U.S. Department of Transportation
Federal Aviation Administration

Report to Congress

Evaluating the Formulation of the National Plan of Integrated Airport Systems (NPIAS)

November 2015

THE SECRETARY OF TRANSPORTATION
WASHINGTON, DC 20590

November 4, 2015

The Honorable Bill Shuster
Chairman, Committee on Transportation
and Infrastructure
U.S. House of Representatives
Washington, DC 20515

Dear Mr. Chairman:

I am pleased to send you the enclosed report to Congress, Evaluating the Formulation of the National Plan of Integrated Airport Systems (NPIAS).

As required by section 155 of the FAA Modernization and Reform Act of 2012 (Public Law 112-95), the Federal Aviation Administration (FAA) has completed a study of the formulation of the NPIAS. This report contains the results and findings from that study, along with recommendations for change.

I have sent a similar letter to the Ranking Member of the House Committee on Transportation and Infrastructure and to the Chairman and Ranking Member of the Senate Committee on Commerce, Science, and Transportation. If I can provide further information or assistance, please feel free to call me.

Sincerely,

Anthony R. Foxx

Enclosure

THE SECRETARY OF TRANSPORTATION
WASHINGTON, DC 20590

November 4, 2015

The Honorable John Thune
Chairman, Committee on Commerce,
Science, and Transportation
United States Senate
Washington, DC 20510

Dear Mr. Chairman:

I am pleased to send you the enclosed report to Congress, Evaluating the Formulation of the National Plan of Integrated Airport Systems (NPIAS).

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Anthony R. Foxx

Enclosure

THE SECRETARY OF TRANSPORTATION
WASHINGTON, DC 20590

November 4, 2015

The Honorable Peter A. DeFazio
Ranking Member, Committee on Transportation
and Infrastructure
U.S. House of Representatives
Washington, DC 20515

Dear Congressman DeFazio:

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Anthony R. Foxx

Enclosure

THE SECRETARY OF TRANSPORTATION
WASHINGTON, DC 20590

November 4, 2015

The Honorable Bill Nelson
Ranking Member, Committee on Commerce,
Science, and Transportation
United States Senate
Washington, DC 20510

Dear Senator Nelson:

I am pleased to send you the enclosed report to Congress, Evaluating the Formulation of the National Plan of Integrated Airport Systems (NPIAS).

As required by section 155 of the FAA Modernization and Reform Act of 2012 (Public Law 112-95), the Federal Aviation Administration (FAA) has completed a study of the formulation of the NPIAS. This report contains the results and findings from that study, along with recommendations for change.

I have sent a similar letter to the Chairman of the Senate Committee on Commerce, Science, and Transportation and to the Chairman and Ranking Member of the House Committee on Transportation and Infrastructure. If I can provide further information or assistance, please feel free to call me.

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Executive Summary

This report is submitted to Congress by the Secretary of Transportation in accordance with section 155 of the FAA Modernization and Reform Act (FMRA) of 2012, Pub. L. No. 112-95. The Federal Aviation Administration (FAA) was directed to study the formulation of the National Plan of Integrated Airport Systems (NPIAS). The study must evaluate six specific issues, provide findings and recommendations for each issue, and identify any other pertinent matters. The exact language contained in section 155 is in Appendix A of this report.

Overview

This report documents the findings from the study and provides policy considerations. Each chapter of the report corresponds to a section in the legislation, with the exception of chapter 2, which addresses the matters identified in sections 155(b)(2) and (b)(3) of the FMRA. At the end of each chapter is a list of findings and policy considerations.

Summary of Findings

Specific findings from the FAA's analysis are listed below.

1. Generally, the NPIAS criteria are appropriate. However, there are 252 airports out of 2,939 nonprimary airports (including 53 privately owned airports) currently in the NPIAS that do not meet the criteria. Privately owned airports in the NPIAS remain a source of concern because of their minimal aviation role, lack of financial depth, and the inability to control off-airport growth crowding the airport.
2. The projects shown in the NPIAS line up with the projects being funded with AIP grants during the fiscal years analyzed.
3. Fifty-one percent of nonprimary airports in non-block grant states have transferred some of their nonprimary entitlement (NPE) funds, while 46 percent have not transferred any of their funds. Only 3 percent of the nonprimary airports have not received NPE funds. The NPE program has reduced the state apportionment fund.
4. Calculating primary entitlements based on an airport's percentage of overall passenger traffic would increase the large airport entitlements while small airports would see major reductions in their passenger entitlements.
5. Though a few airports have taken some creative steps to make sure they reach the required 10,000 passenger enplanement threshold, the methods they use are within current policy parameters.

Summary of Policy Issues for Consideration

There are four specific policy issues that FAA has identified, and each issue has at least two options for consideration.

1. Removing Airports from the NPIAS

During detailed FAA studies, FAA determined that there are 252 out of 2,939 nonprimary airports in the NPIAS that do not appear to meet entry criteria which now includes the airport categories established in 2012. These categories were developed through two top-down reviews of the general aviation airports

in the NPIAS. The results of these efforts are in the May 2012 report, "General Aviation Airports: A National Asset," and the March 2014 report, "ASSET 2: In-Depth Review of the 497 Unclassified Airports." These reports are referred to as the ASSET 1 and 2 reports. The FAA considers these airports unclassified, because they do not meet the minimum NPIAS criteria.

Option a. Remove airports from the NPIAS that do not meet NPIAS entry criteria.

If the intent is to limit airports in the NPIAS to only those that currently meet NPIAS criteria, the policy considerations are:

- These 252 unclassified airports can be removed from the NPIAS using an established process. In most cases, any grant obligations can be forgiven by FAA, allowing the airport to either remain open or to close if the community requests closure.
- The FAA can offer a limited program to allow certain airports (252 airports and a small number of basic airports) to withdraw from the NPIAS. During this amnesty program, FAA would forgive the grant obligations and forgo any repayment requirements for unamortized grant improvements. This would relieve communities, cities, and counties of the burden of maintaining the airport if they have determined that the airport is no longer a benefit to the community or the airport system.

Option b. Do not remove airports from the NPIAS that do not meet NPIAS entry criteria.

If the intent is not to remove any airports from the NPIAS:

- These 252 unclassified airports would remain in the NPIAS as unclassified airports.
- The FAA will continue to monitor activity at these airports and review their status every 5 years. The results of this 5-year review will be reflected in the NPIAS report, beginning in 2017.

2. Eliminate the Reliever Airport Designation.

A special category of general aviation airport, the reliever airport, was established by statute in 1968. An airport was classified as a reliever if it was a general aviation airport that relieved congestion by drawing slower-moving general aviation activity away from congested airports in large metropolitan areas. Over the last 47 years, there has been dramatic growth in population and shifts in population which has resulted in changing aviation needs. Currently, only a few large hub airports have chronic delays.

The reliever category does not fit with the current aviation system. There are 264 reliever airports and the majority do not meet the reliever criteria. If all 264 current reliever airports are redesignated as general aviation airports, 223 publicly owned airports would not be impacted. However, 41 privately owned airports would no longer be eligible to receive a grant.

There are two options for privately owned airports in the NPIAS. Both options include removing the reliever airport designation. The difference in the options is how the privately owned airports are handled. The policy considerations are:

Option a. Allow privately owned reliever airports that meet ASSET National or Regional criteria to remain in the NPIAS as high activity airports.

