

Enclosure (15)

Miscellaneous Exhibits - Federal

- a. Nation Plan of Integrated Airport Systems (NPIAS) - 2019-2023
- b. General Aviation Airports: A National Asset (May 2012)
- c. FAA Airport Improvement Program - Airport Sponsor Assurances 3/2014
- d. KFLY Airport Information:
 - (1) FAA 5010 Airport Master Record: Meadow Lake Airport (KFLY)
 - (2) FAA National Based Aircraft Inventory Program (cover page)
- e. Current FAA Advisory Circulars Required for Use in AIP Funded and PFC Approved Projects
- f. Sample Buyer Awareness Documents . . . [Ref (cc), App H]
 - (1) Typical Avigation Easement
 - (2) Recorded Overflight Notification



Federal Aviation Administration
U.S. Department of Transportation

National Plan of Integrated Airport Systems (NPIAS) 2019–2023

Report of the Secretary of Transportation to the United States Congress
Pursuant to Title 49 U.S. Code, Section 47103

The NPIAS 2019–2023 report will be available online at: [NPIAS Report to Congress](#)



THE SECRETARY OF TRANSPORTATION
WASHINGTON, DC 20590

September 26, 2018

The Honorable Michael R. Pence
President of the Senate
Washington, DC 20510

Dear Mr. President:

Enclosed is the National Plan of Integrated Airport Systems (NPIAS) report for 2019-2023, pursuant to Title 49 U.S. Code, Section 47103, which requires the Secretary of Transportation to submit this report to Congress every 2 years.

The NPIAS report estimates the costs associated with establishing a system of airports that adequately meets the needs of civil aviation and supports the U.S. Department of Defense and the U.S. Postal Service. It draws selectively from local, regional, and State planning studies.

A similar letter has been sent to the Speaker of the U.S. House of Representatives.

Sincerely,

Elaine L. Chao

Enclosure



THE SECRETARY OF TRANSPORTATION
WASHINGTON, DC 20590

September 26, 2018

The Honorable Paul D. Ryan
Speaker of the House of Representatives
Washington, DC 20515

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TABLE OF CONTENTS

EXECUTIVE SUMMARY	III
CHAPTER 1: AIRPORT SYSTEM COMPOSITION	1
Overview	1
Airports in the NPIAS	3
Primary Airports	5
Large Hubs (30).....	5
Medium Hubs (31)	6
Small Hubs (72).....	6
Nonhub Primary (247).....	7
Nonprimary Airports	7
National (88).....	8
Regional (492).....	8
Local (1,278)	8
Basic (840)	9
Unclassified (243)	9
New Airports (7).....	9
Conversion of Military Airfields and Use of Military/civil Airfields	10
Airport Privatization.....	10
CHAPTER 2: SYSTEM GOALS AND PERFORMANCE	13
Overview	13
DOT and faa Goals.....	13
Factors Indicating System Performance	13
Safety	14
Runway Safety	14
Maintaining Safe Airport Conditions	15
Runway Safety Areas (RSAs)	15
Runway Incursion Mitigation (RIM)	16
Wildlife Hazard Mitigation	16
Capacity	16
Congestion and Delay	17
Air Carrier On-Time Performance	18
Delay Indicators	18
Airport Capacity—A National Look	19
Alternative Capacity Enhancement Methods	20
Environmental Considerations	22
Noise	23
Air Quality.....	24
Water Quality	24
Environmental Streamlining.....	25
Runway Pavement Condition	25
Surface Accessibility	26
Financial Performance.....	26

CHAPTER 3: USE OF THE AIRPORT SYSTEM.....	31
Overview	31
Commercial Airline Service	31
Forecast for Commercial Aviation	33
Cargo	33
Forecast for Cargo	34
General Aviation	34
Forecast for General Aviation	36
Other Factors Impacting Airports.....	36
Large Aircraft	37
Industrial Aviation.....	37
Rural Aviation	38
Unmanned Aircraft Systems	38
Commercial Space Transportation	39
CHAPTER 4: DEVELOPMENT REQUIREMENTS	41
Capital Planning Overview.....	41
Development Costs.....	42
Development by Type	44
Safety and Security	45
Reconstruction	45
Standards	46
Environment	47
Noise	47
Terminal Building	48
Surface Access	48
Airport Capacity	49
New Airports	49
Other.....	49
Development by Airport Hub and Role.....	50
Anticipated Sources of Funding	51
Additional Costs Not Included in the NPIAS.....	52

APPENDIX A: List of NPIAS Airports with 5-Year Forecast Activity and Development Estimate

APPENDIX B: State Maps

APPENDIX C: Airport Criteria - Statutory and Policy Definitions

EXECUTIVE SUMMARY

The National Plan of Integrated Airport Systems (NPIAS) report for Fiscal Years (FY) 2019 to 2023 is submitted to Congress in accordance with title 49 United States Code (U.S.C.), section 47103. As required by the statute, the Federal Aviation Administration (FAA) "...shall maintain the plan for developing public-use airports in the United States." The statute also requires that:

