IMPROVEMENTS

I. INTRODUCTION

When Vice President Joe Biden famously declared that New York City's LaGuardia Airport was like being in "some third world country,"¹ the state of the nation's infrastructure was thrust into the spotlight. LaGuardia Airport was the largest, most innovative airport in the world when it opened in 1939 with fine restaurants, Art Deco interiors, and separate spaces for arriving and departing passengers.² But in recent years, the airport has suffered from leaking ceilings, mice, dirty bathrooms, and an increase in the number of homeless people living in the airport's public areas.³ How did an airport that was once the model for the industry fall into such disrepair?

In the 1950s and 1960s, the United States was at the forefront of infrastructure.⁴ This framework changed the way Americans lived.⁵

1. *Biden Compares La Guardia Airport to 'Third World'*, N.Y. TIMES, Feb. 7, 2014, at A19. President Donald J. Trump echoed similar sentiments while speaking at Trump Tower stating, "We used to have the greatest infrastructure anywhere in the world, and today we're like a third-world country. We're literally like a third-world country." Sophie Tatum, *Trump Compares US Infrastructure to that of a 'Third World' Country*, CNN (Aug. 15, 2017, 5:50 PM), <https://www.cnn.com/2017/08/15/politics/donald-trump-third-world-country/index.html>.

2. Linda J. Wilson, *'LaGuardia Airport' Traces Aviation History*, QUEENS GAZETTE (Feb. 4, 2009) (reviewing JOSHUA STOFF, *LAGUARDIA AIRPORT* (2008)), <http://www.qgazette.com/news/2009-02-04/features/027.html>.

3. Kevin Fasick & Natalie O'Neill, *La Guardia Isn't 'Third World' — It's Worse: Immigrants Workers*, N.Y. POST (Feb. 9, 2014, 3:15 AM), <http://nypost.com/2014/02/09/la-guardia-isnt-third-world-its-worse-immigrants-workers>; Danielle Furfaro, Philip Messing & Georgett Roberts, *Homeless Squatters Are Taking over LaGuardia Airport*, N.Y. POST (Dec. 14, 2015, 8:13 AM), <https://nypost.com/2015/12/14/homeless-squatters-are-taking-over-laguardia-airport>.

4. See ROSABETH MOSS KANTER, *MOVE: PUTTING AMERICA'S INFRASTRUCTURE BACK IN THE LEAD* 14 (2015).

5. See *id.*

suburbs grew, the length of commutes increased, and cars surpassed trains as the primary mode of transportation for commuting to work.⁶ The federal government instituted taxes to fund the construction and maintenance of these newly developed infrastructure systems that remain in place today.⁷ However, the anticipated taxes soon failed to meet the infrastructure's growing needs, causing projects to fall sharply behind other, poorer nations.⁸

The nation's infrastructure currently ranks ninth in the world, according to a recent report measuring the country's Global Competitive Index.⁹ In 2017, the American Society of Civil Engineers ("ASCE") gave the United States a "D+" for the state of its infrastructure.¹⁰ Infrastructure spending only makes up 2.4% of the United States Gross Domestic Product ("GDP"), with only a quarter of that coming from the federal government.¹¹ Meanwhile, in 2011, infrastructure spending in Europe made up 5% of its GDP and 9% of the GDP in China.¹² In 2006, the U.S. spent twice as much on new construction as Great Britain, but Great Britain spent 23% more on maintaining its roads.¹³ This exemplifies how the U.S. is still not spending enough money to maintain the infrastructure it has.¹⁴ It is thought that maintenance and upkeep do

6. *Id.*

7. *Id.*

8. *See id.* at 15, 17.

9. WORLD ECON. FORUM, GLOBAL COMPETITIVENESS REPORT 2017–2108, at 302-03 (Klaus Schwab ed., 2017). The United States fell to number sixteen in 2014. Steve Kroft, *Falling Apart: America's Neglected Infrastructure*, CBS NEWS (Nov. 23, 2014), <http://www.cbsnews.com/news/falling-apart-america-neglected-infrastructure>.

10. *America's Grades*, AM. SOC'Y OF CIVIL ENG'RS, <https://www.infrastructurereportcard.org/americas-grades> (last visited Apr. 15, 2018). The ACSE consistently gave United States infrastructure a "D" since 1998, until giving a "D+" in 2013 Report Card. *Failure to Act: Closing the Infrastructure Gap for America's Economic Future*, AM. SOC. OF CIVIL ENG'RS 2 (2016), <http://www.infrastructurereportcard.org/wp-content/uploads/2016/05/2016-FTA-Report-Close-the-Gap.pdf>; *America's Grades*, *supra*. The ASCE report card rates energy, schools, public parks, transit, roads, rail, ports, waterways, bridges, aviation, waste water, solid waste, levees, hazardous waste, drinking water, and dams. *See 2017 Infrastructure Grades*, AM. SOC'Y OF CIVIL ENG'RS, <https://www.infrastructurereportcard.org/wp-content/uploads/2016/10/Grades-Chart.png> (last visited Apr. 15, 2018). Only rail was rated as "good" with a "B." *Id.*

11. Chad Shirley, *Spending on Infrastructure and Investment*, CONG. BUDGET OFF. (Mar. 1, 2017), <https://www.cbo.gov/publication/52463>.

12. *Life in the Slow Lane*, ECONOMIST (Apr. 28, 2011), <http://www.economist.com/node/18620944>.

13. *Id.*

14. *See generally Failure to Act*, *supra* note 10 (discussing how the United States has a large investment gap in all forms of infrastructure).

not “sizzle,” are “not sexy,” or do not generate the recognition that politicians want.¹⁵

While there is a general consensus that the United States must fix its aging infrastructure, there is a great debate about how to finance it.¹⁶ Former Speaker of the House John Boehner spoke about how the United States must create a plan to pay for infrastructure improvements but did not offer any solutions.¹⁷ In a 2015 infrastructure spending bill, Democrats proposed closing corporate tax loopholes to pay for the bill, but Republicans voted it down, stating that increasing taxes on business would hurt the economy.¹⁸ Later that year, Congress came to an agreement to provide \$305 billion for highway improvements over five years, almost two decades after the last long-term infrastructure spending bill.¹⁹

But, while the politicians spend their time debating how infrastructure improvements should be funded, American businesses and families are losing.²⁰ The impact of not investing in infrastructure will cause the cost of transporting goods to go up; the time it takes to travel from place to place to increase; and water and electricity systems to fail to meet demand.²¹ The ASCE has noted, “As costs rise, business productivity falls, causing GDP to drop, cutting employment, and ultimately reducing personal income.”²² The group estimates that, on average, households will lose \$3400 and the GDP will lose \$395 billion each year between 2016 and 2025 due to inadequate funding for infrastructure.²³

15. See KANTER, *supra* note 4, at 20; Andrew Stern, *There's a Multitrillion-Dollar Issue US Politicians Actually Agree on, and It's Making Gas, Food, and Travel More Expensive*, BUS. INSIDER 6:20 (July 16, 2016, 11:40 AM), <http://www.businessinsider.com/why-americas-crumbling-infrastructure-is-harming-its-economy-and-future-2016-7>; LastWeekTonight, *Infrastructure: Last Week Tonight with John Oliver (HBO)*, YOUTUBE 0:40 (Mar. 2, 2015), <https://www.youtube.com/watch?v=Wpzvayypav8>. “So, most people think infrastructure is boring.” LastWeekTonight, *supra*, at 1:19.

16. See Sylvia Merler, *The U.S. Infrastructure Investment Debate*, BRUEGEL (Sept. 19, 2016), <http://bruegel.org/2016/09/the-us-infrastructure-investment-debate> (comparing the analysis of several economists, public officials, researchers, and journalists on how to finance infrastructure projects).

17. See LastWeekTonight, *supra* note 15, at 15:20.

18. Eric Pianin, *\$478B Infrastructure Bill Blocked by Senate GOP*, FISCAL TIMES (Mar. 25, 2015), <http://www.thefiscaltimes.com/2015/03/25/478B-Infrastructure-Bill-Blocked-Senate-GOP>. Republicans instead proposed setting up a “deficit neutral reserve fund.” *Id.*

19. Kathleen Miller & Billy House, *Congress Sends 5-Year, \$305 Billion Highway Plan to Obama*, BLOOMBERG: POLITICS (Dec. 3, 2015, 9:12 PM), <http://www.bloomberg.com/politics/articles/2015-12-03/house-passes-five-year-305-billion-u-s-highway-funding-plan>.

20. See *Failure to Act*, *supra* note 10, at 21.

21. See *id.*

22. *Id.*

23. *Id.* at 26. This loss climbs to \$5100 per households and \$947 billion GDP per year

In the United States, our infrastructure moves \$51 billion worth of goods daily, and infrastructure jobs make up 11% of the workforce as of 2015.²⁴ Air transportation annually moves more than \$562 billion in freight and almost 800 million passengers.²⁵ Civil aviation accounts for \$1.3 trillion in economic activity, 10.2 million jobs, and 5.2% of the GDP.²⁶ Seventy-percent of passenger air traffic goes through thirty “core” airports of the 3300 airports the Federal Aviation Administration (“FAA”) designated as important to the national aviation system.²⁷ Seventy-nine percent of the domestic and international air freight goes through those same thirty airports.²⁸ The volume of people and goods moving through so few airports causes delays and congestion.²⁹ This congestion is the main economic threat to aviation.³⁰ Failure to invest in air infrastructure could cost the United States \$313 billion and 35,000 jobs by 2020.³¹

The Airport Improvement Program (“AIP”) is a federal grant through the FAA used to fund airport projects.³² One of the named purposes for the AIP is to address projected capacity issues that cause congestion.³³ But, in recent years, the AIP has experienced severe cuts to its funding from both President Obama and Congress.³⁴ Additionally, for airports to receive AIP grants, they must acquiesce to strict assurances on what the funds will be used for and how the airport will operate.³⁵

between 2026 and 2040. *Id.*

24. Robert Puentes, *Why Infrastructure Matters: Rotten Roads, Bum Economy*, BROOKINGS INST. (Jan. 20, 2015), <https://www.brookings.edu/opinions/why-infrastructure-matters-rotten-roads-bum-economy>.

25. KANTER, *supra* note 4, at 74.

26. *Id.*

27. *Failure to Act*, *supra* note 10, at 18. There are over 19,000 airports in the United States. U.S. GOV'T ACCOUNTABILITY OFF., GAO-15-306, AIRPORT FINANCE: INFORMATION ON FUNDING SOURCES AND PLANNED CAPITAL DEVELOPMENT 4 (2015). Only the 3345 designated public-use airports are eligible for federal funding. *Id.*

28. *Failure to Act*, *supra* note 10, at 18.

29. *Id.* at 18; Andrew Stern, *supra* note 15, at 7:30.

30. *Failure to Act*, *supra* note 10, at 18. This includes both air and ground congestion. *Id.*

31. KANTER, *supra* note 4, at 75.

32. CINDY NICHOL, TRANSP. RES. BD., INNOVATIVE FINANCE AND ALTERNATIVE SOURCES OF REVENUE FOR AIRPORTS 5-6 (2007).

33. 49 U.S.C. § 47101(a)(7) (2012).

34. *FAA Reauthorization: Airport Issues and Infrastructure Financing: Hearing Before the Subcomm. on Aviation Operations, Safety, & Sec. of the Comm. on Commerce, Sci., & Transp.*, 114th Cong. 5 (2015) [hereinafter *Hearing*] (statement of Gerald L. Dillingham, Ph.D., Director, Civil Aviation Issues, U.S. Government Accountability Office).

35. David Y. Bannard, *A Brief Flight Through Federal Airport Law*, FED. LAW., July 2015, at 26, 27-30 (explaining several of the more restrictive assurances).