After eliminating the reliever designation, move the high activity privately owned airports to the appropriate ASSET category. This allows the 13 private reliever airports that meet the National or Regional criteria to remain in the NPIAS. The 28 privately owned reliever airports that do not meet existing criteria could remain unclassified airports.

Option b. Eliminate the reliever designation.

There are 41 privately owned reliever airports. After eliminating the reliever designation, all 41 could be removed or designated as unclassified airports.

3. Changing the Nonprimary Airport Entitlement and Method of Calculation

Since the introduction of NPEs in Fiscal Year (FY) 2001, the smaller general aviation airports are using the funding for low priority projects, transferring it to other airports, or are allowing it to expire.

Nonprimary airports are carrying over their entitlement funding at an increasing rate. FY 2013 marked the first time that the nonprimary airports carried over more than the nonprimary airports earned in entitlements. This is because the yearly amount ($150,000) and the total amount that an airport is allowed to "bank" ($600,000) is not enough to fund an airfield project such as rehabilitating or extending a runway.

At the same time, many airports perceive the $600,000 banked funding as too large to consider transferring funding to another airport. As a result, airports are requesting low priority projects (such as terminal projects) that are generally not needed at the smaller airports.

The NPE has come at the expense of the state apportionment, which had been used to fund high priority projects within a state. Since the NPE is calculated *first* out of the General Aviation apportionment, the state apportionment has dropped each year.

Some airports earn entitlements (based on reported development need) and consistently transfer the entitlements to other airports.

If the intent is to optimize federal funding to the nonprimary airports, the four policy options are:

Option a. The NPE could become a *subset* of the total state apportionment, thus returning the distribution of the General Aviation Apportionment fund according to state population and area.

Option b. The NPE could be eliminated, replaced by state entitlement funding.

Option c. The NPE amount could vary, depending on the type of airport. For example, an unpaved airport with few operations would receive less than a large airport, such as Teterboro.

Option d. The NPE program could remain unchanged.

4. Changing the Minimum Primary Entitlement Amount and Enplanement Level

An airport that has scheduled service and enplanes 10,001 passengers will receive the minimum primary entitlement of $1 million. If that same airport enplanes only 9,999 passengers, it will receive the NPE entitlement of $150,000. However, there are no differences in facility needs between 10,001 and 10,000 passengers.

The issue with the current level of primary entitlement (amount and level of enplanements) is that it creates an incentive to meet the 10,001 level. In addition to higher primary entitlement, airports with 10,001 passengers have greater access to discretionary funding.

If the intent is to create an easier transition between primary and nonprimary, the policy options are:

Option a. Replace the disparity between primary and nonprimary airports with a gradual calculation based on activity.

For example, the minimum primary entitlement of $1 million could be replaced with a gradual entitlement down to the NPE level of $150,000.

Option b. Raise the primary entitlement threshold from 10,001 passengers to 70,000 passengers.

The threshold of 70,000 enplanements is the point where the passenger entitlements currently increase above the minimum of $1 million. This option would raise the primary threshold to 70,000 enplanements. Airports with between 10,000 and 69,999 (about 148 airports currently classified as nonhub primary airports) could receive $750,000 (rather than $1 million). The 125 nonprimary commercial service airports with between 2,500 and 10,000 could receive $500,000 (rather than $150,000 in NPE). While this option increases the funding to nonprimary commercial service airports, it decreases the funding to about 148 nonhub primary airports.

Chapter 1: National Plan Integrated Airport Systems (NPIAS) Criteria and Application of the Criteria

Requirement

Section155(b)(1) of the FMRA requested FAA to examine the criteria used for including airports in the NPIAS and how that criteria was applied in the most recently published version of the plan.

Evolution of the United States Airport System

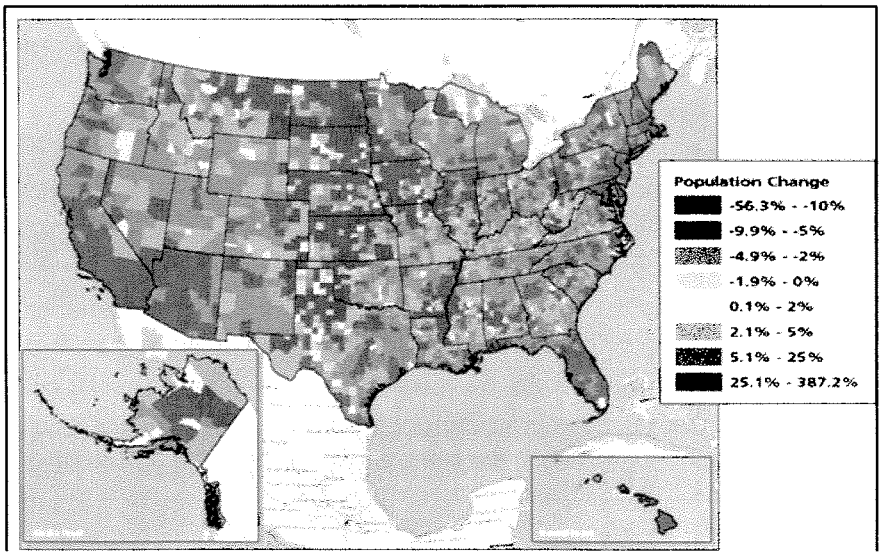
Airports have evolved over the past 100 years to meet the specific needs of the communities they serve and the national aviation system. The first airport in the United States opened in 1909 in College Park, Maryland, and is still in operation today. Many airports opened as private landing strips or military airfields in the 1920s, 1930s, and 1940s. Still other airports were established by local jurisdictions and continue to serve as general aviation facilities providing access to small communities and remote areas.

The United States turned its attention to the development of civilian aviation after the end of World War II. This included a national network of airports and a national airport plan, now known as the National Plan of Integrated Airport Systems (NPIAS). The plan identified existing and proposed new airports to serve commercial and general aviation needs. Specific criteria were established to meet national aviation needs at a reasonable cost. These criteria considered the number of based aircraft and annual operations, scheduled air carrier service, and proximity to other airports in the national plan. Airports that met special needs, such as access to remote populations, could also be included.

The national airport plan released in 1951 identified 2,657 existing airports and 2,288 proposed airports. Many of the proposed airports identified in the 1951 plan were subsequently constructed during the 1950s.

Population Growth in the United States

Population Shifts between 1970 and 2010



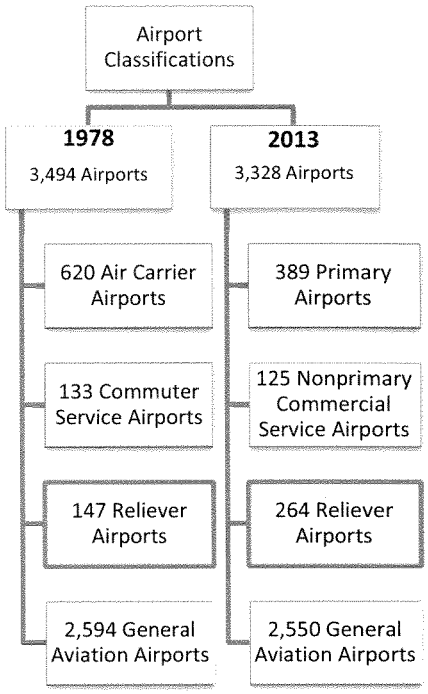
Since the 1950s, aviation in the United States has matured, resulting in more than 3,300 airports consistently included in the NPIAS. Although the number of NPIAS airports remained steady, many airports have changed in size and complexity to meet the travel demands of a growing and changing population and the expanding economy. Between 1970 and 2010, the United States population increased over 50 percent to 308 million according to the United States Census Bureau. There has also been a dramatic geographic shift in the country's population over the last 40 years as indicated in the above map.

