U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION

ORDER NUMBER 5090.5

Effective Date:
September 3, 2019

SUBJ: Formulation of the NPIAS and ACIP

1. PURPOSE.

- Order 5090.5 establishes guidelines for managing and maintaining two federal plans that are essential to airport development: the National Plan of Integrated Airport Systems (NPIAS) and the Airports Capital Improvement Plan (ACIP). The Order also discusses the Office of Airports (ARP) NPIAS project database that supports these plans and its use for preparing the Secretary of Transportation's biennial NPIAS Report.
- The NPIAS identifies existing and proposed airports that are important to national air transportation, and it provides a forward-looking estimate of the type and cost of eligible Airport Improvement Program (AIP) development needed to meet the needs of civil aviation.
- The ACIP, a subset of the NPIAS plan for airport development, is the primary financial planning tool for systematically identifying, prioritizing, and assigning funds to help meet the capital project needs of airports within the NPIAS. The ACIP also provides the basis for grant planning and management under the AIP.

2. AUDIENCE.

This Order applies to all FAA personnel that work with the NPIAS, ACIP, AIP, and Passenger Facility Charge (PFC) program, particularly those in the Office of Airports headquarters, regional and field offices. This Order is also available to airport sponsors; public agencies; planning agency sponsors; state, regional, and metropolitan aviation agencies; and airport-related organizations that work with the FAA in developing airport capital plans and identifying airports in the NPIAS.

3. DISTRIBUTION.

This Order is available on the FAA website. Visit the Orders & Notices web page.

4. CANCELLATION.

This Order cancels two Orders:

- FAA Order 5090.3C, *Field Formulation of the National Plan of Integrated Airport Systems (NPIAS),* December 4, 2000.
- FAA Order 5100.39A, *Airports Capital Improvement Plan,* August 22, 2000.

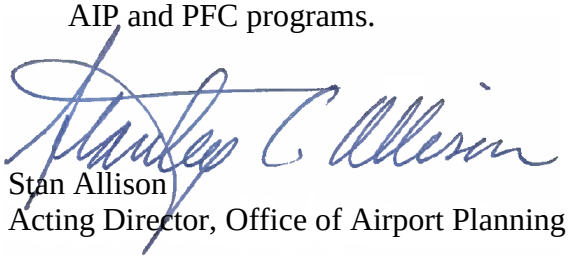
5. EXPLANATION OF CHANGES.

This Order changes previous guidance by:

- Combining the NPIAS and ACIP orders into a single document to enable a comprehensive, orderly flow of airport development data—from planning through the identification of potential federal funding.
- Differentiating what is required by law and what is recommended by policy. It incorporates relevant legislative provisions, revised and added, in accordance with statutory changes since both Orders were last published independently in 2000.
- Updating the requirements for airports requesting entry into and withdrawal from the NPIAS, and it defines the roles of General Aviation airports in the NPIAS that were not defined in previous orders.
- Updating the FAA's Overall Development Objective concept to best capture project details for all planning and financial assistance programs that ARP administers.
- Revising the National Priority System (NPS) equation, the numerical system for prioritizing airport development, to consider the airport's role in the National Airport System.

6. LIMITATIONS.

This Order provides a process for airport development planning that encompasses the NPIAS and ACIP and which is applicable to both the AIP and the PFC programs. There may be language in this Order that conflicts with language contained in either Order 5100.38, *Airport Improvement Program (AIP) Handbook* (referred to throughout this Order as the *AIP Handbook*), or Order 5500.1, *Passenger Facility Charge (PFC)* (referred to throughout this Order as the *PFC Order*). In the event of such a conflict, the most recently issued language controls. This Order does not change or modify any regulatory or statutory requirements of the AIP or PFC programs. This Order is intended for the limited purpose of facilitating airport development planning as it relates to funding requests made through the AIP and PFC programs.



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Acting Director, Office of Airport Planning and Programming

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CHAPTER 1. WHAT DO I NEED TO KNOW ABOUT THIS ORDER?

1.1 Why is airport planning important?

An integrated system of public-use airports is critical to the national transportation system, a productive national economy, and international competitiveness. To best use available resources, planning must ensure we provide the safest, most efficient, and environmentally responsible aviation system in the world that meets the needs of the traveling public. All airports in the national airport system—and proposed changes to the system—must exhibit the essential attributes listed in Tables 1-1A and 1-1B.

Table 1-1A Essential Airport Characteristics

Airports Should Be	Characteristics
Safe	Developed and maintained to appropriate design standards.
Efficient	Located to provide ease of access and enhance usage.
Affordable to both the users and the government	Relies primarily on producing self-sustaining revenue with minimal burden on the general revenues of the local, state, and federal government. As stated in Executive Order 12893, federal investment will be based on analysis of expected benefits and costs.
Flexible and expandable	Can meet changes in demand and accommodate evolving needs, including but not limited to aircraft designs, airline service strategies, and aeronautical activities.
Permanent	Ensures it will remain open for aeronautical use over the long term.
Compatible with surrounding communities	Maintains a balance between the needs of aviation, the environment, and the interests of neighboring areas.
Adaptable to new technology and airspace changes	Developed in concert with improvements to the air traffic control system and associated technological advancements.

Table 1-1B Essential Airport System Characteristics

Airport Systems Should Be	Characteristics
Versatile	Supports a variety of critical national objectives, such as defense, emergency readiness, law enforcement, and postal delivery.
Extensive and efficient	Provides as many people as possible with convenient access to air transportation.

Airport Systems Should Be	Characteristics
Integrated	Integrates a variety of categories of airports with other modes of transportation. National Transportation Policy establishes goals relating to an efficient intermodal transportation infrastructure to support economic competitiveness, enhance the population's standard of living and quality of life, and to reduce energy consumption and air pollution.

1.2 How does this Order advance the Airport Planning Process?

The FAA develops guidance, such as this Order, by taking into account the attributes in Table 1-1, so the planning done by federal, state, and local agencies is effective and supports the continued availability of a national system of public-use airports. This Order provides guidance and policies for formulating, maintaining, and publishing the development plan for public-use airports known as the National Plan of Integrated Airport Systems (NPIAS). The Airports Capital Improvement Plan (ACIP) for funding NPIAS projects is a subset of the NPIAS.

1.2.1 What role does the NPIAS play in airport planning?

The FAA uses the NPIAS to identify airports that have a role in the National Airspace System (NAS) and all potential, unfunded, and Airport Improvement Program (AIP) eligible airport development projects at those airports. The airport and project data collected on a continuous basis provides the basis for the publication of the FAA's biennial NPIAS Report.

1.2.2 What role does the ACIP play in airport planning?

The FAA formulates the ACIP to guide the assignment of Airport Improvement Program (AIP) funding to projects based on airport development needs identified in the NPIAS. Funding this development helps ensure that the NAS is safe, secure, and efficient; airports remain compatible with neighboring communities; and projects preserve existing infrastructure.

1.2.3 How do ARP's databases support airport capital planning?

1.2.3.1 ARP uses internal and external databases for airport capital planning, at both the national and regional levels. The internal database known as System of Airports Reporting (SOAR) is used to compile, analyze, and prioritize eligible airport development for potential AIP funding; therefore, it is critical that the data is current and accurate. The FAA, airport sponsors, and planning agencies should provide the SOAR database with updated data as project information from federal, state, and local sources becomes better defined. Sections 2.3.2 and 4.1.7 discuss SOAR and the sources used to define eligible airport planning.

1.2.3.2 The SOAR database may include information from an airport sponsor's capital improvement plan, but it does not guarantee funding. Similarly, the SOAR database may include numerical ratings of projects in the ACIP requesting financial assistance through the AIP. (The ACIP ratings are covered in Section 5.7.1.) These ratings, however, are not final determinations by the FAA and have no impact on the decision-making for PFC-funded projects. The raw data from these data sets (supporting both the NPIAS and ACIP, including quantitative project ratings) is *deliberative*—that is, the information is part of the FAA's internal decision-making process, and so it is privileged from public disclosure.

1.3 What legislation is relevant to this Order?

This Order is based on the NPIAS- and AIP-related provisions in 49 United States Code (U.S.C.) Chapter 471, the PFC-related provisions in 49 U.S.C. Chapter 401, and the regulatory provisions in 14 Code of Federal Regulations (C.F.R.) Parts 139, 150 158 and 1542.

1.3.1 Understanding legislative and regulatory references.

Table 1-2 describes the formatting used in this Order for references to specific sections (§) of legislation and regulations.

Table 1-2 References to Sections (§) of Legislation and Regulation

Legislation (U.S.C.)	Regulations (C.F.R.)
49 U.S.C. § 47101 The first two numbers indicate the chapter number. U.S.C. = United States Code § = section The numbers after § indicate the section number. This reference, therefore, is to Chapter 49, U.S.C, Section 47101.	14 C.F.R. 123.321, or § 123.321 The first numbers indicate the section title C.F.R. – Code of Federal Regulations The numbers that follow C.F.R: The numbers before and after the decimal indicate the section and subsection. This reference, therefore, is Title 14 of the C.F.R., Part 123, Section 123.321.

Table 1-3 lists the legislative sources relevant to this Order.

Table 1-3 Legislation Relevant to this Order

Program	Legislative Code	Citation
The Airport Improvement Program	Title 49 U.S.C. (Transportation), Subtitle VII (Aviation Programs), Part B (Airport Development and Noise), Chapter 471 (Airport Development)	49 U.S.C. § 47101 through 47175 (Some sections in this range do not apply.)
The NPIAS	Title 49 U.S.C. (Transportation), Subtitle VII (Aviation Programs), Part B (Airport Development and Noise), Subchapter I (Airport Improvement)	49 U.S.C. § 47103
Passenger Facility Charges	Title 49 U.S.C. (Transportation), Subtitle VII (Aviation Programs), Part A (Air Commerce and Safety), Subpart i (General)	49 U.S.C. § 40117
The Military Airport Program	Title 49 U.S.C. (Transportation), Subtitle VII (Aviation Programs), Part B (Airport Development and Noise), Subchapter I (Airport Improvement)	49 U.S.C. § 47118
The State Block Grant Program	Title 49 U.S.C. (Transportation), Subtitle VII (Aviation Programs), Part B (Airport Development and Noise), Subchapter I (Airport Improvement)	49 U.S.C. § 47128
Noise compatibility programs	Title 14 C.F.R. (Aeronautics and Space), Chapter I (Federal Aviation Administration, Dept. of Transportation), Subchapter I (Airports)	14 C.F.R. Part 150 Subparts A through C
Noise	Title 49 U.S.C. (Transportation), Subtitle VII (Aviation Programs), Part B (Airport Development and Noise), Subchapter I (Noise Abatement)	49 U.S.C. § 47501 through 47507
Airport Security and Airport Security Programs	Title 49 C.F.R. (Transportation), Subtitle B (Other Regulations Relating to Transportation), Chapter XII (Transportation Security Administration, Department of Homeland Security), Subchapter C (Civil Aviation Security)	49 C.F.R. Part 1542
Rules governing the certification and operation of airports	Title 14 C.F.R. (Aeronautics and Space), Chapter I (Federal Aviation Administration, Dept. of Transportation), Part 139, Subchapter G (Certification of Airports)	14 C.F.R. Part 139 Subparts A through D

Program	Legislative Code	Citation
Passenger Facility Charges	Title 14 C.F.R. (Aeronautics and Space), Chapter 1 (Federal Aviation Administration, Dept. of Transportation), Subchapter I (Airports)	14 C.F.R. Part 158

1.4 What FAA Office of Airports positions, offices, divisions, and branches does this Order reference?

APP-1 refers to the Director of the Office of Airport Planning and Programming. Table 1-4 lists additional referenced offices, divisions, and branches. In this Order, ADO refers to the FAA Airports District Office that directly works with the sponsor. In regional offices that do not have ADOs, ADO refers to the FAA Office of Airports branch within the regional office that deals directly with the sponsors.

1.5 Supplemental guidance.

1.5.1 The FAA Office of Airports may issue additional guidance to supplement this Order and provide new or qualifying requirements.

1.5.2 For projects that involve block grant state sponsors, the ADO forwards the additional guidance to the appropriate contacts. See Advisory Circular 150/5100-21, *State Block Grant Program*.

1.6 Referenced documents.

1.6.1 The Order summarizes pertinent information from other sources, for example, statutes, regulations, FAA Orders, and guidance material when appropriate. In instances of possible discrepancies between the summaries and the source material cited, the original source always takes precedence. Readers should also check the most current versions of cited documents.

1.6.2 Appendix D lists referenced documents and provides online links for accessing them.

Table 1-4 FAA Office of Airports Office, Divisions, and Branches

Routing Code	Office Name
AAS	Office of Airport Safety and Standards
AAS-100	Airport Engineering Division

Routing Code	Office Name
AAS-300	Airport Safety and Operations Division
ACO	Office of Airport Compliance and Management Analysis
ACO-100	Airport Compliance Division
APP	Office of Airport Planning and Programming
APP-400	Airport Planning and Environmental Division
APP-500	Airports Financial Assistance Division
APP-510	Financial Analysis and Passenger Facility Charge Branch
APP-520	Airport Improvement Program Branch
ARP	Office of Airports
ARP-1	Associate Administrator for Airports
ARP-10	Management Staff
AXX-600	Regional Division Director (Replace AXX with the applicable regional designation: AL, EA, CE, GL, NE, NM, SO, SW, or WP.)

1.7 **Limits to this Order.**

1.7.1 There may be paragraphs or definitions in this Order that conflict with Order 5100.38, *Airport Improvement Program (AIP) Handbook*, or FAA Order 5500.1, *Passenger Facility Charge (PFC)*. In the event of such a conflict, the most recently issued language controls. The policy provided in this Order does not change policy or legislative requirements of either the AIP or PFC program, and to the extent there is a conflict, the most recent statutory or regulatory language controls. The policy is strictly for the purposes of planning airport development (referred to in this order as "development") eligible for potential future funding through the AIP or PFC programs. The planning information provided through this process is also used to develop the NPIAS as required by 49 U.S.C. § 47103 and provide the details required by the FAA in preparing potential future funding through the AIP or the PFC programs.

1.7.2 For complete information on the AIP, see the current FAA Order 5100.38, *Airport Improvement Program Handbook,* on the Airport Improvement Program page of the FAA website.

1.7.3 For complete information on the PFC program, see the current FAA Order 5500.1, *Passenger Facility Charge,* on the PFC Program page of the FAA website.

1.8 What key terms are necessary for understanding this Order?

Many words and phrases have specific, defined meanings within the context of this Order. Appendix A contains the definitions of terms used.

1.9 General principles for using this Order.

1.9.1 The FAA uses this Order for all projects funded under the AIP.
The Order is the published policy required for airport development projects to be included in the NPIAS and ACIP. Except where options are specifically noted or where non-mandatory language ("should," "may," "desirable") is used, the procedures and requirements are mandatory for FAA staff.

1.9.2 Requests to deviate from this Order.
The Director of the Office of Airport Planning and Programming (APP-1) must approve any deviation from the procedures or requirements described. Send all requests for deviations to APP-1.

1.9.3 Regional Office Discretion.
This Order has been developed to balance historical national policies and processes related to the NPIAS and ACIP with local concerns, to preserve flexibility for regional offices as needed. Regional offices have the latitude to establish local procedures as long as they meet the requirements of this Order (as well as statutory and regulatory requirements). Applying capital planning procedures consistently across the nation and the NAS safeguards federal investments and improves program efficiencies.

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CHAPTER 2. WHAT IS THE NPIAS-ACIP PLANNING AND FUNDING PROCESS?

2.1 Background.

2.1.1 Of the more than 19,000 private- and public-use landing areas in the U. S., about a third (26 percent) are open to the public. From these, the FAA identifies the public-use airports that are important to the national transportation system to include in the NPIAS. The NPIAS also identifies the type and cost of eligible development needed to improve these airports (and, in very limited instances, to build new ones) to meet the current and long-term needs of civil aviation.

2.1.2 Public-use airports in the NPIAS are eligible (with limited exceptions) for federal funds through the AIP. The FAA makes these investment decisions on the use of federal funding using structured selection criteria that help identify critical annual development needs within AIP funding levels. This annual internal process, which produces the ACIP, is used by the FAA to select projects for potential AIP funding. The ACIP allows the FAA to determine and fund the most critical airport development needs within AIP funding limits set by Congress through the authorization and appropriation processes. Commercial service airports may also qualify to apply to collect PFCs to fund airport capital projects through the Passenger Facility Charge Program.

2.2 What are the FAA's goals for the Airport Planning Process?

2.2.1 Policy statements in authorizing legislation.
The FAA's authorizing legislation (codified in 49 U.S.C. Chapter 471) states that "it is the policy of the United States (1) that the safe operation of the airport and airway system is the highest aviation priority." In accordance with statutory requirements, the FAA has established a planning process that emphasizes the following key areas to fulfill this policy:

- Preserve existing airport infrastructure in a safe and functional operational condition (if indeed that infrastructure is still needed to meet aeronautical demand).
- Bring airport facilities into conformity with current standards (for facilities built before current standards were in place).
- Construct, modify, or expand facilities as necessary to meet demonstrated aeronautical demand.
- Enhance environmental sustainability.
- Provide for a balanced system of airports that meet the roles and functions necessary to support civil aeronautical demand.

2.2.2 FAA priorities in administering the AIP.
In the administration of the AIP, the FAA gives the highest priority to projects that enhance safety and security at airports. Other major objectives are achieved by awarding

AIP funds to projects that maintain existing airport infrastructure and increase or maintain the capacity of existing facilities to accommodate increasing passenger and cargo demand. U.S. statutory provisions guide aviation policies that direct specific funding resources to achieve other ends:

- Help minimize current and projected noise impacts.
- Preserve and enhance capacity, safety, and security at primary and reliever airports.
- Convert available former military air bases to civil use.
- Support funding availability for nonprimary airports.

2.3 What is the National Plan of Integrated Airport Systems (NPIAS)?

Per the requirements of Title 49 United States Code section 47103, the National Plan of Integrated Airport Systems (NPIAS) identifies existing and proposed airports that are considered significant to national air transportation and thus may be eligible to receive federal grants. The NPIAS is maintained by the FAA to assist in developing public-use airports by cataloging their unfunded needs. As required by law, the plan must specify the kind and estimated cost of the airport development considered necessary to provide a safe, efficient, and integrated system of public-use airports. This development must be adequate to meet the anticipated needs of civil aeronautics, the national defense requirements of the Secretary of Defense, and the United States Postal Service (49 U.S.C. § 47103).

2.3.1 Airport Improvement Program (AIP).

The AIP provides grants to airport sponsors and public agencies for planning and developing public-use airports that are included in the NPIAS. In some cases, private owners and entities that the FAA has qualified as eligible sponsors receive AIP grants.

2.3.1.1 **AIP eligibility.**

Project grant applications for AIP funding may only be proposed for public-use airports included in the NPIAS (49 U.S.C. § 47105(b)(2)). Project grant applications must comply with the parameters set forth in 49 U.S.C. § 47105(b) and project eligibility will be assessed in accordance with 49 U.S.C. Chapter 471. AIP eligible projects proposed to be funded outside the AIP and PFC programs, e.g., funded with state or local funds, should also be included in the NPIAS to provide a comprehensive view of the system needs.

2.3.2 The SOAR database.

2.3.2.1

The SOAR database contains information on airport planning and development for the approximate 3,300 existing and proposed airports the FAA has identified as important to national air transportation. The data is primarily obtained from the FAA's annual requests for project information, airport inspections, and airport master plans and system plans that airport sponsors prepare (or have prepared by contracting with a planning consultant).

The FAA reviews the sponsors' data with a particular focus on the justification and timing of proposed development projects. Along with airport operators, sponsors include state and local planning agencies. The federally funded plans must be consistent with FAA forecasts of aeronautical activity, follow FAA guidelines, and be reviewed and accepted by FAA personnel familiar with local conditions.

2.3.2.2 Once a financial commitment is made to accomplish a development project (either through issuance of a grant, approval of an actual implementation date to begin PFC collections, or an agreement to fund through other sources), the project is no longer considered an unfunded need and is removed from the database's estimates of needed development.

2.3.2.3 Table 2-1 shows the relationship of the NPIAS timelines used for planning. The X indicates the criteria that projects for which federal funding is sought must meet at various stages in the process. Project planning timelines are discussed further in Section 5.2. Near-term projects are included in the published NPIAS Report.

Table 2-1 Relationship of NPIAS to Airport Planning Timeframes

Criteria projects must meet at the various stages in NPIAS-ACIP Planning Process	NPIAS			
	Long Term (11+ years)	**Medium Term (6-10 years)**	**Near Term (1-5 years)**	**Near Term ACIP (1-3 years)**
Eligible to be funded under AIP	X	X	X	X
Reasonable development for the airport to accomplish, with all pertinent preliminary activities (land acquisition, environmental analysis, Benefit-Cost Analysis, permitting, etc.)			X	X
Justified by current use, forecasts, or design standards. Note: Justification will be verified by the FAA when assigning funding to a project (ACIP).			X	X

2.3.3 Responsibilities.

2.3.3.1 The nine ARP regional offices are responsible for continuously maintaining their portion of the database, updating as new information becomes available. The minimum interval for making these updates is once a year, typically during the ACIP update cycle (see the informational NPIAS-ACIP planning calendar in Appendix C for typical update milestones).

2.3.3.2 APP-400 performs an annual review and a comprehensive review of the data once every two years in advance of the published report. The regions are notified in advance of the comprehensive review. Further information is in Appendix C.

2.3.4 Inclusion in the NPIAS.
Chapter 3 discusses how the FAA identifies airports for inclusion in the NPIAS and the recommended development needed at NPIAS airports. Chapter 4 discusses how projects are planned and added to the database.

2.3.5 Publication of a Biennial NPIAS Report.
Every two years, by the end of alternating fiscal years, the FAA publishes a report on the status of the national airport system that reflects each airport's role in the system and identifies each airport's proposed total development cost. The current report is available on the FAA Office of Airports website.

2.4 What is the Airport Capital Improvement Plan (ACIP)?

The ACIP, a subset of the NPIAS, is a needs-based and financially constrained plan for funding development over a rolling 3-year period. (*Rolling* means that the start date of the 3-year term updates on a specific date every year so that the current year is the beginning of the term.) It serves as the basis for the distribution of AIP grant funds, and it emphasizes funding the highest priority projects. Chapter 5 provides additional information on the planning and composition of the ACIP.

2.4.1 Formulation of the ACIP.
The FAA formulates the ACIP, with voluntary cooperation of airport sponsors, states, airport planning agencies, and metropolitan planning agencies, to guide the distribution of AIP funds based on the airport development identified in the database.

2.4.2 Project inclusion.

2.4.2.1 For a project to be included in the database, it must be eligible to receive AIP funding, even if a funding source has not been identified.

2.4.2.2 Planned development regularly exceeds the available AIP funding for current and future years, and changes in airport operations or statutory requirements may impact the justification or eligibility of the proposed project.

2.4.2.3 The FAA, therefore, considers projects in the NPIAS as potential projects, making its investment decisions using structured selection criteria to identify critical development needs within AIP funding levels and limits set by the Congress. Through the annual ACIP process, the FAA systematically identifies, plans, and prioritizes airport planning and development projects for AIP funding to produce the Airport Capital Improvement Plan. Chapter 5 discusses how the FAA identifies, plans, and prioritizes projects in the ACIP.