This Note examines how the AIP, along with other government programs, is not sufficient to fund the redevelopment of the nation's airport infrastructure and offers solutions on how these government programs should be updated to meet current and future airport funding needs.³⁶ This will be accomplished by discussing the history of government funding for airports in the United States, how this funding helped grow the economy in the twentieth century, and shaped how airports are financed today.³⁷ Next, this Note explains how airports currently find financing to complete needed improvements and expansion.³⁸ In addition, this Note discusses how government programs, including the AIP, are no longer able to keep up with the need for airport development and are, in fact, hindering airports from acquiring the funds necessary in order to grow.³⁹ Finally, this Note offers a multi-step solution to update the AIP so that more funds are available from both the federal government and private investors.⁴⁰

II. GROWTH OF THE AVIATION INDUSTRY: HISTORY OF LEGISLATION TO FUND AIRPORT DEVELOPMENT

Wilbur and Orville Wright's famous first flight on December 17, 1903, ushered in a new mode of transportation.⁴¹ Within two years of that historic occasion, the brothers developed a powered plane under the control of a pilot that could remain in the air for extended periods of time.⁴² The growth of the aviation industry over the next hundred years not only saw great improvements in aviation technology but also led to several legislative efforts to regulate not only how airports and airlines were operated, but also how they were financed.⁴³ Questions about whether to fund aviation, at what level the government should fund aviation, and what other ways the government should be involved in aviation, have existed since the industry's inception.⁴⁴ This Part

36. See *infra* Parts III–IV.

37. See *infra* Parts II–III.

38. See *infra* Part III.

39. See *infra* Part III.

40. See *infra* Part IV.

41. See *A Brief History of the FAA*, FED. AVIATION ADMIN., https://www.faa.gov/about/history/brief_history (last modified Jan. 4, 2017, 4:42 PM).

42. See *History of Flight from Around the World: United States*, AM. INST. OF AERONAUTICS & ASTRONAUTICS, <https://www.aiaa.org/Secondary.aspx?id=5551> (last visited Apr. 15, 2018).

43. See *A Brief History of the FAA*, *supra* note 41; *History of Flight from Around the World*, *supra* note 42.

44. See *A Brief History of the FAA*, *supra* note 41; *History of Flight from Around the World*, *supra* note 42.

provides an overview of how the U.S. legislature has attempted to answer these questions.⁴⁵

A. *The U.S. Aviation Industry Develops from Air Mail Laws*

Shortly after the Wright brothers created their plane, European countries under the threat of war started investing in airplane development and production.⁴⁶ The U.S. government did not get involved in the aviation industry until 1915, when it created the National Advisory Committee on Aeronautics.⁴⁷ Shortly thereafter, in 1918, the U.S. Postal Service started an airmail service to spur the production of aircrafts for the war effort.⁴⁸ This airmail service had a substantial effect on business and financial institutions—mail was now able to go from coast to coast in two days when it previously took five.⁴⁹

The Air Mail Act of 1925⁵⁰ was the first major piece of legislation to affect the aviation industry.⁵¹ The Act allowed the Postmaster General to contract with private companies to fly mail for the U.S. Postal Service.⁵² Through this Act, the federal government heavily subsidized the burgeoning aviation industry at a time when there were few paying passengers, spending \$31 million for air mail between 1926 and 1930 even though the postage cost of the mail was only \$15 million.⁵³ The Act was the beginning of the government's economic regulation of the industry, as well as the catalyst for privately owned airlines.⁵⁴

With a rise in the number of flights, the federal government soon noticed that there was a lack of safety and performance standards.⁵⁵ The

45. See *supra* Part II.A–D.

46. *History of Flight from Around the World*, *supra* note 42.

47. *Id.* This agency conducted research and development of new improvements in airplane technology and disseminated this information to U.S. aircraft designers. *Id.*

48. *History of Flight*, ENCYCLOPEDIA BRITANNICA, <https://www.britannica.com/technology/history-of-flight/From-airmail-to-airlines-in-the-United-States#ref943564> (last visited Apr. 15, 2018).

49. *Id.*

50. Air Mail Act of 1925, Pub. L. No. 68-359, 43 Stat. 805.

51. THE AMERICAN AVIATION EXPERIENCE: A HISTORY 303 (Tim Brady ed., 2000). This Act is also commonly known as the Kelly Act. *Id.*

52. *Id.*

53. *History of Flight from Around the World*, *supra* note 42; see JOHN W. FISHER & ROBERT S. KIRK, CONG. RESEARCH SERV., RL30050, AVIATION: DIRECT FEDERAL SPENDING, 1918–1998, at 3 (1999).

54. THE AMERICAN AVIATION EXPERIENCE, *supra* note 51, at 303. This Act created the environment for the creation of the four major airlines of the twentieth century: United, American, Western, and Transcontinental and Western Air (“TWA”). *A Brief History of the FAA*, *supra* note 41. At the same time, European countries established nationally subsidized airlines. *History of Flight*, *supra* note 48.

55. See *A Brief History of the FAA*, *supra* note 41; see also THE AMERICAN AVIATION

Air Commerce Act of 1926⁵⁶ established regulations to support the new industry and protect consumers.⁵⁷ This Act charged the Secretary of Commerce and the newly formed Aeronautics Branch with enforcing air traffic rules, certifying aircraft, and licensing pilots, while at the same time forbidding the Secretary to establish, operate or maintain an airport.⁵⁸ It also forbade the federal government from funding airport development, although this did not last for long.⁵⁹ Through Depression-era work programs, the federal government spent \$393 million on airport development.⁶⁰

The McNary-Watres Act of 1930⁶¹ changed how air carriers would charge for transporting mail.⁶² Instead of bidding on the contract based on weight, the air carrier now charged for the operational cost of transport.⁶³ This led to a deficit of \$53.6 million.⁶⁴ In an effort to help cut costs to the government and airline reliance on subsidies, the McNary-Watres Act also required that airlines carry passengers.⁶⁵ All contracts made under this Act were canceled in 1934 due to suspected price fixing by the airlines.⁶⁶ Instead, the government transitioned to a bidding process and cut the deficit from air mail down to \$26.4 million.⁶⁷

The first law to regulate both air safety and aviation economics was the Civil Aeronautics Act of 1938.⁶⁸ The Act created the Civil

EXPERIENCE, *supra* note 51, at 303.

56. Air Commerce Act of 1926, Pub. L. No. 69-254, 44 Stat. 568.

57. See *History of Flight from Around the World*, *supra* note 42.

58. *A Brief History of the FAA*, *supra* note 41; THE AMERICAN AVIATION EXPERIENCE, *supra* note 51, at 301. Congress equated airports with seaports, and since seaports were controlled by municipalities, legislators felt airports should be as well. THE AMERICAN AVIATION EXPERIENCE, *supra* note 51, at 301.

59. FISHER & KIRK, RL30050, *supra* note 53, at 8-9.

60. *Id.* In fact, between 1933 and 1945, the federal government spent \$1.2 billion on airport development. THE AMERICAN AVIATION EXPERIENCE, *supra* note 51, at 301.

61. Air Mail Act of 1930, Pub. L. No. 71-178, 46 Stat. 259.

62. FISHER & KIRK, RL30050, *supra* note 53, at 3; THE AMERICAN AVIATION EXPERIENCE, *supra* note 51, at 303.

63. FISHER & KIRK, RL30050, *supra* note 53, at 3; THE AMERICAN AVIATION EXPERIENCE, *supra* note 51, at 303.

64. FISHER & KIRK, RL30050, *supra* note 53, at 3.

65. *Id.*

66. *Id.* When the contracts were cancelled, the U.S. Army Air Corps flew the mail. *Id.* Although there were less flights during this time, there were more accidents. *Id.*; THE AMERICAN AVIATION EXPERIENCE, *supra* note 51, at 303.

67. FISHER & KIRK, RL30050, *supra* note 53, at 3.

68. Civil Aeronautics Law of 1938, Pub. L. No. 75-706, 52 Stat. 973; THE AMERICAN AVIATION EXPERIENCE, *supra* note 51, at 303. There were two other air mail acts between 1928 and 1938. See THE AMERICAN AVIATION EXPERIENCE, *supra* note 51, at 303. The 1934 Act mostly repealed the changes established in the 1930 Act, except that it also mandated the separation of airline and aircraft companies. *Id.*

Aeronautics Board (“CAB”) and the Civil Aeronautics Administration (“CAA”).⁶⁹ The CAA was created to check the power of the CAB and was granted the authority to enforce safety rules.⁷⁰ The CAB had three main purposes: to award routes to airlines, to limit entry of airlines into new markets, and to regulate passenger fares.⁷¹ The Act also authorized the CAB to survey the airport systems and report to what extent the government should be involved.⁷² In its report, the CAB recommended the federal government aid in developing and maintaining airports along major trade routes or that were strategic for national defense.⁷³ Due to the start of World War II, the CAB’s recommendations were not considered until after the war.⁷⁴

B. *Passenger Air Travel Grows After World War II*

During World War II, War Department funds were used to establish stateside airfields to accommodate the newer aircrafts being used for the war effort.⁷⁵ After the War, Congress continued funding airports and went back on its earlier prohibition of directly financing airports.⁷⁶ The Federal Airport Act of 1946 provided \$500 million grants-in-aid over seven years to airports specified by the CAA in an annual report to Congress.⁷⁷ The new Federal Aid Airport Program provided state and local governments grants-in-aid for airport development.⁷⁸ Since there was no longer a need to otherwise subsidize the industry, air mail laws came to an end.⁷⁹

The end of World War II changed the way people traveled.⁸⁰ The war established well-traveled air routes, experienced pilots, tested

69. THE AMERICAN AVIATION EXPERIENCE, *supra* note 51, at 303.

70. *Id.*

71. *Deregulation and Its Consequences*, U.S. CENTENNIAL OF FLIGHT COMM., http://www.centennialofflight.net/essay/Commercial_Aviation/Dereg/Tran8.htm (last visited Apr. 15, 2018).

72. FISHER & KIRK, RL30050, *supra* note 53 at 9.

73. *Id.*

74. *Id.*

75. THE AMERICAN AVIATION EXPERIENCE, *supra* note 51, at 301. One of these airfields later became the Chicago O’Hare Airport, one of the busiest airports in the world. *Id.*

76. *Id.*

77. Federal Airport Act, 79 Pub. L. No. 377, 60 Stat. 170 (1946); THE AMERICAN AVIATION EXPERIENCE, *supra* note 51, at 301.

78. *Overview: What Is the AIP?*, FED. AVIATION ADMIN., <http://www.faa.gov/airports/aip/overview> (last modified Nov. 15, 2017, 5:58 PM). Funds for the Federal Aid Airport Program came from the government’s general fund. *Id.*

79. THE AMERICAN AVIATION EXPERIENCE, *supra* note 51, at 303.

80. See *History of Flight from Around the World*, *supra* note 42; *History of Flight*, *supra* note 48.

technology, and experienced flight management.⁸¹ Air traffic in the U.S. more than doubled in a little over ten years after the war, but not much was done to reduce the amount of midair collisions.⁸² In response to safety concerns and airport congestion, the Federal Aviation Act of 1958 established the Federal Aviation Agency, which was authorized to create regulations for how airports and airlines should run and to establish security measures.⁸³ President Lyndon B. Johnson saw the need to create a coordinated transportation system and, in 1966, the Department of Transportation (“DOT”) was formed.⁸⁴ The Federal Aviation Agency became an office under the DOT and changed its name to the Federal Aviation Administration.⁸⁵

From 1946 to 1970, airport development was only sporadically subsidized by federal funds.⁸⁶ In an effort to help fund airport development, Congress passed two pieces of legislation: the Airport and Airway Development Act of 1970 and the Airport and Airway Revenue Act of 1970.⁸⁷ The Airport and Airway Development Act established the Airport Development Aid Program and Planning Grant Program.⁸⁸ The programs received funds from the Airport and Airway Trust Fund (“AATF”) created by the Airport and Airway Revenue Act.⁸⁹ The AATF receives its funds from ticket and fuel taxes, passenger and freight fees, and government funds.⁹⁰ The money in the fund was to be used for

81. *History of Flight from Around the World*, *supra* note 42.

82. *A Brief History of the FAA*, *supra* note 41. In 1956, two airplanes collided over the Grand Canyon because the pilots could not see each other. After this crash, legislation required a flight data recorder. *1956 Grand Canyon Airplane Crash a Game-Changer*, CBSNEWS (July 8, 2014, 9:50 AM), <http://www.cbsnews.com/news/1956-grand-canyon-airplane-crash-a-game-changer>.