This growth has resulted in changing aviation needs. Some communities have grown into major business centers requiring sophisticated aviation facilities. Other regions have seen population decline, reducing the need for aviation facilities.

Airport Classifications

Airport categories have also evolved over time. In the early 1960s, airports were either air carrier or general aviation. In 1962, a special category of general aviation airport, the "reliever" airport, was established to ease congestion at large commercial service airports. In 1982, the reliever program was expanded to include privately owned airports open to the public.

Breakdown of NPIAS Airports, 1978 & 2013



Establishing Reliever Airports

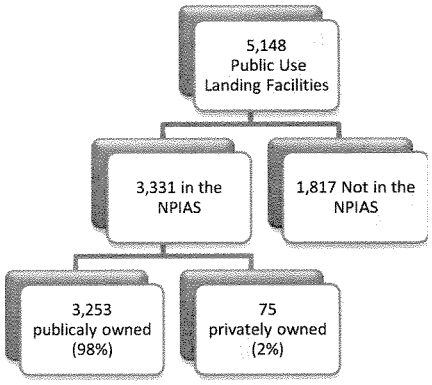
An airport was classified as a reliever if it relieved congestion by drawing slower-moving general aviation activity away from congested airports in large metropolitan areas. In 1978, a total of 147 general aviation airports were designated as relievers for air carrier airports serving the 22 large hub geographic areas. With FAA funding improvements at the reliever airports, the relievers became a more attractive alternative for general aviation pilots. By handling the small aircraft, relievers enabled the larger airports to operate more efficiently. The number of reliever airports peaked in 1998 with 334. This figure illustrates the breakdown of the categories of NPIAS airports in 1978 and 2013, with emphasis on reliever airports.

Types of Airports in the NPIAS 2013-2017

About 65 percent of the public landing facilities in the United States are in the NPIAS and 35 percent are not. One thousand eight hundred and seventeen public use landing facilities are not included in the NPIAS because they either:

- do not meet the minimum NPIAS entry criteria;
- are located at inadequate sites and cannot be expanded or improved to provide a safe and efficient airport;
- are located within 20 miles of another NPIAS airport; or
- the airport owner/operator has chosen not to pursue NPIAS inclusion because they prefer not to be bound by the rules that would accompany Federal funding.

Breakdown of Public Use Airports



Primary Airports

All NPIAS airports are either primary or nonprimary. Primary airports are public airports with scheduled air carrier service and more than 10,000 enplaned passengers per year (enplanements). There are 389 primary airports (Calendar Year (CY) 2012 data). Primary

airports are subdivided into four specific categories defined in statute: large hub, medium hub, small hub, and nonhub.

From 1980 to 1985, the threshold for primary airports was 0.1 percent of the total U.S. enplanements. In 1986, the threshold changed to 10,001 or more enplanements. This increased the number of primary airports by 56 percent from 260 to 405 primary airports.

Nonprimary Airports

Of the 2,939 nonprimary airports, 125 are nonprimary commercial service airports (public airports receiving scheduled passenger service and between 2,500 and 9,999 enplaned passengers per year), 264 are reliever airports, and 2,550 are general aviation airports.

With the creation of the NPE program in 2000, more airports have requested entry into the NPIAS because of the increased availability of "guaranteed" Federal funding. The FAA uses specific criteria to review airport requests to be included in the NPIAS. Since April 2006, FAA has approved only 10[1] airports to be added to the NPIAS.

Existing Entry Criteria for the NPIAS

The FAA may consider adding a public use airport to the NPIAS based on the current activity, service area, and its function/role in the transportation system. The existing entry criteria are contained in FAA Order 5090.3C: Field Formulation of the National Plan of Integrated Airport Systems (NPIAS).

For the following airport type:	The airport must meet the following criteria to be included in the NPIAS:
a. Commercial service airport.	Publicly owned airport with scheduled air carrier service and more than 2,500 annual revenue passengers enplaned entered into the NPIAS as a: 1. Primary commercial service airport – has 10,001 or more enplanements; or 2. Nonprimary commercial service airport – has between 2,500 and 10,000 enplanements.
b. Nonprimary publicly owned airport.	1. Is included in the current State Airport System Plan, accepted by FAA; 2. Has at least 10 based aircraft; and 3. Serves a community located 30 minutes (20-mile radius is often used as equivalent) or more average ground travel time from the nearest existing NPIAS airport.
c. Special justification nonprimary airport.	1. Significant national interest such as serving Native American communities or an isolated community; and 2. A determination that the benefits of the airport will exceed the potential Federal investment.
d. Reliever airport.	1. Relieve congestion at a commercial service airport that is serving a metropolitan area with a population of at least 250,000 or at least 250,000 enplanements; 2. Provide general aviation access to the overall community; 3. Has at least 100 based aircraft or 25,000 annual itinerant operations; and 4. The airport being relieved must be operating at 60 percent of its capacity.
e. Privately owned airport.	1. Meet the reliever airport criteria and be designated as a reliever airport; or 2. Have scheduled service and at least 2,500 passenger enplanements per year (currently there are no airports meeting criteria #2).

[1] In 2006, a more centralized process requiring specific information and approval by FAA Headquarters was established before approving a new entry into the NPIAS.

Privately owned Airports

Currently, there are 75 privately owned airports in the NPIAS. It may be inappropriate for FAA to invest in a privately owned airport unless that airport is public use, has extremely high activity with large numbers of based aircraft, and is at least 20 miles from another airport of similar capacity. This is because providing Federal funds for capital investments at a privately owned airport appears to financially benefit the airport owner when FAA could instead make a similar investment in a nearby publicly owned airport.

The FAA's experience with low-activity, privately owned general aviation airports has been mixed. This is because of their minimal aviation role, lack of financial depth and the inability to control off-airport growth crowding the airport. Additionally, private owners may request infrastructure improvements based on highest potential return on their investment. Moreover, FAA has seen a number of privately owned airports close when there is no reliable succession plan in place for a subsequent owner to take over operations when the existing owner is no longer in a position to continue operations.

There are 34 privately owned general aviation airports in the NPIAS. Some of these airports were put in the NPIAS when the local community was considering acquiring the airport which would have made the airport publicly owned. Others were reliever airports that were redesignated as general aviation in 2000 with the release of the NPIAS order 5090.3C. All 34 airports are unclassified.

There are 41 privately owned reliever airports in the NPIAS. These airports were originally included in the national system as relievers for commercial service airports, but no longer meet the entry criteria. Nineteen of the privately owned relievers are unclassified.

Reliever Airports

The current ASSET categories describe the general aviation system of airports better than the reliever category that was created decades ago. As a result, the reliever category for certain general aviation airports is no longer needed and can be eliminated. The associated discretionary set-aside for certain reliever airports is very small and can be eliminated without any impact on the current reliever airport community, particularly because FAA routinely provides substantially more funding for airports that have historically been in this category.