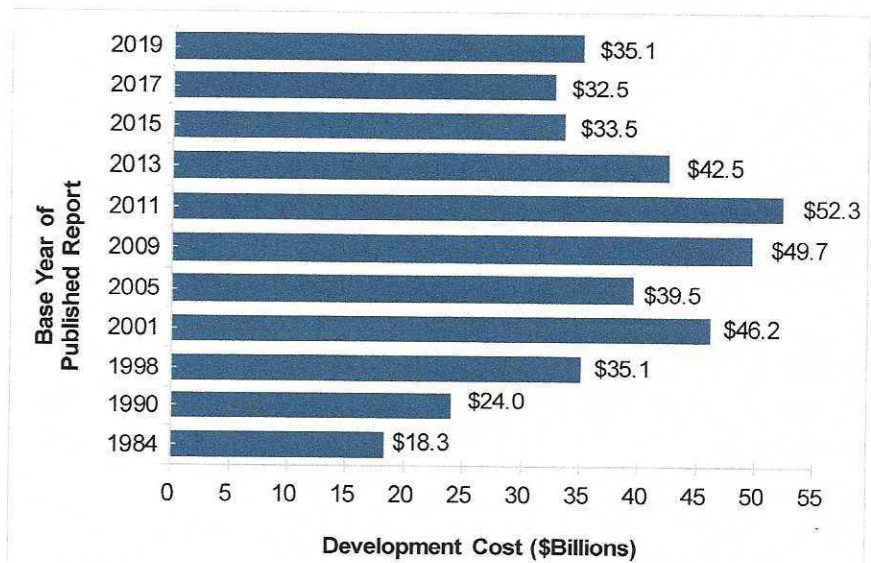
"The plan shall include the kind and estimated cost of eligible airport development the Secretary of Transportation considers necessary to provide a safe, efficient, and integrated system of public-use airports adequate to anticipate and meet the needs of civil aeronautics, to meet the national defense requirements of the Secretary of Defense, and to meet identified needs of the United States Postal Service."

The FAA does not control which routes or airports the airlines serve. Nor does the FAA dictate or limit where privately owned aircraft can fly. Rather, the FAA's responsibility is to work with State and local units of government, as well as other stakeholders, to ensure effective planning of a safe and efficient system of airports to support the needs of the civil aviation industry.

Accordingly, this report identifies the airports included in the national airport system, the roles they currently serve, and the amounts and types of airport development eligible for Federal funding under the Airport Improvement Program (AIP) over the next 5 years. The FAA has been publishing the NPIAS since 1984.

This edition identifies 3,328 public-use airports¹ (3,321 existing and 7 proposed) that are important to national air transportation and estimates a need for approximately \$35.1 billion in AIP-eligible airport projects between 2019 and 2023. This is an increase of \$2.4 billion (7 percent) from the report issued 2 years ago. Figure 1 identifies total development costs from 1984-2019. These estimates reflect the costs at the time each report was prepared and do not reflect constant dollars. The development of primary and nonprimary airports continue to be based on

Figure 1: Development Totals, 1984-2019



¹The word "airport," as identified in this report, includes landing areas developed for conventional fixed-wing aircraft, helicopters, and seaplanes.

eligible and justified needs and priorities consistent with the role of the airport in the national airport system.

Airport capital development needs are driven by current and forecasted traffic, use and age of facilities, and changing aircraft technology, which requires airports to update or replace equipment and infrastructure. Based on actual and projected aeronautical activity trends, AIP-eligible development needs are expected to increase at large and medium hubs and regional airports, but development needs at all other airport types are expected to increase more slowly or remain consistent with previous levels. Capacity-related development continues to decrease, while development to reconstruct pavement, bring an airport up to design standards, and expand or rehabilitate terminal buildings continue to increase. The increase in terminal projects reflected in this report is principally the result of projects at several large and medium hub airports.

After more than a decade, most major airport capacity projects and runway safety area (RSA) initiatives have successfully concluded. This included airport development to increase airport capacity, resulting in 23 major airports completing 27 airfield projects (new runways, runway extensions, or airfield reconfigurations), and to improve virtually all the nonstandard RSAs at commercial service airports to meet dimensional standards or an equivalent level of safety. A new national initiative to improve nonstandard surface geometry is now well underway to improve nonstandard airfield geometry to prevent runway incursions. While this report includes preliminary costs of almost \$300 million through 2023 for this initiative, the next NPIAS report will more fully capture development costs as the FAA continues reviewing and refining solutions.

The FAA considers development included in the NPIAS in the Airports Capital Improvement Plan process. While all of these 5-year capital estimates are AIP-eligible, some may be funded by other sources, including Passenger Facility Charge (PFC) revenues or other airport revenue or financing. Funds for airport development are derived from a variety of sources, including Federal/State/local grants, bond proceeds, PFCs, airport-generated funds (landing and terminal fees, parking, aviation fuel, and concessions revenues), and tenant and third-party financing. The availability of funding sources (and their adequacy to meet needs) varies with each type of airport and levels of aeronautical activity.