83. Federal Aviation Act of 1958, Pub. L. No. 85-726, 72 Stat. 731; *see Post-War Revival and Regulation*, SMITHSONIAN AIR & SPACE MUSEUM, <https://airandspace.si.edu/exhibitions/america-by-air/online/heyday/heyday02.cfm> (last visited Apr. 15, 2018).

84. *A Brief History of the FAA*, *supra* note 41.

85. *Id.*

86. *See THE AMERICAN AVIATION EXPERIENCE*, *supra* note 51, at 301. The Federal Aviation Act of 1946 was renewed periodically, but when the President and Congress could not agree on airport issues in the 1950s, airport development did not keep up with the expansion of industry. *See id.*

87. Airport and Airway Development Act of 1970, Pub. L. No. 91-258, 84 Stat. 219; Airport and Airway Revenue Act of 1970, Pub. L. No. 91-258, 84 Stat. 236; ROBERT S. KIRK, CONG. RESEARCH SERV., IB10026, AIRPORT IMPROVEMENT PROGRAM 2 (2003).

88. KIRK, IB10026, *supra* note 87, at 2; *Overview: What Is the AIP?*, *supra* note 77. These programs provided grants for airport development and planning. *Overview: What Is the AIP?*, *supra* note 77.

89. KIRK, IB10026, *supra* note 87, at 2. Before these acts, taxes paid by air carriers and passengers were put into the U.S. Treasury general fund, and these funds were not necessarily used for airport improvements. FISHER & KIRK, RL30050, *supra* note 53, at 10.

90. BART ELIAS & RACHEL Y. TANG, CONG. RESEARCH SERV., R42781, FEDERAL CIVIL AVIATION PROGRAMS: IN BRIEF 1 (2016); *Overview: What Is the AIP?*, *supra* note 77.

capital improvements for the national airport system.⁹¹ Federal aviation programs still receive a major part of their funding from the AATF today.⁹²

C. Deregulation of the Aviation Industry Ushers in a New Era for Flight

By the late 1970s, airlines were in rough shape.⁹³ Airports had to lobby both airlines and the CAB in order to offer new routes.⁹⁴ After a short test with commercial cargo planes, President Jimmy Carter signed the Airline Deregulation Act of 1978.⁹⁵ The purpose of deregulation was “to encourage, develop, and attain an air transportation system which relies on competitive market forces to determine the quality, variety, and price of air services.”⁹⁶ The federal government no longer controlled the routes airlines could fly or the prices they could charge.⁹⁷ Airlines could now enter whichever markets they wanted, and by eliminating this control, deregulation brought new competition into the aviation industry.⁹⁸

Deregulation had an immense impact on the aviation industry.⁹⁹ The CAB was no longer necessary and was eventually phased out.¹⁰⁰ Deregulation originally brought lower fares, fuller planes, and new routes.¹⁰¹ Airlines changed their routes from point-to-point to “hub-and-spoke.”¹⁰² Airline hub cities benefitted from additional service, while

91. FISHER & KIRK, RL30050, *supra* note 53, at 10.

92. ELIAS & TANG, R42781, *supra* note 90, at 1.

93. See THERESA L. KRAUS, THE FEDERAL AVIATION ADMINISTRATION: A HISTORICAL PERSPECTIVE, 1903-2008, at 51 (2008). Operation and ticket costs skyrocketed. *Id.* New planes increased the number of seats, but passenger travel decreased. *Id.* Fuel costs also increased due to an oil embargo. *Id.*

94. ROBERT W. POOLE, JR. & VIGGO BUTLER, REASON FOUND., AIRLINES DEREGULATION: THE UNFINISHED REVOLUTION 1 (1999).

95. Airline Deregulation Act of 1978, Pub. L. No. 95-504, 92 Stat. 1705; KRAUS, *supra* note 93, at 52. Airlines, unions and safety advocates all opposed deregulation, but the public supported deregulation. FED. AVIATION ADMIN., FAA-H-8083-25B, PILOT'S HANDBOOK OF AERONAUTICAL KNOWLEDGE 1-7 (2016).

96. Airline Deregulation Act of 1978, Pub. L. No. 95-504, 92 Stat. 1705.

97. RACHEL Y. TANG, CONG. RESEARCH SERV., R43078, AIRLINE PASSENGER RIGHTS: THE FEDERAL ROLE IN AVIATION CONSUMER PROTECTION 4 (2016). Previously, the CAB set rates, routes and timetables to ensure solvency of the airlines. See KRAUS, *supra* note 93, at 51.

98. See KRAUS, *supra* note 93, at 51-52.

99. See Fred L. Smith Jr. & Braden Cox, *Airline Deregulation*, LIBRARY OF ECON. & LIBERTY, <http://www.econlib.org/library/Enc/AirlineDeregulation.html> (last visited Apr. 15, 2018).

100. POOLE & BUTLER, *supra* note 94, at 1.

101. See Smith & Cox, *supra* note 99.

102. POOLE & BUTLER, *supra* note 94, at 2; *Deregulation and Its Consequences*, *supra* note 71. Airlines flew non-stop flights from hub airports and most other flights would connect through the hub. See *Deregulation and Its Consequences*, *supra* note 71.

many smaller city airports were forced to close because airlines pulled out of the market due to low-profit margins.¹⁰³

To help prevent smaller communities from losing all flights, Congress added the Essential Air Service (“EAS”) to the Deregulation Act.¹⁰⁴ The EAS offered subsidies to airlines that continued flight service for smaller communities.¹⁰⁵ Although the EAS was intended to only operate for ten years, it was regularly extended, and in 1996, Congress extended the program indefinitely.¹⁰⁶ Shortly after deregulation, the overexpansion of the industry caused many of the old and new airlines to fail.¹⁰⁷

D. The Government Remains Closely Involved in Airport Development After Deregulation

In 1981, the programs established to fund the AATF were allowed to expire.¹⁰⁸ The Airport and Airway Improvement Act of 1982 reactivated the AATF and established the Airport Improvement Program (“AIP”), which disperses federal grants for specific types of airport capital development projects.¹⁰⁹ In addition, the Secretary of Transportation must complete a plan for the development of public use airports in the United States.¹¹⁰ Generally, only publicly-owned airports are eligible for an AIP grant.¹¹¹ The AIP was last extended in 2017 with a short-term FAA reauthorization bill.¹¹²

103. See RACHEL Y. TANG, CONG. RESEARCH SERV., R44176, ESSENTIAL AIRPORT SERVICE (EAS) 1 (2015); POOLE & BUTLER, *supra* note 94, at 2-3.

104. TANG, R44176, *supra* note 103, at 1.

105. *Id.* In order for a community to be eligible, the only requirement was that air service existed in the community at the time the Airline Deregulation Act was signed in 1978. *Id.*

106. *Id.*

107. See *Deregulation and Its Consequences*, *supra* note 71.

108. *Overview: What Is the AIP?*, *supra* note 78. Up until 1981, the fund distributed \$4.5 billion in grants. See *id.*

109. Airport and Airway Improvement Act of 1982, Pub. L. No. 97-248, 96 Stat. 671; ROBERT S. KIRK, CONG. RESEARCH SERV., R40608, AIRPORT IMPROVEMENT PROGRAM (AIP): REAUTHORIZATION ISSUES FOR CONGRESS 3 (2009). Generally, funded projects are for safety, capacity, security, and environmental issues. KIRK, R40608, *supra*, at 3.

110. KIRK, R40608, *supra* note 109, at 3-4. The report, called the National Plan of Integrated Airport Systems (“NPIAS”), is published every two years. *Id.* at 4.

111. See *Overview: What Is the AIP?*, *supra* note 78. Privately owned airports may be able to receive AIP grants if the airport is designated by the FAA as a reliever airport or the airport has over 2500 annual scheduled enplanements. *Id.*

112. Disaster Tax Relief and Airport and Airway Extension Act of 2017, Pub. L. 115-63, 131 Stat. 1168. Congress was unable to come to an agreement on the bill, and instead, passed a short-term bill that gave legislators more time to debate what should be included in a long-term reauthorization of the FAA. Kerry Lynch, *FAA Extension Wins Congressional Approval*, AINONLINE (Oct. 2, 2017, 10:36 AM), <https://www.ainonline.com/aviation-news/business-aviation/2017-10-02/faa-extension-wins-congressional-approval>.

To further airport capital development, Congress enacted the Aviation Safety and Capacity Expansion Act of 1990, which established the Passenger Facility Charge ("PFC").¹¹³ This fee is added to the price of a ticket and is then remitted to the appropriate airports less an administrative fee to the airline.¹¹⁴ Eligible airport development projects are required to: "(1) Preserve or enhance safety, security, or capacity of the national air transportation system; (2) Reduce noise or mitigate noise impacts resulting from an airport; or (3) Furnish opportunities for enhanced competition between or among air carriers."¹¹⁵ Airports must first seek approval from the FAA to collect PFC fees and must also receive approval for airport projects intended to be funded by PFCs.¹¹⁶ The PFC rates have not increased since 2000.¹¹⁷

The attacks on September 11, 2001, changed the types of projects airports and the federal government wanted to fund.¹¹⁸ Shortly after September 11, AIP project restrictions were lifted in order to fund airport security projects.¹¹⁹ The Aviation and Transportation Security Act of 2001 broadened the AIP to include security enhancements required by law to the list of eligible types of projects.¹²⁰ Funds not normally available for the AIP were provided to help offset the costs for airport security upgrades.¹²¹ Even with this additional money, grants that would normally have gone to financing expansion and renovation efforts were then diverted to pay for airport security.¹²² The security project expansion of the AIP was repealed in 2003 with the introduction of the Vision 100—Century of Aviation Reauthorization Act of 2003 ("Vision

113. Aviation Safety and Capacity Expansion Act of 1990, Pub. L. No. 101-508, 104 Stat. 1388-353-1388-372; U.S. GOV'T ACCOUNTABILITY OFF., GAO-15-107, COMMERCIAL AVIATION: RAISING PASSENGER FACILITY CHARGES WOULD INCREASE AIRPORT FUNDING BUT OTHER EFFECTS LESS CERTAIN 4 (2014). PFCs are capped at \$4.50 per segment with a maximum of \$18 roundtrip. U.S. GOV'T ACCOUNTABILITY OFF., GAO-15-107, *supra*, at 4. PFCs can also be in increments of \$1, \$2, \$3, and \$4. *Id.* at 6-7.

114. U.S. GOV'T ACCOUNTABILITY OFF., GAO-15-107, *supra* note 113, at 4-5.

115. 14 C.F.R. § 158.15 (2018). Projects at airports with PFCs at \$4 or \$4.50 must also improve air safety and security, increase competition among air carriers, reduce congestion, or reduce the impact of aviation noise on people living near the airport. 14 C.F.R. § 158.17 (2018).

116. U.S. GOV'T ACCOUNTABILITY OFF., GAO-15-107, *supra* note 113, at 4.

117. *Hearing*, *supra* note 34, at 9 (statement of Gerald L. Dillingham, Ph.D., Director, Civil Aviation Issues, U.S. Government Accountability Office).

118. KIRK, IB10026, *supra* note 87, at 1.

119. *Id.* at 10. Although security activities to protect persons, baggage, and cargo at an airport and on board an aircraft were eligible, training and personnel costs were not. *Id.*

120. Aviation and Transportation Security Act of 2001, Pub. L. No. 107-71, 115 Stat. 597; see KIRK, IB10026, *supra* note 87, at 10.

