



Airports 101

(February 2023)

Transportation systems (including air, rail, highways, and waterways) connect communities, business, and people and provide critical support functions. Airports are critical to the national transportation system and contribute to a productive national economy and international competitiveness. This includes the 46 million people living in rural areas where an airport may provide the community with critical access to the national transportation system.

Overview

- A. The Aviation Industry and the System
- B. Commercial Aviation
- C. Airport Development and Funding
- D. Airport Ownership & Organizational Structures
- E. Key Regulations/Requirements
- F. Airport Finance

A. The Aviation Industry and the System

→ National Airspace System (NAS) – Highways in the Sky

→ The national airport system, envisioned in the first National Airport Plan issued in 1946, has been developed and nurtured by close cooperation with airport sponsors and other local agencies, as well as Federal and State agencies. FAA Order 5090.5, Formulation of the NPIAS and ACIP contains the enduring principles guiding Federal involvement in the national airport system which continue to be periodically reaffirmed by the FAA and the aviation industry.

→ Every day, the Federal Aviation Administration provides air traffic service to more than 45,000 flights and 2.9 million airline passengers traveling across the more than 29 million square miles that make up the U.S. national airspace system (NAS).

→ The NAS is a network of both controlled and uncontrolled airspace, both domestic and oceanic. It also includes air navigation facilities, equipment and services; airports and landing areas; aeronautical charts, information and services; rules and regulations; procedures and technical information; and manpower and material.



A. The Aviation Industry and the System Cont'd

- ➔ National Plan of Integrated Airport Systems (**NPIAS**)
- ➔ The NPIAS supports DOT and FAA goals for the air transportation system through six key areas: safety, capacity, environmental performance, runway pavement condition, surface transportation accessibility, and airport financial performance

Of the 333 million people in the United States: ▪ 92% are within 30 miles of a primary airport ▪ 99.7% are within 30 miles of a NPIAS airport (includes primary and nonprimary) ▪ 63% of NPIAS airports are located in metropolitan or micropolitan statistical areas ▪ 37% of NPIAS airports provide rural areas with access to the National Airport System

3,287 NPIAS Airports:

- *Includes 5,050 runways*
- *Houses 154,511 aircraft*
- *Accommodates 662 million enplanements*
- *Supports 90.8 million aircraft operations*

NPIAS Cont'd

- Required by 49 U.S.C. § 47103.
- Federal Aviation Administration (FAA) is also required to maintain the plan for developing public-use airports in the United States and include the kind and estimated cost of eligible airport development necessary to provide a safe, efficient, and integrated system of public-use airports.
- The NPIAS identifies the amounts and types of airport development eligible for Federal funding
- Airport capital development needs are driven by current and forecasted traffic, use and age of facilities, and changing aircraft technology, all of which require airports to update or replace equipment and infrastructure.

Airport Classification/Category

- A **public-use airport** is an airport open to the public that also meets the following criteria: Privately owned but having scheduled service and at least 2,500 annual enplanements. Further, to be eligible for a grant, an airport must be included in the NPIAS.
- Commercial service airport means a **public airport**, in a State, that has at least 2,500 passenger boardings each year and is receiving scheduled passenger aircraft service.
- **Primary Airport** As defined by the [FAA](#), a commercial service airport with more than 10,000 passenger boarding each year.
- **Nonhub primary** – airports handling over 10,000 but less than 0.05% of the country's annual passenger boardings.

Airport Categories

HVN

Airport Category	Number of Airports	Percentage of Airports	Percentage of Paved Runways	Percentage of 2021 Total Enplanements	Percentage of All Active GA Aircraft	Percentage of Total Operations	Percentage of NPIAS Cost
Large Hub	30	1	2	69	1	10	32.0
Medium Hub	35	1	2	18	2	5	14.9
Small Hub	80	2	4	9	5	7	9.7
Nonhub	238	7	9	3	10	10	12.2
Primary Subtotal	383	11	17	99	18	32	68.8
National	107	3	4		12	11	5.3
Regional	501	15	17		22	25	9.0
Local	1,179	36	34		20	23	10.3
Basic	904	28	23		3	7	6.0
Unclassified	213	7	5		1	2	0
Nonprimary Subtotal	2,904	89	83	0.07	58	68	30.6
Total NPIAS Airports	3,287	100	100	100	76	100	100

Airport Environment

- ➔ Airline – Provide air transportation to passengers to get from point A to point B, Mass Transportation System not operated by a government entity (In the US)
- ➔ ATC – Direct traffic in the air and on the ground to ensure safe movement of aircraft
- ➔ Airport – Provides facilities and land for airlines and tenants' to operate, ensure safe and secure environment for passengers and airlines. Often confused with Airline
- ➔ Fixed Base Operator – Provides fuel and aircraft services to airlines and pilots

B. Commercial Aviation

→ Early 1900's Wright Brothers

→ Post WWI – Airlines begin

→ Air Mail Act of 1925 – critical to economic growth of airlines

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B. Commercial Aviation – Cont'd

- Early years – Flying was very expensive
- Air Commerce/International Travel
- 1978 Airline Deregulation Act –
 - Deregulated the airline industry in the United States
 - Removed federal control over such areas as fares, routes, and market entry of new airlines.
- Low Fare Airlines/Ultra Low Fare
 - Low Fare vs. Low Cost
 - Competition
 - Predatory Pricing
 - Open Marketplace/Competition Plans

C. Airport Development and Funding

→ Airport Improvement Program (AIP)

- The Act's broad objective is to help in developing a nationwide system of public-use airports that meets the current needs and the projected growth of civil aviation.
- Funded through ticket tax on **BASE FARE**
- May fund a percentage of eligible projects
- Priority projects funded at 90%
- Entitlement - formula based on number of enplaned passengers
- Discretionary – competitive with all other airports , typically disbursed on highest priority projects (safety & capacity)

AIP is funded under the Airport and Airway Trust Fund

Established in 1970, the **Airport and Airway Trust Fund**, also known as the Aviation Trust Fund, helps finance the Federal Aviation Administration's (FAA) investments in the airport and airway system, such as construction and safety improvements at airports and technological upgrades to the air traffic control system, as well as FAA operations, including providing air traffic control, overseeing commercial space launches, and conducting safety inspections.