Cost estimates in the NPIAS are obtained primarily from airport master and State system plans prepared by planning and engineering firms for airport sponsors and local and State aeronautical agencies. As these plans are typically funded in part by the FAA, the FAA ensures that they are consistent with FAA forecasts of aeronautical activity, follow FAA guidelines, and have been reviewed and accepted by FAA planners who are familiar with local conditions. Efforts were made to obtain realistic estimates of development needs that coincide with local and State capital improvement plans. The estimates only include development undertaken by airport sponsors (as opposed to nonpublic projects undertaken by airport tenants, such as airlines and air cargo operators). The development reflected in this report is based on planning documents and information available through 2017.

The NPIAS cost estimates are based upon planning estimates developed prior to design and full environmental evaluation, which may introduce additional costs. These development estimates

do not include contingency costs (increases in cost based on changes in design, construction uncertainty, or environmental mitigation) or normal price escalation due to inflation (annual increase in costs).

This report explains how the NPIAS supports the U.S. Department of Transportation's (DOT) and the FAA's goals of safety, infrastructure, innovation, and accountability. These goals are identified in chapter 2 of this report, which addresses the condition and performance of the national airport system, highlighting six topic areas: safety, capacity, environment, pavement condition, surface accessibility, and financial performance.

Overall, the findings are favorable, indicating the system is safe, convenient, and well maintained. For the largest and busiest airports, the majority of capital improvements are funded by nonfederal sources, such as airport revenues, bond proceeds and PFC revenues. Even for smaller airports, capital funding sources are diverse and well-leveraged. The majority of airports in the national airport system have adequate airport capacity and few delays. However, there are airports that consistently experience delays and a small percentage of airports that are seeing growing constraints in the terminal and landside areas.

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CHAPTER 1: AIRPORT SYSTEM COMPOSITION

OVERVIEW

The national airport system, envisioned when civil aviation was in its infancy, has been developed and nurtured by close cooperation with airport sponsors and other local agencies, as well as Federal and State agencies. Airports are critical to the national transportation system and contribute to a productive national economy and international competitiveness. The enduring principles guiding Federal involvement in the national airport system were articulated more than 25 years ago and were subsequently reaffirmed by the FAA and the aviation industry in 2011 as part of the national review of the airport system. To meet the demand for air transportation, airports and the national airport system should have the following attributes:

- Airports should be safe and efficient, located where people will use them, and developed and maintained to appropriate standards;
- Airports should be affordable to both users and the Government, relying primarily on producing self-sustaining revenue and placing minimal burden on the general revenues of the local, State, and Federal Governments;
- Airports should be flexible and expandable and able to meet increased demand and accommodate new aircraft types;
- Airports should be permanent with assurance that they will remain open for aeronautical use over the long term;
- Airports should be compatible with surrounding communities, maintaining a balance between the needs of aviation, the environment, and the requirements of residents;
- Airports should be developed in concert with improvements to the air traffic control system and technological advancement;
- The airport system should support a variety of critical national objectives, such as defense, emergency readiness, law enforcement, and postal delivery; and
- The airport system should be extensive, providing as many people as possible with convenient access to air transportation, typically by having most of the population within 20 miles of a NPIAS airport.

In addition to the above listed principles, a guiding principle for Federal infrastructure investment, as stated in Executive Order 12893,² is that Federal investments should be cost beneficial.³ This Executive Order also included other key principles that the FAA supports through its administration of the NPIAS, including support of State and local planning and information management systems; support for private sector participation; and support for effective administration of grant programs like AIP.

²Executive Order 12893, Principles for Federal Infrastructure Investments, was issued in the Federal Register on January 31, 1994, and has not been revoked. See: <http://www.archives.gov/federal-register/executive-orders/pdf/12893.pdf>.

³The FAA implements these principles by using program guidance to ensure the effective use of Federal aid. A national priority system guides the distribution of funds, supplemented when necessary, by specific requirements for additional analysis or justification. Moreover, virtually all development projects must be justified based on existing or reasonably anticipated civil aeronautical activity levels.

While the Nation’s airports have evolved differently over the past decades, they are an integral part of U.S. lifestyle and commerce. Some airports are large in size and have multiple runways. Others are relatively small and may only need a short, single runway to serve a critical purpose. The role of an airport is not necessarily limited by its size, location, or facilities. Airports fulfill very diverse roles—from moving people and cargo and serving agricultural needs, to providing critical access to remote communities, including emergency medical services, to supporting private transportation using the smallest piston aircraft to the most sophisticated jets, and providing aeronautical access to manufacturers/assemblers and repair stations that support airlines and operators of all sizes in a global aerospace marketplace.

The latest statistics indicate 610,796 pilots, 213,050 active general aviation aircraft, and 18,203 air carrier aircraft utilize 19,627 landing areas, including private use (closed to the public) and public-use (open to the public) facilities. Listed below (Table 1) is the breakdown of private- and public-use landing areas in the United States by type of facility.

The FAA works closely with State aviation agencies and local planning organizations to identify public-use airports that are important to the system for inclusion in the NPIAS. About 65 percent (3,321) of the 5,099 public-use airports are included in the NPIAS. There are 1,778 existing public-use airports that are not included in the NPIAS, generally because they do not meet the minimum entry criteria,⁴ are located at inadequate sites, cannot be expanded or improved to provide a safe and efficient airport, or are located within 20 miles of another NPIAS airport.