2.5 What is the relationship between airport planning and funding programs?

One of the products of airport planning is the Capital Improvement Plan (CIP), which identifies airport projects, defines funding requirements, and helps identify the applicable funding types. The FAA manages the AIP and PFC program to fund the qualified airport projects in CIPs.

2.5.1 Airport Improvement Program.

As stated in Section 2.3, the AIP provides grants to airport sponsors and public agencies for planning and developing public-use airports that are included in the NPIAS. In some cases, private owners and entities that the FAA has qualified as eligible sponsors receive AIP grants.

2.5.1.1 **Categories of funding**.

AIP funding splits into two categories and types of funding according to AIP legislation: apportioned funds (also known as entitlements) and discretionary funds. Apportioned funds are those designated under 49 U.S.C. § 47114, which are determined by formula and available to airport sponsors annually. Discretionary funds (49 U.S.C § 47115) are funds that remain after entitlement distributions and include a number of set-aside amounts for specific project types designated under 49 U.S.C § 47116 and 49 U.S.C § 47117.

2.5.1.2 **Uses of discretionary funding**.

2.5.1.2.1 Approximately two-thirds of discretionary funding is set aside for specific project types, such as noise mitigation and environmental projects, or airport types, such as airports in the Military Airport Program. The remainder is distributed to eligible projects based on project ranking and other factors. Specific details on the distribution of AIP funding are in Section 5.7. Further information on AIP funding categories is in the *AIP Handbook*.

2.5.1.2.2 Programs and projects that may qualify to be funded under set-aside programs within the AIP, such as noise, environmental, Military Airport Program, or which are issued a Letter of Intent (LOI), must still be planned for within the NPIAS and ACIP to be eligible for AIP funding.

2.5.2 Passenger Facility Charge Program.

2.5.2.1 The PFC program authorizes a public agency to collect fees on paying passengers boarding an aircraft at a commercial service airport controlled by the public agency (49 U.S.C. § 40117(a) and 14 CFR 158.1). Public agencies use these fees to fund FAA-approved projects that preserve or enhance safety, security, or capacity, reduce noise, or enhance air carrier competition at airports the agency controls. PFC programs are authorized by 49 U.S.C. § 40117.

2.5.2.2 Most projects anticipated to be funded in whole or in part with PFCs are entered in the NPIAS if the project information is available and it is AIP-eligible. Because airport public agencies may elect to use PFC funding for project elements as a development program progresses (or to reimburse projects undertaken previously), planning in advance for these projects in the NPIAS is not always possible. However, due to the number of projects that may eventually have both AIP and PFC funding, it is increasingly beneficial to have the project data in the consolidated NPIAS location.

2.5.3 AIP and PFC projects included in the NPIAS and the ACIP.

2.5.3.1 **When should projects be entered or removed from the NPIAS and the ACIP?**
All unfunded AIP-eligible airport development projects should be included in the NPIAS to provide a comprehensive picture of development needs. Once a project has been funded with AIP, the projects are removed from the NPIAS. When the FAA approves PFC revenue for use on the project, the project is considered funded and removed from the NPIAS.

2.5.3.2 **PFC projects are not included in the ACIP with exceptions.**
PFC projects generally are not included in the ACIP unless they are expected to be funded by a combination of PFC and AIP funds. Although a PFC project may be included in the ACIP, this does not grant the project a preference or priority when competing for AIP funding.

2.5.4 Airport planning process flowchart.
Figure 2-1 and Figure 2-2 depict the NPIAS, ACIP, AIP and PFC actions that make up the airport capital planning process.

Figure 2-1 Airport Capital Planning Process Flow Chart – NPIAS

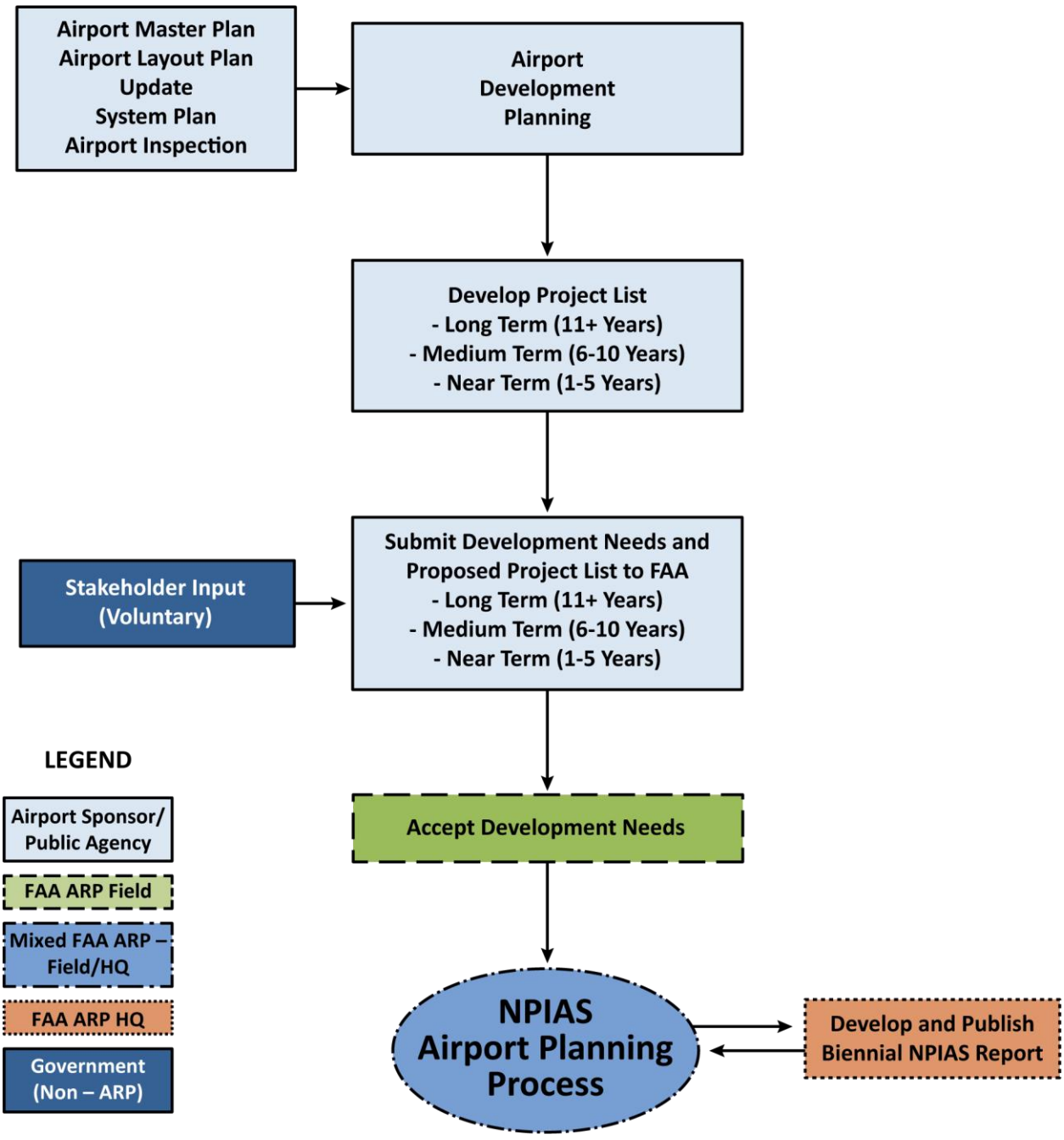
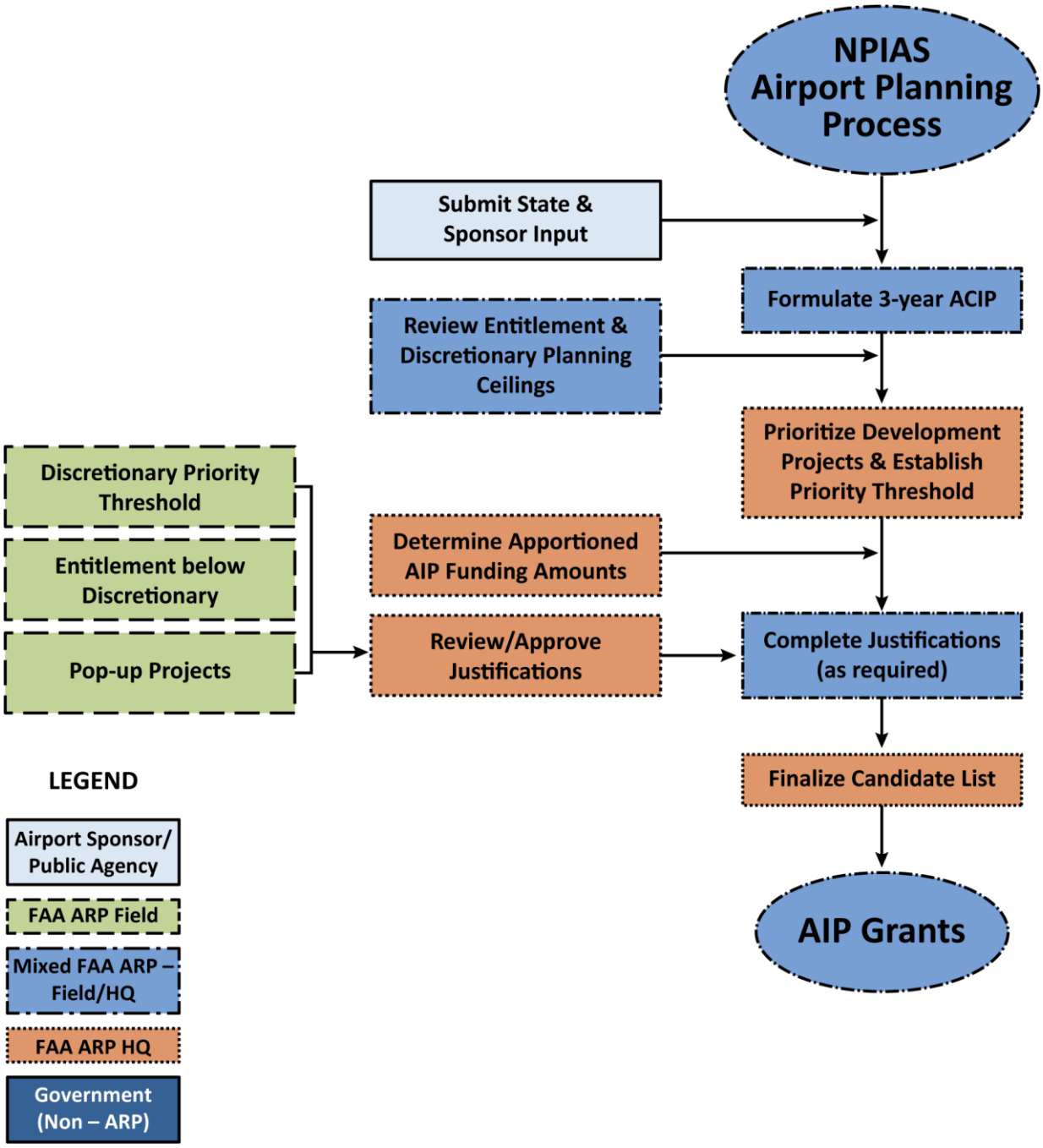


Figure 2-2 Airport Capital Planning Process Flow Chart – ACIP



CHAPTER 3. HOW ARE NPIAS AIRPORTS CATEGORIZED AND SELECTED?

3.1 How are airports categorized in the NPIAS?

3.1.1 Approximately 65 percent of all public-use airports (roughly 3,300 airports) are included in the NPIAS. To help define the role of NPIAS airports, the airports are categorized based on aviation activity, geography, and public-interest measures.

3.1.2 Each year, APP-400 reviews the airports to determine if an airport meets the statutory definition of primary and nonprimary commercial service, and then makes appropriate adjustments the database to service level and hub classifications. The FAA publishes a list of commercial service airports annually on its website.

3.1.3 Every two years, in preparation for the publication of the NPIAS Report, APP-400 reviews the activity data for all NPIAS airports to determine if adjustments to an airport's category are required. A critical component of this review is based aircraft data. Airport sponsors should maintain an accurate list of aircraft based at their airport on the FAA-supported website, BasedAircraft.com. Each airport's aircraft list is validated against the FAA Aircraft Registry on a continuous basis.

3.2 What are the Airport categories used in the NPIAS?

3.2.1 Public Airport.

3.2.1.1 A public airport is an airport used or intended to be used for public purposes that is under the control of a public agency with the landing/takeoff area and the surface maneuvering area also publicly owned (49 U.S.C. § 47102(21)).

3.2.1.2 A public agency is a state, or a political subdivision of a state (e.g., county or local government, or a governmental agency established by a state), a tax supported organization, or an Indian tribe or pueblo (49 U.S.C. § 47102(20)).

3.2.2 Public-Use airport.

A public-use airport is a public airport or a privately owned airport used for public purposes. Privately owned, public-use airports could be a reliever airport, or an airport determined by the Secretary of Transportation to have scheduled air carrier service with at least 2,500 passenger boardings a year (49 U.S.C. § 47102(22)).

3.2.3 Airport categories defined in statute.

Airport categories in the NPIAS as defined in statute are shown below. Table 3-1 provides additional information on category criteria.

- **Commercial Service** – publicly owned airport that has at least 2,500 annual passenger boardings each calendar year and scheduled passenger service (49 U.S.C.

§ 47102(7)). Commercial service airports fall into two major categories: primary and nonprimary commercial service.

- **Primary** – a commercial service airport with more than 10,000 annual passenger boardings (49 U.S.C §47102(16)). Primary airports comprise large, medium and small hubs as well as non-hub airports.
- **Nonprimary** – a public-use airport that provides scheduled commercial service to between 2,500 and 10,000 passengers a year.

- **Reliever** – an airport the Secretary of Transportation designates to relieve congestion at a commercial service airport and to provide more general aviation access to the overall community (49 U.S.C. § 47102(23)).
- **General Aviation** – a public-use airport that is located in a state and that, as determined by the Secretary, does not have scheduled service or has scheduled service with less than 2,500 passenger boardings each year (49 U.S.C. § 47102(8)).

Table 3-1 Airport Categories

Airport Categories	Criteria	Known as:
Commercial Service	Public-owned airports with more than 2,500 annual enplanements (passenger boardings) and scheduled air carrier service	
• Large Hub	Receives 1% or more of the annual U.S. commercial enplanements	Primary
• Medium Hub	Receives 0.25 to 1.0% of the annual U.S. commercial enplanements	Primary
• Small Hub	Receives 0.05 to 0.25% of the annual U.S. commercial enplanements	Primary
• Nonhub	Receives less than 0.05% but more than 10,000 of the annual U.S. commercial enplanements	Primary
• Nonprimary Commercial Service	Also referred to as nonhub nonprimary, these airports have scheduled passenger service and between 2,500 and 10,000 annual enplanements.	Nonprimary
Reliever	An airport designated by the Secretary to relieve congestion at a commercial service airport and to provide more general aviation access to the overall community.	Nonprimary
General Aviation	A public-use airport that does not have scheduled service or has scheduled service with less than 2,500 passenger boardings each year.	Nonprimary

3.2.4 Nonprimary airport categories.

The FAA has established categories for nonprimary airports serving mainly general aviation aircraft. Included in the nonprimary category are the airports eligible for Nonprimary Entitlement funding: Nonprimary Commercial Service, Reliever, and General Aviation airports. The types and characteristics of nonprimary general aviation airports are described in Table 3-2.

Table 3-2 Nonprimary Airport Categories

If a nonprimary airport is classified as:	It fulfills this role in the system:	And meets one of the following minimum criteria for annual activity:
National	Supports the national airport system by providing communities access to national and international markets throughout the U.S. National airports have very high levels of aviation activity with many jets and multiengine propeller aircraft.	5,000 or more instrument operations, 11 or more validated based jets and 20 or more international flights or 500 or more interstate departures; or 10,000 or more enplanements and at least 1 carrier enplanement by a large certificated air carrier; or 500 million pounds or more of landed cargo weight.
Regional	Supports regional economies by connecting communities to regional and national markets. Located in metropolitan areas serving relatively large populations. Regional airports have high levels of activity with some jets and multiengine propeller aircraft	In a Metropolitan or Micropolitan Statistical Area, 10 or more domestic flights over 500 miles, 1,000 or more instrument operations, and 1 or more validated based jet or 100 or more validated based aircraft; or: Nonprimary commercial service airport (requiring scheduled service) within a Metropolitan Statistical Area; or Currently designated by the FAA as a Reliever with 90 or more validated based aircraft.
Local	Supports local communities by providing access to markets within a state or immediate region. Local airports are most often located near larger population centers, but not necessarily in metropolitan or micropolitan areas. Most of the flying at local airports is piston aircraft in support of business and personal needs. These airports typically accommodate flight training, emergency services, and charter passenger service.	Public owned and 10 or more instrument operations and 15 or more validated based aircraft. Public owned and 2,500 or more annual enplanements.

If a nonprimary airport is classified as:	It fulfills this role in the system:	And meets one of the following minimum criteria for annual activity:
Basic	Provides a means for general aviation flying and links the community to the national airport system. These airports support general aviation activities such as emergency response, air ambulance service, flight training, and personal flying. Most of the flying at basic airports is self-piloted for business and personal reasons using propeller-driven aircraft. They often fulfill their role with a single runway or helipad, and minimal infrastructure.	Public owned with 10 or more validated based aircraft, or 4 or more validated based helicopters if a heliport. Public owned located 30 or more miles from the nearest NPIAS airport. Owned or serving a Native American community. Identified and used by the U.S. Forest Service, U.S. Marshals, U.S. Customs and Border Protection (designated, international, or landing rights), U.S. Postal Service (air stops), or has Essential Air Service. A new or replacement public owned airport that has opened within the last 10 years. Unique circumstances related to special aeronautical use.
Unclassified	Currently in the NPIAS but with limited activity and may not meet the essential airport attributes in Table 1-1. If the next review of an unclassified airport's activity shows levels that meet the criteria for one of the classifications, that airport will be reclassified in the next published NPIAS.	

3.3 What are the initial screening requirements for a facility to be *considered* for inclusion in the NPIAS?

3.3.1 Entry into the NPIAS is based on quantitative and qualitative factors. Quantitative data include the level of scheduled commercial service, number of revenue passenger boardings (enplanements), itinerant take-offs/landings (operations that arrive from outside the airport area or depart and leave the area), instrument approaches, and based aircraft. Qualitative factors include type of ownership (public or private), ability of the airport to meet the critical grant assurances (e.g., number 2 and 4), remoteness of the location, distance of travel to a comparable facility, type of traffic supported, and other available means of travel. The initial screening requirements for inclusion in the NPIAS are presented in Table 3-3; other factors the FAA considers are in Table 3-4.

Table 3-3 Initial Screening Requirements for a Facility to be *Considered* for Inclusion in the NPIAS

Type of Airport	Screening Requirement
An existing airport meeting the definition of a commercial service airport must be included in the NPIAS.	The airport must be publicly owned, publicly accessible, have scheduled air carrier service, and 2,500 or more annual passenger boardings.
An *existing* public-use general aviation airport or seaplane base must satisfy ALL the screening requirements at the time of request to be considered for inclusion.	• Operated by a sponsor eligible to receive federal funds and meet obligations. • Used by 10 or more operational and airworthy aircraft based on the airport. The aircraft tail numbers must be provided and validated against the FAA Aircraft Registry. • Located at least 30 miles from the nearest NPIAS airport. The 30-mile calculation must consider all existing NPIAS airports within a 30-mile radius, even if it is in an adjacent state. • Demonstrates an identifiable role in the national system (such as a basic, local, regional, or national). • Included in a state or territory aviation system plan with a role similar to the federal role, and recommended by the airport's state or territory aviation authority to be a part of the NPIAS. • A review by the FAA finds no significant airfield design standard deficiencies, compliance violations, or wetland or wildlife issues. An existing public-owned airport that does not meet all of these criteria may be considered for inclusion using a "special justification" that it fulfills a unique role in the national system as identified in Table 3-2 under Basic (e.g., an isolated community, Native American). The airport would be considered Unclassified until it can meet the criteria for a role as shown in Table 3-2. A public-owned airport that is co-located with a commercial space transportation facility may be considered for inclusion if the airport's activities not related to space transportation (such as its based aircraft, annual operations, and types of aircraft operations) meet the NPIAS entry criteria. If an airport with commercial space activities is included in the NPIAS, commercial space related development is not eligible for AIP funding.

Type of Airport	Screening Requirement
An *existing* public-use airport requesting inclusion as a reliever airport must satisfy ALL the screening requirements at the time of request to be considered for inclusion:	Operated by a sponsor eligible to receive federal funds and obligations. Used by 100 or more operational and airworthy aircraft based on the airport property. The aircraft tail number must be provided and validated by the FAA against the FAA Aircraft Registry. Relieves a large- or medium-hub airport that is operating at 60% or more of its capacity. The number of existing relievers already designated for the large- or medium-hub will be taken into account. Demonstrates an identifiable role in the national system (such as national or regional) and submits information confirming the candidate airport's ability to fulfill that role (e.g., feasibility to develop facilities to accommodate jets, compatible land-use, and available resources to maintain and improve the facility). Included in a state system plan with a role similar to the federal role and recommended by the airport's state or territory aviation authority to be a part of the NPIAS. A review by the FAA finds no significant airfield design standard deficiencies, compliance violations, or wetland or wildlife issues. Privately owned public-use airports may be considered for inclusion in the NPIAS if the FAA determines the airport meet all the reliever criteria identified above and serves a demonstrated critical role in the national system.

Type of Airport	Screening Requirement
A proposed commercial service or general aviation public airport (replacement, supplemental, or additional) must provide evidence it will satisfy the criteria as shown in Table 3-2 and meet these additional requirements.	• Demonstrates how the airport will meet the operational activity required (through a forecast validated by the FAA) within the first 5 years of operation. The operational activity at the new airport should not be based on attracting existing demand from other airports, unless there is a demonstrable deficiency in safety or standards at these other airports. • Provides enhanced facilities that will accommodate the current aviation activity and improve functionality as well as provide room for future development based on imminent justified demand. • Shows a Benefit-Cost Analysis rating of 1.0 or more. (Information on when and how to conduct a Benefit-Cost Analysis is in FAA Order 5100.38, *Airport Improvement Program Handbook,* and FAA Airport Benefit-Cost Analysis Guidance.) • Presents a detailed financial plan for the proposed airport to accomplish its construction and ongoing maintenance. • Level of local support/consensus is adequate to achieve the development of the new airport. A proposed public-owned airport that does not meet all of the criteria may be considered for inclusion using a "special justification"; if it can demonstrate that, it will fulfill a unique role in the national system as identified in Table 3-2 (e.g., an isolated community, Native American).
An existing public-owned public-use heliport may be considered for inclusion in the plan if it makes a significant contribution to public transportation. It must satisfy these criteria at the time of request.	• Operated by a sponsor eligible to receive federal funds and meet obligations. • Used by 4 or more operational and airworthy rotorcraft based at the heliport for at least 2 years prior to this request and 400 annual IFR Flights. • Be part of the state airport system plan. Note: Private use heliports or special service heliports that primarily provide community services such as police patrol, traffic surveillance, or air ambulance transportation are not included in the NPIAS.