121. See KIRK, IB10026, *supra* note 87, at 4-5.

122. See KIRK, R40608, *supra* note 109, at 22.

100").¹²³ Instead, security-related projects would be funded by the Aviation Security Capital Fund, established by Vision 100.¹²⁴

III. CURRENTLY AVAILABLE FUNDS DO NOT MEET AIRPORT DEVELOPMENT NEEDS

Airports are required to be self-sustaining, meaning they must earn the money needed to cover day-to-day operations with almost no taxpayer support.¹²⁵ In addition to their daily needs, airports also require money for capital improvements.¹²⁶ The reasons for capital improvements vary, but are mainly determined by the need to expand capacity, upkeep, and refurbish facilities, and upgrade to advanced technologies.¹²⁷ It is estimated that airports in the U.S. will require \$15.1 billion each year for 2018 and 2019 just for capacity concerns and maintenance alone.¹²⁸

Capital projects take years of planning, not only to design the project but also to find a way to pay for it.¹²⁹ Airport financing primarily comes from three sources: grants, PFCs, and local airport revenue.¹³⁰ In addition, many airports also issue bonds.¹³¹ But, even with these various sources of funding, airports have difficulty finding funding for vital improvements.¹³² One way airports have looked to fill this gap is by entering into public-private partnerships.¹³³ This Part discusses the sources of funding that airports commonly utilize to fund capital improvements, the difficulties that airports face when deciding where to get funding from, and why financing problems inhibit critical improvements at airports.¹³⁴

123. Vision 100—Century of Aviation Reauthorization Act of 2003, Pub. L. 108-176, 117 Stat. 2490; see KIRK, R40608, *supra* note 109, at 22.

124. See KIRK, R40608, *supra* note 109, at 22.

125. See *Airport Financing*, AIRPORTS COUNCIL INT'L-N. AM., <http://www.aci-na.org/content/airport-financing> (last visited Apr. 15, 2018).

126. See NICHOL, *supra* note 32, at 7; *Airport Financing*, *supra* note 125.

127. NICHOL, *supra* note 32, at 7.

128. See AIRPORTS COUNCIL INTERNATIONAL-NORTH AMERICA, AIRPORT CAPITAL DEVELOPMENT NEEDS 2015-2019, at 1 (Mar. 2015).

129. KANTER, *supra* note 4, at 104. For examples of the length of time it took for some airports to secure funding and start construction, see Benet Wilson, *Show Me the Money: Airport Capital Improvement Projects Are Long on Time but Short on Funds*, CENTERLINES, Spring/Summer 2015, at 20-26.

130. Wilson, *supra* note 129, at 21; *Hearing*, *supra* note 34, at 9 (statement of Gerald L. Dillingham, Ph.D., Director, Civil Aviation Issues, U.S. Government Accountability Office).

131. Wilson, *supra* note 129, at 21.

132. See U.S. GOV'T ACCOUNTABILITY OFF., GAO-15-306, *supra* note 27, at 30-32.

133. *Id.* at 35-36.

134. See *infra* Parts III.A-C.

A. Government Funding for Airports

Direct government funding for airports comes from grants, both on the federal level and the local level.¹³⁵ Airports are eligible for these funds if they meet the minimum requirements for entry into the programs.¹³⁶ Federal and state governments each have their own requirements and restrictions, called assurances, that the airport must follow after the grant has been awarded.¹³⁷

1. Airport Improvement Program

Federal grants for airport development are distributed by the FAA through the AIP to airport sponsors.¹³⁸ There are two types of AIP grants: entitlement funds and discretionary funds.¹³⁹ Entitlement funds are calculated by a formula based on the type of airport requesting the funds and type of project to be completed.¹⁴⁰ These funds can be used for airport capital improvements and repairs, such as rehabilitating runways and acquiring aircraft rescue or firefighting equipment, so long as the project is AIP-eligible.¹⁴¹ Discretionary funds must be used for statutory set-aside programs and other discretionary projects that affect capacity, safety, security, and noise compatibility.¹⁴²

The AIP receives its funding from the AATF.¹⁴³ The AATF receives money from taxes on passenger tickets, fuel, and cargo.¹⁴⁴ Figure 1 below lists the taxes that are charged to passengers and cargo.

135. U.S. GOV'T ACCOUNTABILITY OFF., GAO-15-306, *supra* note 27, at 6.

136. *See id.*

137. For AIP grant assurances, see 49 U.S.C. § 47107 (2012). For New York State requirements and restrictions, see *Frequently Asked Questions*, N.Y. ST. DEP'T OF TRANSP., <https://www.dot.ny.gov/divisions/operating/opdm/aviation/faqs> (last visited Apr. 15, 2018).

138. *See* U.S. DEP'T OF TRANSP., OFF. OF INSPECTOR GEN., AV-2008-002, PRIORITIZATION OF AIRPORT IMPROVEMENT PROGRAM FUNDING I (2007). An airport sponsor is a public agency or private owner of a public use airport. 40 U.S.C. § 47102(26) (2012).

139. U.S. DEP'T OF TRANSP., *supra* note 138, at 2.

140. *Id.*

141. *Id.*

142. *See id.* The set-aside programs are for airport noise mitigation, for the Military Airport Program to convert military fields to civilian airports, and for reliever airports to help ease congestion at busier nearby commercial airports. *Id.*

143. KIRK, R40608, *supra* note 109, at 7.

144. KANTER, *supra* note 4, at 103-04.

FIGURE 1. AATF EXCESS TAXES STRUCTURE¹⁴⁵

Trust Fund Exise Tax Revenue Sources	Rates effective as of January 1, 2017
Domestic passenger ticket tax	7.5%
Domestic flight segment tax (excluding flights to or from rural airports)	\$4.10 per passenger per segment; indexed to the Consumer Price Index
Tax on flights between the continental United States and Alaska or Hawaii (or between Alaska and Hawaii)	\$9.00 per passenger; indexed to the Consumer Price Index
International arrival and departure tax	\$18.00 per passenger; indexed to the Consumer Price Index
Tax on mileage awards (frequent flyer awards tax)	7.5% of value of miles
Domestic commercial fuel tax	\$0.043 cents per gallon
Domestic general aviation gasoline tax	\$0.193 cents per gallon
Domestic general aviation jet fuel tax	\$0.218 cents per gallon; Note: Effective after March 31, 2012, a \$0.141 cents per gallon surcharge for fuel used in fractional ownership flights
Tax on domestic cargo or mail	6.25% on the price paid for transportation of domestic cargo or mail

These taxes account for 20% of the average ticket price.¹⁴⁶ Airline fees, including those for ticket changes and baggage, are not subject to AATF taxes.¹⁴⁷ Taxes can only be imposed on charges related to the “transportation of a person.”¹⁴⁸ In 2016, these taxes raised \$14.4 billion for the AATF to fund not only the AIP, but also FAA facilities, equipment, research, and operations.¹⁴⁹ The EAS is also funded by AATF taxes.¹⁵⁰ In total, the AATF made up 87.8% of the FAA’s 2016 budget.¹⁵¹

To be eligible to receive an AIP grant, the airport must be included in the National Plan of Integrated Airport Systems (“NPIAS”).¹⁵² The NPIAS consists of approximately 3400 airports that are important to air transportation.¹⁵³ The 3400 airports in the NPIAS consist of all commercial airports, all reliever airports, and select general aviation

145. FED. AVIATION ASSOC., AIRPORT & AIRWAY TRUST FUND (AATF) FACT SHEET 4 (2017), https://www.faa.gov/about/budget/aatf/media/AATF_Fact_Sheet.pdf.

146. KANTER, *supra* note 4, at 104 (“Airlines are the most taxed industry in the country.” (quoting Delta CEO Richard Anderson)).

147. Heather Caygle, *Airlines Gain Ally in Bid to Shield Fees from U.S. Taxes*, BLOOMBERG (Jan. 3, 2014, 12:00 AM), <http://www.bloomberg.com/news/articles/2014-01-03/airlines-gain-ally-in-bid-to-shield-fees-from-u-s-taxes>.

148. *Id.*

149. FED. AVIATION ASSOC., *supra* note 145, at 3, 5.

150. *Id.* at 3.

151. *Id.* at 2.

152. *Airport Categories*, FED. AVIATION ADMIN., http://www.faa.gov/airports/planning_capacity/passenger_allcargo_stats/categories (last modified Mar. 3, 2016, 2:00 PM).

153. *National Plan of Integrated Airport Systems (NPIAS)*, FED. AVIATION ADMIN. (last modified Nov. 17, 2015, 1:54 PM), http://www.faa.gov/airports/planning_capacity/npias.

airports.¹⁵⁴ The commercial classification is further broken down into primary, large hub, medium hub, and small hub airports.¹⁵⁵ How the airport is classified in the NPIAS will determine the type and level of funds that the airport is eligible to receive.¹⁵⁶

Funding received from the AIP is directly linked to the airport classification, the number of passengers that utilize the airport, and the amount of funds available in the AIP budget.¹⁵⁷ If the budget is over \$3.2 billion, a primary airport can receive a minimum of \$1 million and a maximum of \$26 million for an approved project.¹⁵⁸ If the budget falls below \$3.2 billion, the minimum drops to \$650,000 and the maximum to \$22 million, leaving the remaining funds for the airport to find.¹⁵⁹ A large or medium hub airport can receive 75% of the total project cost from the AIP; all others can receive up to 90% of the project cost.¹⁶⁰ The airport sponsor is then responsible for raising the remaining funds needed for the project.¹⁶¹ While this may seem to favor smaller airports since they only have to match 10% of the project cost, smaller airports are actually disadvantaged because of the limited revenue streams available to them.¹⁶² For example, if a small airport with annual revenue of \$150,000 needs to repave the runway for a cost of \$1 million, raising \$100,000 will be very difficult.¹⁶³ On the other hand, if a large airport with annual revenue in the millions needs to repave a runway for \$1 million, raising \$250,000 will not be as difficult.¹⁶⁴

Each airport that receives AIP grants must follow a list of assurances to keep the funds and remain on the list of eligible airports.¹⁶⁵ Some of these assurances include: requiring that the airport be self-sustaining; prohibiting exclusive rights to one tenant; requiring the airport to comply with a long list of federal statutes, regulations, and

154. *Id.* Commercial airports are publicly owned and have at least 2500 annual passenger enplanements; reliever airports are designated by the FAA to relieve congestion at commercial service airports; general aviation airports have no scheduled flights or fewer than 2500 annual scheduled enplanements. *Airport Categories*, *supra* note 152.

155. *Airport Categories*, *supra* note 152. A large airport has 1% or more of the national annual plane boardings; medium has between 0.25% and 1%; small has between 0.05% and 0.25%. *Id.*

156. *See* 49 U.S.C. § 47114 (2012).

157. *See id.*

158. *Id.* § 47114(c)(1)(C).

159. *Id.*

160. FED. AVIATION ADMIN., INTRODUCTION TO THE AIRPORT IMPROVEMENT PROGRAM 12 (2002).

161. *See* Robert Mark, *The Magic of AIP Funding*, AVIATIONPROS (Apr. 15, 2015), <http://www.aviationpros.com/article/12052787/the-magic-of-aip-funding>.

162. *See id.*

163. *See id.*

164. *See id.*

165. 49 U.S.C. § 47107.

orders; and prohibiting discrimination.¹⁶⁶ Airport sponsors' failure to follow these assurances could cause the FAA to bring claims against them.¹⁶⁷ To avoid violating any of the assurances, airport lawyers create form contracts, and airport planning processes include an analysis of the assurance requirements.¹⁶⁸

One of the most litigated assurances requires that airport revenue can only be used "for the capital or operating costs of the airport; the local airport system; or other local facilities owned or operated by the airport owner or operator and directly and substantially related to the air transportation of passengers or property."¹⁶⁹ Essentially, sponsors are not allowed to divert funds from operational expenses and capital improvements.¹⁷⁰ Additional permitted uses for revenue are airport promotion and advertising, certain ground access projects, and lobbying and attorney fees.¹⁷¹ There are only two exceptions to this rule: (1) the airport sponsor has been "grandfathered"; or (2) there is an authorized exception as part of an airport privatization pilot plan.¹⁷²

An airport is "grandfathered" if the airport and the sponsor had a financial arrangement that predates the Airport and Airway Improvement Act of 1982.¹⁷³ The sponsor is grandfathered only so far as what existed in 1982.¹⁷⁴ Although an airport sponsor is able to use revenues for non-airport purposes, if it uses more funds for non-airport purposes than it did in 1994, adjusted for changes in the Consumer Price Index, the FAA can use this fact against the sponsor in its next AIP application.¹⁷⁵ Some of the grandfathered airports, such as O'Hare International Airport in Chicago or John F. Kennedy International Airport in New York, are among the busiest in the United States, and are part of larger agencies that operate several transportation facilities.¹⁷⁶

166. See Bannard, *supra* note 35, at 27-30.

167. See *id.* at 30-31.

168. See *id.* This is not to say that it is an easy task to ensure that the airport is meeting all the assurances. *Id.* The FAA Airport Compliance Manual explaining the assurances for airport sponsors is over 600 pages long. See FED. AVIATION ADMIN., ORDER 5190.6B, FAA AIRPORT COMPLIANCE MANUAL (2009), https://www.faa.gov/airports/resources/publications/orders/compliance_5190_6/media/5190_6b.pdf.