Table 1: Numbers and Types of Existing Airports in the United States (as of May 2018)

Type of Facility	Total U.S. Facilities	Private-Use Facilities	Public-Use Facilities	Existing NPIAS Facilities
Airport	13,117	8,302	4,815	3,273
Heliport	5,842	5,782	60	10
Seaplane Base	507	292	215	38
Ultralight	112	109	3	
Gliderport	35	30	5	
Balloonport	14	13	1	
Total	19,627	14,528	5,099	3,321

All commercial service airports⁵ are included, and selected general aviation airports that meet requirements are included in the NPIAS. Ninety-eight percent of the facilities included in the NPIAS are airports. Throughout this report, the term “airport” includes landing areas developed for conventional fixed-wing aircraft, helicopters, and seaplanes.

The NPIAS report identifies the airports included in the national airport system, the roles they serve, and the amounts and types of AIP-eligible airport development needed over the next

⁴The NPIAS entry criteria is contained in FAA Order 5090.3C, Field Formulation of the National Plan of Integrated Airport Systems (NPIAS), available online at: http://www.faa.gov/regulations_policies/orders_notices/index.cfm/go/document.information/documentID/12754.

⁵Privately owned airports with scheduled air carrier service are not eligible for designation as a commercial service airport (i.e., Branson Airport in Branson, Missouri).

5 years. An airport must be included in the NPIAS to be eligible to receive a grant under the AIP. Because the capital development needs have historically exceeded available AIP resources, airport development needs included in the NPIAS may ultimately be funded by other funding sources, such as PFCs or other airport revenue or financing.

AIRPORTS IN THE NPIAS

The NPIAS contains 3,328 airports, including 3,321 existing and 7 proposed airports that are anticipated to open within the 5-year period covered by this report. The proposed airports are classified in the same categories as existing airports. Approximately 98 percent (3,249) of the NPIAS airports are owned by public entities (generally city, county or State) and 2 percent (72) are privately owned airports.

Airports are grouped by statute into two major categories: primary and nonprimary as shown in Figure 2 below. Primary airports are defined in the FAA's authorizing statute as public airports receiving scheduled air carrier service with 10,000 or more enplaned passengers per year. There are 380 primary airports based on calendar year (CY) 2016 data. Primary airports are further grouped into four categories defined in statute: large hub, medium hub, small hub, and nonhub.

Nonprimary airports primarily support general aviation aircraft. The nonprimary category includes nonprimary commercial service airports (public airports receiving scheduled passenger service and between 2,500 and 9,999 enplaned passengers per year), general aviation airports, and reliever⁶ airports. There are 2,941 nonprimary airports. These airports are further grouped into five categories: national, regional, local, basic, and unclassified. Appendix C of this report contains the airport definitions contained in both statute and policy that are used in this report.

⁶The term "reliever" is defined in the FAA's authorizing statute at 49 U.S.C., section 47102, as "an airport the Secretary designates to relieve congestion at a commercial service airport and to provide more general aviation access to the overall community." The term "reliever" is relevant in a small number of contexts but is increasingly problematic because only a small number of commercial service airports still experience significant congestion. Regardless, because the term is still defined and used in statute, the FAA continues to report the current designations in this report.

Figure 2: NPIAS Airports by Category and Role

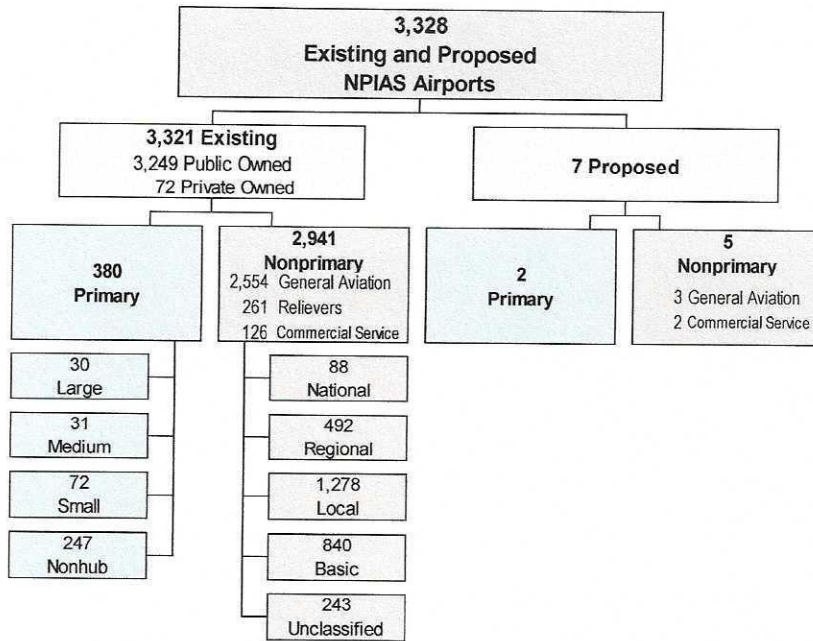


Table 2 reflects the number of existing NPIAS airports by category, as well as the percentage of enplanements, based aircraft, total aircraft operations, and total development.