3.3.2 The FAA, in its charge of the AIP, has the authority to identify factors when considering admitting an airport into the NPIAS to assure entry is in accordance with the statutory requirements "to provide a safe, efficient, and integrated system of public-use airports" (49 U.S.C. §47103(a)). Table 3-4 lists factors the FAA has considered and may consider in its administration of entry into the NPIAS.

Table 3-4 FAA Considerations in Reviewing NPIAS Entry Requests

Condition	Considerations

For all candidate airports, can the sponsor demonstrate:	• How financially self-reliant is the airport and how much reliance on federal funding does it anticipate?
	• Would any issues prevent the airport from accepting a grant (grant obligations) and complying with federal obligations?
	• Does the airport meet minimum federal design and safety standards?
	• What are the historic trends for the airport and community that it would serve (i.e., population, activity)?
	• Are the aircraft owners or users a diverse aeronautical group (i.e., majority of aircraft owned by one user that could lead to potential compliance issues)?
	• How many NPIAS airports are within a 30-mile radius of the airport requesting entry and what are their roles?
	• What is the airport's potential federal role in the NAS: National, Regional, Local, or Basic airport?
	• Are there existing conditions (ownership, lease agreements, non-aeronautical activity on airport owned property, etc.) that would render the airport noncompliant?
	• Is there a special justification or unique purpose other than those identified in Table 3-3?
	• Can the proposed airport sponsor demonstrate that the airport has these characteristics?
	  ○ Safe and efficient?
	  ○ Developed and maintained to appropriate standards?
	  ○ Expandable and reasonably affordable to maintain and develop?
	  ○ Able to meet increased demand and accommodate new aircraft types?
	  ○ Permanent, with assurance that it will remain open for aeronautical use over the long term?
	  ○ Compatible with surrounding communities, maintaining a balance between the needs of aviation, the environment, and the requirements of the airport's neighboring residents?

Condition	Considerations
If this is a proposed airport (not yet constructed), can the proposed airport sponsor demonstrate:	How the airport will meet the operational activity criteria required for a proposed airport within the first 5 years of operation (through a forecast validated by the FAA)? • How the airport will meet unmet aviation demand without attracting existing demand from other airports, unless there is a demonstrable deficiency in safety or standards at the other airports?

3.3.3 Commercial service airports.
All commercial service airports (see 3.2.3) must be included in the NPIAS. This applies to both primary and nonprimary commercial service airports. See Table 3-1 and Table 3-2 for a description of airport types in the NPIAS.

3.3.4 Nonprimary airports**.**
Nonprimary airports (excluding those defined as commercial service) must be approved by the FAA at the ADO, regional, and headquarters level for inclusion in the NPIAS. The airport must meet all the criteria in Table 3-3 before it can be considered for inclusion.

3.3.5 Proposed new airports (replacement, supplemental, or additional); also referred to as "Planning placeholders".

3.3.5.1 A proposed airport, also referred to as a "planning placeholder" for planning purposes, is one identified as a potential location for a future replacement, supplemental or additional airport which may or may not be built. Planning placeholders are identified as "New" in SOAR and the published NPIAS Reports.

3.3.5.2 The FAA has established a process for considering inclusion of planning placeholders in the NPIAS.

- The ADO or regional office must notify APP-400 as soon as the ADO or regional office becomes aware that a new airport is being considered and must update APP-400 regularly during the entire process.
- When considering adding a new or replacement airport to the NPIAS, the FAA must review the airport's forecast activity and operations, intended role in its state system plan, required infrastructure, proximity to other federally funded airports, ability to comply with federal obligations, and eligibility of its proposed airport sponsor.
- A proposed airport sponsor may undertake a feasibility study to examine replacing a NPIAS airport without the FAA adding the proposed new airport to the NPIAS. APP-400 must review and concur with the need for the study prior to issuing any federal funding for a study. Upon

completion of the draft study, APP-400 must receive a copy for review and comment.

- The airport must meet all the requirements in Table 3-3 before it can be considered for inclusion as a new airport or for replacing an airport in the NPIAS, and it must have the support of the state or territory aviation authority or the state's transportation agency or entity, as applicable. Support is defined as being included in the state aviation system plan. Before a new airport is added to the NPIAS, it must be approved by the Region Division Director and APP-1.
- NPIAS airports that are to be replaced shall obtain approval for the release of the old airport from outstanding federal obligations, including how the federal share will be reinvested, per the current version of the FAA Order 5190.6, *Airport Compliance Manual.*

3.3.5.3 Accepting a proposed site (planning placeholder) in the NPIAS does not represent actual approval of the proposed new airport, from either an airspace or environmental standpoint. It also does not represent any financial commitment related to AIP grants or PFC funds. After 5 years of inactivity, the FAA will revalidate the continued need for the new airport (planning placeholder) in the national plan.

3.4 What if an airport no longer qualifies for the NPIAS?

3.4.1 Once in the NPIAS, airports are not generally re-evaluated for continued inclusion. Their activity levels, however, are reviewed to verify their classification. In certain circumstances, such as a change in ownership or public accessibility, the FAA may reconsider an airport's NPIAS inclusion or put restrictions in place on the types of AIP funding for which the airport might otherwise qualify.

3.4.2 The AIP statute defines four types of projects that may be funded at unclassified airports using ***only*** state apportionment funding (49 U.S.C. 47106(a)(7)). Specifically, the FAA may fund the following projects:

- maintenance of the pavement of the primary runway;
- obstruction removal for the primary runway;
- rehabilitation of the primary runway; or
- a project that the Secretary considers necessary for the safe operation of the airport.

3.4.3 Airports not meeting the minimal activity defined in Table 3-3 may remain in the NPIAS as "Unclassified" until they meet the NPIAS entry criteria and can be classified. The FAA may remove an Unclassified airport from the NPIAS if the airport is within 30 miles of another NPIAS airport and the sponsor is incapable of accepting or maintaining any new grant assurance obligations. The FAA will consult with the state or territory aviation agency before making a final determination. Activity information (as described in Table 3-2) is reviewed and validated by the FAA annually. It is the airport's responsibility to ensure that at a minimum their based aircraft counts are accurate as reflected in their Airport Master Record (FAA Form 5010-1).

3.5 How does an airport request an FAA review for potential inclusion in the NPIAS?

3.5.1 Submit a request for entry.
Proposed airport sponsors submit a request for entry through the ADO or regional office, along with the required documentation to demonstrate how the airport meets the entry criteria described in Table 3-3. A standard template identifying the required information is available for this purpose, which the ADO or regional office can request from APP-400.

3.5.2 Existing airports**.**

3.5.2.1 Airport sponsors of existing non-NPIAS airports must submit a request demonstrating that the airport meets the entry criteria shown in Table 3-3 and the factors in Table 3-4. They may also submit other documentation they feel is relevant.

3.5.2.2 An airport sponsor requesting inclusion must also submit the following information to the ADO or regional office:

- An opinion from the proposed airport sponsor's attorney as to the legal authority of the proposed airport sponsor to act as an eligible and qualified sponsor and carry out its responsibilities under the AIP statute.
- A narrative describing the airport and its projected benefit to the National Airspace System (NAS).
- An existing conditions report or summary.
- Its short-term (5-year) aviation activity forecast.
- Enter all the operational and airworthy aircraft in the FAA-sponsored website, BasedAircraft.com. The aircraft are validated against the FAA Aircraft Registry.
- A description of what role the airport will fulfill, initially and in the long term.

3.5.3 Proposed new airports (Planning Placeholders).

3.5.3.1 An airport sponsor of a proposed airport must submit to the ADO or regional office the items referenced in Table 3-3 for a proposed airport, along with a narrative describing the proposed airport, the reason for the request (replacement, new, supplemental), its projected benefit to the NAS, and address the factors in Table 3-4.

3.5.3.2 This narrative must also meet these requirements:

- Confirm the proposed airport is for public-use and publicly owned.
- Describe the role the proposed airport is intended to fulfill (National, Regional, Local, or Basic).
- Identify if the proposed airport is included in a state system plan and recommended for inclusion in the NPIAS. If not included, does it have the support of its state aviation authority or state transportation agency or entity, as applicable?
- Include a map showing surrounding NPIAS airports and explain how the proposed airport will enhance the local as well as national system of airports.
- Detail and highlight additional considerations such as:
- Identifying that no obstructions exist in the traffic pattern,
- Showing that approach/departure surfaces are clear,
- Describing how the airport will be able to meet the FAA's Airport Design Standards,
- Showing that land will be owned fee simple,[1]
- Verifying that the airfield can meet 95% or more wind coverage, and
- Proving how future growth can be accommodated.

3.5.3.3 If the purpose of a proposed airport is to replace an existing NPIAS airport that is unable to meet the current and future demand, then the existing obligated airport must close. (See Section 3.6.2.1 for more information about closure requirements for federally obligated airports.) In addition to NPIAS requirements, the closure also must conform to the requirements contained in

[1] The *AIP Handbook* states, "The sponsor should normally acquire the fee simple interest in land needed to construct or protect airport use or development." However, the Handbook also provides that, "Some lesser property interest may be acquired if that interest is legally sufficient for the purpose of the project or the acquisition is to a lesser property interest by a court order."

FAA Order 5190.6, *Airport Compliance Manual*, regarding the airport sponsor's federal obligations.

3.5.3.4 The proposed airport sponsor may need to provide additional information on request.

3.5.4 How does the FAA evaluate NPIAS entry requests?

3.5.4.1 The FAA reviews the information at the ADO, regional, and headquarters levels. It assesses the information submitted and considers the type of airport and the factors listed in Table 3-3 and Table 3-4 using the established screening requirements to determine the airports that best serve the national interest. APP-400 leads the headquarter review, coordinating it with ACO, AAS, and APP-520. This may be a lengthy process.

3.5.4.2 The ADO and regional office evaluate the written request from the proposed airport sponsor. If the submission has merit and the ADO and regional office support the inclusion of the facility in the NPIAS, the package is sent to APP-400 for headquarters review and coordination.

- APP-400 reviews the entry request, and asks for additional clarification from the ADO and regional office, if needed. If acceptable, APP-400 coordinates with appropriate ARP offices before submitting the request to APP-1 for final review and approval. If the submission is not acceptable, APP-400 provides a written explanation.
- APP-1 reviews and approves/disapproves the request. The ADO or regional office notifies the proposed airport sponsor of the decision. Only the FAA can approve an airport's inclusion in the federal plan.
- After 5 years of inactivity, the FAA will revalidate the continued need for the new airport (planning placeholder) in the national plan.

3.6 What are the criteria for withdrawal from the NPIAS?

3.6.1 What if an airport no longer wants to be in the NPIAS?

3.6.1.1 **Requesting removal from the NPIAS.**
A nonprimary airport that is in the current published National Plan of Integrated Airport Systems (NPIAS) may request removal from the NPIAS. The airport sponsor may initiate a request for the airport to be removed from the NPIAS. The airport sponsor must coordinate with the state aeronautical agency and the ADO. The FAA's ADO and Region will coordinate with the Office of Airport Planning and Programming (APP) to perform an accurate and credible assessment of an airport prior to concurring it should be removed from the NPIAS.

3.6.1.1.1 Airport sponsor responsibilities.

The airport sponsor requesting removal from the NPIAS must provide the following documentation to the ADO[2] in one complete package.

1. Written statement on Facts and Circumstance - the written statement, supported by facts and documentation, should describe the circumstances that justify the request to remove the airport from the NPIAS. The written statement should include:
   - A written request for removal signed by the authorized representative of the airport sponsor.
   - The reason for the removal request, including the facts and circumstances that justify the request.
   - The present condition and present use of any property or facilities.
   - Statement from at least one individual from the requesting airport sponsor certifying that the airport is not currently subject to federal obligations.
   - A description of how the sponsor acquired or obtained the property.
   - A description of any notations on additional land holdings and land use.
2. An airport with federal obligations[3] seeking removal from the NPIAS must submit the documentation identified above in Item 1, in addition to the following information:
   - List of all AIP funded grants (from FAA, state, etc.).
   - Current and active obligations.
   - Statement justifying removal from NPIAS.
   - Statement explaining plans for compliance with ongoing federal obligations.
3. Assessment of the Written Statement from State Aviation Authority - For classified airports, the State Aviation Authority may provide a

[2] In this process, the FAA Airports District Office (ADO) assigned to oversee the airport subject to the removal request will be the designated as the local oversight office. In cases where the airport is located in a block grant state, the airport may coordinate with the state aeronautical agency as well. However, the FAA ADO with oversight over the applicable state's block grant program will be the designated local oversight office and the airport must ultimately submit its request for NPIAS removal directly to the FAA.

[3] However, if the airport is federally obligated and wishes to be released from those obligations, then there is a separate process prescribed by the Office of Airport Compliance (ACO). See relevant section(s) of the current version of FAA Order 5190.6, *Airport Compliance Manual*.

statement supporting the removal of the airport from the NPIAS and indicating how the airport will be reflected in the next update of the state aviation system plan.

3.6.1.1.2 FAA role.

The FAA will review the airport sponsor's claim that there are no federal obligations. It will also supplement the airport sponsor's package with the following information:

1. General airport information and proximity to other airports - The FAA will identify all public-use airports within a 30-mile radius of the airport seeking removal (regardless of state borders) and will compile specific information on each airport:
    - Airport name and sponsor.
    - Current NPIAS airport. (Yes/No)
    - Driving Distance (miles) to airport requesting removal.
    - Nonprimary Airport Role (per most recent two published NPIAS reports).
    - Physical infrastructure (runways and meet design standards).
    - Summary of activity levels including based aircraft, operations, and community service provided.
2. The airport's current and historical role in the system.
    - An unclassified airport requesting removal must meet the following criteria:
        - Must have been identified by the FAA as Unclassified for a minimum of four consecutive years (last two NPIAS Reports).
        - Does not support a critical function in the national airport system.
    - A classified airport requesting removal must meet all of the following criteria.
        - Must have had declining aeronautical activity at the airport over the last 10 years and is now classified as Local or Basic.
        - Does not support a critical function in the national airport system.
        - Does not serve an irreplaceable role in the NAS and NPIAS. To demonstrate the airport is replaceable and its services and facilities are replicable, the airport must submit supporting documentation.

3.6.1.1.3 Review process.

- The ADO, regional, and headquarters (APP) offices will conduct a thorough review of the information submitted and will assess whether the airport is a viable candidate for removal from the NPIAS. The assessment will include relevant input from the appropriate Regional Directorate and the Office of Airports, Airport Safety and Standards Directorate, to assure necessary safety measures are included.
- The review team will provide its assessment to the Director of the Office of Airports, Airport Planning and Programming Division (APP-1). The assessment will include a recommendation based on whether the proposed removal from the NPIAS can be accomplished, if there are any safety implications, and what the impact will be on the remaining system of airports (for example, whether the system can absorb the removal without undue stress).

3.6.1.1.4 APP planning determination for removal from NPIAS.

- The Final APP Determination will depend on the role of the airport and proposed future use, which may include conditional approvals. The FAA generally will **not** consider removal of a NPIAS airport that serves a unique role (e.g., serving a remote area or supporting critical functions), especially if there is no comparable alternative within its vicinity or if the airport is classified as either a National or Regional airport in the current published NPIAS report.
- An airport sponsor will be notified of the APP Determination by the Director of the Office of Airport Planning and Programming. If the FAA determines that the request is contrary to the public interest and therefore the agency cannot grant the request, APP-1 through the FAA's ADO or regional airports division will advise the airport sponsor in writing of the denial.

3.6.2 What if a NPIAS airport wants to close?

3.6.2.1 **Federally obligated airports.**
Federally obligated airports are those that have accepted federal assistance, either in the form of grants or property. Each type of obligation carries specific requirements. An airport may be obligated in more than one way. To request closing a federally obligated airport (this includes an airport that is being replaced, see Section 3.3.5), airport sponsors must follow the requirements contained in the current version of FAA Order 5190.6, *Airport Compliance Manual,* and any applicable Compliance Guidance Letters.

3.6.2.2 **Non-federally obligated NPIAS airports.**

3.6.2.2.1 If a NPIAS airport is not federally obligated and wishes to close, airport sponsors must provide a written request (after coordination with the

designated state aeronautical agency) to the appropriate ADO or region for review and coordination. The request must provide information listed in Section 3.6.1.1.1(1), including the justification for closure, the anticipated impact on local, state, and national aeronautical activity, and the disposition of current users (i.e., the options that aeronautical users would have following the closure).

3.6.2.2.2 This process is necessary because even though the airport is not obligated, the FAA would still need to make an informed determination regarding the airport's role in the national air transportation system (consistent with 49 U.S.C. §47103(a)).

3.6.2.2.3 Each request will be reviewed on a case-by-case basis. The FAA will review the information at the ADO, regional, and headquarters levels.

3.6.2.2.4 Once the FAA has made a determination, the remaining steps are:

- The airport owner must submit a written request to the ADO along with FAA Form 7480-1, Notice for Construction, Alteration and Deactivation of Airports, at least 90 days before deactivation so that the FAA may complete its review of the proposed closure. Form 7480-1 is accessible from Airports Forms page of the FAA website.
- The FAA must publish a Notice of Permanent Closure in the Federal Register (in accordance with 49 U.S.C. 46319(b)) and provide the date of official closure.

3.7 Are commercial space transportation facilities eligible for NPIAS inclusion?

3.7.1 Currently, there is no functional requirement to co-locate public-use airports and commercial space launch facilities. Sponsors proposing commercial space launch facilities on or adjacent to a public-use airport should contact APP-400 for guidance.

- A public-owned airport that is co-located with a commercial space transportation facility may be considered for inclusion in the NPIAS if the non-launch related aeronautical activity levels meet the NPIAS entry criteria outlined in this chapter.
- Facilities that are not co-located with a public-owned airport and **only** support spacecraft launch and recovery are not eligible to be in the NPIAS.

3.7.2 For information on the licenses required to operate a commercial space launch site, see 14 C.F.R. Part 420, Chapter III – Commercial Space Transportation, Federal Aviation Administration, Department of Transportation. (Legislation - Commercial Space Launch Act, 51 U.S.C. Ch. 509, §§ 50901-23 (2011)).

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CHAPTER 4. HOW IS THE NPIAS PLANNED?

4.1 Planning.

4.1.1 What is the FAA's planning process for eligible airport development?
Identifying the development needed to maintain the national airport system is derived from locally prepared airport master plans, state system plans, and capital improvement plans (CIPs). Each of these types of plans is discussed in this chapter. These planning documents consider all significant aviation requirements along with the current use, condition, and forecast activity of each airport.

4.1.1.1 **Responsibilities.**

- FAA field offices review the locally prepared planning documents, which follow a standard format specified in advisory circulars.
- The FAA collaborates with airports to enter their eligible development needs for the next 10 years into the NPIAS.
- The FAA reviews the projects identified in the NPIAS to prioritize and allocate AIP funding for development and track PFC funding. This process is described in Sections 4.1.8, 5.3, 5.4, 5.6, and 5.7.

4.1.2 Who needs to plan?
The following sponsors, agencies, and other entities should incorporate planning into their development process.

4.1.2.1 **Airport sponsors.**
Airport sponsors must have the legal authority and financial capacity to meet all federal requirements necessary to initiate an AIP funded project.

4.1.2.2 **Local and regional planning agencies.**
These are entities usually authorized by state or local laws to engage in metropolitan area airport system planning. They include Metropolitan Planning Organizations (MPOs), Councils of Government, and Regional Planning Commissions.

4.1.2.3 **States.**

4.1.2.3.1 A state's airport system plan can determine how funding is prioritized; provide information to make aviation planning and development decisions consistent with its state goals and objectives; and provide overall policy guidance and direction to individual airports, MPOs, and multi-state planning efforts. States can also provide the FAA with recommendations and supporting justification for inclusion of airports and projects in the NPIAS, address special studies on pertinent airport related issues, and support a continuing airport planning process. States vary in the level of airport planning, development, and regulation that they undertake. States with less

involvement in their airports may have basic system plans, identifying airport roles, defining broad recommendations of project development, and providing justification and priorities for state funding.

4.1.2.3.2 States participating in the State Block Grant Program (49 U.S.C. § 47128) receive block grants through the FAA for airport master planning and development projects at eligible nonprimary airports in the state. The state then becomes the State Block Grant Sponsor.

4.1.2.4 **State aviation authorities.**
State aviation authorities, state transportation agencies, or entities, as applicable, may also serve as the sponsor for one or more airports in the state for development and planning projects. Within the NPIAS, the work sponsored by the state is categorized by the airport, similar to that of non-block grant states.

4.1.2.5 **Public agencies.**
A public agency can be a state or a political subdivision of a state, a tax-supported organization, or an Indian tribe or pueblo.

4.1.2.6 **Public agencies not controlling airports.**
Public agencies (cities, counties, authorities, or other entities) that do not currently control an airport, but are in the planning stages of acquiring or constructing a public-use airport, are recognized under AIP. They may not yet qualify, however, to be a sponsor for development purposes.

4.1.2.7 **Co-sponsors.**
The FAA has determined that public agencies, either independently or jointly, meet the sponsorship requirements. When public agencies act as co-sponsors to propose a project or CIP, the ADO agrees to the co-sponsorship by issuing the grant. Each of the co-sponsors is individually bound to the terms and conditions of the grant agreement unless their respective rights and obligations with respect to an approved AIP project are otherwise set forth in a written agreement. The *AIP Handbook* provides specific details on how to establish the agreement between co-sponsors.

4.1.2.8 **Airports in the Airport Investment Partnership Program.**
The sponsor of a NPIAS airport accepted into the Airport Investment and Partnership Program, formerly known as the Airport Privatization Pilot Program, under 49 U.S.C. 47134, whether the airport is fully or partially privatized under this section, is eligible for AIP grants. Accordingly, as required by statute (49 U.S.C. 47103), these airport sponsors should include planning for eligible airport development projects in their annual NPIAS planning processes.

4.1.3 Why do airports need to plan?

4.1.3.1 **To support more effective development.**
Airports in the NPIAS, no matter the size or role, need to plan. When done successfully, planning leads to more effective development, reduced costs, more streamlined environmental and permitting processes, and the flexibility to refine plans when conditions change. Planning should support the objective of developing an efficient system of airports for meeting current and forecast needs, consistent with local, state, and national goals.

4.1.3.2 **Airport sponsors should complete these planning tasks as "best practices"**:

- Develop a long-term plan for the airport, outline a process to implement that plan, and identify potential funding for the development.
- Identify and develop strategies to meet current and future airport development needs. This development should prepare the airport to meet forecast demand safely and efficiently.
- Define development goals that are realistic and attainable, with due consideration of economic and environmental sustainability. Development goals should include activity-level trigger points for future planning, consistent with Table 4-3 and Table 4-4. (Also, see the discussion of activity-level triggers in Section 4.3.5.)
- Anticipate and prepare the airport for future challenges. Current planning, for example, often considers the transition to satellite-based navigation systems and other equipment, procedures, and facilities to implement NextGen. Planning should also try to anticipate technical advances that will improve terminal functionality, change facility design, or accommodate new types of aircraft and new entrants to the national air transportation system.
- Identify and resolve potential development issues to confirm the need for projects and programs. The planning process should collect sufficient data on existing conditions and forecast needs to justify moving forward with development. Plans should provide for continued data collection to justify projects when they are identified in the ACIP.
- Develop a CIP of eligible projects to be included within the NPIAS for potential consideration in the ACIP and possible request for PFC funding.