Removal from the NPIAS

Generally, airports are not removed from the NPIAS unless the airport closes or requests that FAA remove the airport. However, if an airport no longer meets the NPIAS criteria and has not accepted a Federal grant, FAA may determine that the continued inclusion of the airport in the NPIAS is no longer in the Federal interest. Approximately 57 airports[2] have been removed from the NPIAS since 2006. Many of these airports were privately owned and had never accepted a grant or had closed.

[2] In 2006, FAA began tracking airports that were removed from the NPIAS.

National Review of General Aviation Airports

In cooperation with the aviation community, FAA recently completed two top-down reviews of the general aviation airports in the NPIAS. The results of these efforts are in the May 2012 report: "General Aviation Airports: A National Asset" and the March 2014 report: "ASSET 2: In-Depth Review of the 497 Unclassified Airports."[3] These reports are referred to as the ASSET 1 and 2 reports.

The FAA documented airport roles and aeronautical functions these facilities provide to their communities and the national airport system. These functions include emergency preparedness and response, direct transportation of people and freight (including postal services), commercial applications such as agricultural spraying, aerial surveying, and oil exploration. The result of the report was that 2,455 airports were divided into four categories, based on activity and role. Some airports were categorized using a public service role rather than on based aircraft or operations. However, FAA found that, in general, based aircraft is the most reliable indicator of activity at small airports.

The remaining 497 airports did not have enough activity or enough based aircraft to categorize the airport. The FAA considered these airports as unclassified airports. The FAA then conducted a more in-depth study of these 497 airports in 2013 (ASSET 2). As of the publication date of this report, there were 252 unclassified airports.

Many of the unclassified airports have received Federal funding in the past and may be considered for future funding if and when activity levels increase justifying AIP-funded capital investments.

Validated Based Aircraft as a Measure of Activity

Operations (takeoffs and landings) are a key measure of an airport's activity levels, but this data is not often available for airports without control towers. Instead, FAA has long recognized that the number of based aircraft is a valid indicator of an airport's activity levels (based on a strong correlation between based aircraft and operations), but has historically had difficulty obtaining consistent, accurate, and verifiable data about based aircraft. For many years NPIAS airports self-reported the number of aircraft based at the airport. The airport community was reluctant to provide detailed information citing privacy concerns or lack of accurate data. Some aircraft owners may have been concerned about the possible property tax implications.

Because based aircraft is a key indicator for activity, beginning in 2007, FAA and the states worked together to validate active aircraft using publicly available aircraft data. The FAA identified the number of active and airworthy aircraft based at NPIAS airports. Based at least in part to better reporting, the total active and airworthy aircraft counts decreased about 18 percent from 152,668 aircraft in 2007 to 125,313 aircraft in 2014.

The FAA found that there is no requirement for an aircraft owner to identify the airport where their aircraft is based. While FAA will continue to survey airports about based aircraft, FAA also recommends aircraft owners report the location of their aircraft as part of their triennial aircraft registration process. For airports requesting entry into the NPIAS, FAA now requires validated based aircraft counts through www.basedaircraft.com.

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[3] This report is available online at: http://www.faa.gov/airports/planning_capacity/ga_study/

Using Economic Impact on Surrounding Communities

Many stakeholders suggested that the economic impact of the airport on the surrounding community should be one of the criteria used to categorize an airport. After extensive consideration and discussion, FAA decided not to include this data. For the large commercial service airports (such as Chicago O'Hare International or Los Angeles International), there are thousands of jobs associated with the airport, bringing millions of dollars (or more) in revenue to the surrounding communities. However, in most other cases, it was not the airport driving the development of the surrounding communities, but the communities that drove the location and development of the airport based on passenger demand and other economic opportunities. Therefore, the general aviation entry criteria are not primarily focused on community economic benefits that may result from an airport, and FAA does not support the establishment of a new airport solely as a prospective, speculative driver for economic growth. Rather, FAA supports the general aviation airports primarily to provide a community access to the national transportation system.

Updating ASSET Roles

The FAA plans to review ASSET criteria in 2015. Adjustments to the criteria will be considered during that review. Input from industry stakeholders will be a critical component of this effort.

Revisions to ASSET criteria and roles will be completed by the fall of 2015. This will ensure that the changes are included in the next NPIAS report to Congress (2017-2021), which FAA will begin working on in the fall of 2015. The NPIAS report to Congress is due to Congress by September 30, 2016, and will include any revisions to ASSET criteria and roles for nonprimary general aviation airports.

Updating NPIAS Criteria

The FAA is in the process of updating FAA Order 5090.3C and is considering several changes to the entry criteria. Some of the changes being considered include:

- clarifying the minimum distance between NPIAS airports (i.e., changing it to no closer than 30 miles from the next nearest NPIAS general aviation airport);
- eliminating the ground travel time equivalent because it is too difficult to apply consistently; and
- linking airport's role in the system with future development.

The categorization of nonprimary airports developed through the ASSET studies have been incorporated in the NPIAS Report to Congress and are being incorporated into FAA guidance, including the updated NPIAS order.

Considering Airports in Close Proximity

The FAA often receives NPIAS entry requests from airports that are very close to another airport. This is frequently because the requesting airport is in a different county or city. When a second or third general aviation airport is already operating within 30 miles, it is likely that it would be duplicating services. Therefore, the updated NPIAS criteria will recommend verifying whether multiple airports are needed and whether the airports can be sustained both financially and by aeronautical activity within a small area.

The NPIAS order update will also consider a new requirement that the state or metropolitan area have completed a system plan that indicates the number of based aircraft within the catchment area, and determine if there are adequate local resources and sufficient demand to support all of the airports. However, inclusion in a system plan does not automatically mean an airport will be added to the NPIAS.

Findings

Listed below are six findings related to the NPIAS criteria and how they were applied to the 2013-2017 Report.

1. The criteria used for including airports in the plan generally meet the aviation needs of the United States.
2. The NPIAS entry criteria have been appropriately applied to airports requesting entry into the NPIAS, however, privately owned general aviation and reliever airports have not been updated since 2000.
3. The new ASSET roles provide a better delineation of the general aviation airport community and are being adopted in FAA guidance. The reliever designation is outdated and does not reflect an airport's current role in the system.
4. The classification of the airports within the NPIAS itself largely conforms to the stated aviation policies of the United States in title 49 United States Code (U.S.C.), § 47101.
5. Using prospective, speculative economic impact to the surrounding community is not a sufficient rationale for adding an airport to the NPIAS.
6. Many states have multiple airports within a small area duplicating services and competing with each other.

Policy Considerations

There are two specific policy issues that FAA has identified for consideration.

1. Airports not meeting NPIAS criteria.

During detailed FAA studies, FAA determined that there are 252 nonprimary airports in the NPIAS that do not meet NPIAS criteria or fall within an ASSET category. The FAA considers these airports unclassified, because they do not meet the minimum NPIAS criteria. There are two options identified for airports not meeting NPIAS criteria.

Option a. Remove airports that do not currently meet NPIAS criteria.