Table 2: Activity and Development at NPIAS Airports

Number of Airports	Airport Category	Percentage of NPIAS Airports	Percentage of 2016 Total Enplanements ¹	Percentage of Aircraft Based at NPIAS Airports ²	Percentage of Total Aircraft Operations	Percentage of NPIAS Cost ³
30	Large Hub	1	72.48	0	13.1	23.5
31	Medium Hub	1	15.87	1.7	4.9	10.5
72	Small Hub	2	8.21	4.8	6.9	11.9
247	Nonhub	7	3.26	10.2	10.7	15.2
380	Primary Subtotal	11	99.83	16.7	35.6	61.1
88	National	3		10.5	8.4	5.3
492	Regional	14		22.3	24.5	12.1
1,278	Local	40		21.3	23.2	14.5
840	Basic	25		3.4	5.9	6.2
243	Unclassified	7		1.1	2.3	0.03
2,941	Nonprimary Subtotal	89	0.13	58.6	64.3	38.1
3,321	Total NPIAS Airports	100	99.96	75.3	100	99.2

¹The 126 nonprimary commercial service airports account for 0.07 percent of enplanements. The 2,815 nonprimary airports account for 0.06 percent of enplanements. The remaining 0.04 percent occurred at non-NPIAS airports.

²Based on active general aviation fleet of 211,793 aircraft in 2016. The remaining aircraft are based at non-NPIAS airports.

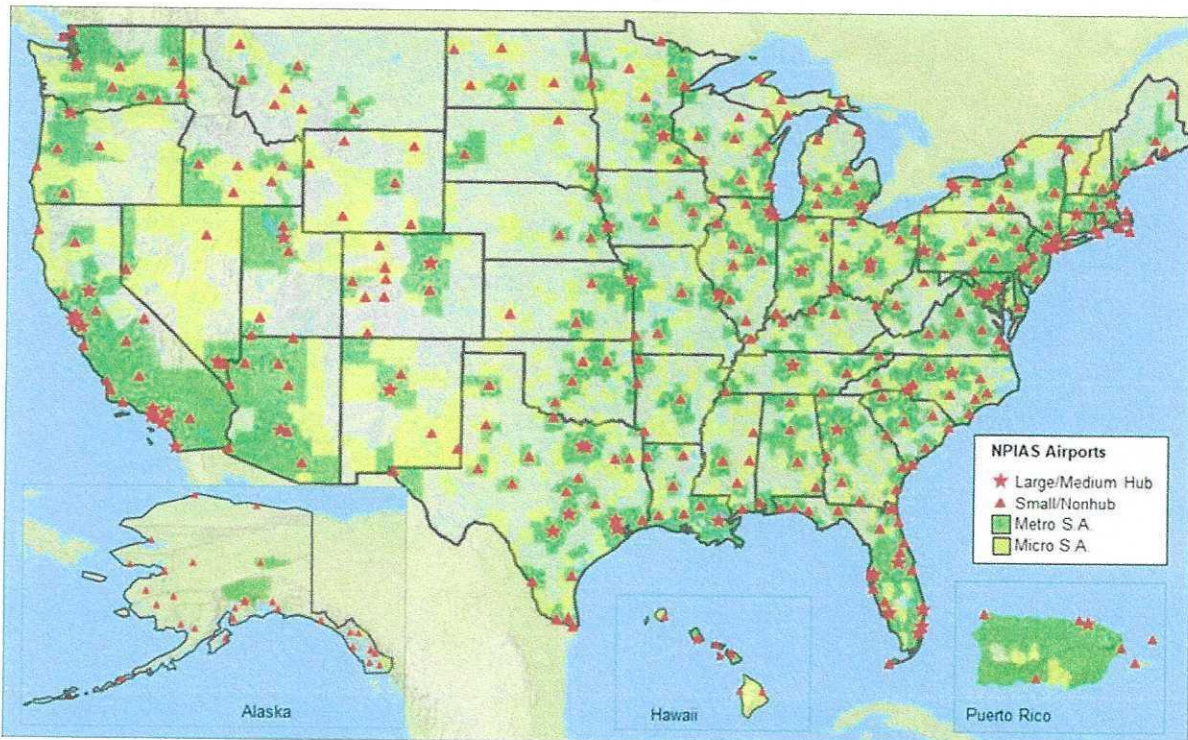
³These costs are rounded and do not include the cost for new airports (1 percent).

PRIMARY AIRPORTS

The 380 primary airports are grouped into four categories defined in statute: large, medium, small, and nonhub airports. Primary airports are eligible to receive an annual apportionment based on the number of enplaned passengers. CY 2017 enplanements determine FY 2019 service levels and passenger apportionments. Figure 3 shows the locations of the primary airports.

As shown in table 2, primary airports account for 99 percent of passenger enplanements, 36 percent of aircraft operations, and 61 percent of development contained in the NPIAS with the type of development needed varying by hub category. Further information on the various types of development is included in chapter 4.