4.1.4 What is the CIP's role?
Airport sponsors, planning agencies, and states use planning data to develop CIPs, which capture their airport's long-, medium- and short-term development needs, estimated costs, and projected years of implementation. They serve as the basis for discussions with the FAA about federal funding needs.

Airport sponsors and states work with the FAA to develop their CIPs for inclusion in the database. PFC projects, which are part of an airport sponsor's CIP, may also be included in the database, although not necessarily in the ACIP. (Section 2.5.3 discusses the conditions for inclusion of PFC projects.)

4.1.5 What other activities, components, or criteria should effective planning consider?

4.1.5.1 **Intergovernmental coordination.**
As airport development often coincides with other development projects and government sponsors, the planning process should be continuing, cooperative, and comprehensive (49 U.S.C. § 47101(g)(1)). This "3-C" planning process is also used by Metropolitan Planning Organizations (MPOs) and other agencies for planning surface transportation programs. Airport plans and programs should be developed in coordination with other transportation planning and foster effective coordination between aviation planning and metropolitan planning (49 U.S.C. § 47101(g)). Airport capital develop planning partners include state aviation agencies, state transportation agencies, or other entities; airport management; 49 C.F.R., Part 1542 (Airport Security) regulatory agents; Part 139 (Airport Certification) inspectors; and metropolitan planning agencies, as applicable to the airport and region.

4.1.5.2 **Anticipated technologies and trends that will affect the airport.**
In anticipation of satellite-based navigation systems and other technological developments in aeronautics, plans should be flexible. Policies, procedures, budgets, authorizations, and organizational arrangements may be expected to change during the transition to the Next Generation air traffic control system. The plans must also be consistent with the current National Airspace System architecture (49 U.S.C. § 47101(f)).

4.1.5.3 **Intermodal planning activities to efficiently connect different forms of transportation.**
In accordance with 49 U.S.C. § 47101(g)(2) and the Clean Air Act Amendments of 1990, airports are encouraged to become involved in system planning. Federal Highway Administration funds are directed through the MPO. Federally funded airport access projects, therefore, should be coordinated with the MPO and listed in its transportation improvement program under 23 C.F.R. § 450.318 to promote seamless airport intermodal transfers. The FAA encourages airports to complete planning projects that are consistent with MPO system forecasts, ground access and air quality studies, and land use planning.

4.1.5.4 **Stakeholder coordination.**
Successful planning engages airlines, other airport tenants, airport users, and the community in planning activities that may have an effect on their operations and environment. The FAA encourages active outreach efforts with both users and the public during the planning process (49 U.S.C. §§ 47105 and 47106).

4.1.6 When do airports need to coordinate with the FAA?

4.1.6.1 Airport sponsors should proactively plan development projects. At a minimum, the airport sponsor should submit its CIP to the FAA annually. Depending on the complexity and coordination required, airport sponsors may need to provide project information to the FAA on a regular basis as planning continues or when circumstances change.

4.1.6.2 See Appendix C for timing and responsibilities of airport development planning actions. The development becomes part of the NPIAS if the FAA agrees with the eligibility and justification for the project(s) within the next five-year timeframe.

4.1.7 What federally funded planning documents and other sources are used to identify AIP-eligible airport development to be included in the NPIAS?

Planning documents are useful in identifying eligible airport development needed on or around the airport and in justifying the projects in the CIP. Depending on the type and magnitude of the project, planning documents could consist of acceptable adequate documentation (such as a pre-application for funding and project narrative) resulting from a collaborative planning effort. The planning documents, activities, and actions listed in this section provide detail to the FAA, local government and agencies, tenant airlines, and other stakeholders to define development programs and projects which are then captured in the NPIAS.

4.1.7.1 **Airport Master Plans.**

Airport master plans are comprehensive studies that define the sponsor's strategy for developing the airport, generally over a 20-year period. (These are defined in FAA Advisory Circular 150/5070-6, *Airport Master Plans.*) Master plans should document the overall development need, justify the proposed development, establish a realistic implementation schedule, provide sufficient project definition and detail to support cost estimates and environmental evaluations, propose an achievable financial plan, and establish a framework for continuing planning. The proposed development plan should satisfy local, state, and federal regulations. Along with a long-term vision for the airport, a master plan includes a forecast of aviation activity (including critical aircraft determinations), an Airport Layout Plan drawing set depicting existing features and proposed development, a near-term CIP, and Exhibit A (airport property map). The FAA enters key information from Airport CIPs into the SOAR database.

4.1.7.1.1 Aviation Activity Forecasts.

- Aviation activity forecasts provide the basis for justifying the planning and proposed development identified in the airport sponsor's CIP. Aviation activity forecasts are typically prepared as part of a master plan project, but forecasts may also be updated independently as the first step in assessing the changes in activity on an airport's needs. Forecasts

should be realistic, based on the most recent data available, and reflect the current and anticipated future conditions at the airport.

- Table 4-1 identifies alternative methods for estimating total aircraft operations for airports that do not have an airport traffic control tower (ATCT) or other means to track aviation activity. See AC 150-5000-17, *Critical Aircraft and Regular Use Determination*, for additional information on acceptable methods for documenting existing activity.

Table 4-1 Alternative Methods for Estimating Aircraft Operations

Method	Description
Traffic Flow Management System Counts (TFMSC)	Completed Instrument Flight Rules (IFR) flight plan data is available for most airports, either towered or non-towered, from the FAA's Aviation System Performance Metrics web site. IFR counts of jet and turboprop operations, once normalized, are considered representative of the total operations of these aircraft characteristics, which nearly always operate on IFR flight plans. This is useful for critical aircraft determinations, since jets and turboprops can often be the most demanding aircraft types operating at a general aviation airport.
Flight Tracking Systems	Data for an airport or commercially operated flight tracking system
Airport or aircraft operator reports	Aircraft landing fee reports, fuel sale records, aircraft operator logs, etc., if developed with a reliable and consistent methodology for data collection. To be useful, the logs would need to record the aircraft make and model.
ACRP Report 129: *Evaluating Methods for Counting Aircraft Operations at Non-Towered Airports*	See ACRP Report 129 for additional information about this method.
Based Aircraft Multiplier (This method should only be used to estimate the number of annual operations once all other sources identified above have been reviewed. The multiplier cannot be used in determining critical aircraft.)	For basic general aviation airports, 250 annual operations per validated based aircraft. For local general aviation airports, 350 annual operations per validated based aircraft. Estimates should be in line with TAF (see section 4.1.7.1.1) See based aircraft definition in Appendix A.

- The FAA ADO or regional office approves aviation activity forecasts (including the critical aircraft determination). Aviation activity forecasts

supplied by the airport sponsor should be consistent with the FAA's Terminal Area Forecast (TAF) for the facility, as defined in current APP-400 guidance on forecast review and approval process. A link to this guidance and other information on forecasting aviation activity is on the Airport Planning and Capacity page of the FAA's website. If the forecast is not consistent with the TAF, the ADO should consult with APP-400.

4.1.7.2 **System plans.**
As summarized from AC 150/5070-7, *Airport System Planning Process*, states, regional or local planning agencies, or airport sponsors develop system plans. They define needs and coordinate plans for a group of airports within a given geographic area, recognizing each airport's roles within the area. The system plan provides an agency the ability to look at the system of airports to gauge interactions, interdependencies, conflicts, or competition, as well as individual airport contributions and needs. System plans generally include near-term CIP recommendations that can be incorporated into the NPIAS. New airports proposed in system plans need to be based on demonstrable existing or forecast unmet demand.

4.1.7.3 **Stand-alone plans.**
These types of plans focus on a particular issue or problem that an airport sponsor wants to solve or explore in more detail. Examples of stand-alone plans include Terminal Area Master Plans, program or project definition plans, and airfield geometry studies such as Runway Safety Action Team (RSAT) studies or Runway Incursion Mitigation (RIM) studies. These may result in additions to, refinements of, and reprioritization of elements within airport CIPs that can be incorporated into the NPIAS.

4.1.7.4 **Inspections, assessments, and meetings.**
These activities may identify issues, recommend solutions, or identify broader issues that may require projects to improve airport safety, increase access, or abate noise concerns. These may result in changes to the airport CIP. Here are a few examples of these activities:

- Runway Safety Action Team recommendations
- Part 139, state, and airport safety inspections
- Wildlife Hazard Assessments
- Annual or ad-hoc meetings with sponsors or public agencies
- Pavement Maintenance Management Plans
- PFC Application Consultations

4.1.7.5 **Input from other federal agencies.**
Agencies such as the Transportation Security Administration, Customs and Border Protection, U.S. Army Corps of Engineers, the Federal Highway

Administration, and Federal Transit Administration may be involved in related studies and be able to help an airport sponsor identify needs—such as upgrading infrastructure or anticipating mitigation requirements for environmental approval of a development project. These may result in changes to the airport CIP for AIP-eligible projects related to aviation use of the airport to be incorporated into the NPIAS. Projects that solely benefit another federal agency's mission are prohibited from being funded under AIP.

4.1.7.6 **Legislative mandates.**
Mandates that address local or national concerns often inform CIPs. The enhanced security measures that followed the events of September 11, 2001, for example, resulted in airport sponsors adding new security projects to their CIPs.

4.1.7.7 **Unforeseen events.**
Natural disasters such as earthquakes or flooding, or events such as premature pavement failure, may require near-term remedial projects and highlight other mid- or long-term projects to prevent damage from future events. These may result in changes to the airport CIP that can be incorporated into the NPIAS. AIP funds, however, cannot be used for disaster recovery without congressional authorization. They may be available for long-term preventive or protective measures. See the current version of the *AIP Handbook*.

4.1.8 What is the FAA's involvement in the airport's annual CIP submittals?

4.1.8.1 **Meeting with airport sponsors.**
Before submitting their annual plans for final consideration, airport sponsors should meet and discuss them with the FAA ADO or regional office, or meet with state aviation officials if the airport is in a block grant state. An open discussion about the projects and types of funding desired by the airport sponsor provides the FAA or state planners with insight into the airport's goals, objectives, and activity.

4.1.8.2 **Reviewing project data to ensure it meets requirements.**
The FAA reviews an airport sponsor's CIPs to verify it meets the criteria for inclusion in the NPIAS.

4.1.9 Implementation timeframes.
AC 150/5070-6, *Airport Master Plans,* defines three timeframes for capital planning that are generally associated with airport master planning and development programs, as described below. The NPIAS contains airport development needed within the next 20 years.

4.1.9.1 **Long term (11 + years**).
With more conceptual and less specific cost estimates and design details than near- and mid-term projects, long-term planning assumptions also tend to be re-evaluated more often as conditions change. This may involve new planning and studies before projects are implemented.

4.1.9.2 **Medium term (6 – 10 years).**
Although planning for this timeframe is typically not defined in the same detail as near-term projects, it is important to identify long lead-time items as specific as possible. These are needed to complete permits or documents that are required before construction can begin, for example, facility or programming definition reports and environmental studies.

4.1.9.3 **Near term (1 – 5 years).**

4.1.9.3.1 Planning for this timeframe has the highest level of detail in terms of project definition, cost, timing of implementation, and financial planning. Project justification, reasonableness, and eligibility must meet the requirements defined in the *AIP Handbook*.

4.1.9.3.2 The published NPIAS report identifies near-term development. ACIP further refines the projects in the 1- to 3-year timeframe.

4.2 What are the requirements for projects to be included in the NPIAS?

To be included in the NPIAS, a project must meet the following criteria, as depicted in Table 4-2.

- Be eligible. A project is eligible for federal funding if it meets the criteria defined in the current *AIP Handbook*, which provides eligibility criteria for all types of projects. Eligibility is derived from statute.
- Have sponsorship. A sponsor that is eligible and able to assume the responsibilities defined in the grant must be proposing the project.
- Have appropriate project timing, which is justified by airport planning, operational requirements, and design standards.

4.2.1 Near-term projects requirements.

- Provide justification for federal participation. A project is justified when it (1) advances an AIP policy, (2) addresses an actual airport need within the next five years, and (3) has an appropriate scope of work. The FAA normally determines if a project is justified, based on existing or forecast activity levels.
- Meet other regulatory requirements and FAA objectives (National Environmental Policy Act (NEPA), Aeronautical Study, etc.).

4.2.2 Similar, but distinct, requirements apply to projects funded under the PFC and AIP programs. For example, some terminal building projects such as constructing new baggage make-up areas are eligible for PFC but not AIP funds. See the requirements listed in FAA Order 5500.1 on the PFC Program page of the FAA's website.

4.2.3 Near-term projects are published in the NPIAS Report.

4.2.4 Sponsors submit CIPs.
Sponsors submit their CIPs for review to the FAA or state (if a block grant) as part of the master planning process or ongoing planning. CIPs are also reviewed and amended during annual CIP meetings with the FAA and/or state.

Table 4-2 Project Planning Timeframes Used for NPIAS, ACIP, and AIP

Projects must meet these criteria	NPIAS				AIP (Current FY)
	Long Term (11+ years)	Medium Term (6-10 years)	Near Term (1-5 years)	ACIP (1-3 years)	
Eligible to be funded under AIP	X	X	X	X	X
Reasonable development for the airport to accomplish, with all pertinent preliminary activities (land acquisition, environmental analysis, Benefit-Cost Analysis, permitting, etc.)			X	X	X
Justified by current use, forecasts, or design standards			X	X	X
Funding available					X

4.3 What is typical infrastructure for NPIAS airports?

4.3.1 Basic elements.
Typical airport infrastructure comprises basic elements common to airports in the national system and typical for airports in the NPIAS. The infrastructure required for an airport is affected by the type of activity and, to a lesser extent, the amount of activity the airport serves. Evaluating these basic elements helps the FAA and airport sponsors identify and plan for airport needs.

4.3.2 Consistent with FAA Advisory Circulars and Orders.
When considering development projects for their airport, sponsors should consult the FAA Advisory Circulars and Orders that govern the proposed infrastructure improvements. Links to key documents can be found in Appendix D.

4.3.3 Consistent with governing codes and regulations.
Table 1-3 lists codes and regulations that are pertinent to airports and airport development. Citations are also noted throughout this order.

4.3.4 Typical airport infrastructure.

4.3.4.1 Table 4-3 describes typical airport infrastructure that may be found at the majority of airports in the NPIAS. The terms *essential, desirable,* and *useful* that are used to describe the infrastructure characteristics have these special meanings:

- Essential – means an infrastructure element that is necessary for the airport to function and perform as intended.
- Desirable – means an infrastructure element that is recommended to enhance airport functionality.
- Useful – means an infrastructure element that is beneficial to the overall performance of the airport.

4.3.4.2 Including these infrastructure elements in an airport's development plan does not guarantee their eligibility—or indicate they have met the justification requirements— for federal funding.

Table 4-3 Typical Airport Infrastructure for NPIAS Airports

Note: Including the infrastructure elements in this table in an airport's development plan does not guarantee their eligibility – or indicate that they have met the justification requirements – for federal funding.

Infrastructure Element	Infrastructure Characteristic	References (Latest Version)
Airport Land	Essential to own all land for airfield development, terminal building area, runway safety areas, runway protection zones, object free areas, obstacle free zones, runway visibility zones, and approach aids.	Airport Improvement Program Grant Assurance #4, *Good Title*; Airport Improvement Program Grant Assurance #21, *Compatible Land Use;* Advisory Circular 150/5300-13, *Airport Design*
	Desirable for the airport to control land use out to the 65 Decibel Day Night Average Sound Level (DNL) boundary.	14 CFR Part 150; Airport Improvement Program Grant Assurance #21, *Compatible Land Use*
Primary Runway	Essential to have a primary runway with clear approaches, runway safety areas, runway protection zones, object free areas, and obstacle free zones.	Advisory Circular 150/5300-13, *Airport Design*; Advisory Circular 150/5325-4B, *Runway Length Requirements for Airport Design*
Crosswind Runway	Desirable if wind coverage on the primary runway is less than 95%.	Advisory Circular 150/5300-13, *Airport Design*
Lighting and Rotating Beacon	Type of lighting for runway and taxiway is justified by the runway usage and type of approach. Reflectors may be adequate depending on the runway usage.	Advisory Circular 150/5340-30, *Design and Installation Details for Airport Visual Aids*
Full Parallel Taxiway	Desirable for efficiency and improved instrument approach procedure minimums. May be essential depending on the type of airport and/or aircraft operations.	Advisory Circular 150/5300-13, *Airport Design*

Infrastructure Element	Infrastructure Characteristic	References (Latest Version)
Visual Glide Slope Indicator (VGSI)	Desirable for all runways.	49 USC § 47101(f); Order 5100.38, *AIP Handbook,* Appendix K; Advisory Circular 150/5340-30, *Design and Installation Details for Airport Visual Aids*
Runway End Identification Lights (REIL)	Desirable for lighted runways unless an Approach Light System is present.	49 USC § 47101(f); Order 5100.38, *AIP Handbook,* Appendix K; Advisory Circular 150/5340-30, *Design and Installation Details for Airport Visual Aids*
Runway Markings	Essential for all runways to support the applicable approach type.	49 USC § 47101(f); 14 CFR Part 139, Paragraph 139.311; Order 5100.38, *AIP Handbook;* Appendix J; Advisory Circular 150/5340-1, *Standards for Airport Markings*
Signage	Essential to have signage to support the applicable approach type. Reflective signage may be suitable unless lighted signage needed to support an approach.	49 USC § 47101(f); Title 14 Part 139, Paragraph 139.311; Order 5100.38, *AIP Handbook;* Appendix J; Advisory Circular 150/5340-18, *Standards for Airport Sign Systems*
Apron	Size to accommodate transient activity and local parking with adequate space for circulation of the aircraft.	Order 5100.38, *AIP Handbook;* Appendix I; Advisory Circular 150/5300-13, *Airport Design*
Runway Treatment (Grooving/Friction Course)	As necessary to support based and transient jet traffic.	49 USC § 47101(f); Advisory Circular 150/5300-13, *Airport Design*
Instrument Approach Procedures (IAP):	To maximize airport utility, IAPs with the best approach minima possible are desirable for all runway ends	49 USC § 47101(f); Order 8260.3, *U.S. Standard for Terminal Instrument Procedures*; Advisory Circular 150/5300-13, *Airport Design*

Infrastructure Element	Infrastructure Characteristic	References (Latest Version)
Wind Cone and Segmented Circle	Both are essential for commercial operations. Segmented circle is essential if nonstandard traffic pattern exists. A lighted wind cone is essential if airport is approved for night operations.	49 USC § 47101(f); 14 CFR Part 139; Advisory Circular 150/5340-5, *Segmented Circle Airport Marker System*; Advisory Circular 150/5340-30, *Design and Installation Details for Airport Visual Aids*
Obstruction Lighting and Marking	Essential where necessary.	49 USC § 47101(a)(8); 14 CFR PART 77; 14 CFR Part 139; Advisory Circular 70/7460-1, *Obstruction Marking and Lighting*; Order 5100.38, *AIP Handbook*; Appendix D
Access and Service Roads	An unfettered means of ingress/egress is essential. On-airport service roads are desirable for moving airport equipment without using the runway/taxiway system.	49 USC § 47101(b); Order 5100.38, *AIP Handbook*; Appendix P; Advisory Circular 150/5300-13, *Airport Design*
Perimeter Fencing	Essential to meet airport security or wildlife mitigation needs. Essential when necessary for wildlife mitigation needs. Desirable to meet airport security needs. Useful to delineate the airport property boundary.	14 CFR Part 139; 49 CFR Part 1542; Order 5100.38, *AIP Handbook;* Appendix L
24-hour fuel service	Desirable at all airports.	49 USC § 47118(f); Order 5100.38, *AIP Handbook*; Appendices D and T

4.3.5 When to begin capacity planning?

4.3.5.1 **Activity-level triggers.**
The FAA and airports can use activity levels as timing indicators, sometimes called *triggers*, for planning and implementing projects intended to increase capacity. These activity levels, shown in Table 4-4, are approximate thresholds to begin planning and then, if appropriate, start the development. The justification to begin development does not rely solely on the activity-level triggers. Additional considerations include assessing whether the improvement is timely and cost effective, has a clear purpose, and will remedy an operational shortfall.

4.3.5.2 **Key metrics in capacity planning.**
Key metrics used in capacity planning are shown in Table 4-4. These include:

4.3.5.2.1 Annual Service Volume (ASV).
This is a reasonable estimate of an airport's annual capacity, for the purpose of infrastructure planning. In simpler terms, such as small primary and nonprimary airports, the ASV accounts for differences in runway use, aircraft mix, weather conditions, and other factors typically encountered over a year's time.

- ASV can be calculated from the weighted (annualized) hourly capacities of an airport's runways (see Hourly Capacity). Alternately, ASV can be defined by factoring in a specified level of average delay per aircraft operation. Weighting factors cannot be used for calculating ASV for the purposes of this Order. The ASV metric can be of limited value with Large and Medium hub airports with complex operations. Advisory Circular 150/5060-5, *Airport Capacity and Delay*, provides detailed explanations of these three methods for calculating ASV summarized here:
  - For general aviation airports without a capacity concern, Chapter 2 in the AC provide estimates of ASV based on airfield configuration and traffic mix. This approach is typically used for order-of-magnitude estimates needed for long-range planning.
  - For airports at or above 50 percent of ASV, the more precise formula-calculated method in Chapter 3 of the AC should be used that will include hourly capacity by operating configuration.
  - For medium or large hub airports, use a delay-derived ASV, typically based on computer simulation modeling that will include hourly capacity by operating configuration.
- For the purposes of this Order, the use of the ASV metric is as an initial threshold indicating that the demand-to-capacity ratio warrants consideration of capacity enhancement. By itself, the ASV metric can be of limited value for defining the operational benefits of proposed capacity projects. This is particularly true at capacity-constrained

airports with complex operations. If the ASV thresholds shown in Table 4-4 are achieved, follow-on analyses with more detailed methods and metrics are normally needed to validate the need (or justify) a proposed capacity project.

Table 4-4 Activity Levels That May Trigger Capacity Planning and Development

Development Item	Activity Levels to Begin Planning and Development	Remarks
New runway or extended runway to increase hourly capacity (based on a specific airfield use configuration)	Planning: 60% ASV Development: 80% of ASV and within 5 years of activity reaching ASV under currently approved forecast.	• Parallel runway usually preferred for efficiency. • Runway length determined by critical aircraft intended to use the new or extended runway.
Runway extension to accommodate more demanding aircraft	Planning and Development: Regular use of new critical aircraft, existing or forecast within 5 years, that needs increased runway length or payload capability.	• If the critical aircraft changes, an extension may be necessary. • New critical aircraft must be expected to remain in the fleet for the foreseeable future with regular use at the airport.
Additional exit taxiways	Planning: 50% of ASV Development: 70% of ASV, or within 3-5 years of activity reaching ASV under currently approved forecast.	To be considered as a capacity project, additional exit taxiways will typically allow for reductions in Runway Occupancy Time.
Holding aprons/ by-pass taxiway	75,000 total operations, 20,000 itinerant operations, or 30 peak hour operations per runway.	Consider effect on navigational aids (NAVAIDs). Coordinate with ATC and Ramp Operations to determine the aircraft positions needed in holding aprons.
Terminal aprons, aircraft loading aprons, parking aprons	Planning: 60%+ of available apron space is used routinely (at least 30 days per year). Development: 80%+ of available apron space is used routinely (at least 30 days per year).	Planning should begin 3-5 years before aprons are expected to be congested during peak periods.
Replacement/ supplemental airports	Planning: 60% ASV Development: 120% of ASV or within 5-10 years of activity reaching ASV under currently approved forecast.	Timing depends on forecasts, type of airport, location (metropolitan area), cost, and other factors. At the start of planning, the state or airport sponsor should request a new planning placeholder in the NPIAS from APP-400.