These 252 unclassified airports can be removed from the NPIAS using an established process. In most cases, any grant obligations can be forgiven by FAA, allowing the airport to either remain open or to be closed. The FAA can offer a limited program to allow certain airports (252 airports plus other basic airports) to pull out of the NPIAS. During this amnesty program, FAA would forgive the grant obligations, and forgo any repayment requirements for unamortized grant improvements. This would relieve communities, cities, and counties of the burden of maintaining the airport if they have determined that the airport is no longer a benefit to the airport system.

Option b. Do not remove airports that do not meet NPIAS criteria.

Allow the 252 airports to remain in the NPIAS as unclassified airports. These airports remain eligible for AIP funding for safety related projects only. The FAA will continue to monitor activity at these airports and review their status on a 5 year recurring basis. The review results will be reflected in the NPIAS reports beginning in 2017.

2. Eliminate the Reliever Airport Designation.

A special category of general aviation airport, the reliever airport, was established in 1968. An airport was classified as a reliever if it was a general aviation airport that relieved congestion by drawing slower moving general aviation activity away from congested airports in large metropolitan areas. Over the last 47 years, there has been dramatic growth in population and shifts in population which has resulted in changing aviation needs. Currently, only a few large hub airports have chronic delays.

The reliever category, established in 1962 and contained in statute, does not accurately reflect the role of these airports in the current aviation system. There are 264 reliever airports and the majority do not meet the criteria. If all 264 current reliever airports are redesignated as general aviation airports, 223 publicly owned airports would not be impacted. However, 41 privately owned airports would no longer be eligible to receive a grant.

There are two options for privately owned airports in the NPIAS. Both options include removing the reliever airport designation. The difference in the options is how the privately owned airports are handled.

Option a. Allow high activity privately owned airports that meet ASSET National or Regional criteria to remain in the NPIAS.

After eliminating the reliever designation, move the privately owned (former reliever) airports to the appropriate ASSET category. This allows 13 private airports meeting the National or Regional criteria to remain in the NPIAS. The remaining 28 privately owned reliever airports that do not meet existing criteria could remain in the NPIAS as unclassified airports.

Option b. Remove all privately owned reliever airports from the NPIAS.

There are 41 privately owned reliever airports. After eliminating the reliever designation, all 41 could be removed (13 that meet existing reliever criteria and 28 that do not) from the NPIAS.

Chapter 2: Capital Development Needs Compared to AIP Funding

Requirement

Section 155(b)(2) of the FMRA directs FAA to review the changes in airport capital needs as shown in the 2005-2009 and 2007-2011 plans, compared with the amounts apportioned or otherwise made available to individual airports between 2005 and 2010.

Section 155 (b)(3) of the FMRA directs FAA to compare the AIP amounts received in apportionments, state apportionments, and discretionary grants during same years reported in the plan.

Overview

This section examines the changes in airport capital needs compared with the amounts apportioned or otherwise made available to individual airports. Although the FMRA directed FAA to use airport capital needs between 2005 and 2010, FAA used data between 2007 and 2013. This is because in 2004, FAA began using a new centralized data management system called the System of Airports Reporting (SOAR). SOAR integrated the development planning (NPIAS and Airport Capital Improvement Program) and funding (AIP) data. This new database also utilized a new data structure called the Overall Development Objective, which grouped the work associated with a multiyear project under one overall development objective. With the advent of SOAR, FAA began using planning timeframes of 1-5 years, 6-10 years, and 11-20 years, rather than a specific fiscal year. The planning timeframes are similar to those used in master planning and shown on airport layout plans.

These new data structures were reflected in the 2007-2011 NPIAS report to Congress. Because the grants and planning information prior to 2007 cannot be accurately compared to later information, the airport capital needs have been reviewed using the capital needs as shown in the 2007-2011 and the 2009-2013 NPIAS reports.

AIP Funding

AIP funding comes from taxes on passenger tickets and aviation fuel, and is used by FAA to fund airport planning and development projects that enhance safety, security, capacity, and mitigate noise. There are two main categories of AIP funding: entitlements and discretionary funding. The subcategories of AIP funding are shown below.

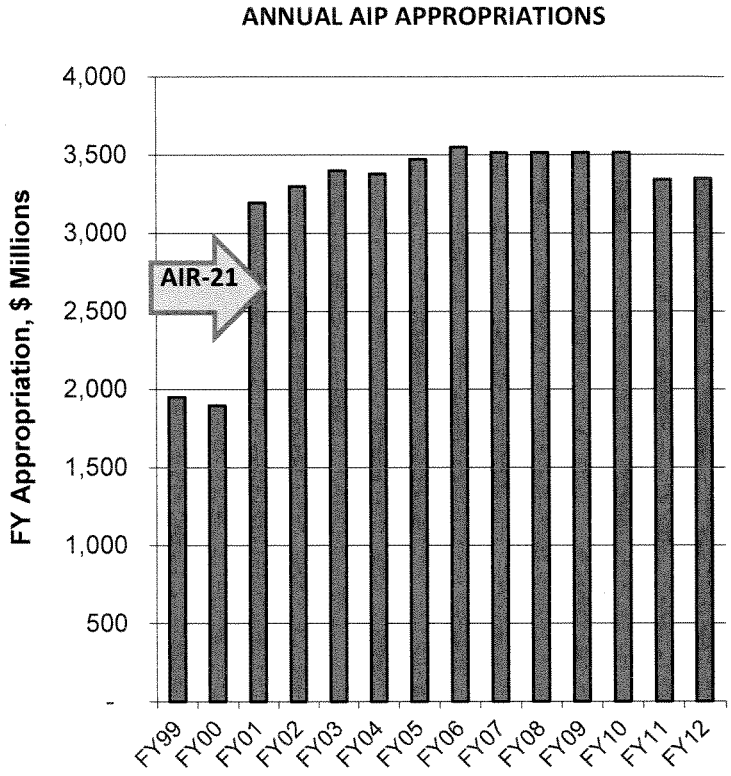
Types of AIP Funding

Entitlement	Discretionary	Discretionary Set Asides
•Primary Airport •Cargo Airport •Alaska Supplemental •General Aviation Entitlements • *State Apportionment* • *Nonprimary Entitlement*	•Capacity/Safety/Security/ Noise •Discretionary	•Environmental and Noise •Military Airport Program •Reliever Set Aside

In general, about two-thirds of the AIP's annual funds are allocated to airports via entitlement grants that are based on formulas found in title 49 U.S.C., § 47114.[4] The remainder is in discretionary and discretionary set-aside funds for specific projects based on their overall importance and priority. AIP grants can only be used for eligible capital projects, equipment, and certain types of planning and environmental studies. AIP funds cannot be used for airport operating expenses or for debt financing.

Impact of AIR-21

A significant change to AIP funding occurred through the Wendell H. Ford Aviation Investment and Reform Act for the 21st Century (P.L. 106-181), commonly known as AIR-21, enacted April 5, 2000. AIR-21 increased AIP levels from below $2 billion per year to above $3.2 billion per year and changed several entitlement grant formulas.



Primary Airport Entitlements

Primary airports receive entitlement funding based on the number of enplaned passengers (known as a passenger entitlement). AIR-21 doubled the passenger entitlements whenever the total AIP is at or above $3.2 billion. It also increased the minimum and maximum entitlement grant amounts that are available to primary airports to $1 million and $26 million.