Figure 3: Primary Airports



Large Hubs (30)

Large hubs are those airports that each account for 1 percent or more of total U.S. passenger enplanements.⁷ The 30 large hub airports account for 72 percent of all passenger enplanements. Some of these passengers originate in the local community, and some are connecting passengers transferring from one flight to another. Nine of the large hub airports primarily serve passengers

⁷The FAA's use of the term "hub" airport is slightly different from that of airlines, which use it to denote an airport with significant connecting traffic by one or more carriers. The hub categories used by the FAA are defined in 49 U.S.C., section 40102.

that originate in the community or who are traveling specifically to those destinations.⁸ Many other large hub airports support higher percentages of passengers who are traveling through the airport to connect to another flight, rather than starting or ending their travel at these airports. Such connecting traffic can account for more than 65 percent of passenger activity at the airport, such as Charlotte/Douglas International and Hartsfield-Jackson Atlanta International.

Large hub airports tend to concentrate on commercial airline and freight operations and have limited general aviation activity. Two large hub airports have an average of 170 based aircraft (Honolulu's Daniel K. Inouye International and Las Vegas McCarran International), and Salt Lake City International has more than 325 based aircraft, but the other 27 large hubs have an average of 29 based aircraft. Thus, locally based general aviation aircraft play a small role at most large hub airports.

The Nation's air traffic delay problems tend to be concentrated at certain large hub airports, particularly in the New York City area. Delays occur primarily during inclement weather conditions (i.e., thunderstorms or clouds that reduce ceiling and visibility) or when runway or airspace capacity is reduced below what is needed to accommodate traffic levels. Gate availability and airline schedules that exceed optimal airport capacity can also result in delays. Because of the number of connecting flights supported by these airports, delays at these airports can quickly ripple throughout the system causing delays at other airports nationwide.

Medium Hubs (31)

Medium hubs are defined in statute as airports that each account for between 0.25 percent and 1 percent of total U.S. passenger enplanements. The 31 medium hub airports account for 16 percent of all U.S. enplanements. Medium hub airports usually have sufficient capacity to accommodate air carrier operations and a substantial amount of general aviation activity. One medium hub airport (John Wayne Airport-Orange County) has 489 based aircraft, and three medium hub airports (Metropolitan Oakland International, Dallas Love Field, and William P. Hobby in Houston) each have an average of 270 based aircraft. The remaining 27 medium hub airports have an average of 81 based aircraft.

Small Hubs (72)

Small hubs are defined in statute as airports that enplane 0.05 percent to 0.25 percent of total U.S. passenger enplanements. There are 72 small hub airports that together account for almost 8 percent of all enplanements. Less than 25 percent of the runway capacity at small hub airports is used by airline operations so these airports can accommodate a great deal of general aviation activity, with an average of 128 based aircraft at each airport. These airports are typically uncongested and do not have significant air traffic delays. One small hub airport, Fairbanks International, has 570 based aircraft. Three small hub airports—Fairbanks International, Cyril E. King in Charlotte Amalie, Virgin Islands, and Orlando Sanford International—have an average of 380 based aircraft. The remaining 68 small hub airports have an average of 124 based aircraft.

⁸The nine include the major airports in Boston, Fort Lauderdale, Orlando, San Diego, Tampa, Portland (Oregon), and Las Vegas, as well as New York LaGuardia and Ronald Reagan Washington National.

Nonhub Primary (247)

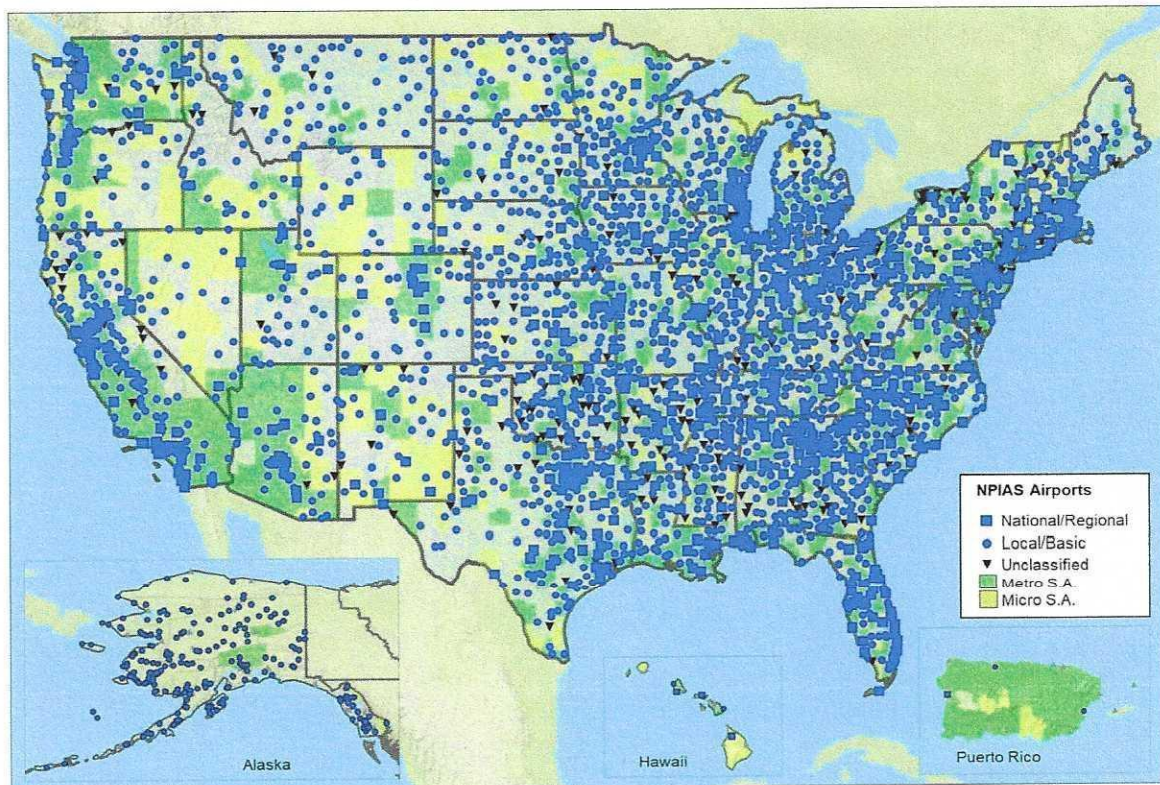
Commercial service airports that enplane less than 0.05 percent of all commercial passenger enplanements but have more than 10,000 annual enplanements are categorized as nonhub primary airports. There are 247 nonhub primary airports that together account for 3 percent of all enplanements. These airports are also heavily used by general aviation aircraft with an average of 87 based aircraft.