Development Item	Activity Levels to Begin Planning and Development	Remarks
Additional NAVAIDs (visual or electronic)	Planning: Begin 3 years before NAVAID is predicted to be needed to address operational shortfall. Development: Timing determined with approved benefit-cost analysis.	NAVAIDs can provide reliable access during low-visibility conditions, improve safety by providing approach guidance, and improve hourly capacity. For NAVAID projects that could be AIP funded, consult the *AIP Handbook*. Requests for non-AIP funded NAVAIDs consult Order 7031.2, *Airway Planning Standard Number One – Terminal Air Navigation Facilities and Air Traffic Control Services*. For the establishment of new precision instrument approaches, Area Navigation (RNAV) is preferred. For this and other procedures, consult the *AIP Handbook*.

4.3.5.2.2 Hourly Capacity.
The aircraft operations that an airport is able to reliably process (i.e., sustainable throughput) during periods of high demand. Often, airfield capacity is assessed in terms of runway capacity. If gate, apron, taxiway, and airspace constraints affect the airfield capacity, however, these conditions should be factored into the analysis. The sustainable hourly capacity is normally less than peak hour throughput.

4.3.5.2.3 Capacity (broadly defined).
This Order, the AIP program, and the airport industry often refer to a "capacity project" to express a broader meaning. That is, capacity projects may include those that increase efficiency but not hourly capacity. For example, a runway extension may be needed to support aircraft operations with a larger aircraft and higher payload. The runway extension could increase the range or payload capacity of the aircraft, but it may not increase the hourly capacity of the airport.

4.3.5.2.4 Critical Aircraft.
The most demanding aircraft type or grouping of aircraft with similar characteristics, that regularly use the airport. To be considered a critical aircraft, this aircraft type must have at least 500 annual operations at the airport including both itinerant operations (landing from or departing to areas outside the region) and local operations but excluding touch-and-go operations. (Touch-and-go operations are continuous departures and landings of the same aircraft practiced for flight training.) See AC 150/5000-17, *Critical Aircraft and Regular Use Determination*, for additional information.

4.3.5.3 **ADO and regional office roles.**
The ADO and regional staff can compare results of planning analyses performed by an airport, review anticipated activity trends, and consult with airport staff to evaluate the proposed timing and need for elements of an airport sponsor's CIP. This helps prepare FAA staff for discussions with airport sponsors and public agencies about their CIPs.

4.4 How do Airport Sponsors determine the appropriate timeframes for planning projects?

4.4.1 Implementation timing.
Projects in the airport sponsor's CIP should be tied to an implementation timeframe and a schedule that identifies the years in which each project is expected to be underway. The three timeframes for capital planning defined in AC 150/5070-6, *Airport Master Plans* – long-term, medium-term and near-term – can be used to generally define timeframes and level of detail needed. (See Section 4.1.9 for an explanation of each timeframe.) The NPIAS contains airport development needed within the next 20 years.

4.4.2 Phasing of complex programs.
Complex programs, such as a runway extension at a large hub airport, typically require work over several years to receive environmental approvals, finalize design, and complete construction before the runway is operational. If the project is to be operational in the medium term, elements of the project, such as environmental analysis, may need to be started in the near-term timeframe, although the bulk of the program and most of its associated costs are anticipated to be completed in the period beyond five years.

CHAPTER 5. HOW IS THE ACIP PLANNED?

5.1 What is the purpose of the ACIP?

The ACIP contains potential projects that are AIP eligible, justified, and capable of being accomplished without unreasonable delay. This section describes the relationship of ACIP projects to those in an airport sponsor's CIP and the NPIAS.

5.2 What timeframe is planned for in the ACIP?

The ACIP, a subset of the NPIAS, is a needs-based and financially constrained plan for funding development over a rolling 3-year period. It serves as the basis for the distribution of AIP grant funds, and it emphasizes funding the highest priority projects. The ACIP is not limited to a 3-year period, but can be planned out as far as practical provided the project information is available. For example, a major airfield expansion program may have projects that would be implemented over a ten-year term.

5.3 What is the FAA review process for airport sponsor CIPs?

The FAA reviews airport sponsors' CIPs to assess whether the projects meet the criteria for inclusion in the ACIP. All projects proposed for AIP funding are required to be included in the ACIP to be considered for funding. A project in the ACIP must meet the same 3-part criteria (described in 4.1.8.2 and Table 4-2) required for inclusion in the NPIAS and described in the *AIP Handbook*:

5.3.1 Eligible.

A project is eligible for federal funding if it meets the criteria defined in the current *AIP Handbook*, which provides eligibility criteria for all types of projects. Eligibility is derived from statute.

5.3.2 Justified.

A project must be justified by current use, forecasts, or design standards.

- Justifies inclusion in the near-term planning timeframe (1-5 years) of the NPIAS.
- Advances AIP policies defined in statute.
- Demonstrates an aeronautical need.
- Defines an appropriate project scope.
- The project's benefit-cost analysis (if required) results in a ratio of at least 1.0 unless specified otherwise in applicable guidance for the type of project.

5.3.2 Reasonable.

A project must be reasonable for inclusion in the near-term planning timeframe (1-5 years) of the NPIAS. Reasonableness is derived from statute (49 USC 47110(b)(3)).

- Meets, but does not exceed, the design standards. Except in limited circumstances as outlined in the *AIP Handbook*. For example, pavement widths should be planned to

meet design standards based on the current or the forecast near-term (within the next 5 years) critical aircraft, not on forecasts after this timeframe.

- Meet all other regulatory agency requirements, such as obtaining NEPA approvals or clearances, before issuance of an AIP grant.
- Can be completed without unreasonable delay.
- For AIP eligible projects only: Can complete all pre-grant actions before issuance of the AIP grant, such as identification of potential projects, early coordination between the ADO and sponsor, verification that the ALP is current, and review of open grant status, as outlined in the *AIP Handbook*.

5.4 How are AIP funds assigned to the ACIP?

5.4.1 APP-520 establishes AIP entitlement and discretionary planning ceilings for each Region. Planning ceilings are established for each fiscal year in the ACIP (1 to 3 fiscal years in the future) based on the estimated AIP funding levels appropriated by Congress. Establishing planning ceilings, however, does not constitute a commitment of federal funding.

5.4.2 For ACIP planning purposes, APP-520 may assume the funding levels remain the same for each fiscal year. Planning ceilings for each funding type then are established using a combination of statute and policy, based on assumed funding levels. Statute (49 U.S.C. Chapter 471) prescribes the percentage of funds to be used for apportionments (often referred to as "entitlements"), discretionary, and other special programs. Additionally, eligible airport sponsors' participation in the passenger facility charge program impacts apportionment, which affects other formulas. Finally, factors such as the government's share and other special provisions affect the amounts available for each planning ceiling. Thereafter, policy set in accordance with statutory and regulatory allowances and/or prohibitions, further define AIP funding decisions.

5.4.3 In addition to the above noted criteria, APP-520 identifies protected entitlements (referred to as carry over) amounts. The primary and cargo entitlement funds apportioned to large, medium, and small hub airports, and state apportionment funds, are available to airports for grant obligations in the year apportioned and two subsequent years. The primary and cargo entitlement funds apportioned to non-hub airports, and nonprimary entitlement funds will be available to those airports for grant obligations in the year apportioned and three subsequent years. As noted in Section 5. 5.1, the funds set aside for entitlements not used in a fiscal year that the airport sponsor has advised the FAA to "carry over" to the next fiscal year are converted to discretionary. The goal of the AIP is to reduce carry over of entitlements as it impacts discretionary allocations in future fiscal years.

5.4.4 APP-520 applies the criteria in Section 5.5.1 to apportionment (entitlement) planning ceilings and discretionary planning ceilings. Section 5.5.2 describes the discretionary planning allocations process. Lastly, the ADOs and ROs, following FAA policies set in accordance with statute and regulations, assign AIP funds to projects within the ACIPs in their respective offices based on the criteria in section 5.5.3.

5.5 **Planning Ceilings.**

5.5.1 Apportionments (Entitlement) Planning Ceiling.
The ceiling for apportionments (entitlement) planning is based on the last fiscal year's levels (the entitlement amount authorized in the previous year for each funding category) plus an average of the entitlement amounts carried over from the last 3 fiscal years. Apportionment (Entitlement) planning ceilings are calculated for each fund type and carryover entitlement amounts for each fund type are considered separately.

5.5.1.1 **FY Protected Apportionments (Entitlements).**
APP-520 calculates this amount by identifying unused entitlements during the previous fiscal year (these include carry-overs) that had been converted to discretionary and protects them for the current fiscal year.

5.5.1.2 **FY Primary Apportionments (Entitlements).**

5.5.1.2.1 In accordance with 49 U.S.C. § 47114(c), primary airports including large hub, medium hub, small hub, and nonhub airports are apportioned not less than $650,000 nor more than $22,000,000 each fiscal year. APP-520 applies two factors when setting annual apportionment ceilings for primary airports. First, APP-520 assigns entitlements for primary airports based on the amount prescribed by statute (49 U.S.C. § 47114) using enplanement data reported for the last full calendar year preceding the current fiscal year.

For example, FY19 apportionments are based on CY17 enplanement data because FY19 began in October 2018. The data is collected by APP-400 and entered into SOAR.

5.5.1.2.2 Second, APP-520 uses data provided by APP-510 on airport sponsors collecting PFCs to calculate the statutorily requirements reductions, also known as PFC giveback or turnback.

For example, in accordance with 49 U.S.C. § 47114(f), the amount of apportionments (entitlement) funds available to large and medium hub airports collecting a PFC are reduced based on the PFC collection level approved for the airport. If the airport is collecting at $3.00 or less, the amount of entitlements is reduced by 50%. If the airport is collecting more than $3.00, the amount of entitlements is reduced by 75%. In Hawaii, this calculation is modified based on the percent of inter-island passengers.

5.5.1.3 **FY Cargo Apportionments (Entitlements).**
APP-520 allocates cargo entitlements to the sponsor of each cargo hub airport having at least 100,000,000 pounds landed weight of cargo-only aircraft. This amount is based on each such airport's proportion of the aggregate landed weight of cargo-only aircraft at all such airports in last full calendar year preceding the current fiscal year.

5.5.1.4 **FY Nonprimary Apportionments (Entitlements).**
The formula for nonprimary entitlements is found at 49 U.S.C. § 47114(d). Summarily, this section of the statute provides the apportioned amount for nonprimary commercial service airports, reliever airports, and general aviation airports, as well as state and/or planning agencies and other specific state, territory, or identified interests. APP-520 applies the percentages found in the statute, based on previous year's annual AIP funding levels, to prescribe planning ceilings for nonprimary airports, states, and planning agencies.

5.5.2 Discretionary Planning Ceiling.

5.5.2.1 The planning ceilings serve as an internal guide to manage reasonable expectations for regional discretionary requests. All regions are expected to plan to within ±10% of their respective planning ceilings to ensure an adequate number of projects are ready for funding.

5.5.2.2 APP-520 formulates the planning ceiling for the discretionary portion of the ACIP based on a 3-year timeframe. Each region is provided a discretionary planning ceiling. The discretionary planning ceiling is based on the previous year's appropriations and the average of the previous three years carried over (total for all fund types).

5.5.3 AIP Funding Assignment.

5.5.3.1 Regions and ADOs work within the established planning ceilings to assign AIP funds to projects within the ACIP. This is an internal, deliberative FAA process. AIP funds are assigned based on input from airport sponsors' CIPs; however, final assignment of funding is done internally by the FAA. Details of planned or anticipated funding assignments cannot be shared outside of ARP unless the disclosure is approved by ARP-1.

5.5.3.2 Funds are assigned to projects in the ACIP based on project priority, funding types, and project type. As previously stated, assignment of funds in an ACIP does not guarantee funding. Funding levels may vary based on annual appropriations and projects will compete for discretionary in accordance with published policy.

5.6 What is the Annual Airport Capital Development Process?

5.6.1 Review of NPIAS and ACIP project needs.

The NPIAS-ACIP Planning process is an annual process for reviewing the NPIAS and the 3-year ACIP for development project needs. The process begins with the submittal of the airport sponsor's CIP and ends in the formulation of the NPIAS Report, National ACIP, and Discretionary Candidate List (DCL). The NPIAS-ACIP Planning process should not prevent any preliminary planning efforts between the sponsor and the ADO and regional office, including sponsor/FAA meetings, joint planning conferences, and review of the sponsor's CIP.

5.6.2 Initiated by APP-520.

The ACIP review process starts when APP-520 issues the ACIP Planning Guidance, known in this section as the *guidance*. The guidance is necessary to address year-to-year variances in the annual appropriations and authorization. The guidance includes this information:

- A breakdown of the discretionary planning ceilings by region.
- Information related to anticipated set-aside funding categories (for example, noise, capacity, military, and safety and security projects) as established in the authorizing and annual appropriations legislation.
- A schedule for completing regional ACIPs.
- Pertinent legislative updates which could affect fiscal planning (i.e., changes to federal share percentages).
- Pertinent policy (i.e. new airports, unclassified airports, revenue producing projects).
- Use of project flags (discussed in Section 5.7.4).
- Project work code revisions. (Work codes are assigned based on the project purpose, component, and type, as discussed in Section 5.7.3 and Chapter 1.)
- Discussion of Letter of Intent (LOI) commitments for the 3-year planning period.

5.6.3 What is analyzed in the ACIP Review Process?

The ACIP review process is comprehensive and ongoing. The ADO, regional office, APP, and AAS participate in a series of reviews to evaluate proposed projects. Thorough review of all capital development needs during this process decreases the probability of issues arising later in the AIP grant programming process and delays in grant offers. The ACIP review process analyzes these criteria:

- Adherence to the planning ceilings.
- Proper identification of flags on capital projects (including the safety inspector's certification review and the runway safety action team's recommendations).
- Proper selection of project work codes.
- Use of entitlement funding on highest priority projects.

- Review of revenue-producing projects.
- Special Program review, such as for the Military Airport Program and Voluntary Airport Low Emission Program.

5.6.4 Formulating the Regional ACIPs or "Snapshots".

5.6.4.1 Snapshots, or short progress updates, of the ACIP are taken at various times throughout the ACIP review process to ensure that all requirements are met. A snapshot provides a record of the projects included in the 3-year ACIP at a particular point in time. The snapshot is used to review funding assignments to ensure statutory funding restrictions are met. Statutory funding restrictions include: (a) use of entitlement funding on higher priority projects (49 U.S.C. § 47120(b)); (b) use of all entitlement funding for all other projects qualifying for funding that have attained a higher national priority rating (NPR) before requesting discretionary funds (49 U.S.C. § 47115(d)(2)(A)); and, (c) funding restrictions based on project type (49 U.S.C. § 47110). The snapshot is also used to ensure adequate capital planning based on anticipated funding levels.

5.6.4.2 The ACIP snapshots are completed by APP-520 and stored on internal FAA systems.

5.6.5 What is the Discretionary Candidate List?

The DCL accounts for all AIP projects competing for discretionary funding for the first year of the 3-year ACIP. The DCL is prioritized based on quantitative and qualitative criteria (discussed in Section 5.7). A project's inclusion on the DCL does not constitute a commitment of federal funding, particularly because the DCL may include more projects than the available funding anticipated to provide flexibility with project bid variability, projects being canceled, or other unforeseen factors.

5.6.6 Formulating the Discretionary Candidate List.

Once the ACIP review process is complete, APP-520 compiles snapshots of all regional ACIPs into a national ACIP, which forms the basis for discretionary funding decisions in the immediate fiscal year. All discretionary projects are extracted from the national ACIP to create the DCL. Once the DCL is created, the national priority rating (NPR) threshold is established. For projects that fall below the NPR threshold, regions can provide additional qualitative justification (described in Section 5.7.4 below) to have their ratings re-evaluated.

5.6.7 Limitations on distributing the ACIP and DCL.

The national ACIP and DCL are internal, deliberative FAA documents. The national ACIP and DCL cannot be distributed outside of ARP, in whole or in part, in any form, unless the disclosure is approved by ARP-1. Inclusion of a project on the national ACIP or DCL also does not constitute a commitment of federal funding.

5.7 **How are projects prioritized?**

5.7.1 Identifying National Priority Ratings (NPRs).

5.7.1.1 The ACIP emphasizes using AIP funding on the highest priority projects as required by statute. (49 U.S.C. § 47120 and § 47115(d)(2)). To determine project priorities, the FAA uses a priority system comprising quantitative and qualitative factors.

5.7.1.2 The National Priority System (NPS) equation is used to calculate the National Priority Rating (NPR), a quantitative measure used for ranking project importance based on the project and airport type. The resulting score, between 1 and 100, is known as the national priority rating (NPR). The NPR score categorizes airport development according to FAA goals and objectives, with higher numerical scores indicating the project is more aligned with FAA goals and objectives. Section 5.7.3 and Appendix B provide a detailed explanation of the NPS Equation and how work codes are used.

5.7.1.3 Qualitative factors are assessed through project justifications and flags (discussed in Section 5.7.4). Qualitative factors do not impact the NPR for a given project but are taken into account in funding decisions.

5.7.1.4 When assessing quantitative factors, individual capital projects within Overall Development Objectives (ODOs) are assigned the same priority. (ODOs and the ODO- Capital Project System are the subjects of Chapter 6.) For example, land acquisition required for a runway extension would receive the same priority of the runway extension ODO.

5.7.1.5 49 U.S.C. § 47120(b) requires the FAA to give "lower priority to discretionary projects submitted by airport sponsors and airports that have used entitlement funds for projects that have a lower priority than the projects for which discretionary funds are being requested." Airport sponsors are encouraged to use entitlement funding on the highest priority projects and request discretionary funding for lower priority projects. This ensures that the highest priority national projects are addressed first. In some instances, it is not possible to achieve this, and in these situations a justification form is required (as described in Table 5-2).

5.7.2 Establishing the NPR Threshold.

5.7.2.1 The NPR threshold is based on the projects included in the regional ACIPs and anticipated availability of AIP funds. Upon completion of the national ACIP and the DCL, projects are organized based on their NPR—from highest to lowest. Funding assignments therefore start with the highest priority

projects and work towards the lowest. The NPR threshold is set at the point where discretionary funding is estimated to be exhausted.

5.7.2.2 Projects that are at or above the NPR threshold can be considered for discretionary funding without additional qualitative justification. Regions may request funding for projects that fall below the NPR threshold but must provide additional qualitative justification (as described in Section 5.7.4) to support the need for starting the project in the current fiscal year.

5.7.3 Quantitative evaluation of candidate projects using the NPS Equation.

5.7.3.1 The FAA quantifies the priority of a project according to the goals and objectives of the agency. In general, the higher the resulting NPR, the more consistent the project is with FAA goals and objectives. The NPR is calculated using the NPS Equation, which considers the type of airport, the purpose of the project, the component of the project, and the type of action. The maximum value of the NPS equation is 100. The NPS Equation is:

$$NPR = ((4A)+(2C)+(.7P)+(.7T))/4.2$$

where

A is the airport type, defined in Table 3-1 and Table 3-2. The airport type code value has a range from 7 (an unclassified general aviation airport) to 20 (for a large hub primary airport).

C is the component code, which identifies the development area, planning study, or type of equipment that is the project focus. Examples of component codes are runways, taxiways, planning, building, and equipment. The component code value has a range from 1 to 100.

P is the purpose code, which identifies the underlying objective of the development, planning, or equipment project. These include capacity, safety, rehabilitation, reconstruction, and other projects. The purpose code value has a range from 1 to 100.

T is the type code, which identifies a more specific area of focus with regards to the component or the type of effort with regards to a study. Examples of type codes include construction, lighting, install, New Plan/Study/Assessment, Update, Snow (snow-related equipment), and 65 – 69 DNL (i.e., abating a specific noise impacted area). The type code value has a range from 1 to 100.

5.7.3.2 The current listing and assignment of values for A, C, P, and T will be published annually by the FAA as an Addendum to this Order. It can be found on the FAA website on the Orders & Notices page. Appendix B provides additional discussion on the evolution of the NPS Equation, as well as a comparison of the previous and initial new values assigned to the codes and the NPR results of those values for typical projects. Appendix E lists the values of A, C, P, and T at the time this Order was published.

5.7.4 Qualitative evaluation.

Quantitative equations alone do not always suffice for determining a project's priority. For this reason, the ACIP process considers other qualitative factors— such as project flags and project justifications—to supplement the NPR score in determining priorities.

5.7.4.1 **Project flags.**

These qualitative factors, referred to as *project flags,* are used to factor in specific circumstances that warrant special priority consideration. Project flags relate to the development project (for instance whether it is part of an ongoing ODO and necessary for it to proceed), the worksite where the development project is taking place (if it is part of the Military Airport Program, for example), a special program (such as the Runway Incursion Mitigation program), or special emphasis areas. Project flags are for internal use only and are applied to projects during the formulation of the regional ACIP. Project flags provide inherent justification. Because they identify projects that respond to one or more of these goals, their priority has already been established, and does not require additional written justifications.

5.7.4.2 **Justifications.**

5.7.4.2.1 Written justifications provide documentation of other factors that could capture or express the priority of a project apart from the NPR. Justifications can document the reasons for funding projects in unique circumstances or for including a project in the ACIP that was not known at the time of formulation of the regional ACIP.

5.7.4.2.2 Justifications are narratives that describe the project, including its purpose and background, provide additional details which could not be captured by a quantitative system, and explain how the project meets FAA goals listed in Table 5-1.

5.7.4.2.3 Table 5-2 shows three types of occasions when justifications can be used. The ADO or regional offices provide justifications to APP-520 for review and approval. Projects which require additional qualitative justification cannot be funded until a justification form has been approved by APP-520. The justification form can be found on the FAA's internal fileserver.

Table 5-1 FAA Goals to be Addressed in Project Justifications

FAA Goal	Description
Safety or Security	A project must enhance the safety or security of individuals at the airport. Projects often enhance both.
System Capacity	A project must enhance the capacity of the airport or system of airports.
Environment	A project that is subject to NEPA or other environmental laws, regulations, or initiatives.
Access	A project that enhances ground or air access to the airport or system of airports.

Table 5-2 Projects Requiring Justifications

Justification Type	Purpose of Justification
Discretionary Below the NPR Threshold	**a.** Used for proposed discretionary projects with an NPR below the established NPR threshold. For example, if the NPR threshold is set at 48, all projects with an NPR of 47 and below require justification to be reconsidered for funding. **b.** Documents additional details related to the project to justify inclusion in the DCL and receive discretionary funding. **c.** Explains how the project meets the FAA goals and whether it has support (logistical and financial) from state and local governments.