Cargo Entitlements

A small percentage of AIP funding is available to airports that handle significant amounts of cargo in all-cargo aircraft (as opposed to being carried in the belly of a passenger jet). The majority of airports receiving a cargo entitlement are primary airports, though five nonprimary airports receive a cargo entitlement.

State Apportionment

The general aviation entitlement percent is divided into two categories: state apportionment and NPEs. State apportionment is available for nonprimary airports, and many state aeronautical agencies rely heavily on these funds for the highest priority nonprimary airport projects. States vary in terms of how directly they get involved in the decisions on where state apportionment funding goes. In the

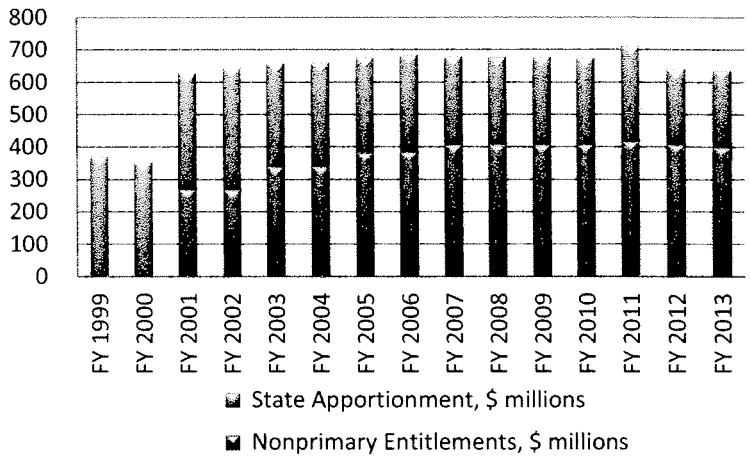
[4] Each specific subcategory of AIP funding is defined in statute with specific rules and restrictions. These are not discussed unless they are germane to the issues at hand.

10 block grant states, the states have broad latitude. In other cases, states provide input to FAA. Regardless, this funding source can also enable states to undertake statewide initiatives, such as improving runway conditions across multiple airports or installing weather or navigational aids at multiple airports.

Impact of AIR-21 on State Apportionment

Before AIR-21, state apportionment received the total general aviation entitlement. In FY 2000, state apportionment was $353 million (18.5 percent of all AIP funding). AIR-21 increased the general aviation entitlement to 20 percent when the AIP is at or above $3.2 billion, but then apportioned NPEs out of that amount to public use airports in the NPIAS. In FY 2001, the first year that NPE was allocated, the total general aviation entitlement increased from 18.5 percent to 20 percent of the AIP, but 42 percent of that amount went to NPEs. From FY 2001 to FY 2013, total NPEs increased from around $270 million to over $400 million, while the remaining state apportionment dropped from $358 million to around $238 million. The change in state apportionment and NPEs between 2001 and 2013 is shown in the adjacent chart.

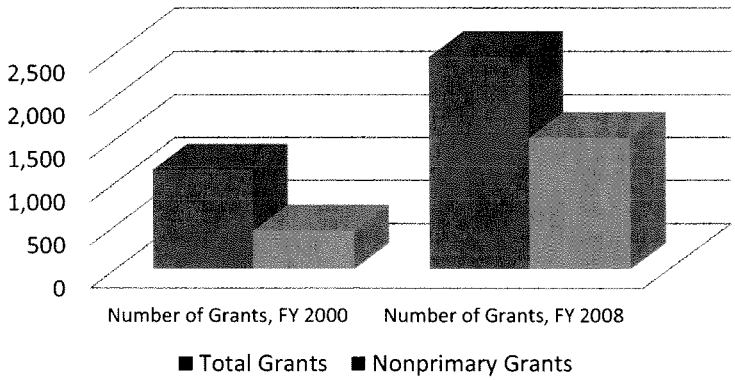
State Apportionment and NPEs, FY 1999 - 2013



Frequency of Grants to Nonprimary Airports

Before AIR-21 and the NPE program, FAA did not typically provide yearly grants to general aviation airports. An airport would receive a grant every 10 years or so for major rehabilitation of the airfield pavements, obstruction removal, and other high priority projects. This worked well because the airport only had construction impacts during one construction season. Once nonprimary airports began receiving NPEs, the frequency of general aviation airport grants increased. The number of NPE grants increased again after the FY 2003 Vision 100—Century of Aviation Reauthorization Act (Vision 100) reauthorization because it allowed airports to use NPE for runway maintenance and revenue producing projects.

Total Number of Grants Issued Compared to the Number of Nonprimary Grants Issued, FY 2000 and FY 2008



In FY 2000, of 1,150 AIP grants, 445 (39 percent) were to nonprimary airports.[5] In FY 2008, of 2,457 grants, 1,523 (62 percent) were to nonprimary airports.

NPIAS Planned Projects

The FAA uses data derived from locally prepared airport master plans, airport system plans, capital improvement plans, and airport inspections to develop the NPIAS. These airport planning documents consider all significant aviation requirements that are tied to the current and forecasted use of each airport and identify the development needed to accommodate the forecasted activity. The projects that are included in the NPIAS consider the airport's category, the type of project, and the agency's goals for safety, capacity, efficiency, security, and infrastructure preservation.

Only Eligible and Justified Projects Are Included in the NPIAS

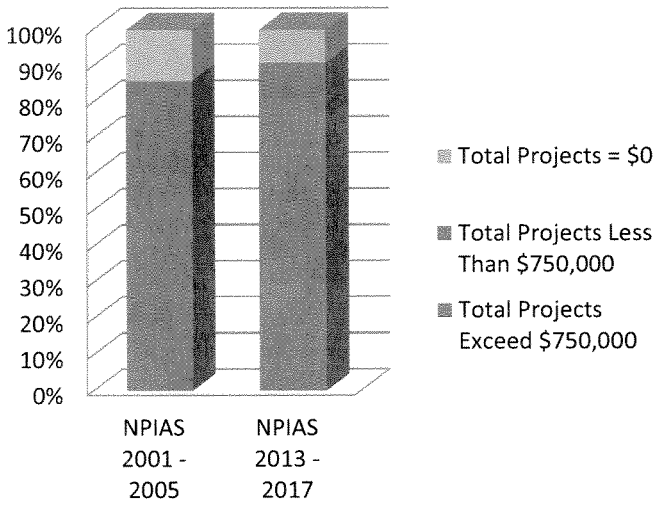
Only development that is eligible for Federal AIP funding and justified by the aviation activity forecast over the next 5 years is entered into the NPIAS database for inclusion in the next 5-year estimate. This combination of a planning process that links development to activity and an FAA review of specific proposed projects results in reasonable and well-documented estimates of future airport projects in the next 5 years. However, the actual timing and cost of development may vary. For instance, projects may be deferred or developed in phases in order to reduce immediate costs, or conversely, an unexpected rapid increase in activity may justify accelerating certain development.

Nonprimary Airports Planned Projects

While the NPE program was intended to direct AIP funding to the smallest airports in the NPIAS, there were a few unintended consequences. Because NPEs were linked to published NPIAS planned projects, this transformed the NPIAS report to Congress into a funding vehicle. This is because AIR-21 requires that FAA calculate the NPE for each airport to equal one-fifth of the planned projects for each airport shown in the NPIAS, with a cap of $150,000 per airport.