NONPRIMARY AIRPORTS

Nonprimary airports are mainly used by general aviation aircraft and include 126 nonprimary commercial service, 261 relievers, and 2,554 general aviation airports. Nonprimary airports are divided into five categories based on existing activity (e.g., the number and types of based aircraft and volume and types of flights), geographic factors, and public interest functions. These categories, illustrated in figure 4, are national, regional, local, basic, and unclassified.

The 2,941 nonprimary airports included in the NPIAS account for 59 percent of the active general aviation fleet, 64 percent of aircraft operations, and 38 percent of the AIP-eligible development through 2023. Development at nonprimary airports tends to focus on pavement reconstruction (runway, taxiway, and apron) and improvements to meet current airport design standards.

Figure 4: Nonprimary Airports



In preparation for the biennial report, the FAA reexamined the roles of nonprimary airports and coordinated with airport sponsors and State aviation agencies. The FAA continues to work with

industry to identify users of these facilities and their associated role in the State and national airport system.

As specialized functions emerge, the FAA will work with industry to incorporate them into the NPIAS categories. Each airport's category and role is reflected in appendix A. The next review of airport roles will be in FY 2020 in preparation for the 2021 NPIAS report due September 2020. Future development of nonprimary airports will continue to be based on eligible and justified needs and priorities consistent with the role of the airport in the national airport system.

National (88)

National airports are located in metropolitan areas near major business centers and support flying throughout the Nation and the world. These airports provide pilots with attractive alternatives to the busy primary airports. In fact, the FAA has designated 70 of these facilities as relievers for primary airports. National airports have very high levels of activity with many jets and multiengine propeller aircraft. Four national airports—Fort Lauderdale Executive, Phoenix Deer Valley, Centennial Airport in Denver, and Addison in Dallas—have more than 600 aircraft based at their airport. National airports average 249 total based aircraft, including 30 jets. The 88 national airports account for 5 percent of the development in this report.

Regional (492)

Regional airports are also in metropolitan areas and serve relatively large populations. These airports support regional economies with interstate and some long-distance flying and have high levels of activity, including some jets and multiengine propeller aircraft. Fifty-three of these airports have limited air carrier service, and the FAA has designated 140 regional airports as relievers for primary airports. Four regional airports (Falcon Field in Mesa, Arizona; Livermore Municipal in Livermore, California; Montgomery-Gibbs Executive in San Diego, California; and Caldwell Industrial in Caldwell, Idaho) each have more than 400 based aircraft. Regional airports average about 92 total based aircraft, including 3 jets. The 492 regional airports account for 12 percent of the development in this report.

Local (1,278)

Local airports are a critical component of our general aviation system, providing communities with access to local and regional markets. Typically, local airports are located near larger population centers but not necessarily in metropolitan areas. They also accommodate flight training and emergency services. These airports account for 39 percent of all NPIAS airports and have moderate levels of activity with some multiengine propeller aircraft. About 73 of these airports have limited air carrier service. Two local airports have more than 200 based aircraft (Nampa Municipal in Idaho and Birchwood Airport in Alaska). Local airports average about 34 based propeller-driven aircraft and no jets. The 1,278 local airports account for 14 percent of the development in this report.

Basic (840)

Basic airports fulfill the principal role of a community airport providing a means for private general aviation flying, linking the community with the national airport system, and making other unique contributions. In some instances, the airport is the only way to access the community and provides emergency response access, such as emergency medical or fire fighting and mail delivery. These airports have moderate levels of activity with an average of nine propeller-driven aircraft and no jets. Many of these airports are located in rural areas. The 840 basic airports account for 6 percent of the development in this report.