169. 49 U.S.C. § 47107(b)(1); see Bannard, *supra* note 35, at 27.

170. FED. AVIATION ADMIN., *supra* note 168, at 15-9.

171. *Id.* at 15-4 to 15-6.

172. *Id.* at 15-9.

173. *Id.* at 15-7; see 49 U.S.C. § 47107(b)(2). For a complete list of grandfathered airports, see FED. AVIATION ADMIN., *supra* note 168, at 15-12.

174. FED. AVIATION ADMIN., *supra* note 168, at 15-7.

175. 49 U.S.C. § 47115; FED. AVIATION ADMIN., *supra* note 168, at 15-7.

176. See FED. AVIATION ADMIN., *supra* note 168, at 15-12; FED. AVIATION ADMIN., CALENDAR YEAR 2014 PASSENGER BOARDINGS AT COMMERCIAL SERVICE AIRPORTS (Sept. 22, 2015), https://www.faa.gov/airports/planning_capacity/passenger_allcargo_stats/passenger/media/cy14-commercial-service-enplanements.pdf.

2. State Grants

The FAA generally decides which airports will receive AIP grants.¹⁷⁷ Sometimes, the FAA does this indirectly by distributing funds to states who, in turn, decide which airports in the state will receive the grants.¹⁷⁸ This allows the state to determine where the grants will have the most impact in the state and possibly speed up how long it takes to complete a project.¹⁷⁹ In exchange for getting state block grants, the state takes on the responsibility of enforcing grant assurances on airport sponsors.¹⁸⁰ While the state now has control over which smaller airports would receive funding, the FAA still determines which and at what level primary airports receive AIP funding.¹⁸¹ Only ten states currently participate in the State Block Grant Program.¹⁸²

In addition, states also help fund airports through state grants.¹⁸³ These grants are generally used to match the AIP grants the airport has received.¹⁸⁴ Funds for these grants are usually raised through state taxes on aviation fuel.¹⁸⁵

3. Passenger Facility Charges

PFCs are fees charged to passengers that enplane, or board, at an airport.¹⁸⁶ These fees pay for infrastructure projects in the airport in which the fees were collected.¹⁸⁷ Whether the PFC charged is \$1.00, \$2.00, \$3.00, \$4.00, or \$4.50 depends on the type of project and how much the project costs.¹⁸⁸ Funds collected from PFCs may only be used for specified purposes: airport development and planning, terminal development, noise compatibility measures and planning, construction

177. See Matthew Snyder Brysacz, Comment, *Not in My Backyard! The Federal-Local Conflict over General Aviation Airports*, 72 J. AIR L. & COM. 561, 593-94 (2007).

178. See *id.* at 593.

179. See *id.* at 593-94.

180. *Id.* at 593.

181. See *id.* at 593.

182. U.S. GOV'T ACCOUNTABILITY OFF., GAO-15-306, *supra* note 27, at 15. The ten states participating in the State Block Grant Program are Georgia, Illinois, Michigan, Missouri, New Hampshire, North Carolina, Pennsylvania, Tennessee, Texas, and Wisconsin. *State Block Grant Program*, FED. AVIATION ADMIN., https://www.faa.gov/airports/aip/state_block (last modified July 26, 2017, 2:57 PM).

183. U.S. GOV'T ACCOUNTABILITY OFF., GAO-15-306, *supra* note 27, at 23.

184. *Id.*

185. See Lyman Stone & Richard Borean, *Combined Effective Commercial Jet Fuel Tax Rates and Fees by State*, TAX FOUND. (June 25, 2015), <http://taxfoundation.org/blog/combined-effective-commercial-jet-fuel-tax-rates-and-fees-state>. For example, in 2015, California's tax was twenty-seven cents per gallon and the funds were to be used only on capital airport improvements, much the same way funds from PFCs are restricted. *Id.*

186. 14 C.F.R. § 158.5 (2018).

187. See *id.* §§ 158.13, 158.15, 158.17.

188. See *id.* §§ 158.15, 158.17.

of gates and passenger boarding areas, the Air Traffic Modernization Cost Sharing Program, and debt and financing cost repayment.¹⁸⁹ A third of collected PFCs is used for principal payments and interest on debt, which was expected to grow to 74% in 2015.¹⁹⁰

Airports are penalized for implementing PFCs.¹⁹¹ If a large or medium hub airport implemented a PFC of \$3.00 or less, the airport's AIP grant will be reduced by 50% of the forecasted PFC revenue for that fiscal year; if the PFC is more than \$3.00 the amount reduced is 75%.¹⁹² The withheld funds are then reapportioned to the discretionary fund and to a small airport fund.¹⁹³ This movement of fees from larger to smaller airports especially hurts improvements in larger airports since a greater percentage of passengers would be affected by the improvements than at smaller airports.¹⁹⁴

In addition, PFCs have not increased from the current levels since 2000.¹⁹⁵ When adjusted for inflation, PFC buying power is cut almost in half.¹⁹⁶ In January 2018, the \$4.50 fee established in 2000 had an equivalent buying power of \$3.06.¹⁹⁷ This decrease in the buying power of the PFC has led to airport improvements and updates being delayed.¹⁹⁸ To compound this problem, a sharp downturn in the number of airline passengers resulted from the economic recession in 2007.¹⁹⁹ As of 2014, funds collected from PFCs were still down over \$100 million nationwide, compared to its peak in 2006.²⁰⁰

189. See FED. AVIATION ADMIN., ORDER 5500.1, PASSENGER FACILITY CHARGE 50 (2001).

190. U.S. GOV'T ACCOUNTABILITY OFF., GAO-15-306, *supra* note 27, at 22.

191. See FED. AVIATION ADMIN., *supra* note 160, at 9.

192. 49 U.S.C. § 47114(f); FED. AVIATION ADMIN., *supra* note 160 at 9.

193. FED. AVIATION ADMIN., *supra* note 160, at 9. The discretionary fund receives 12.5% of the funds, while the small airport fund receives 87.5%. *Id.*

194. See ENO CTR. FOR TRANSP., ADDRESSING FUTURE CAPACITY NEEDS IN THE U.S. AVIATION SYSTEM 8-9 (2013).

195. U.S. GOV'T ACCOUNTABILITY OFF., GAO-15-498T, AIRPORT FUNDING: CHANGES IN AVIATION ACTIVITY ARE REFLECTED IN REDUCED CAPACITY CONCERNS 5 (2015); see Felipe A. Rodriguez, *Op-Ed: Should Passenger Facility Charges Be Increased?*, AIRWAYS (Oct. 16, 2017), <https://airwaysmag.com/airports/op-ed-should-passenger-facility-charges-be-increased>.

196. *U.S. Airports Are 'Awful.' Here's the Problem*, CNN TRAVEL (Apr. 3, 2014), <http://www.cnn.com/2014/04/02/travel/u-s-airports-bad>.

197. To calculate the value, see *CPI Inflation Calculator*, BUREAU OF LAB. STAT., https://www.bls.gov/data/inflation_calculator.htm (type "4.50" in the top box of the calculator; select "January" and "2018" in the first line of drop downs; then select "January" and "2000" in the second line of drop downs; click "Calculate").

198. See *U.S. Airports Are 'Awful.'*, *supra* note 196.

199. See *Hearing*, *supra* note 34, at 10 (statement of Gerald L. Dillingham, Ph.D., Director, Civil Aviation Issues, U.S. Government Accountability Office). While the number of passengers has mostly recovered, the total number of airline operations was still down 18.5% in 2015. *Id.*

200. *Id.* at 17.

B. Other Sources of Airport Funding

Since federal funding for airport capital improvements are conditioned on an airport being self-sufficient, airports need other sources of income to pay for day-to-day operations.²⁰¹ Airports pay for their day-to-day operations out of local sources of revenues such as rent, advertising, and concessions.²⁰² In addition to paying for its operational needs, an airport must also cover the difference in the cost of capital improvements projects.²⁰³ If the local sources of revenue are not enough to pay for operations or capital improvement projects, the airport will have to raise funds from outside sources such as bonds or public-private partnerships.²⁰⁴ This Subpart discusses various alternatives to government funding that an airport can utilize.²⁰⁵

1. Sources of Airport Revenue

Airport operations are primarily paid for by local revenue.²⁰⁶ Airport revenue is any revenue paid or due to an airport for the aeronautical or non-aeronautical use of the airport, including state and local taxes on ticket prices.²⁰⁷ In addition to paying for airport operations, local revenue can also pay for airport improvements and other facilities owned by the airport operator.²⁰⁸ Local revenue streams are divided into two categories: aeronautical and non-aeronautical revenue.²⁰⁹

In 2017, aeronautical revenue reached \$11.3 billion in the United States and accounted for 54% of total earnings.²¹⁰ Aeronautical revenue consists of fees paid by airlines for use and maintenance of airport facilities.²¹¹ Airlines will enter into Use and Lease Agreements with airports that will establish what the fees are for and how much will be charged.²¹² These fees usually consist of terminal fees, landing fees, and

201. See *Airport Financing*, *supra* note 125.

202. See Tom Kinton, *Airports Revenues Must Adapt to New Transportation Technologies*, AVIATIONPROS (Dec. 26, 2017), <http://www.aviationpros.com/article/12342029/airports-revenues-must-adapt-to-new-transportation-technologies>.

203. See *id.*

204. U.S. GOV'T ACCOUNTABILITY OFF., GAO-15-306, *supra* note 27, at 32.

205. See *infra* Part III.B.1–3.

206. *Airport Financing*, *supra* note 125.

207. FED. AVIATION ADMIN., ORDER 5190.6B, *supra* note 168, at 15-3.

208. *Id.* at 15-4.

209. See *Airport Financing*, *supra* note 125; *How Do Airports Generate Revenue?*, FLA. TECH: ONLINE, <https://www.floridatechonline.com/blog/aviation-management/how-do-airports-generate-revenue> (last visited Apr. 15, 2018).

210. AIRPORTS COUNCIL INT'L, ACI-NA CONCESSIONS BENCHMARKING SURVEY 9 (2018), <http://aci-na.org/sites/default/files/2017-aci-na-concessions-benchmarking-summary.pdf>.

211. See *Airport Financing*, *supra* note 125.

212. See *id.*; *How Do Airports Generate Revenue?*, *supra* note 209.

other fees such as the use of jet bridges, tarmac buses, etc.²¹³ As of 2013, landing fees accounted for 30% of aeronautical revenue, while terminal fees, rent, and utilities accounted for 45%.²¹⁴ The airlines then pass these fees onto the passenger by incorporating the fee into the ticket price.²¹⁵ The average rate passed onto passengers was \$11.88 per ticket in 2013, with this figure continually trending upwards.²¹⁶

Airlines can negotiate for more favorable provisions and better rates based on the amount of space the airline wishes to utilize and the length of the contract's term.²¹⁷ To cut operational costs, some airports lease entire terminals to anchor airlines who then build and maintain the terminal, as well as sublease gates to other airlines.²¹⁸ The airport then only maintains common use areas such as airport roads, common terminals without an anchor, and utilities.²¹⁹

Although aeronautical revenue accounts for the majority of airport revenue, non-aeronautical revenue is quickly gaining ground.²²⁰ Modern airports provide more to passengers than mere takeoffs and landings.²²¹ Airports now look more like malls—with retail shops, restaurants, kiosks, live entertainment, and even sleeping areas in the terminal.²²²

Non-aeronautical revenue reached \$9.7 billion in 2017, accounting for 46% of airport operating income.²²³ Passengers spent most of this money on transportation, food, shopping, and hotels.²²⁴ A large slice of the non-aeronautical revenue pie comes from transportation.²²⁵ Transportation includes parking fees, car rentals, and ground transportation such as taxis, shuttles, and buses.²²⁶ Together they accounted for 40% of non-aeronautical revenue, or \$4 billion, in 2017.²²⁷

213. See *Airport Financing*, *supra* note 125; *How Do Airports Generate Revenue?*, *supra* note 209.

214. See *How Do Airports Generate Revenue?*, *supra* note 209.

215. *Id.*

216. See *id.*

217. FED. AVIATION ADMIN., ORDER 5190.6B, *supra* note 168, at 15-3.

218. *Id.*

219. *Id.*

220. See *How Do Airports Generate Revenue?*, *supra* note 209.

221. See Adam Rogers, *Checkpoints, Imax, and Waterfalls: The Airport's Terminal Identity Crisis*, WIRED (Dec. 7, 2017, 9:00 AM), <https://www.wired.com/story/airport-design-identity-crisis>.