Before AIR-21, the NPIAS report only included AIP-eligible projects that were reasonable and planned projects. After AIR-21, a nonprimary airport had to show at least $750,000 in planned projects in order to receive the maximum NPE. Therefore, to maximize their NPEs, most airports increased the amount of projects shown in the NPIAS to at least $750,000. In other words, this created an incentive for some airports to overstate their near-term development needs.

Costs of Planned Projects in 2001 - 2005 NPIAS Report and 2013 - 2017 NPIAS Report at Nonprimary Airports



[5] The grant summary in FY 2000 did not differentiate between primary commercial service and nonprimary commercial service. Therefore, the 64 commercial service grants were not included in the nonprimary count.

This can be seen in two separate statistics. First, the airports with more than $750,000 in projects in the NPIAS increased 21 percent. Next, the total NPIAS needs for nonprimary airports increased by 55 percent. Normally, development needs at a nonprimary airport should stabilize after nearly 15 years of increased funding. This is because any need for infrastructure improvements should have been met and the types of projects should change from new development to pavement rehabilitation and maintenance.

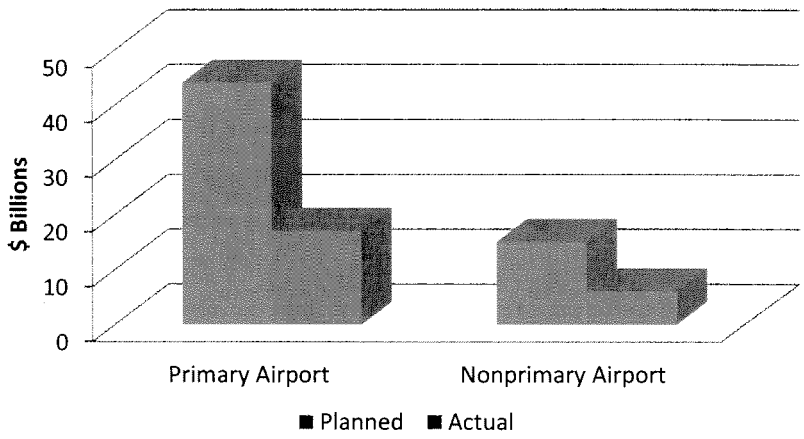
NPIAS Planned Projects Compared to AIP Funding

One of the goals in this report is to determine whether AIP funding is consistent with the NPIAS. The NPIAS planned projects were compared to AIP funding for primary and nonprimary airports between 2007 and 2013. Although the needs identified in the NPIAS consistently exceed the actual amounts of available AIP funding, the types of projects planned do align with the types of projects that FAA ultimately funded.

The FAA selects projects for AIP funding using a priority system. The projects that are related to safety and runways are the highest priority projects. Airfield projects typically have a higher priority than landside projects, as do projects to meet regulatory requirements, such as airport rescue and fire fighting vehicles.

It is not surprising that primary airports show a much larger need compared to AIP funding received. This is because the primary airports, especially large and medium hub airports, have greater project needs. Primary airports may have multiple runways and an extensive taxiway system, as well as expensive terminal projects. However, primary airports are less reliant on the AIP because they can fund a larger percent of their planned projects with non-AIP sources of funds, including passenger facility charges (PFC) and bond proceeds. Most nonprimary airports do not have these non-AIP sources available to fund projects and therefore rely more heavily on AIP funding. Moreover, nonprimary airports may use AIP funds to cover 90 percent of eligible project costs, but large- and medium-hub airports can only use AIP funds for 75 percent of eligible costs.

NPIAS Planned Project Totals Compared to AIP Projects Funded FY 2007-2013



Impacts on the NPIAS: U.S. Economy

In the late 2000s, the amount of AIP-funded projects decreased. The decrease between the two NPIAS report time periods (2007-2011 and 2009-2013) is directly related to two factors.

First, between 2007 and 2011, the national economy suffered a significant downturn, followed by a slow recovery. In fact, while many parts of the United States have recovered back to 2008 levels, some areas have not. This economic impact was felt in market volatility and business uncertainty, which reduced business and leisure travel. This travel reduction was felt in airports delaying large projects both

because of the difficulty in funding sponsor share and because of the reluctance to have unneeded infrastructure that would then have to be maintained.

Impacts on the NPIAS: FAA Authorization Expirations

The second factor was the expiration of the FAA's authorization. The FAA's Vision 100 authorization expired at the end of FY 2007. Following that, there were 23 separate authorization extensions between the expiration of Vision 100 and passage of the FMRA. Because the FAA extension was so uncertain, airports were reluctant to complete project designs, bid projects, or purchase equipment. Many airports chose instead to carry over their funding until the next fiscal year.

These two factors, the United States economy and the FAA authorization extensions, resulted in fewer grants being issued when comparing the time period between 2007 and 2013.

In addition, there was a reduction in the overall AIP funding level from FY 2011 to FY 2012. The overall funding level decreased from $3.515 billion to $3.35 billion—a decrease of $165 million or 5 percent of the total. On the surface, this appears to be a relatively small reduction. However, because there was no change in the entitlement formulas, nearly all of the reduction was felt in the discretionary categories, making it that much harder for FAA to ensure that the highest priority projects received funding.

Projects by Airport Type and Development Category

This report also compared NPIAS planned projects to AIP-funded projects in eight development categories including airfield, terminal, roadway, and hangar projects. This helped determine whether the planned projects reflected in the NPIAS are consistent with the projects that are being funded by the AIP.

Airfield and terminal projects make up about 80 percent of the primary airport planned and funded projects and are least affected by external economic factors. Airfield projects are typically designed using long range forecasts (up to 20 years in the future). Therefore, even during an economic downturn, an airport will likely proceed with planned airfield construction. Also, delaying needed pavement renovation projects will dramatically increase the costs of repairs in the future.

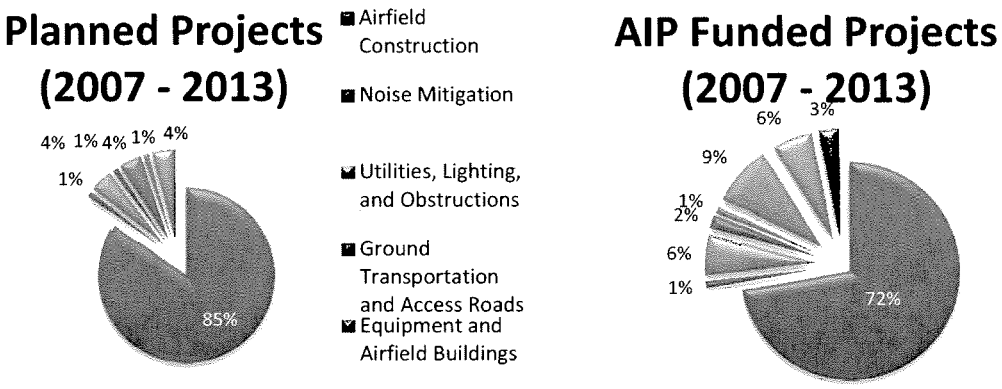
The increase in funding of airfield projects at primary airports (from 59.1 percent of projects planned to 67.1 percent of projects funded) is also probably due in part to the American Recovery and Reinvestment Act of 2009 (ARRA) (P.L. 111-5), February 17, 2009, which allowed airports to supplement AIP with ARRA funds.