Justification Type	Purpose of Justification
Entitlement NPR Below Discretionary NPR	**a.** Used in situations where a sponsor wants to apply entitlement funding to a project with a lower NPR than a project funded with discretionary funds. Per 49 U.S.C. § 47120(b), FAA is required to give "lower priority to discretionary projects submitted by airport sponsors and airports that have used entitlement funds for projects that have a lower priority than the projects for which discretionary funds are being requested." **b.** Explains why entitlement funds are necessary to fund a lower priority project while discretionary funds have been requested for a higher priority project. **c.** Explains why the funding for the lower priority project is required in the current fiscal year and cannot be funded in a later fiscal year. **d.** Identifies other projects that may be at risk by not funding the proposed project. **e.** Explains how the project enhances the FAA goals, and whether it has support from state and local governments. **f.** Exceptions to this justification requirement: 1. Entitlement projects within 5 NPR points (5 points or less) of the highest priority discretionary project. 2. Entitlement projects that are $100,000 or less. 3. Entitlement projects that include certain project flags as identified by APP-520 in the annual AIP implementation guidance.
Pop-Up Discretionary projects	Pop-up projects are those that arise (or pop up unexpectedly) after the ACIP was developed and could not have been anticipated during the planning process. **a.** Justifies adding a project that is not currently included on the DCL, explains why it was not included, and provides the rationale why discretionary funding is needed in the current fiscal year vs. delaying the project to the next FY. **b.** Identifies projects which may be at risk by not adding the proposed project (i.e., funding would need to be diverted from another project on the DCL). **c.** Explains how the project enhances the FAA goals and whether it has support from state and local governments. Only one justification is required. Therefore, if a pop-up justification is required and the project is below the NPR threshold, the justification for when the Discretionary Below the NPR Threshold is not required.

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CHAPTER 6. WHAT IS THE OVERALL DEVELOPMENT OBJECTIVE-CAPITAL PROJECT SYSTEM?

6.1 What is the ODO-Capital Projects system?

6.1.1 What is an ODO?

6.1.1.1 An ODO—an Overall Development Objective—is a means for organizing and managing a major development initiative, planning study, or procurement of an equipment need. An ODO establishes an overall goal and purpose, and it provides a system to group together all phases or components—the supporting capital projects—that are necessary for its successful completion. The ODO-Capital Projects system, then, is used for planning all capital needs in the NPIAS and the ACIP.

6.1.1.2 The ODO provides the full picture of a development project, planning study, or equipment purchase, including the estimated capital needs. The ODO captures the planned (estimated or actual) development need, regardless of funding source (AIP, PFC, or other local funding). The FAA summarizes capital needs for all airports and reports them in the published NPIAS Report.

6.1.2 What is the purpose of the Overall Development Objective?

6.1.2.1 An ODO groups together multiple phases or logically related efforts of a main project into a single ODO. This project management approach makes it possible to track the total cost of the development, planning, or equipment project and to streamline prioritization of all capital projects necessary for the completion of the ODO.

6.1.2.2 The ODO also enables sponsors and the FAA to outline complex development, planning, or equipment projects by identifying major phases or components in individual capital projects within an ODO. Sponsors and the FAA can then separate high-dollar projects into phases and adequately plan for future funding needs. When an NPR is established for the ODO, the same NPR is assigned to each of the capital projects. This allows for streamlined prioritization and a consistent level of consideration for funding throughout the life of the project. The ODO comprises one or more capital projects.

6.1.3 What is a Capital Project?

A capital project usually represents a phase of work or component necessary to complete the ODO. It defines an action or step for completing a development project as part of an overall planning study, or an element of an equipment acquisition. A capital project typically represents a usable unit of work, which the FAA defines as “a completed project that will result in an increase in safety, usefulness, or usability at the airport.” In the case

of development to be accomplished in phases, a safer, more useful, and more usable unit must be provided at least upon completion of all projects in the ODO.

6.1.4 Overview of the ODO-Capital System.

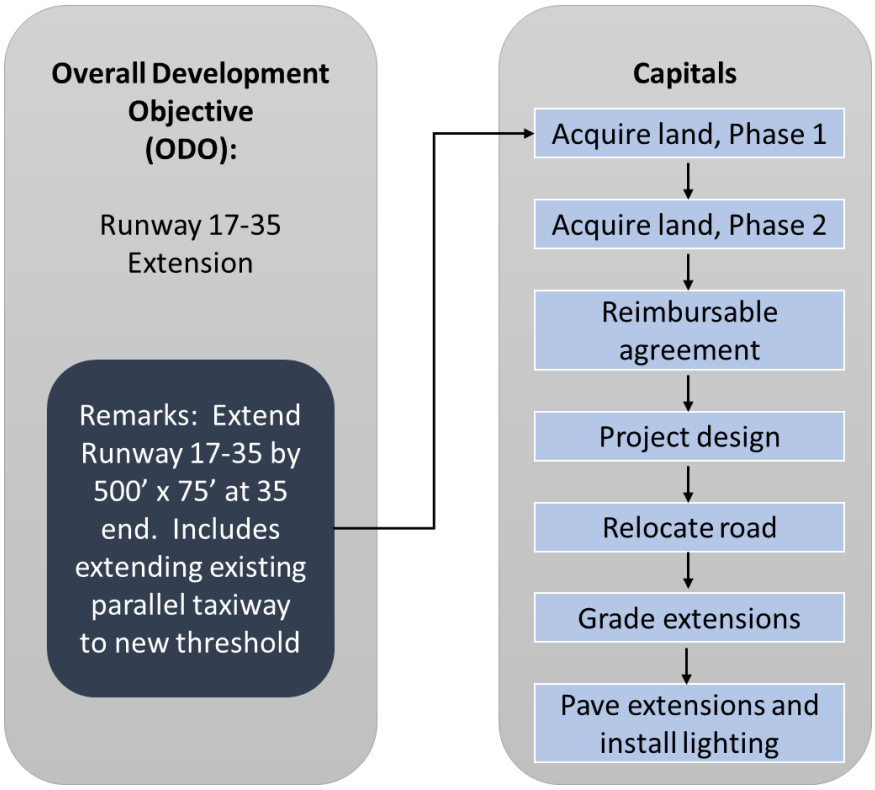
6.1.4.1 Figure 6-1 shows how the ODO-Capital Projects system groups together and identifies all of the phases or components of a project into a single overall project. A single project name best describes the main focus or goal of the ODO, and remarks are used to provide more information about the focus and purpose of the project. In this case, the ODO is "Runway 17-35 Extension" and the remarks provide more information about the focus of the project by quantifying the extension dimensions, noting which runway end is to be extended, and stating that the parallel taxiway will also be extended. Each capital project is further defined with short descriptions. (See Sections 6.1.5 and 6.2.6 for required elements of ODOs and capital projects, respectively, and Table 6-4 for additional remarks that can be used to describe ODOs and capital projects.)

6.1.4.2 Because a capital project represents a phase or component of an ODO, the distinct capital projects in an ODO may be in the same or different fiscal years. The capital project therefore identifies the AIP funding anticipated for the phase or component and the FY in which funding is expected.

6.1.4.3 When any phase or part of an ODO transitions into the ACIP, the capital projects must be defined, and the funding must be identified. An ODO may continue to include projects beyond the projected funding years identified in the ACIP. In such cases, the ODO may continue to show funding estimates that are not generally constrained by capital project details and funding availability for specific fiscal years, as required to be included in the ACIP.

6.1.4.4 Complex ODOs may have their work phased with multiple capital projects spanning several fiscal years. As the ODO and its scope become better defined, capital projects can be added, removed, or modified to better match the planned phasing or the expected components of the project.

Figure 6-1 The ODO and Capital Projects Relationship



6.1.5 Creating ODOs.

A sponsor typically proposes an overall project in the CIP or other planning document or process outlined in Section 4.1.7 for the ODO to be established and for the need to be captured in the NPIAS. The FAA regional office must create an ODO in the NPIAS before any capital projects can be included in the ACIP.

6.1.5.1 **Work encompassed by an ODO must be related, or incidental, to the primary goal of the ODO.**

6.1.5.1.1 Work may also be grouped within a single ODO if the grouping provides a significant benefit to the federal government—for example, cost savings due to economy of scale. The individual capital projects are considered as part of the overall project if they are necessary to achieve the intended benefits of the ODO's overall goal and purpose. Another way to state this is that elements of work affected by the main purpose of the project should be included in the same ODO.

Example: If the ODO's goal is to construct new runway pavement, the installation of lighting, signage, and marking are necessary and related to achieve the full use of the new pavement and so would be grouped in the same ODO.

6.1.5.1.2 In another example, if the ODO is to reconstruct only the center section of a runway that has centerline and edge lights, the centerline lights would be affected by the reconstruction and their replacement would be included in the ODO. However, the runway's edge lights and guidance signs would not be affected and would not be in the same ODO as the reconstruction. Section 6.2 provides additional guidance on how to assess the relationship of work within an ODO.

6.1.5.2 **Include necessary work components.**
The ODO should include all necessary capital projects for its completion, including environmental, design, construction, etc. Environmental studies should be included in the same ODO as the overall development, with one exception. If an Environmental Impact Statement is required, that must be in a separate ODO. Funding of the environmental capital project within an ODO does not constitute a commitment of funding the related development projects, nor does it constitute a prejudgment of the environmental determination. Environmental studies which include more than one project should be funded separately under different ODOs.

6.1.5.3 **Timing of the work does not necessarily determine inclusion in the ODO.**
The ODO should not group work together on the logic that it is being conducted at the same time or is similar in nature. For example, if taxiway work is being done, runway work should not be grouped within a single ODO simply because it is similar type of work.

6.1.5.4 **Keep the ODO current and accurate.**
An ODO and the capital projects within it should continuously be updated to reflect the most accurate cost estimates, project phasing, and components.

6.1.6 ODOs and Capital Projects in the SOAR Database.
The SOAR database tracks and manages airport planning data as discussed in Section 1.2.2. The NPIAS and ACIP are composed of ODOs and capital projects.

- ODOs for AIP-eligible work should be entered into the SOAR database even if AIP funds are not anticipated to be requested. This data is needed for accurate reporting on development needs throughout the NAS. (Section 2.5.3 discusses the conditions for inclusion of PFC projects.)
- The FAA enters ODO data into the SOAR database or, if airports and approved airport representatives have an external access to the SOAR database, they may submit the data electronically.
- The SOAR database includes the official list of work codes and associated standard descriptions for those codes used to describe ODOs and Capital Projects. These codes and descriptions are selected using dropdown menus. Table 6-1 lists the data requirements used to define ODOs. Standard descriptions for ODOs and Capital Projects can be supplemented with remarks, as described in Section 6.3.

Table 6-1 ODO Data Requirements

ODO Data Element	Content
Planning Timeframe	The ODO needs to identify if the project will be completed in the near-term (1-5 years), medium-term (6-10 years), or long-term (11+ years), as discussed in Table 2-1 and Section 4.4. Information for medium-term and long-term projects is often uncertain; nonetheless, project information and estimates in these timeframes need to be as detailed as practical.
Work Code	The most accurate work code for the intended project must be chosen. Refer to Appendix E and the FAA website, Orders & Notices page for more information on work codes. The work code is made up of three factors: **Purpose:** The primary purpose or reason for undertaking the ODO (P in the NPS Equation). **Component:** The physical component for which the development is intended, e.g., runway. (C in the NPS Equation) **Type:** The type identifies the actual work being done, e.g., extension, lighting, new construction (T in the NPS Equation).
Estimated Total Project Cost	The total project cost must include all elements of the project, AIP and non-AIP eligible. See Section 6.2.7 for additional details on costs.
Federal Share Percentage	The maximum federal share percentage is established by statute based on the airport type (49 U.S. Code § 47109). The federal share percentage in the statute should be used as a default entry in the database unless a lower participation rate is established for the project.
Maximum Federal Share	This is the estimated total federal share allowable for project cost for only work that is eligible for AIP funding. (49 U.S.C. §47109). This amount is typically the entire project estimate less the estimated cost of ineligible work, multiplied by the federal share percentage. Project cost is based on current year dollars, that is, the dollar value in the year the costs were determined, not adjusted for inflation. Project cost includes including all soft costs such as engineering design and construction contract administration, irrespective of anticipated funding sources. Table 6-2 presents an example of a maximum federal share calculation.
Addendum	This is a small, character limited field that can be used as a quick reference to define the specific pavement or area addressed by the project—for example, the specific runway end, the taxiway designator, apron identifier (e.g., GA, terminal, hardstand) or terminal concourse.

Table 6-2 Example of Maximum Federal Share Calculation

Cost	Amount
Total Project Costs	$1,500,000
Total Non-AIP Eligible Costs	($500,000)
Total AIP Eligible Costs	$1,000,000
Federal Share Percent	90%
Maximum Federal Share	$900,000

6.2 Creating Capital Projects.

6.2.1 Separating an ODO into multiple capital projects assists in accurately defining, identifying, and accounting for the work necessary for its completion. Breaking down the ODO allows for proactive planning, including early identification of eligibility, justification, and determination of reasonableness. Therefore, it may be necessary to create multiple capital projects within an ODO to accurately characterize the work necessary to complete a given ODO.

6.2.2 Capital projects specifically identify and describe the phase or component that will be completed in the overall ODO. If multiple tasks are to be accomplished in a capital project, which is often the case, those tasks should be identified in the capital project's description. See Table 6-3 for guidance on what information to include in the capital project's descriptions.

6.2.3 Capital projects may be created to represent a single phase in a FY, to separate work that may go under different grants (such as Reimbursable Agreements between an airport sponsor and a federal agency), to describe work/phases that may move from one FY to another, or to identify different portions of the ODO for clarity.

6.2.4 <u>When should separate capital projects be created, and what is necessary work?</u>

6.2.4.1 Separate capital projects should be created when different types of work components are *necessary* to complete an ODO.

For example, to realign a taxiway that does not meet airport design standards, a taxiway section may need to be removed and a new detention pond constructed. To construct the new detention pond, the airport may also need to acquire a small parcel of land. All of these components are logically necessary to realign the taxiway to meet design standards. Each one of these therefore may be a capital project under the ODO to construct the new

taxiway section. Each component may also be broken down to phases in order to meet local or federal financial constraints.

6.2.4.2 Necessary work should always be included in the same ODO to accurately account for all project costs required for the successful completion of the project. These necessary capital projects must also be grouped within the same ODO to ensure streamlined funding of all necessary components of the project.

6.2.4.3 **Can work in adjoining areas be considered necessary?**
Work that is required to tie the project into the adjoining areas is considered necessary, but only to the extent it ensures the project meets proper engineering standards.

For example, when the project purpose is overlaying a runway, paving part of the connector taxiways is required to ensure the runway and taxiway profiles match. Rehabilitating the entire taxiway connector may be considered related, but only the portion required tying the runway and connector taxiway pavements together correctly is considered necessary.

6.2.5 When is work related, but not necessary?

6.2.5.1 **Similar and in the same physical area.**

6.2.5.1.1 Related, or incidental, work is work that would be convenient but not necessary to accomplish while undertaking a capital project. It might be similar work and in the same physical area. If it is not necessary to complete the project, this related work should not be considered as a capital project. As in the previous example, rehabilitating the entire taxiway connector is related work, but only the portion to tie the runway and connector taxiway pavements together is necessary.

6.2.5.1.2 Work that is related to the project may be included, but only in the following limited circumstances:

- Related work must be 15 percent or less of the estimated capital project cost or no more than the Simplified Acquisition Threshold (2 C.F.R. § 200.88), whichever is less. (The Simplified Acquisition Threshold is the dollar amount below which a non-federal entity may purchase property or services using small purchase methods.) More information on the Simplified Acquisition Threshold and other procurement requirements are in the *AIP Handbook*).
- If the related work exceeds the thresholds, it should be moved to its own ODO. The *AIP Handbook* provides examples of related work to help determine whether inclusion is in the federal government's best interest. In the case where related work exceeding the threshold is proposed to be included, the ADO or regional office can submit a request to APP-520

for approval to group the projects together. However, if approved, the related work must still be broken out as a separate capital project, within the ODO.

6.2.5.2 **Request for approval of related work.**
A documented request must be submitted from the regional office to APP-1, through APP-520, for approval before adding the related work. This type of work could be emergency or unexpected work that is needed in an adjacent location.

Example: If during a project to rehab an apron, an adjacent section of taxiway is found to have distress that could create a safety hazard (foreign object debris), repair work could be extended to that area. The value of this adjacent work would have to be within the related work threshold (defined earlier as 15 percent or less of the estimated project cost, or the Simplified Acquisition Threshold, whichever is less).

Example: In a runway crack filling, sealing, and remarking project, a related connecting taxiway could not be included if it can be shown the taxiway work alone is more than the Simplified Acquisition Threshold or 15 percent of the total project. A separate ODO for the taxiway work would be required. (Refer to 6.2.2.1)

6.2.6 Elements of a Capital Project.
Capital projects are defined by a set of data that the FAA enters into the SOAR database when the capital projects are created and updated. Table 6-3 lists the capital projects data requirements.

Table 6-3 Capital Projects Data Elements

Capital Project Data Elements	Content
Grant Year	The year in which AIP funds are expected to be disbursed in a grant to fund the capital project. This is for planning purposes and not a guarantee the funds will be granted in that fiscal year.
Phase Description	A brief explanation of the project phase or component of the ODO. For ODOs with more than one capital project, this description is critical for overall project tracking. Refer to Table 6-1 for additional details on what must be included in the description.
Flag(s)	If the capital project meets the requirements of one or more of the flags, the appropriate flag(s) must be identified. Up to two flags may be identified. Select only a primary and secondary flag if more than two flags have been associated with the capital project. (See Section 5.7.4.1 for more information on flags.)

Capital Project Data Elements	Content
Assigned Funding	The amount of funding anticipated for the capital project must be identified, by fund type (Entitlement, State Apportionment, Discretionary, etc.). This amount must not exceed the amount projected to be available in the selected FY or the capital projects cannot be entered into the system.
Noise Beneficiaries	If the capital project is for noise mitigation, the number of noise beneficiaries, or student beneficiaries (in the case of an educational institution), must be included.
Letter of Intent Number	If the capital project provides funding for a payment of an approved LOI, the LOI number must be provided.
Reimbursable Agreement	If the capital project provides funding for a reimbursable agreement, the checkbox must be checked and the reimbursable agreement number mist be entered.

6.2.7 How are costs determined?

6.2.7.1 **Total project cost (Planning Estimates).**
The total project cost is made up of the total AIP eligible project costs. All costs should be in current year dollars, that is, the dollar value in the year the costs were determined, not adjusted for inflation.

6.2.7.2 **Total AIP eligible project costs.**
The *AIP Handbook*, provides guidance on AIP cost allowances in addition to eligibility. In general, eligible costs must meet five rules to be considered allowable.

- Directly necessary to accomplish the project.
- Incurred after the grant execution date. Unless specifically allowed in AIP-related legislation, 49 U.S.C. § 47110(b)(2) requires all project costs to be incurred after the grant execution date.
- Reasonable. Sponsors must perform a cost or price analysis of federally funded procurement actions, including contract modifications. The type of cost analysis varies with the type of action or modification, as defined in the *AIP Handbook*.
- Exclusive to the project and not exceeding the federal share. 49 U.S.C. § 47110(b)(4) states that AIP funds must not be used for a project cost that has already been covered by another federal grant. In short, the costs must not be paid for by the federal government more than once and may not cause the federal share percentage of the project to exceed the federal share allowed in 49 U.S.C. § 47109. However, an airport sponsor

may use funds from another federal agency (but not for a project already paid for) if that federal agency permits this use. (See *AIP Handbook*).

- Within the limits of the grant agreement. 49 U.S.C. § 47110(b)(5) states that the total allowable federal costs cannot exceed the maximum federal cost that is in the grant agreement (except as allowed under certain conditions as stated in the amendment rules under 49 U.S.C. § 47108(b)).

6.2.7.3 **Adjusting cost estimates.**

As projects are further defined, cost estimates need to be updated. Cost estimates are usually updated when the project design is completed, negotiated contracts implemented, or projects bid.

6.3 How to define ODOs and Capital Projects through Work Codes.

FAA regions code projects when an ODO is created. Capital projects within an ODO inherit the ODOs work code, description, and priority (NPR). The work code and associated standard project description is selected within the SOAR database from a drop down menu. The resulting project description is used in the NPIAS and ACIP. The *AIP Handbook* contains guidance on selecting the work codes. The FAA website, Orders & Notices page lists these work codes along with standard project descriptions associated with each code.

6.3.1 How do you create distinct ODO and Capital Project descriptions using remarks?

Create short, plain language descriptions of the overall project—the ODO—and the supporting capital projects. The ODO description should provide enough detail for the FAA and airport sponsor/public agency to easily identify and differentiate the ODO from other proposed projects at the airport. An ODO description should be more detailed than the auto-generated standard description. Table 6-4 provides guidance and examples on what information to include in the ODO and capital project descriptions.

Table 6-4 ODO and Capital Projects Descriptions

Type of project	Information to include in ODO Remarks	Information to include in the Capital projects description
All projects	What the focus of the project is in plain language. If possible, add more information than the "standard" description. For example, the ODO of Miscellaneous Studies could have remarks of Conduct a Pavement Management Program. An ODO of Acquire Low Emissions Vehicles could have remarks of Acquire four compressed natural gas (CNG) vehicles for operations and maintenance use.	No project specific information required.
All projects	The amount of detail required is relative to the timeframe assigned to the ODO. Long-term work descriptions may be broad, medium-term descriptions should be more specific, and short-term descriptions should be much more defined. Using the example in Figure 6-1, the ODO could have been created as a project 10 years in the future with remarks of "Extend Runway 17-35 by approximately 500 feet on the Runway 35 end." More detail, such as the width of the extension, the type of pavement, and the addition of the parallel taxiway extension dimensions can be added to remarks as the project is further defined.	Capital projects are generally only associated with ODOs in the short term.
All projects	Number of phases expected to complete the objective. (Using the example in Figure 6-1, the Runway 17-35 Extension ODO would require multiple phases over multiple years to complete the project work and reopen the runway.)	Describe the work to be completed in the phase, e.g., Design, Reimbursable Agreement, Grading, Paving, and Equipment Purchase. The phase should be a finitely identifiable part of the ODO (useable unit). Indicate a measurable amount (for example, the number of units of equipment to be purchased or number of square yards for paving), if applicable, to be completed by the phase.
Flagged projects	Give the rationale for the inclusion of flag(s). For example: If the project is a wildlife hazard assessment recommendation (WHAR flag), identify that the project is included in a wildlife hazard mitigation plan or has been adopted from a wildlife hazard site visit.	Identify if the capital project is directly related to the flag.