222. See *id.*; Amy B. Wang, *Airports Compete to Make Travelers Comfy*, USA TODAY (Apr. 8, 2013, 9:36 AM), <http://www.usatoday.com/story/money/business/2013/04/08/airports-add-amenities-passenger-comfort/2062735>.

223. See AIRPORTS COUNCIL INT'L, *supra* note 210, at 9.

224. See *How Do Airports Generate Revenue?*, *supra* note 209.

225. See *id.*

226. See *id.*

227. See AIRPORTS COUNCIL INT'L, *supra* note 210, at 9.

Concessions are a classic form of non-aeronautical revenue that has recently undergone a high-end makeover.²²⁸ Revenue from concessions consists of rent from restaurants, shops, and other airport vendors.²²⁹ Passenger median household income ranges from \$100,000 to \$124,999, while the national average is \$55,322.²³⁰ This additional spending power, combined with passengers' need to arrive at the airport early enough to go through time-consuming security clearance measures, means that passengers now have more time and money to spend while at the airport.²³¹ In order to cater to these more discerning customers, most airports no longer limit themselves to only offering franchise fast food and magazine and candy shops.²³² Today, many airports have sit-down restaurants and high-end retail.²³³

Another way airports are maximizing non-aeronautical revenue is putting previously vacant land to use.²³⁴ Some airports, such as Dallas Fort Worth International Airport ("DFW"), sit on large tracks of unused land.²³⁵ Airports have begun developing this land by adding hotels, conference centers, retail shops, and even car dealerships.²³⁶ In addition to revenue from passengers at the airport, this repurposing of land also makes the airport a destination for the community and aids in keeping revenues up when there is a downturn in the number of flights and passengers.²³⁷

However, grant assurances require that airport revenue is expended for aeronautical purposes.²³⁸ This means the revenue use must be related to running the airport or other airport operator facilities.²³⁹ If the revenue stream is from land use, not specified in an approved Airport Layout Plan, an agreement between the FAA and the owner of the airport on how airport land will be used—the new land use generally must be

228. See U.S. GOV'T ACCOUNTABILITY OFF., GAO-15-306, *supra* note 27, at 34; *How Do Airports Generate Revenue?*, *supra* note 209.

229. *Airport Financing*, *supra* note 125.

230. See AIRPORTS COUNCIL INT'L, *supra* note 210, at 11.

231. *How Do Airports Generate Revenue?*, *supra* note 209.

232. *Id.*

233. *Id.* Part of the high-end trend includes luxury vending machines that sell electronics, cosmetics, and other personal items all hours of the day. See *id.*

234. See Benet Wilson, *How Airports Handle Non-aeronautical Revenue*, AVIATIONPROS (Aug. 26, 2016), <http://www.aviationpros.com/article/12196835/how-airports-handle-non-aeronautical-revenue>.

235. See *id.* DFW is on 18,000 acres, or 50 miles, of land. *Id.*

236. See *id.* In addition to hotels, DFW also has over 100 natural gas wells, which produce approximately \$4 million in revenue each year. *Id.* Many other airports, such as those surrounded by water, are not as fortunate and are unable to benefit from this type of lucrative expansion. See *id.*

237. See *id.*

238. See Bannard, *supra* note 35, at 27.

239. See *id.*

approved by the FAA.²⁴⁰ Therefore, land rental and use is commonly subject to much agency oversight.²⁴¹ As airports with large tracks of unused land look to increase revenue from the development of agriculture, retail, energy farms, and warehouses, airports must assure the FAA that the placement of these rentals will not affect the operation of the airport or its potential growth in the future.²⁴²

Another source of revenue for some airports is the sale of land.²⁴³ The sale of land from airports that receive federal grants is extremely restricted.²⁴⁴ Even more, restrictions exist if the federal government granted the land to the airport or if the money used to purchase the land came from the federal government.²⁴⁵ In order to sell land acquired with a federal grant: the airport must sell the land for market value, the proceeds must either be turned over to the AATF or be invested in an AIP approved project, and the changes to the airport master plan must be discussed with the FAA Airports District Office.²⁴⁶

2. Privatization

The FAA defines airport privatizations as “transferring airport operations from the public sector to the private sector through a formalized transfer of federal grant obligations and the granting of a Part 139 operating certificate [ensuring safety in air transportation] to the new airport operator.”²⁴⁷ Unlike the rest of the world, efforts to privatize airports have not gained a footing in the United States, resulting in only a small portion of airports in the country to become privately owned or operated.²⁴⁸ Although there are many reasons for the lack of interest in privatization, the primary factors are economic.²⁴⁹ First, publicly held airports are able to offer tax-exempt municipal bonds, and these bonds

240. U.S. GOV'T ACCOUNTABILITY OFF., GAO/RCED-99-109, GENERAL AVIATION AIRPORTS: UNAUTHORIZED LAND USE HIGHLIGHTS NEED FOR IMPROVED OVERSIGHT AND ENFORCEMENT 4 (1999).

241. *See id.*

242. *See* LOIS S. KRAMER, TRANSP. RESEARCH BD., AIRPORT REVENUE DIVERSIFICATION: A SYNTHESIS OF AIRPORT PRACTICE 41-45 (2010).

243. U.S. GOV'T ACCOUNTABILITY OFF., GAO/RCED-99-109, *supra* note 240, at 4.

244. *See id.*

245. *See id.*

246. KRAMER, *supra* note 242, at 9-10.

247. *See* U.S. GOV'T ACCOUNTABILITY OFF., GAO-15-42, AIRPORT PRIVATIZATION: LIMITED INTEREST DESPITE FAA'S PILOT PROGRAM 3-4 (2014). It is worth noting that there is one fully private commercial airport in the U.S.: Branson Airport in Missouri. *Id.* at 17-18. Branson Airport was privately developed and is currently privately operated. *Id.* It has also opted not to participate in the AIP, although it still collects passenger taxes that fund AIP grants. *Id.*

248. *See* Zane O. Gresham & Brian Busey, “Do As I Say and Not As I Do”—United States Behind in Airport Privatization, AIR & SPACE LAW., Summer 2002, at 12, 12 (2002).

249. *See id.*

are generally considered a safe investment.²⁵⁰ Privately owned, or privatized, airports are not able to offer tax-exempt bonds to raise additional capital, which therefore puts them at a disadvantage.²⁵¹ Next, the public entities that currently own or operate airports have no incentive to divest control.²⁵² Airports are considered valuable assets and provide many public sector jobs.²⁵³ Last, airlines have opposed privatization out of fear that a profit-driven airport model, rather than the infrastructure purpose that currently exists, will force prices upward and will change the contractual relationships the airlines have worked hard to secure.²⁵⁴

In an effort to open the airport market, the FAA established the Airport Privatization Pilot Program in 1997, effectively limiting the number of airports that could privatize to five.²⁵⁵ There has been limited interest with only ten airports applying for the program.²⁵⁶ Only three airports are currently in the program.²⁵⁷ Restrictions imposed on privatization efforts made the program inaccessible.²⁵⁸ Besides requiring 65% of the air carriers to agree to privatization, the private entity that owns or manages the airport cannot raise fees “faster than inflation” and its profit must be reasonable.²⁵⁹ In addition, commercial airports cannot be sold and may only enter into long-term leases.²⁶⁰ Other forms of privatization are service and management contracts and developer financing and operations.²⁶¹

One specific form of privatization that has been gaining traction globally in recent years is the public-private partnership (“P3”).²⁶² States

250. *See id.* at 14-15.

251. *See id.* at 14. Internationally, privatization is used to attract private investment that the U.S. has been able to avoid by offering airport revenue bonds. *Id.* at 15.

252. *Id.* at 15.

253. *Id.*

254. *See id.*

255. *See Airport Privatization Pilot Program*, FED. AVIATION ADMIN. (last modified Aug. 9, 2017, 2:49 PM), https://www.faa.gov/airports/airport_compliance/privatization. In 2012, the program was reauthorized and expanded the number of airports that could be privatized to ten, but the restrictions remained the same. *Fact Sheet – Airport Privatization Pilot Program*, FED. AVIATION ADMIN. (Dec. 2, 2016), https://www.faa.gov/news/fact_sheets/news_story.cfm?newsId=21174.

256. U.S. GOV’T ACCOUNTABILITY OFF., GAO-15-498T, *supra* note 195, at 20.

257. *See Fact Sheet–Airport Privatization Pilot Program*, *supra* note 255. These airports are Westchester County Airport in New York, Henry County Airglades Airport in Florida, and Luis Muñoz Marín International Airport in Puerto Rico. *Id.*

258. *See Gresham & Busey*, *supra* note 248, at 14.

259. *See id.*

260. *See Fact Sheet – Airport Privatization Pilot Program*, *supra* note 255.

261. *See* U.S. GOV’T ACCOUNTABILITY OFF., GAO-15-42, *supra* note 247, at 4-5.

262. FITCH RATINGS, GLOBAL PPP LESSONS LEARNED 2 (2013), <https://www.ibtta.org/sites/default/files/documents/IBTTA%20Publications/Fitch%20Ratings%20Global%20PPP%20Lessons%20Learned%202013.pdf>. Historically, P3s were used by governments for infrastructure

have complained that the normal design-bid-build project structure is no longer offering the public the best designs, innovations, and pricing.²⁶³ P3s are seen as a way to decrease the cost of a project by combining some or all of the elements of an infrastructure project: design, build, finance, operate, and maintain.²⁶⁴ The private partner is responsible for a combination of these elements and, in return, receives either a lump sum payment at the end of the project or payment as set out in a long-term contract.²⁶⁵ In addition, the private partner assumes the risk of any cost overruns.²⁶⁶ P3s have been used successfully in the United States and in other countries as well.²⁶⁷ Between 2008 and 2013, there were 158 P3s world-wide, with 15 P3s in the United States.²⁶⁸

While P3s are attractive because of their ability to raise finances and start projects more quickly, there are significant drawbacks as well.²⁶⁹ First, private investors are more likely to be attracted to larger projects with a greater chance of return on their investments.²⁷⁰ For this reason, smaller projects will not as easily attract P3 investors.²⁷¹ Next, given that P3 projects can be large and complex, the number of qualified partners who are willing and able to withstand the process and risk is small.²⁷² Additionally, airports and airlines have partnered together for the airport and terminal development, minimizing the need for outside private investment.²⁷³ Also, the robust bond market in the United States makes P3s less attractive.²⁷⁴

projects until the Great Depression, when public funding from taxes became the more prevalent way to pay for projects. *See id.* at 2.

263. PANEL ON PUBLIC PRIVATE PARTNERSHIPS, REP. ON PUBLIC PRIVATE PARTNERSHIPS: BALANCING THE NEEDS OF THE PUBLIC AND PRIVATE SECTORS TO FINANCE THE NATION'S INFRASTRUCTURE 14 (2014).