Unclassified (243)

These airports tend to have limited activity and include public- and private-owned airports. There are 188 public-owned unclassified airports. Of those, 57 have no based aircraft, 75 have between 1 and 4 based aircraft and 56 have between 5 and 8 based aircraft.

There are 55 privately owned unclassified airports. Of those, 23 are privately owned airports designated as relievers that do not meet existing criteria for AIP funding. About half of these airports have fewer than 50 based aircraft (compared to the long-established threshold of 100 based aircraft for designation as a reliever). Also included in the 55 are 32 privately owned general aviation airports. These airports do not meet the criteria for designation as a reliever and have never received an AIP development grant. These airports have been in the NPIAS for at least 20 years, and there is no indication they will ever meet the requirements to become classified. Over the next 2 years, the FAA will review these locations for continued inclusion in the NPIAS.

Two hundred and sixteen of the airports identified as unclassified airports in 2017 remain unclassified in this report. The activity or circumstances changed for 56 airports. The activity dropped at 27 airports, and they became unclassified. Activity increased at 29 airports, and they went from unclassified to basic (26), local (2), or regional (1).

NEW AIRPORTS (7)

The NPIAS identifies seven proposed airports, two primary and five nonprimary, that are anticipated to be developed and open over the 5-year period covered by this report⁹. One of the proposed new primary airports to help meet future aviation demand would be in the Chicago area and is still in the planning stages. The airport sponsor is currently evaluating methods for developing, financing, and operating the proposed airport. The other new primary airport will replace an existing commercial service airport in Williston, North Dakota, where airlines and general aviation are experiencing constraints due to increased activity caused by regional economic growth attributed to oil and natural gas production.

The five nonprimary airports are in Angoon, Alaska; Newtok, Alaska; Noatak, Alaska; Sioux Center, Iowa; and Griffin, Georgia. The replacement airport in Sioux Center, Iowa, will open in the fall of 2018 and the existing NPIAS airport (Orange City Municipal Airport) will close.

⁹Proposed new airports anticipated to open after 2023 are not listed in this report. However, needed development for those new airports between 2019 and 2023 is captured in Chapter 4, Table 6.

The new airports anticipated to open by 2023 are shown separately in appendix A and are also included in the State list of airports. They are identified by a location identifier beginning with a plus symbol (e.g., +07W). Appendix A does not identify new airports (planning sites) expected to open beyond 2023. Inclusion of a planning site in the NPIAS does not represent actual approval of the proposed airport (from a planning, environmental, or financial perspective), nor does it mean that the FAA has drawn a final conclusion about the need for (or technical or financial feasibility of) the proposed airport.

Since the last report, three new replacement airports opened in 2016 and 2017: Pilot Station, Alaska; Barter Island, Alaska; and Zuni, New Mexico. The three airports that were replaced have closed.

CONVERSION OF MILITARY AIRFIELDS AND USE OF MILITARY/CIVIL AIRFIELDS

The Defense Base Realignment and Closure (BRAC) Commission has made many military airfields available for conversion to civil aviation use since 1989. Local communities have converted about 32 surplus military airfields to civil use. Most of these military airfields have long runways and associated facilities that can accommodate large civil aircraft. Even before the establishment of the BRAC, military officials have cooperated with local communities across the country to provide civilian access to military airport facilities. These local arrangements add capacity to the national airport system and maximize public investment dollars by eliminating the duplication of airport facilities in a community for military and civilian activities. There are 21 military installations that also allow civilian aircraft activity. Many of the facilities are included in the NPIAS.

The U.S. Department of Defense (DOD) has found it advantageous to operate from civilian airfields. Similar to civilian uses on military airfields, military activity at civilian airfields reduces public investments in airport infrastructure by taking advantage of existing civilian airfield capabilities for military purposes. As specified in the National Guard Bureau Air National Guard Pamphlet 32-1001, Airport Joint Use Agreements for Military Use of Civilian Airfields, at airports where military units conduct a significant level of activity, the DOD entered into an agreement with the local community to pay for costs related to the military use of the airfield. As of 2017, the military has agreements in place with 90 civilian airports.

AIRPORT PRIVATIZATION

Public-use airports in the United States owned and operated by a public agency or a government entity, such as a county, city, or State government, are eligible to participate in the Airport Privatization Pilot Program. Congress established the pilot program (title 49 U.S.C., section 47134) in 1996 to determine if, once certain economic and legal impediments were removed, privatization could produce alternative sources of capital for airport development and provide benefits. The FAA's Modernization and Reform Act of 2012 expanded the pilot program from 5 to 10 airports, but left the requirement that the pilot program can include no more than one large hub airport and at least one general aviation airport unchanged. Public-

owned general aviation airports can be leased or sold; public-owned air carrier airports can only be leased. In February 2013, under the pilot program, the FAA approved a 40-year lease of Luis Muñoz Marin International Airport in San Juan, Puerto Rico, from the Puerto Rico Ports Authority (the public airport sponsor) to Aerostar (a private operator). Currently, Airglades Airport in Clewiston, Florida; Westchester County Airport in White Plains, New York; and St. Louis Lambert International Airport in St. Louis, Missouri, have applications under FAA consideration. Six pilot program slots (including one for a large hub airport) are still available.