The trust fund is funded principally by a variety of taxes paid by users of the national aviation system. Revenue sources for the trust fund include taxes on airline passenger ticket sales, the flight segment tax, air cargo taxes, and aviation fuel taxes paid by both commercial and general aviation aircraft. In FY2016, the trust fund received revenues of over **\$14.4 billion in aviation taxes and fees**. Between FY2012 and FY2016, the trust fund provided between 71% and 93% of FAA's total appropriations, with the remainder coming from the general fund of the U.S. Treasury.

C. Airport Development and Funding – Cont'd

- Passenger Facility Charge (PFC)
 - Program allows the collection of PFC fees up to \$4.50 for every eligible passenger at commercial airports controlled by public agencies.
 - PFCs are capped at \$4.50 per flight segment with a maximum of two PFCs charged on a one-way trip or four PFCs on a round trip, for a maximum of \$18 total.
 - Airports use these fees to fund FAA-approved projects that enhance safety, security, or capacity; reduce noise; or increase air carrier competition.
 - Often used as match to AIP grants
 - Cap Hasn't been increased by Federal; Government in many (over 20) years
 - Has not kept pace with inflation
- Other Programs
 - The Coronavirus Aid, Relief, and Economic Security Act, also known as the CARES Act
 - Coronavirus Response and Relief Supplemental Appropriations Act of 2021 (CRRSAA), to support the transit industry during the COVID-19 public health emergency.
 - Bipartisan Infrastructure Law

D. Airport Ownership & Organizational Structures

→ Ownership Structures

- State Owned
- Authority – State/Local/Regional
- Enterprise Fund
- Municipal Department
- Public/Private
 - Lease
 - Management Agreement

D. Airport Ownership & Organizational Structures

→ Organizational Structures

→ Typical Departments

- Administration
- Operations
- Maintenance

→ Divisions

- Security
- Fire
- Landside
- Airside
- Environmental
- Engineering/Planning
- Finance

E. Key Regulations/Requirements

- FAA
 - Part 139 – Certification of Airports – How the Airport must be operated (very detailed)
 - Part 77 - establishes standards and notification requirements for objects affecting navigable airspace.
 - Part 150 – Airport Noise Compatibility Planning - prescribes the procedures, standards, and methodology governing the development, submission, and review of airport noise exposure maps and airport noise compatibility programs,

E. Key Regulations/Requirements – Cont'd

- Grant Assurances – Obligated as part of accepting Federal Funds
- 39 Grant Assurances
- Assurance Number 1 includes:
 - Federal Legislation – 28 laws
 - Executive Orders – 11 EOs
 - Federal Regulations – 24 Regulations
- Compliance Manual - The Airport Compliance Program ensures airport sponsors' compliance with their federal obligations in the form of grant assurances, surplus and nonsurplus obligations, or other applicable federal law.
- Airline/Stakeholder Rights – Compliance complaints
 - Part 13 - The FAA accepts **informal** complaints either verbally or in writing under Title 14 Code of Federal Regulations Part 13
 - Part 16 - The FAA accepts **formal** complaints in writing under Title 14 Code of Federal Regulations Part 16
- TSA
 - 49 CFR Part 1542 – Airport Security

F. Airport Finance

- Rates and Charges
 - Approved Methodologies
 - Residual - airlines collectively assume significant financial risk by agreeing to pay any costs of running the airport that are not allocated to other users or covered by nonairline sources of revenue,
 - Compensatory - the airport operator assumes the major financial risk of running the airport and charges the airlines fees and rental rates so as to recover the actual costs of the facilities and services that they use
 - Hybrid – combination of the above
 - Revenue Diversion/Use of Airport Revenue
 - 49 U.S.C. § § 47107(b)(1), 47133
 - Grant Assurance # 25
 - Policy—64 Fed. Reg. 7696
 - Revenue must be used for capital and operating costs of:
 - The airport
 - The local airport system
 - Other facilities owned and operated by the sponsor that are directly related to the air transportation of passengers or property

F. Airport Finance – Cont'd

- Key Grant Assurances
 - 22. Economic Nondiscrimination – must make the airport available as an airport for public use on reasonable terms and without unjust discrimination to all types, kinds and classes of aeronautical activities, including commercial aeronautical activities offering services to the public at the airport.
 - 24. Fee and Rental Structure - maintain a fee and rental structure for the facilities and services at the airport which will make the airport as self-sustaining as possible under the circumstances existing at the particular airport.
 - 25. Airport Revenues – see previous slide

HVN Summary

- Owner - State Authority (TNHAA) with lease from City of New Haven
- Primary, Commercial Service, Non-hub Public Use Airport
- Operated by a private management company (Avports)
- Capital Development funded by Private Investment (New HVN), FAA, PFC and other sources
- Regulated by multiple Rules, Laws and Regulations – Primarily Federal
- Major Economic Engine for the Region