264. *See* PRIVATE FINANCING OF PUBLIC TRANSPORTATION INFRASTRUCTURE: UTILIZING PUBLIC PRIVATE PARTNERSHIPS 20-24 (Wendell C. Lawther & Lawrence L. Martin eds., 2015).

265. *See id.*

266. *See id.*

267. *See* PANEL ON PUBLIC PRIVATE PARTNERSHIPS, *supra* note 263, at 43. Other countries have established government committees to regulate and set out a framework for future P3s. *See id.* at 44. A 2014 congressional panel to investigate P3s recommended the U.S. also set up a committee for similar purposes. *See id.* at 13.

268. *Id.* at 43.

269. *See* FITCH RATINGS, *supra* note 262, at 1.

270. *See* PANEL ON PUBLIC PRIVATE PARTNERSHIPS, *supra* note 263, at 9, 23.

271. *See id.* at 10.

272. FITCH RATINGS, *supra* note 262, at 1.

273. PANEL ON PUBLIC PRIVATE PARTNERSHIPS, *supra* note 263, at 29.

274. *See id.* at 10.

3. Bonds

Airports issue municipal bonds as a way to raise capital for projects.²⁷⁵ Historically, bonds make up 54% of funds for airport capital needs.²⁷⁶ The availability of municipal bonds has allowed large airports to fund capital improvement projects through debt offerings.²⁷⁷ Bonds have been a stable form of financing for airports and other public sectors.²⁷⁸ Transportation bonds have become the second largest type of general purpose debt sold by municipalities.²⁷⁹ Airport bonds, in particular, enjoyed above-average returns between 2011 and 2015, outpacing the S&P Municipal Bond Index 21% to 17%.²⁸⁰

Issuing bonds also has another typical consequence: better financial management.²⁸¹ Airports, keen to keep a good credit rating, carefully manage operating, financing, and capital expenses in order to obtain a lower interest rate for their bonds.²⁸² They also monitor the markets to determine the best time to issue bonds and the number of bonds to issue.²⁸³ The lower rates help the airport charge lower fees to airlines, which attracts competition to the airport and creates more options for consumers.²⁸⁴

While municipal bonds have been a steady source of revenue for airports, they are not without flaws.²⁸⁵ There are several factors that affect the ability of an entity to issue bonds.²⁸⁶ Some of these factors are the airport's debt structure, its revenue structures, and its economic base.²⁸⁷ Because the sale of bonds depends on interest rates and the state

275. *Municipal Bond Market – A Critical Funding Source for Airport Capital Projects*, AIRPORT COUNCIL INT'L, http://www.aci-na.org/sites/default/files/municipal_bond_market_fact_sheet.pdf (last visited Apr. 15, 2018).

276. *Id.*

277. *See* Gresham & Busey, *supra* note 248, at 14.

278. *Id.*

279. *See* Barnet Sherman, *Project Runway: Airport Muni Bonds Strut Their Stuff*, FORBES (June 18, 2016, 2:16 PM), <http://www.forbes.com/sites/investor/2015/06/18/project-runway-airport-muni-bonds-strut-their-stuff/#2a2af1a15fec>.

280. *Id.*

281. *See* *Municipal Bond Market – A Critical Funding Source for Airport Capital Projects*, *supra* note 275.

282. *See id.* Seven of the top ten U.S. airports have a credit rating of AA, with the remaining three being on the A investment grade category. Sherman, *supra* note 279.

283. *See* *Municipal Bond Market – A Critical Funding Source for Airport Capital Projects*, *supra* note 275.

284. *Id.*

285. *See* David Cho, *Municipal Bond Deals Squeezed by Credit Crisis*, WASH. POST (Nov. 29, 2007), <http://www.washingtonpost.com/wp-dyn/content/article/2007/11/28/AR2007112802486.html>.

286. *See* Christopher R. Rowley, Comment, *Financing Airport Capital Development: The Aviation Industry's Greatest Challenge*, 63 J. AIR L. & COM. 605, 616 (1998).

287. *See id.*

of the economy, the sale may not go as planned.²⁸⁸ This can lead to an unaccounted for gap in the project's budget.²⁸⁹ In addition, smaller municipalities and agencies may not have the size, attraction, or credit to issue bonds.²⁹⁰

To further limit the availability of municipal bonds, the recent tax legislation²⁹¹ enacted in December 2017 will challenge the effectiveness of these bonds.²⁹² Municipal bonds are attractive because the investor does not pay federal tax on the interest earned from the bonds.²⁹³ By decreasing the marginal tax rates, there is less of a need for the investor to be tax free and therefore demand for the bonds will decrease.²⁹⁴ "When the marginal tax rate falls, the value of being 'tax-exempt' falls."²⁹⁵ In response, the bond issuer will have to increase the interest payments to remain a competitive investment.²⁹⁶

C. The Limitations and Restrictions on Sources of Funding Leave Airports Underfunded

Large hub airports fare best in finding and securing funding for capital improvement projects and day-to-day operations.²⁹⁷ These airports have more equity, work with larger municipalities, and pursue more complex projects that attract more investment, both in the bond market and in privatization initiatives.²⁹⁸ Even with these resources, large airports do occasionally experience difficulty fully funding improvements.²⁹⁹ Smaller airports are unable to utilize these same sources available to large airports.³⁰⁰ As a result, these smaller airports

288. See Cho, *supra* note 285.

289. See *id.*

290. U.S. GOV'T ACCOUNTABILITY OFF., GAO-15-306, *supra* note 27, at 25.

291. H.R. 1, 115th Cong. (2017) (to be published as Act of Dec. 22, 2017, Pub. L. No. 115-97, 131 Stat. 2054).

292. See Daniel Bergstresser, *How GOP Tax Overhaul Makes It Harder to Pay for Infrastructure in the U.S.*, CBS NEWS (Dec. 28, 2017, 5:15 A.M.), <https://www.cbsnews.com/news/gop-tax-overhaul-makes-it-harder-to-pay-for-infrastructure-in-u-s>.

293. Aaron Klein, *How the New Tax Bill Will Cut Infrastructure Investment*, BROOKINGS INST. (Dec. 26, 2017), <https://www.brookings.edu/blog/up-front/2017/12/26/how-the-new-tax-bill-will-cut-infrastructure-investment>.

294. *Id.* Many of the municipal bond investors are wealthier individuals and corporations. *Id.* These investors received a cut in the marginal tax rate. See *id.*

295. *Id.*

296. See Bergstresser, *supra* note 292.

297. See *supra* Part III.A-B.

298. See *supra* Part III.B.

299. See *supra* Part III.A-B.

300. See *supra* Part III.A-B.

tend to face even more obstacles when trying to obtain funds to cover necessary improvements compared to their larger counterparts.³⁰¹

The AIP, a major source of airport improvement funding, has not adequately provided the funds necessary to support airport infrastructure improvement projects.³⁰² Although capacity concerns were once one of the driving factors of the AIP, capacity is no longer considered to be a major issue at most airports in the United States.³⁰³ A few large hub airports continue to experience capacity and congestion concerns.³⁰⁴ Today the primary issues are the condition of aging airports and the need to redevelop airports to meet expectations of the global community.³⁰⁵ In addition to problems with the AIP, the long list of assurances airports must agree to, often restricting how they are able to manage their finances and ability to innovate, do not help the situation.³⁰⁶

In addition to inadequate AIP funding, Congress has not increased PFCs to keep up with the rate of inflation.³⁰⁷ This leaves airports with a built-in shortfall to pay for debt interest payments and much-needed improvements.³⁰⁸ To make matters worse, if an airport is partially funding a project with PFC fees, the amount of AIP grants it can receive is greatly reduced.³⁰⁹ All of these factors are creating an environment where America's airports are consistently underfunded and falling behind those in other corners of the world.³¹⁰

301. See *supra* Part III.A–B.

302. NICHOL, *supra* note 32, at 8.

303. See ENO CTR. FOR TRANSP., *supra* note 194, at 7.

304. *Id.* While there were only four large hub airports with immediate capacity and congestion concerns as of 2013, this number is likely to grow to twenty-seven by 2025. *Id.* at 8.

305. See Dana Davidsen, *Biden: LaGuardia Like a 'Third World Country'*, CNN POLITICAL TICKER (Feb. 6, 2014, 6:38 PM), <http://politicalticker.blogs.cnn.com/2014/02/06/biden-laguardia-like-a-third-world-country>. “There’s no question that U.S. airports suffer from an image problem globally, and the main culprit is our nation’s lack of dedicated infrastructure investment, particularly in its aviation infrastructure.” *U.S. Airports Are ‘Awful.’*, *supra* note 196 (quoting Kevin M. Burke, President and CEO of Airports Council International North America).

306. See Michael Sargent, *End of the Runway: Rethinking the Airport Improvement Program and the Federal Role in Airport Funding*, HERITAGE FOUND. (Nov. 23, 2016), <https://www.heritage.org/transportation/report/end-the-runway-rethinking-the-airport-improvement-program-and-the-federal>.

307. See *supra* notes 195–97 and accompanying text.

308. *Id.* Of the \$89 billion in PFCs collected from 1990 to 2014, 34% went to pay for interest on debt. U.S. GOV’T ACCOUNTABILITY OFF., GAO-15-107, *supra* note 113, at 5–6.

309. See *supra* notes 191–92 and accompanying text.

310. See *supra* Part III.

IV. UPDATING THE PFC PROGRAM AND AIP ASSURANCES IS NEEDED TO PROVIDE NECESSARY AIRPORT FUNDING AND PRIVATE INVESTMENT

The current state of airport infrastructure is a bipartisan issue, but there are very different views on how needed improvements should be funded.³¹¹ Significant changes in how airport improvements are funded by the federal government are necessary to keep up with the global economy.³¹² The first step is by raising PFC rates, while also changing the PFC program to allow airports to permanently keep PFCs in ticket prices, not just while funding specific projects.³¹³ The next steps are more difficult to accomplish: update the AIP to allow for PFCs along with full AIP grants,³¹⁴ and revise or eliminate some of the grant assurances airports must follow to receive AIP grants.³¹⁵ In addition, the AIP must reflect the growing need for private investment as a form of airport funding or financing.³¹⁶ This Part details how these changes can create an atmosphere where airports will be able to not only perform much-needed updates but also bring them into the future and surpass more advanced airports in other countries.³¹⁷

A. Restructure the PFC Program

The PFC program provides much-needed funds directly from the passenger to the airport.³¹⁸ But, the impact PFCs could have on funding airport improvement has been diminished due to congressional inaction.³¹⁹ This Subpart will outline the first steps that should be taken to increase the amount of funding for airport infrastructure: raise PFC rates to meet inflation,³²⁰ and allow PFCs to be included in the ticket price even when there is not an approved capital improvement project at the airport.³²¹

311. See KIRK, R40608, *supra* note 109, at 23.

312. See Roddy Boggus, *Airport Infrastructure, Funding, and Planning for Tomorrow*, WSP, <http://www.wsp-pb.com/en/Aviation/Insights/Airport-Infrastructure-Funding-and-Planning-for-Tomorrow> (last visited Apr. 15, 2018).

313. See *infra* Part IV.A.

314. See *infra* Part IV.B.

315. See *infra* Part IV.C.

316. See *infra* Part IV.C.

317. See *infra* Part IV.A–C.

318. See *supra* Part III.A.3.

319. See *supra* Part III.A.3.

320. See *infra* Part IV.A.1.

321. See *infra* Part IV.A.2.

1. Increase PFC Fees to Make Up for the Loss of Buying Power

PFC fees must be increased.³²² Because airports have not been able to charge higher PFC fees, they have been left with approximately half the funds that should have been available to them.³²³ To make up for the change in inflation, PFCs should be increased from a maximum of \$2.50 to \$6.00 at small hub airports, and from \$4.50 to \$10.00 at medium and large hub airports.³²⁴ Although this increase exceeds the rate of inflation,³²⁵ it would provide airports with additional funds to make up for the lack of buying power caused by not increasing PFCs with inflation since 2000.³²⁶ In addition, the increase would provide more money to pay off interest at a quicker rate, and finance additional projects that were delayed due to lack of funds.³²⁷

Although raising PFCs by just a few dollars may not seem like a groundbreaking decision, any time fees are raised there is potential for political and public backlash.³²⁸ Especially in today's climate, where airlines are charging passengers for every checked bag or seat assignment, a few extra dollars may be enough for passengers to think that the airport is merely trying to squeeze them for more money.³²⁹ To mitigate the possible backlash, there should be an education program put in place that informs the public of what the PFC increase will do.³³⁰ It is important for the public to understand that the small increase in PFCs will wind up back in passengers' pockets since travel time will go down

322. See *supra* Part III.B.3. This phenomenon recently reached its way to Congress. In 2017, the Senate Committee on Appropriations proposed raising PFCs to \$8.50 for the first flight segment, with an additional \$4.50 for any connecting or return flight, amounting to a maximum fee of \$13.00 per passenger. S. REP. NO. 115-138, at 153 (2017). Meanwhile, a bill introduced in the House of Representatives suggested to eliminate the \$4.50 cap on PFCs, but also recommended cutting funding for the AIP. H.R. REP. NO. 115-1265, at 2-3 (2017).