Type of project	Information to include in ODO Remarks	Information to include in the Capital projects description
Safety projects	Identify the safety deficiency and the proposed solution.	None
Special emphasis projects	Identify the program, regulation authorizing the project, or both. For example, an emphasis of applying grooving or friction treatment to primary and secondary runways a result of the Wendell H. Ford Aviation Investment and Reform Act (AIR 21).	None
Rehabilitation projects	Identify the type of rehabilitation proposed. For example, mill and overlay or crack seal. For example, an ODO of Rehabilitate GA Apron could have remarks stating: This project repairs cracks and applies a slurry seal to extend the useful life.	None
Rehabilitation projects	Justification for the rehabilitation. For example, the type of deterioration, frequency of repairs, scarcity of parts, age, or Pavement Condition Index. In the example above of Rehabilitate GA Apron, justification could be stated as: Pavement management system evaluation identified pavement oxidization, extensive cracking, and a PCI of 39 (very poor).	None
Reconstruction projects	Include the last date of reconstruction and last date of rehabilitation. Identify any geometric modifications necessary to meet current standards including realignment and shifting.	None
Pavement projects	Identify the pavement, i.e., taxiway name, runway end, apron location. Identification can also be done in the ODO Addendum field of the SOAR database.	If multiple parts (i.e. east/west half of taxiway, north/south portion of apron) of pavements are being included in a single ODO, identify the pavement area that is being worked on in the specific capital project.
Construction projects	Include the dimensions of the affected infrastructure: Length and width for runways & taxiways, square yards for aprons, square feet for buildings, number of units for other types of equipment such as signs.	None

Type of project	Information to include in ODO Remarks	Information to include in the Capital projects description
Lighting projects	List all the equipment in the system affected by the project—lights, regulators, cabling, etc. Identify the type of lights used—high intensity, medium intensity, LED, incandescent, etc.	None
Equipment projects	Type of equipment.	None
Building projects	Purpose, type of building, or both, and building size in square feet.	None
Noise mitigation projects	Describe the type of mitigation. For example, sound insulation or acquisition of residence.	List the specific work done in the phase and number of beneficiaries (using the beneficiary fields).
Land projects	Location and purpose of land. Include number of tracts and approximate acreages.	Name of specific tract(s) being acquired. Exact acreage of each tract.

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APPENDIX A. DEFINITIONS

Definitions and abbreviations are an important part of this Order. As with any large program, many words and phrases have specific meaning. Table A-1 alphabetically lists the definitions in the Order. In the event that language in this Order conflicts with language contained in either Order 5100.38, *Airport Improvement Program (AIP) Handbook* (referred to throughout this Order as the *AIP Handbook*), or Order 5500.1, *Passenger Facility Charge (PFC)* (referred to throughout this Order as the *PFC Order*), the most recently issued language controls. The definitions here do not change policy or legislative requirements; in the event of a conflict, the most recent statutory or regulatory language controls.

Table A-1 Definitions

Term	Definition
Acquire	To come into possession or ownership of land, a piece of equipment, etc.
Additional Airport	Construction of a new airport for a community that does not have an existing NPIAS airport.
Airport Access	Development of the ground access system within the airport property line.
Advisory Circular	These periodic informational notices are part of a single, uniform, agency-wide system that the FAA uses to deliver advisory material to industry, the aviation community, and the public.
Agency	Refers to the Federal Aviation Administration (FAA).
Airport	Per 49 U.S.C. § 47102(2), an airport is: **a.** An area of land or water used or intended to be used for the landing and taking off of aircraft. **b.** An appurtenant area used or intended to be used for airport buildings or other airport facilities or rights of way. **c.** Airport buildings and facilities located in any of those areas. Per 49 U.S.C. § 47102(2)(B), this specifically includes heliports.
Airport Capital Improvement Plan (ACIP)	A plan that identifies eligible, justified, and reasonable development, planning, equipment, or environmental projects for airports which are included in the National Plan of Integrated Airport Systems. The ACIP is the primary planning tool for systematically identifying, prioritizing, and assigning AIP funds to help meet the capital project needs of airports within the NPIAS.
Airport Code (A)	A factor used in the National Priority System equation to identify the role and size of the airport.

Term	Definition
Airport Improvement Program (AIP)	A funding program that provides grants to public agencies – and, in some cases, to private owners and entities – for planning and developing public-use airports included in the National Plan of Integrated Airport Systems. AIP has been providing federal grants for airport development and planning since the passage of the Airport and Airway Improvement Act of 1982 (P.L. 97-248).
Airport Improvement Program Grant Assurances	The grant assurances are the obligations associated with a grant that require the sponsors to maintain and operate their facilities safely and efficiently and in accordance with specified conditions. Many of the assurances are based on 49 U.S.C. § § 47105, 47106 and 47107.
Airport Sponsor	As defined in 49 U.S.C. § 47102(26): a. A public agency that submits to the Secretary under this subchapter an application for financial assistance; and b. A private owner of a public-use airport that submits to the Secretary under this subchapter an application for financial assistance for the airport. In most cases, the Airport Sponsor is considered the owner of the airport.
Administrative Costs	Reasonable and necessary costs of administering the AIP/PFC program.
Based Aircraft	Aircraft that are “operational and airworthy,” which are based on the airport for most of the year. Nonprimary airports are required to provide this information on at least an annual basis to the FAA supported website, www.basedaircraft.com (National Based Aircraft Inventory Program which is related to the Airport Master Record (FAA Form 5010-1)). These aircraft are validated against the FAA Aircraft Registry to ensure accurate counts are used to categorize airports and in aviation forecasts. These validated counts are referred to as validated based aircraft.
Basic Airport	A nonprimary airport that supports general aviation activities such as emergency service, charter or critical passenger service, cargo operations, flight training, and personal flying.
Capacity	The number of operations per year that the airport can safely accommodate based on airport configuration, fleet mix, and procedures. The hourly throughput (arrivals and departures) that an airport is able to sustain during periods of high demand.
Capacity Project (Purpose)	Capacity projects include the minimum development or equipment that is required to reduce delay or improve an airport or system of airports for the primary purpose of maintaining access or accommodating more passengers, cargo, aircraft operations, or based aircraft, or allow access to a broader fleet mix.
Capital Improvement Plan (CIP)	List of eligible airport planning and development projects submitted by airport sponsors for inclusion in the FAA Office of Airports Capital Improvement Plan (ACIP). The data from these plans are considered as the FAA develops the NPIAS Report to Congress and the ACIP.
Carry-Over Entitlements	Entitlements that were provided in a prior fiscal year were not used and remain available for obligation for the original recipient.

Term	Definition
Commercial Service Airport	Title 49 of the United States Code defines a commercial service airport as a public airport in a state that the Secretary of Transportation determines has at least 2,500 passenger boardings each year and is receiving scheduled passenger aircraft traffic. A commercial service airport that has more than 10,000 passenger boarding's each year is considered a primary airport, and a commercial service airport that has less than 10,000 annual boardings is considered a nonprimary airport.
Commercial Service Airport	Per 49 U.S.C. § 47102(7), a commercial service airport means a public airport in a state that the Secretary determines has at least 2,500 passenger boardings each year and is receiving scheduled passenger aircraft service.
Component Code (C)	An element of the work code and used in the National Priority System equation to determine the resulting NPR. The component code identifies the physical component (such as a runway or terminal) for which the development is intended.
Congestion	A situation at a capacity constrained airport where an in traffic has led to more frequent and longer delays caused by demand for aircraft takeoffs and landings or other controlled ground movements exceeding capacity of those associated airport movement areas.
Construction	The process of making improvements on the airport. Construction may include new or existing facilities.
Critical Aircraft	Also called "design aircraft" or "critical design aircraft". An aircraft that planners and others use to determine the airport design standards for a specific runway, taxiway, taxilane, apron, or other facility (such as Engineered Materials Arresting System). This aircraft can be a specific aircraft model or a composite of several aircraft using or expected to make regular use at the airport or part of the airport. The specific rules and guidelines for determining the applicable critical aircraft is contained in the current version of Advisory Circular 150/5000-17, *Critical Aircraft and Regular Use Determination*.
Demolition	Destruction and removal of an object or structure as part of a capital improvement project or program.
Discretionary	These funds, subject to certain restrictions in legislation, are available for distribution at the discretion of the Secretary of Transportation. The discretionary funds are not required to be distributed to specific states and sponsors. 49 U.S.C. § 47115 and 49 U.S.C. § 47117 provide statutory set-asides and minimum funding for noise, military, capacity, safety, and security.
Discretionary Candidate List (DCL)	A list of projects that are seeking discretionary funds in a particular fiscal year.
Enplanement	A revenue passenger boarding at airports (including heliport or seaplane base) that receive scheduled or nonscheduled passenger service. The definition also includes passengers who continue on an aircraft in international flight that stops at an airport in any of the 50 states for a non-traffic purpose, such as refueling or aircraft maintenance rather than passenger activity.

Term	Definition
Entitlements	Funds apportioned under AIP based on formulas within 49 U.S.C. § 47114. Comprised of the following: passenger entitlements, nonprimary entitlements, cargo entitlements, state apportionment (including insular), and Alaskan supplemental).
Environmental Project (Purpose)	Environmental projects include studies and resulting actions required to comply with the National Environmental Policy Act (NEPA) and other federal environmental laws, regulations, and initiatives.
Feasible	The project is capable of occurring within the designated time frame and meeting all federal, state, and local requirements.
General Aviation Airport	Defined in 49 U.S.C. § 47102(8) A public-use airport located in a state that, as determined by the Secretary of Transportation: **a.** Does not have scheduled service; or **b.** Has scheduled service with less than 2,500 passenger boardings each year.
Hub Airport	Commercial service airports that comprise four classifications: **a.** *Large hub* airports—enplane at least 1% of the national annual passenger boardings. 49 U.S.C. § 47102(11). **b.** *Medium hub* airports—enplane at least 0.25% but less than 1% of the national annual passenger boardings. 49 U.S.C. § 47102(13). **c.** *Small hub* airports—enplane at least 0.05% but less than 0.25% of the national annual passenger boardings. 49 U.S.C. § 47102(25). **d.** *Non hub* airports enplane less than 0.05% of the national annual passenger boardings. 49 U.S.C. § 47102(14).
Improve	To make better in quality or usability.
Joint Planning Conference	A periodic meeting held at primary and reliever airports where airport specific planning and development issues are discussed. Typically, short-term initiatives of sponsor, tenant and FAA (i.e. NAVAID upgrades) are discussed. Typical attendees include FAA Airports, the airport sponsor, state aviation officials, local FAA representatives, airlines, general aviation representatives and other airport tenants.
Joint Use Airport	An airport owned by the Department of Defense, at which both military and civilian aircraft share the airfield. (49 U.S.C. § 47175(7))
Justified	When a project (1) advances an Airport Improvement Program (AIP) policy; (2) meets an actual airport need within the next five years; and (3) has an appropriate project scope. The FAA normally determines if an AIP project is justified. Defined in Chapter 3 of the current FAA Order 5100.38, Airport Improvement Program Handbook.
Large Hub Airport	Per 49 U.S.C. § 47102(11), a primary commercial service airport that enplanes at least 1% of the national annual passenger boardings.
Light	To install lighting fixtures such as runway lights, taxiway lights, or apron lights.

Term	Definition
Local Airport	A category of nonprimary airport that supplements local communities by providing access primarily to intrastate and some interstate markets.
Long Term (11+ Years)	Refers to planning and projects that are expected to occur 11 or more years beyond the current year.
Mark	To paint pavement markings on runways, taxiways, aprons, and roadways on the airport. May include the painting of various objects such as antennas to make them more visible.
Medium Hub Airport	Per 49 U.S.C. § 47102(13), a commercial service airport that enplanes at least 0.25% but less than 1% of the national annual passenger boardings.
Metropolitan and Micropolitan Statistical Areas (MSA)	The Office of Management and Budget establishes and maintains the delineations of Metropolitan Statistical Areas, Micropolitan Statistical Areas, and Combined Statistical Areas. See the latest OMB Bulletin, "Revised Delineations of Metropolitan Statistical Areas, Micropolitan Statistical Areas, and Combined Statistical Areas, and Guidance on Uses of the Delineations of These Areas" (OMB Bulletin No 18-04, September 2018).
Mid-Term (6-10 Years)	Planning studies and projects that are expected to occur six to ten years after the current year.
Military Airport Program (MAP)	The program that allows the FAA to give grants to civil sponsors of joint-use military airfields or former military airports (49 U.S.C. § 47118). 49 U.S.C. § 47117(e) (1) (B) designates at least 4 percent of Airport Improvement Program discretionary funds set aside for the FAA to use towards projects at MAP designated airports, usually for transitioning MAP-designated airport from military to civilian use.
National Airport	A category of nonprimary airport that supports the national and state system by providing communities with access to national and international markets in multiple states and throughout the U.S.
National Plan of Integrated Airport Systems (NPIAS)	Every other year, the Secretary of Transportation is required to develop a plan that specifies the eligible airport development considered necessary (along with the estimated costs) to provide a safe efficient, and integrated system of public-use airports. The development needs to adequately anticipate and meet the needs of civil aeronautics, the national defense requirements of the Secretary of Defense, and the United States Postal Service. This plan is the NPIAS.
National Priority Rating (NPR)	A value generated as part of the Airports Capital Improvement Plan for ranking a project's importance and its potential for AIP funding. It is derived by using the NPS equation that considers the project type, component of work, purpose, and airport type. The NPR generally categorizes airport development projects according to FAA goals and objectives. The NPR is only applicable to projects potentially funded through the Airport Improvement Program (AIP).
National Priority System (NPS)	The combination of quantitative and qualitative evaluation of airport development to assist in establishing and justifying Airport Improvement Program expenditures.

Term	Definition
Near Term (Current + 4 Years)	Planning studies and projects expected to occur within the 1 to 5 years.
New Airport (Purpose)	A new airport includes: replacement, supplemental, or additional airport. A new airport is also one converted from military to civilian/joint use.
Nonhub Airport	Per 49 U.S.C. § 47102(14), a commercial service airport that enplanes less than 0.05% of the national annual passenger boardings.
Nonprimary Airport	An airport that is not a primary airport as defined under 49 U.S.C. § 47102(16). In other words, an airport that has 2,500 to 10,000 passenger boardings each year.
NPIAS Purpose	The principal reason for an airport project. Used for categorizing development needs and reporting in the biennial Report to Congress.
Operation	A takeoff or landing of an aircraft is considered one operation. The activity at an airport can be broken down into different categories based on the types of operations, such as local and itinerant or air carrier, commuter/air taxi, general aviation, and military operations.
Order	In the current version of FAA Order 1320.1, *FAA Directives Management*, directives are explained as the primary means within the FAA to issue, establish, and describe agency policies, organization, responsibilities, methods, and procedures. Orders are permanent directives and stay in effect until canceled.
Other Project (Purpose)	Other projects include development items other than those necessary for safe and efficient airport operations or for improvement of airside capacity. Items such as fuel farms, hangars, and access roads. This also includes projects for converting military airfields to civil use (authorized under the Military Airport Program).
Passenger Facility Charge (PFC) Program	Authorizes the collection of PFC fees on revenue passengers enplaning at commercial service airports controlled by a public agency. Airports use these fees to fund FAA-approved projects that preserve or enhance safety, security, or capacity; reduce noise; or increase air carrier competition. Described in FAA Order 5500.1, *Passenger Facility Charge*.
PFC Project	Airport planning, airport land acquisition or development of a single project, a multi-phased development program (including but not limited to development described in an airport capital plan) or a new airport for which PFC financing is sought or approved under 14 CFR 158. AIP-eligible projects that are intended to be funded through the PFC Program but are not on a current PFC application can be shown in SOAR with a purpose code of CC.
Planning Agency	An agency designated by the FAA Administrator that is authorized by laws of the State or states (including District of Columbia, the Commonwealth of Puerto Rico, the Virgin Islands, American Samoa, the Government of the Northern Mariana Islands, and Guam) or political subdivisions concerned to engage in area-wide planning for the areas in which the grant assistance is to be used, but is not the airport sponsor.

Term	Definition
Planning Project (Purpose)	Planning projects include, but are not limited to master plans, regional plans, state system plans, and environmental studies, as more thoroughly listed in Appendix E of the AIP Handbook.
Primary Airport	Publicly owned airports with scheduled air carrier services and more than 10,000 passenger boardings each year. Primary airports are grouped into four categories: large, medium, small hubs, and nonhub airports. (49 U.S.C. § 47102(16))
Public Agency	A public agency is a State government or any agency of one or more states; a municipality or other political subdivision of a state; an authority created by federal, state or local law; a tax-supported organization; an Indian tribe or pueblo. A public agency is an entity legally capable of imposing a PFC. (49 U.S.C. § 40117)
Public Airport	Per 49 U.S.C. § 47102(21), an airport used or intended to be used for public purposes that meet the following two criteria: (a) that is under the control of a public agency; and (b) of which the area used or intended to be used for the landing, taking off, or surface maneuvering of aircraft is publicly owned.
Public-Use Airport	Under 49 U.S.C. § 47102(22), a public-use airport is: **a.** A public airport; or **b.** A privately-owned airport used or intended to be used for public purposes that is: 1. A reliever airport or 2. Determined by the Secretary to have at least 2,500 passenger boardings each year and to receive scheduled passenger aircraft service.
Publicly Owned Airport	An airport under the control of a public agency.
Purpose Code (P)	An element of the work code and used in the National Priority System equation to determine the resulting NPR. The purpose code identifies the overall purpose of the project (i.e., safety, capacity, planning, environmental).
Realign	To change the position of an airport improvement. Generally, this involves the rotation of pavement about an axis (as opposed to along its centerline or offset from its centerline).
Reasonable	An ability to draw conclusions of an explanation of an action and its use of funds; analyzed based on a fair, just cause or motive.
Reconfigure	To change the shape or formation of an improvement. For example, an apron reconfiguration could change the shape of the apron while occupying the same overall area of pavement.
Reconstruction Project (Purpose)	To construct again as new. Reconstruction of an improvement should allow the full useful life of the structure or facility to be achieved as if it were new.

Term	Definition
Regional Airport	A category of nonprimary airport that supports regional economies by connecting communities to statewide and interstate markets.
Regular Use	500 or more annual operations, excluding touch and go operations. An operation is either a take-off or a landing.
Regulatory Agency Requirement	Federal regulations with specific details, directives, or requirements with the force of law enacted by federal agencies to enforce the legislative acts passed by local, state, or federal agencies.
Rehabilitation Project (Purpose)	A comprehensive restoration of the original functionality resulting in a piece of pavement, piece of equipment, or building with a useful life of at least 10 years, or half of the useful life whichever is less.
Reimbursable Agreement	An agreement between an airport sponsor and a federal agency for the purpose of carrying out work necessary for the completion of a project if the work is necessary for the project and the other federal agencies statutes allow this action. For instance, 49 U.S.C. § 106(l)(6) allows the FAA to enter into reimbursable agreements in order to carry out the functions of the FAA. An example of this is a reimbursable agreement between a sponsor and the FAA Air Traffic Organization (ATO) for the purpose of having the ATO relocate an FAA-owned navigational aid that is required by an AIP funded project (as allowed under 49 U.S.C. § 44502(a)(2)). The *AIP Handbook* provides information about reimbursable agreements.
Reliever Airport	General Aviation airports in metropolitan areas that provide pilots with alternatives to using congested commercial service airports or provide general aviation access to the surrounding area (49 U.S.C. § 47102(23)).
Relocate	To move to a different location. For example, relocating a taxiway involves removing the old pavement and constructing new pavement in a different location.
Remove	To take away or eliminate an object such as lights, pavement, markings, buildings, trees, etc.
Replace	To remove existing structure, facility, equipment, etc., and substitute it with new improvements. Generally, this is used for equipment such as lighting, NAVAIDS, snow removal, and Air Rescue and Fire Fighting equipment.
Replacement Airport	Construction of a new airport that is needed to replace an existing airport that is unable to meet the long-term aviation demand in the community or established design standards because the existing airport is constrained. It must be built to FAA design standards.
Reseal Project (Purpose)	A project to extend the useful life of all or a portion of the pavement that will last a minimum of three to five years.
Revenue Producing Aeronautical Support Facilities	Per 49 U.S.C. § 47102(24), fuel farms, hangar buildings, self-service credit card aeronautical fueling systems, airplane wash racks, major rehabilitation of a hangar owned by a sponsor, or other aeronautical support facilities that the Secretary determines will increase the revenue producing ability of the airport**.**

Term	Definition
Safety Project (Purpose)	Safety projects include the minimum development or equipment that is required by federal regulation, airport certification procedures, necessary for the safety of individuals or property at the airport, or design standards intended primarily for the protection of human life.
Security Project (Purpose)	Security projects include the minimum development or equipment that is required by federal regulation for maintaining airport security.
Shift	To move an item along the longitudinal axis. For example, a runway shift moves the runway ends forwards or backwards along the centerline only.
Simplified Acquisition Threshold	Per 2 CFR 200.88, simplified acquisition threshold means the dollar amount below which a non-federal entity may purchase property or services using small purchase methods. Non-federal entities adopt small purchase procedures in order to expedite the purchase of items costing less than the simplified acquisition threshold. The simplified acquisition threshold is set by the Federal Acquisition Regulation at 48 CFR Subpart 2.1 (Definitions) and in accordance with 41 U.S.C. 1908. As of the publication of this part, the simplified acquisition threshold is $150,000, but this threshold is periodically adjusted for inflation.
Small Hub Airport	Per 49 U.S.C. § 47102(25), a commercial service airport that enplanes at least 0.05% but less than 0.25% of the national annual passenger boardings.
Special Emphasis Project (Purpose)	Projects that have been designated by Congress within the Airport Improvement Program legislation or projects which satisfy FAA priorities that improve the safety and efficiency of the NAS. For example, an emphasis of applying grooving or friction treatment to primary and secondary runways a result of the Wendell H. Ford Aviation Investment and Reform Act (AIR 21).
Sponsor	An entity legally capable of accepting an AIP grant. (49 U.S.C. §47102(26))
Standards Project (Purpose)	Standards projects include the minimum development, equipment, or land required due to a change in federal design or construction standards.
State Apportionment	An amount apportioned under 49 U.S.C. §47114 (d)(2) to states for GA airports.
State Block Project (Purpose)	Nonprimary development projects in a state in the State Block Grant Program. A NPE grant is issued to a State Block grant sponsor. The SBG sponsor will then issue subgrants to nonprimary airport sponsors for NPE funded projects
Supplemental Airport	Construction of a new airport that the FAA has determined is needed to supplement an existing NPIAS airport that will remain open. Typically, supplemental airports are considered for providing additional capacity for a large, medium, or small hub airport. It is unusual to have a general aviation airport supplement an existing general aviation airport.
Throughput	The actual number of aircraft operations per hour that occur at an airport; the capacity or annual service volume of a runway. Throughput can vary with demand and available capacity.