323. See *supra* notes 195-197 and accompanying text.

324. See *supra* Part III.B.3.

325. See *CPI Inflation Calculator*, *supra* note 197. The PFC prices of \$2.50 and \$4.50 established in the year 2000 equate to \$3.67 and \$6.61, respectively, in January 2018. *Id.*

326. See *U.S. Airports Are 'Awful.'*, *supra* note 196.

327. See *supra* Part III.A.3.

328. See KIRK, R40608, *supra* note 109, at 36-37.

329. See Talia Avakian, *Senator Calls on United Airlines to Drop New Carry-On Baggage Policy*, TRAVEL & LEISURE (Dec. 5, 2016), <http://www.travelandleisure.com/airlines-airports/schumer-united-airlines-basic-economy>. Airlines also argue that raising the PFC will create a hardship on passengers, and that airlines already fund airport improvements. See Marisa Garcia & Jason Clampet, *What Will it Take to Bring U.S. Airports into the Future? Only \$4*, SKIFT (July 29, 2015, 7:30 AM), <https://skift.com/2015/07/29/what-will-it-take-to-bring-u-s-airports-into-the-future-only-4>. While certain airlines have funded terminal development at some airports, these improvements have been for the airlines' benefit and were not intended to benefit the airport as a whole. See *id.*

330. See Kusum L. Ailawadi & Paul W. Farris, *How Companies Can Get Smart About Raising Prices*, WALL ST. J. (July 21, 2013, 4:01 PM), <http://www.wsj.com/articles/SB1000142412788732734304578543202877975478>.

with more efficient terminals and runways, which leads to fewer delays and cancellations.³³¹

2. Allow PFC Fees to Be Charged Without Requiring a Current Capital Project

In addition to the need to increase PFCs, airports should be able to charge PFCs whether or not there is an approved project at the airport.³³² Currently, airports are only allowed to charge PFCs to pay for federally approved projects.³³³ By allowing airports to charge PFCs on all tickets regardless of whether there is an approved project, airports will have more funding available for capital improvements.³³⁴ Rather than struggling to find financing for a project, an airport will have a reserve that can be tapped to begin a project while additional funding is being secured, or the airport can use the reserve to pay for an emergency improvement.³³⁵ This will also allow the airport to better account for available funds and plan for large-scale improvements.³³⁶

If the increased PFCs become continual, they should also be automatically readjusted for inflation every two years.³³⁷ This would ensure that PFCs' worth would remain constant, so it does not gradually decrease as time passes.³³⁸ This requirement would also prevent congressional inaction that has consistently placed airports in a position in which they are forced to charge PFCs that continuously lose buying power as inflation rates rise.³³⁹

However, Congress will not lose its oversight over PFCs with this change.³⁴⁰ Airport improvements funded with PFCs would still need to be an eligible project and would require federal approval.³⁴¹ The funds collected from PFCs would only be used to improve the airport where they were collected.³⁴² Airports will not be able to use PFCs for local community projects, and the municipal agency that owns or operates the airport will not be able to use these funds for other facilities they own or operate, even if the agency was previously grandfathered through the

331. See *supra* notes 25-31 and accompanying text.

332. See *supra* Part III.A.3.

333. See *supra* notes 186-89 and accompanying text.

334. See *supra* Part III.A.3.

335. See *supra* Part III.A.3.

336. See *supra* Part III.A.3.

337. See *supra* notes 195-97 and accompanying text.

338. See *supra* notes 195-97 and accompanying text.

339. See *supra* notes 195-97 and accompanying text.

340. See Sargent, *supra* note 306.

341. See 49 U.S.C. § 40117 (2012).

342. See KIRK, R40608, *supra* note 109, at 37.

AIP.³⁴³ PFCs will operate much the same way they do today except that airports will already have the funds available at the start of the project, rather than having to implement the PFC after project approval.³⁴⁴

B. Amend the AIP to Allow Grants Along with Higher PFC Fees

AIP restrictions need to be relaxed by allowing an airport to receive full AIP grants even if it also collects PFC fees.³⁴⁵ President Barack Obama's 2016 fiscal year budget included a raise in the PFC from \$4.50 to \$8.00.³⁴⁶ But, the budget also proposed to cut AIP funding and to add to the FAA discretionary fund.³⁴⁷ The rationale is that an increase in PFCs would make up for the missing funds from the AIP and would allow for a better selection of projects.³⁴⁸ While it is commendable that the Obama Administration recognized that the PFC is in need of an increase, finally increasing the PFC should not come with a decrease in AIP funding.³⁴⁹ Rather, it should come with a subsequent increase in airport infrastructure spending through AIP grants.³⁵⁰

In addition to increasing the amount of funds available through AIP grants, airports that collect PFCs should not be penalized with fewer AIP grants.³⁵¹ Although airports that collect PFCs tend to be larger airports with more passenger activity, resulting in more opportunities to raise funds through PFCs, they are also in need of the AIP grants.³⁵² Because there are more flights and passengers going through larger hub airports that collect PFC fees, problems that these larger airports encounter can greatly affect the rest of the airport industry, including smaller airports that do not charge PFC fees.³⁵³ By aiding larger airports, the government is, in turn, helping the smaller airports by ensuring that consistent problems that affect the entire system are fixed in a quick and efficient manner.³⁵⁴ This will help the entire airport infrastructure system in the

343. *See id.*; 49 U.S.C. § 47107(b) (2012).

344. *See* U.S. GOV'T ACCOUNTABILITY OFF., GAO-15-107, *supra* note 113, at 4-5.

345. *See supra* notes 191-93 and accompanying text.

346. U.S. GOV'T ACCOUNTABILITY OFF., GAO-15-306, *supra* note 27, at 38.

347. *Id.* at 37-38. The FAA discretionary fund gives preference to noise mitigation programs and the Military Airport Program. *See* FED. AVIATION ADMIN., AIP SPONSOR GUIDE – 100, at 100-2 (2013). The rest of the funds are distributed based on national prioritization system. *Id.*

348. U.S. GOV'T ACCOUNTABILITY OFF., GAO-15-306, *supra* note 27, at 38. Larger airports have expressed their willingness to forego funding from federal grants under the AIP if they were given the discretion to determine PFC rates for themselves. *See* ENO CTR. FOR TRANSP., *supra* note 194, at 27.

349. *See supra* Part III.A.1, 3.

350. *See supra* Part III.A.1, 3.

351. *See supra* notes 191-93 and accompanying text.

352. *See supra* Part III.A.1, 3.

353. *See* ENO CTR. FOR TRANSP., *supra* note 194, at 27.

354. *See id.* at 8-9.

United States.³⁵⁵ Although the increase in AIP grants will initially go towards larger airports, once the problems that affect the entire system are cleared up, the focus can then switch to updating and improving smaller airports.³⁵⁶ If Congress determines that the smaller airports are falling significantly behind in capital improvements, Congress can change the allocation percentages between large and small airports or raise the level of funding.³⁵⁷

*C. Eliminate or Relax Assurances Related to Revenue
Sharing Within Large Entities*

AIP grant assurances limit effective spending at airports.³⁵⁸ The most restrictive grant assurance is the requirement that the airport use all revenue on operational, management, and improvement expenses.³⁵⁹ This assurance may seem simple and necessary, but it can inhibit the efficient use of airport revenue.³⁶⁰ And, while it may seem counter-productive to use funds specifically earmarked for airport improvements for another purpose, that other purpose may have substantial benefits for the airport.³⁶¹

A common situation that arises is when airports want to use funds for local public transportation.³⁶² When the bus route or train line directly benefits the airport, such as when the purpose of the route extension is to get people to the airport, the funds are allowed to be diverted.³⁶³ But if a subway that stops at the airport needs a new signal system, the funds cannot be used pursuant to the grant assurances.³⁶⁴ By freeing up this restriction, all people who use the subway line will benefit from the new signal system, including those going to and from the airport.³⁶⁵ For a revenue diversion to be approved, there would need to be some connection between the proposed project and the airport, yet, the airport's direct benefit does not need to be the purpose for the project.³⁶⁶

355. *See id.*

356. *See id.* at 30.

357. *See Sargent, supra* note 306.

358. *See id.*

359. *See id.*

360. *See id.*

361. *See Bannard, supra* note 35, at 27.

362. *See id.*

363. *See id.*

364. *See id.*

365. *See id.*

366. *See id.*

There are two other restrictions that may seem benign but could impact a passenger's desire to travel to or through the airport.³⁶⁷ First, airports cannot use AIP money for artwork in the airport.³⁶⁸ But, art can make the experience of going to the airport more pleasurable and could be a draw for some people to use one airport over another.³⁶⁹ Second, airport revenue cannot be used to advertise anything other than the airport.³⁷⁰ By imposing this limit on airports, it is preventing them from acquiring new passengers that may be interested in some attraction nearby that airport.³⁷¹ Instead, these assurances should be changed so that the airport could use AIP grant funds to attract passengers to the airport and the local area, therefore increasing airport revenue and PFCs.³⁷²

V. CONCLUSION

As legislators propose new infrastructure spending plans,³⁷³ they should look beyond the amount of funds available for various infrastructure projects, and instead also evaluate the restrictions placed on these funds.³⁷⁴ Restrictions on how funds can be used, and where funds may come from, prevent airports from benefiting from available public funding and private investment for infrastructure.³⁷⁵ Lawmakers should also look at what infrastructure needs to be repaired before looking to build new infrastructure.³⁷⁶

By making these proposed changes to the AIP and PFCs simultaneously, a large increase in funds would become available for airport improvement and development.³⁷⁷ The availability of much-needed funds will spur a resurgence in airport infrastructure projects,

367. See Sargent, *supra* note 306; Sandy Murdock, *Airport Art May Add to Passenger Experience, but Involves a Fine FAA Line*, JDA J. (Nov. 7, 2016), <http://jdasolutions.aero/blog/aa-aip-airport-art>.

368. See Murdock, *supra* note 367.

369. See *id.*

370. See Sargent, *supra* note 306.

371. See *id.*

372. See *id.*

373. See Joan Lowy, *Senate Democrats Propose \$1 Trillion Infrastructure Plan*, ASSOCIATED PRESS (Jan. 24, 2017), <http://apnews.com/e7c29b21e1b3486a8f90f4b7ef32b90f>.

374. See *supra* Part IV.

375. See *supra* Part III.

376. Brianna Gurciullo, *NTSB: Amtrak Engineer Tested Positive for Pot After Crash*, POLITICO: MORNING TRANSP. (Jan. 27, 2017, 10:00 AM), <http://www.politico.com/tipsheets/morning-transportation/2017/01/ntsb-amtrak-engineer-tested-positive-for-pot-after-crash-218447>. President Trump stated that "[w]e will fix our existing product before we build anything brand new." *Id.*

377. See *supra* Part IV.

and, in its wake create jobs and economic opportunities.³⁷⁸ Additionally, it will make the United States more competitive in a newer global market for the discerning business or leisure traveler.³⁷⁹ In effect, U.S. airports will once again become a part of the destination.³⁸⁰

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378. *See supra* Part IV.

379. *See supra* Part I.

380. *See supra* Part I.

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