Term	Definition
Type Code (T)	An element of the work code and used in the National Priority System equation to determine the resulting NPR. The type code identifies the actual work being done (e.g., extension, improvement, master plan).
Update	To bring up-to-date with current information, standards, and requirements. For example, an updated master plan would incorporate current airport facility and traffic information, new forecasts, and current FAA design standards and guidance.
Usable Unit of Work	A completed project that will result in an increase in safety, usefulness, or usability at the airport. For Airport Improvement Program grants, a usable unit of work can be funded with one or more grants, provided the result is a usable unit of work. For PFC projects, a Useable Unit of Work must be a safe, useful, and usable unit of work resulting from the project. In the case of development to be accomplished in stages, a safe, useful, and usable unit must be provided at least upon completion of the final stage.
Useful Life	Useful life is the time an asset or property is expected to be usable for the purpose it was acquired. Its usable life may be shorter than the item's actual physical life or economic life, such as apron pavement (still useful) that nonetheless must be replaced as part of a new terminal program to adhere to grading requirements.
Worksites	Refers to an existing airport, a planning agency, a state sponsor, a temporary or proposed airport, a state system plan placeholder, a "various locations" placeholder, or a state block grant administrator placeholder. In SOAR, a worksite is typically synonymous with an airport location; however, for grant administration purposes, a worksite assignment is established for initiatives that are not airport-specific. A worksite, therefore, may not always represent the physical location where an airport development or planning project will occur.

APPENDIX B. NATIONAL PRIORITY SYSTEM EQUATION

This appendix discusses changes to the National Priority System (NPS) Equation. The new values for the four variables, shown in comparison tables in this appendix, are the values initially used with this update of this Order. However, because the FAA may update the values associated with each code to correspond to the agency's priorities or add codes resulting from legislative changes, current code values may be obtained from the FAA's SOAR database.

B.1 What is the NPS equation?

The NPS equation is used to calculate the National Priority Rating (NPR), a quantitative measure used for ranking project importance based on the project and airport type. The NPR comprises quantitative evaluations of airport development projects to assist in establishing and justifying AIP expenditures. The NPR score categorizes airport development according to FAA goals and objectives, with higher numerical scores indicating the project is more aligned with FAA goals and objectives. In addition, qualitative factors are assessed through project justifications and flags and do not impact the NPR but are taken into account in funding decisions.

B.2 Why was the NPS equation changed?

B.2.1 To reflect a change in the FAA's goals and project emphasis.

Some of the FAA's goals and points of emphasis have shifted since the previous NPS equation was created in 2000. Airport types have been added that may not be scored appropriately due to a lack of flexibility in the original NPS equation. Additionally, the FAA recognized the weighting of some types of work needed to be adjusted to better reflect the FAA's current areas of emphasis and statutory requirements.

The FAA then conducted a survey of the Office of Airports personnel in Headquarters, regional offices, and ADOs to gauge whether the project priorities properly reflect the FAAs goals and priorities. Respondents were asked to rank 32 types of AIP projects. Figure B-1 shows the 32 projects in rank order alongside the rank under the current NPR based on the survey response. Each project was presented at least three times in the survey and were ranked against a different set of projects each time. Respondent valuations were affected by several factors, including the type of airport, the state or region of the country, and the types of AIP projects that most support FAA's mission. In analyzing the results, the FAA order team attempted to account for regional and other variances among respondents. For example, snow removal equipment is rated lower in warmer regions than in the colder ones. The two highest ranked projects in the survey are Runway Project and Runway Safety Area. Both projects are highly rated across all regions and headquarters. These findings reflect changes in FAA priorities that had not been reset since the implementation of the NPR in 2000.

B.3 Summary of Results.

Using the results and findings from the survey, combined with a more modern view of the FAA's current areas of emphasis and statutory requirements, the new equation reflects an updated set of priority values to AIP projects. These include:

- **To reduce the disproportionate impact of project purpose on project scoring.** One of the most important findings from analyzing the original NPS equation is the significant impact of the Purpose Code (P) element on the resulting NPR. The P element dominated the NPR where a low P value ensured a low NPR, regardless of the other elements' values.
- **To better characterize projects.** Consistency in project coding improves accuracy of tracking and characterizing projects in the NPIAS, ACIP and AIP. Coding was made more intuitive by defining new codes and eliminating double codes – codes that had repeated letters such as PL PL MA and OT OT FF. Project types were combined, where practical to minimize or eliminate duplicate coding for projects.
- **To capture PFC projects more completely into the NPIAS airport database.** Adding PFC work codes allows PFC projects to be represented in the NPIAS and ACIP until funded. All PFC codes are assigned a value of zero. This is in keeping with the governing legislation of the PFC program which prohibits prioritizing projects.
- **To better consider the various airport roles.** The new NPS equation places higher value on airport type, recognizing the greater impact of projects at larger airports, and the effect on movement of passengers and cargo throughout the country. However, the differential values of "A" and the structure of the equation ensure that the NPR of similar types of projects do not vary by more than 15 percent between large hub and basic airports. This retains competitiveness for projects at smaller airports.

B.4 What are the Differences between the Original NPS Equation and the Revised NPS Equation?

The old and revised NPS equations utilize the same variables, but the form of the equation, the constants, and the variable values have been changed. Table B-1 compares the old and new equations and the values of the associated codes. Both equations use the following variables:

- **P,** the Purpose variable, identifies the underlying objective of the development, planning, or equipment project. These include capacity, safety, extending the useful life, etc.
- **A,** the airport classification, is based on a grouping of airports using hub size and activity.
- **C,** the Component variable, identifies the development area, planning study, or type of equipment that is the focus of the project. For example, runways, airport master plans, or trucks for the Aircraft Rescue and Fire Fighting unit are components.
- **T,** the Type variable, represents the work to be done such as constructing a development project, conducting a planning study, or purchasing a piece of equipment.

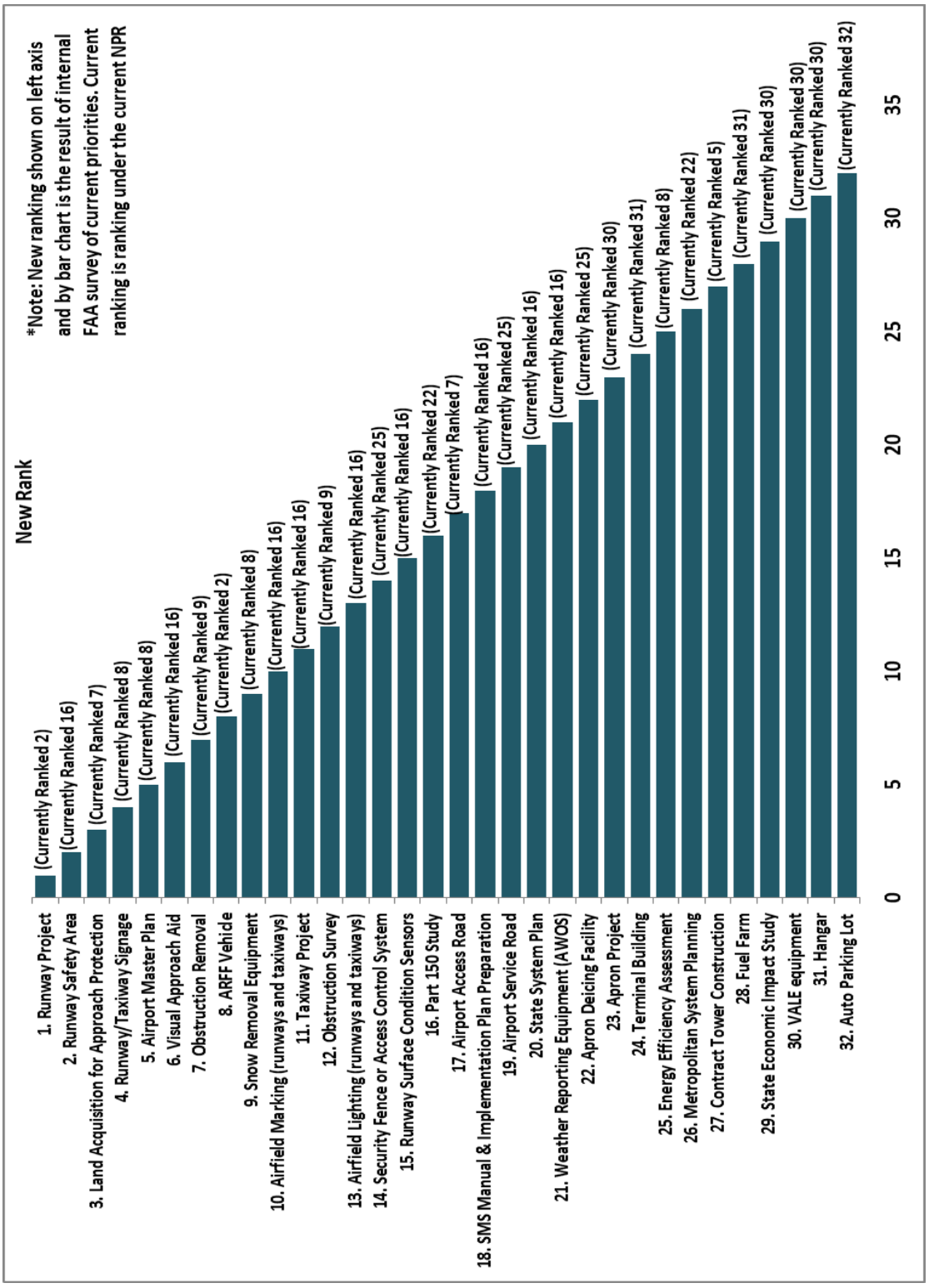
Table B-1 Comparison of Old and Revised NPS Equations

Component	Old NPS Equation	Revised NPS Equation
Formula	NPR = 0.25P*(1.4P + A + C+ 1.2T)	NPR = ((4A)+(2C)+(.7P)+(.7T))/4.2
Variables	Old Value Range	Revised Value Range
Purpose (P)	1 to 10	1 to 100
Airport (A)	2 to 5	7 to 20
Component (C)	10 to 100	1 to 100
Type (T)	10 to 100	1 to 100

B.5 Conclusion.

The codes and values associated with each variable in the equation were adjusted, tested, and readjusted by the FAA Order team and other FAA staff. This ensured that the resulting NPR for various projects met the objectives of reducing the influence of the purpose code, balancing airport roles, and capturing current priorities.

Figure B-1 Projects in Order of Ranking by Survey of FAA Personnel (All Responses)



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APPENDIX C. NPIAS-ACIP PLANNING CALENDAR

The following tables present key dates in the NPIAS-ACIP Planning Process. All dates are approximate and may change with changes in timing of funding authorization and/or appropriation. The FAA sets the annual calendar each year and distributes it within the Airports organization. Airport sponsors can contact the ADO or regional office to obtain current key dates.

Table C-1 NPIAS Planning Process Approximate Key Dates and Responsibilities

Events and Actions Items	Responsible Party	Start Date	Duration	Due Date	Fiscal Year Type
NPIAS Guidance issued	FAA HQ			Spring	Odd
Notify States and Airports of Deadlines for Updating Activity Data for Nonprimary Airport Roles	FAA Field and HQ			September	Odd
Review NPIAS based on HQ guidance	FAA Field	October 1st	3 months	December	Odd
Final edits to Activity Data (based aircraft.com)	Airports and States	July 1st	5 ½ months	Mid-December	Odd
Initial NPIAS Snapshot: 5 year - Starting with next fiscal year	FAA HQ			Mid-January	Even
APP 400 reviews NPIAS Snapshot and provides comments to FAA Field, including Appendix A	FAA HQ and Field	Mid-January	30 days	Mid-February	Even
APP 400 provides draft list of Unclassified Airports to FAA Field for review	FAA Field	January 2	30 days	February 1	Even
Final NPIAS Snapshot Taken	FAA HQ			Mid-February	Even
NPIAS Report Published	FAA HQ			September 30th	Even

Table C-2 ACIP Planning Process Approximate Key Dates and Responsibilities

Events and Actions Items	Responsible Party	Start Date	Duration	Due Date	Fiscal Year Type
ACIP adjustments due to previous FY funding	FAA Field	October 1st	1 month	October 31st	Every
APP 520 issues final ACIP Snapshot[4] and development discretionary planning ceilings for current fiscal year	FAA HQ			3rd Monday of November	Every
FAA begins coordinating with Sponsors and Public Agencies on development needs for next 3 fiscal years beyond current fiscal year	FAA Field	October 1st	3 ½ months	2nd week of January	Every
Airport sponsors submit development needs (CIP) to FAA Field Office for next 3 fiscal years beyond current fiscal year	Airport Sponsor	October 1st	4 Months	End of January	Every
ACIP Guidance issued[5]	FAA HQ	1st week of January	8 weeks	End of February	Every
FAA reviews initial CIPs received and provide comments to airport sponsors and public agencies	FAA Field	1st week of February	2 weeks	2nd week of February	Every
Revised CIPs due to FAA Field (Coordinate with ADO/RO)	Airport Sponsor			1st week of March	Every

[4] The national ACIP and DCL are internal, deliberative FAA documents. The national ACIP and DCL cannot be distributed outside of FAA, in whole or in part, in any form.
[5] This date is approximate and provided for activity planning.

Events and Actions Items	Responsible Party	Start Date	Duration	Due Date	Fiscal Year Type
FAA Field Office reviews and concurs with final CIPs received for roll-up into ACIP[6]	FAA Field	1st week of March	4 weeks	End of March	Every
ACIP entry into FAA Database to identify project financing, including use of PFCs	FAA Field			2nd Monday of April	Every
Declare intentions to use entitlements for current fiscal year projects	Airport Sponsor			1st business day in May	Every
Application for AIP funding on current fiscal year projects is due	Airport Sponsor			1st week of June	Every
Make funding and project adjustments to following fiscal year CIPs based on sponsors' current year declared intentions to use entitlements as well as reported carry-over.	FAA Field	1st week of May	1 Month	1st week of June	Every
Draft ACIP to HQ	FAA Field			3rd week of June	Every
Initial ACIP Snapshot	FAA HQ	3rd week of June	1 week	4th week of June	Every
Send ACIP Checklist to Field	FAA HQ	3rd week of June	2 weeks	1st week of July	Every
ACIP review and comments back to regions	FAA HQ	1st week of July	3 weeks	4th week of July	Every

[6] FAA concurrence on CIPs or inclusion of a project on the national ACIP or DCL does not constitute a commitment of federal funding.

Events and Actions Items	Responsible Party	Start Date	Duration	Due Date	Fiscal Year Type
ACIP Regional changes complete -submit regional review checklist to HQ	FAA Field	4th week of July	4 weeks	4th week of August	Every
ACIP review complete and second snapshot taken	FAA HQ			End of September	Every
APP 510 completes calculations of following fiscal year adjustments to entitlements using actual PFC collections from prior calendar year and provides to APP 400	FAA HQ			2nd week of February (February 14)	Every
PFC forecast amount for next fiscal year due for input into FAA Database	Public Agency			July 1st	Every
Confirm public agencies' PFC forecast amounts are complete	FAA Field			July 1st	Every
PFC forecast amount for next fiscal year compiled	FAA HQ			July 31st	Every
APP 400 completes review of entitlements adjustments and provides to APP 520	FAA HQ			August - September	Every

APPENDIX D. REFERENCES AND WEB LINKS

D.1 General.

Table D-1 contains a list of the references included in this Order. Web links are provided in this list and were current on the Order publication date. The versions for specific documents are not given, although the current version must be used. Also, website links do not link directly to documents because these types of links tend to break often. Instead, they link to source web pages to ensure links stay current (and for some documents this is required by FAA Web policy).

This Order may be found at: FAA Orders

Table D-1 References and Web Links

Reference	Web Links
AIP Handbook **(FAA Order 5100.38)**	http://www.faa.gov/airports/aip/aip_handbook/
AIP Grant Assurances	http://www.faa.gov/airports/aip/grant_assurances/ The grant assurances are the obligations associated with a grant that require the sponsors to maintain and operate their facilities safely and efficiently and in accordance with specified conditions. Many of the assurances are based on 49 U.S.C. § § 47105, 47106 and 47107.
AIP Program Guidance Letters (PGLs)	http://www.faa.gov/airports/aip/guidance_letters Program guidance letters are interim guidance issued about AIP. A PGL is a change to the Handbook.
AIP Program Information Memorandums (PIMs)	http://www.faa.gov/airports/aip/guidance_letters Program Information Memorandums are interim guidance that does not change the content of the *AIP Handbook*, but provides additional clarifying information.
Airports Cooperative Research Program Synthesis 4: Counting Aircraft Operations at Non-Towered Airports	http://www.trb.org/Main/Public/Blurbs/157794.aspx
Airports Cooperative Research Program Report 129: Evaluating Methods for Counting Aircraft Operations at Non-Towered Airports	http://www.trb.org/Main/Blurbs/172335.aspx
Code of Federal Regulations (CFR)	https://www.ecfr.gov/cgi-bin/text-idx

Reference	Web Links
Current FAA Advisory Circulars Required for Use in AIP Funded and PFC Approved Projects	http://www.faa.gov/airports/aip/ This is the list of advisory circulars that must be used on AIP and PFC funded projects. Other advisory circulars that are specific to the project may also be needed. The list is kept up-to-date by AAS-100.
FAA ASSET Study	http://www.faa.gov/airports/planning_capacity/ga_study/
FAA Advisory Circulars (ACs)	http://www.faa.gov/airports/resources/advisory_circulars/
FAA Airport Benefit-Cost Analysis Guidance	http://www.faa.gov/airports/aip/bc_analysis/ This document provides guidance to sponsors on benefit-cost analysis (BCA) for capacity projects.
FAA Forecast Reviews	http://www.faa.gov/airports/planning_capacity/ Guidance on Review and Approval of Local Aviation Forecasts is available on the Airport Planning and Capacity page of the FAA website.
FAA Office of Airports Website	http://www.faa.gov/airports/ This website contains many references, forms, guidance, and other information needed for AIP projects.
FAA National Plan of Integrated Airport Systems (NPIAS)	https://www.faa.gov/airports/planning_capacity/npias/ This is the report transmitted to Congress every other year. Appendix A contains the list of airports and Appendix C contains the current statutory and policy definitions.
FAA Orders	http://www.faa.gov/regulations_policies/orders_notices/
Federal Register Notices	http://www.archives.gov/federal-register/
Office of Management and Budget (OMB) Circulars	https://www.whitehouse.gov/omb/information-for-agencies/circulars/
Public Laws	https://www.congress.gov/
United States Code (U.S.C.)	https://www.govinfo.gov/app/collection/uscode

APPENDIX E. WORK CODES

Work codes are defined by the FAA to reflect the FAA's priorities in the NAS. As such, codes are adjusted annually. New codes may be added and codes that are no longer useful may be eliminated. Values of the various codes may also change to support changing project priorities.

The current listing and assignment of values for A, C, P, and T are maintained in SOAR.

Work codes define projects and tasks in the NPS Equation:

$$NPR = ((4A)+(2C)+(.7P)+(.7T))/4.2$$

Where A is the Airport Code, C is the Component Code, P is the purpose Code and T is the Type Code. Descriptions and values are presented in the following tables for the AIP and PFC Programs. Values shown at the bottom of Table E-2 with a "0" are related to the State Block Grant Program or the PFC Program (which does not use the Purpose code) so the NPS equation is not applicable. In Tables E-3 and E-4 if the code is applicable to the AIP or PFC Program there is a number, if the code is not applicable to a program it is labeled NA (i.e., not applicable).

Table E-1 Airport Categories and Values

Primary Airport Classification	"A" Value	Nonprimary Airport Classification (includes nonprimary commercial service)
Large Hub	20	NA
Medium Hub	18	National
Small Hub	16	Regional
Nonhub	14	Local
NA	12	Basic
NA	7	Unclassified

Table E-2 Purpose Code Values

Purpose	Description	AIP "P" Value
CA	Capacity	70
EN	Environmental	80
OT	Other	25

Purpose	Description	AIP "P" Value
PL	Planning	65
RC	Reconstruct	75
RE	Rehabilitate	75
RS	Reseal	75
SA	Safety	100
SE	Security	100
SP	Special Emphasis	80
ST	Standards	35
CC	Passenger Facility Charge Program	0
SB	State Block (only use as SB GP PP)	0

Table E-3 Component Code Values

Component	Description	AIP "C" Value	PFC "C" Value
AF	Airfield	25	NA
AP	Apron	65	0
AR	Access Road	20	NA
BD	Building	32	0
BE	Building and Equipment (Control Tower)	65	NA
EQ	Equipment	85	0
GT	Ground Transportation	20	0
GP	Grant Program (SBGP)	0	NA
HE	Helipad/Heliport	65	0
HO	Homes	72	0
LA	Land	70	0

Component	Description	AIP "C" Value	PFC "C" Value
MA	Airport Master Planning	70	NA
ME	Metro Area Planning	60	NA
NA	New Airport	45	0
OT	Other	15	0
PB	Public Building	62	0
PI	Privatization Planning	65	NA
PL	Planning	60	0
PM	People Mover	20	NA
RL	Rail	20	NA
RP	State/Regional Planning	65	NA
RV	Revenue Producing	10	NA
RW	Runway	90	0
SB	Seaplane Base	70	0
SL	Sealane	70	NA
SV	Service/Perimeter Road	15	NA
TE	Terminal	22	0
TL	Taxilane	60	NA
TW	Taxiway	80	0
FI	Financing	NA	0
NO	Noise	NA	0

Table E-4 Type Code Values

Type	Description	AIP "T" Value	PFC "T" Value
60	Outside 65 DNL	10	0

Type	Description	AIP "T" Value	PFC "T" Value
65	65-69 DNL	35	0
70	70-74 DNL	65	0
75	Within 75 DNL	85	0
AC	Access	16	0
AQ	Acquire	43	0
CO	Construct	70	0
CT	Construct New Contract Tower	50	0
DI	Deicing	50	0
DR	Drainage	62	0
DV	Development	44	0
ES	Environmental Related Assessment/Plan/Study	62	NA
EX	Expand/Extend	64	0
FF	Fuel Farm/Utilities	24	NA
FR	Friction Course	89	NA
GE	Generator	62	NA
GI	Geographic Information	50	0
HG	Hangar/T-Hangar	8	NA
IM	Improve/Modify	62	0
IN	Install	85	0
LF	Lift Device	15	0
LI	Lighting	62	0
MS	Miscellaneous	15	0
MT	Mitigation	65	0
NO	Noise	61	0

Type	Description	AIP "T" Value	PFC "T" Value
NP	New Plan/Study/Assessment	70	0
OB	Obstruction	100	0
PA	Parking	3	0
PR	Energy Production	1	NA
PS	Power Supply	62	NA
RF	Rescue and Fire Fighting	100	0
RT	Reconstruct Contract Tower	48	0
SE	Security	85	0
SF	Safety Area	100	0
SG	Marking/Signage	92	0
SH	Shift or Reconfigure	62	NA
SN	Snow	91	0
SR	Sensors	85	0
SZ	Approach Protection	84	0
UP	Update	80	0
VI	Vertical/Visual Guidance System	68	0
VU	Electrical Vault	62	NA
WH	Wildlife	80	0
WR	Wash Rack	5	NA
WX	Weather	75	0
ZE	Zero Emissions	25	0
PP	SBGP Project (SBGP only)	0	NA
AD	Administrative Costs	NA	0
AT	Air Traffic Modernization Program	NA	0

Type	Description	AIP "T" Value	PFC "T" Value
DS	Debt Service	NA	0
EA	Environmental Study	NA	0
HO	Homes	NA	0
LA	Land	NA	0
MP	Multi-Phase	NA	0
OT	Other	NA	0
PB	Public Building	NA	0
PM	People Mover	NA	0
RL	Rail	NA	0
RX	Runway Incursion Mitigation	NA	0
SV	Service Road	NA	0
VL	VALE	NA	0