However, the percentage of terminal projects actually funded in the same period decreased over what had been planned. The reason for this is likely tied to the U.S. economic climate, which resulted in fewer commercial flights. During the economic downturn, airlines tried to fill up airplanes by decreasing aircraft size. In the smaller, less profitable markets, actual passenger counts decreased as fewer people were flying. If an airport postpones a terminal project, it does not have a huge impact on the airport. Therefore, it is reasonable that, in the face of reduced demand, an airport would have postponed a terminal project. This decision also allows the airport to postpone taking on the maintenance and operating costs of the new terminal area (as well as debt service associated with any bond funding of the local share or portions of the project for which AIP or PFC funding was not available).

For nonprimary airports, the vast majority of both NPIAS planned projects and AIP funding was allocated for airfield construction. This demonstrates consistency between the planning and funding of projects and confirms that AIP funding is being used consistent with the needs identified in the NPIAS and the FAA's priority toward projects that are related to runways and airfields. Many nonprimary airports were able to continue constructing projects during the economic downturn due to ARRA funding and due to the low (5 percent) local share that was required for a project between 2007 and 2012. AIP funding is also available for pavement maintenance projects for smaller airports, which cannot be postponed. Therefore, it is likely that nearly all pavement maintenance projects that were planned were constructed.

A comparison of the NPIAS planned projects and AIP-funded projects between fiscal years 2007 and 2013 is shown in the figure.

Comparison of NPIAS Projects to AIP-Funded Projects



Findings

Listed below are five findings related to airport capital needs and the use of AIP funds.

1. Linking the NPE calculation to the NPIAS planned development impacted the system by creating an incentive to overstate development needs. It also created an incentive for state aeronautical agencies to want more airports in the NPIAS.
2. As NPEs increase, state apportionment decreases.
3. The projects that airports listed in the NPIAS are being completed. For example, 83 percent of primary airport projects in the NPIAS were for airfields and terminals. Seventy eight percent of AIP-funded primary airport projects were for airfields and terminals. Terminal projects are most impacted by an economic downturn, while airfield projects that preserve capacity generally proceed as planned.
4. Airports are planning high priority projects, which are being funded to the limits of available funding by FAA.
5. Even with the economic downturn, FAA has generally been able to help nonprimary airports fund the highest priority projects.

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Chapter 3: Transfers of Entitlements

Requirement

Section 155(b)(4) of the FMRA requested a study on the effect of transfers of airport apportionments, which are allowed under title 49 U.S.C., § 47117(c). Because transfers and apportionment carryover are closely related, this section also reviews carryovers.

Entitlement Transfers

During the review, it was noted that some airports consistently transfer either all or a majority of their NPEs to other airports within their state. This is common between state owned airports in Alaska (235 of 257 NPIAS airports are state owned), Vermont (9 of the 12 NPIAS airports are state owned), and Rhode Island (all 6 NPIAS airports are state owned).

Reasons for Transfers

The reasons that an airport may choose to transfer funds are:

- A planned project may not be ready to go due to any number of reasons potentially including pending environmental review or subsequent permits, pending land purchase, etc.;
- Lack of local (matching) share required for the AIP project (which was 5 percent from FY 2005 through FY 2011 and then reverted to the historical 10 percent level from FY 2012 to the present);
- The airport could be owned by a sponsor that owns multiple airports (such as the States of Alaska, Vermont, or Rhode Island), which maximizes funding through transfers; or
- The airport is receiving NPE funds without having an immediate need for the funding.

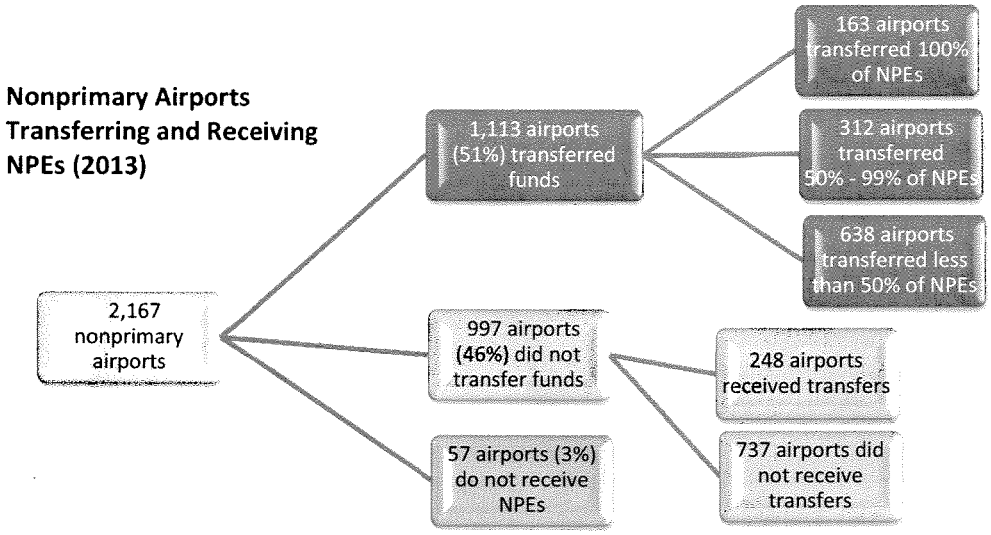
History of Transfers

The history of transfers was reviewed from FY 2001 to FY 2013. Before 2001, primary airports were generally the only airports receiving entitlements. Primary airports were also the only airports that could transfer entitlements. (Before 2001, there were a handful of nonprimary airports that received cargo entitlements, which were not transferred by the airports.)

Nonprimary Airports Transferring Funds in FY 2013

Once nonprimary airports began receiving entitlements in FY 2001, the number of airports transferring entitlement funds and the total amount of funds being transferred rose sharply from $24 million in FY 2001 to $89 million in FY 2007, dropping to $30 million in FY 2012.

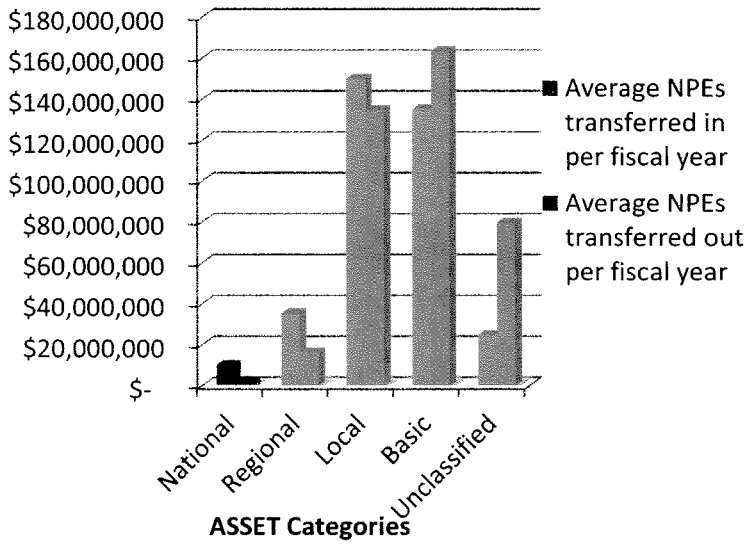
The chart on the next page illustrates how many nonprimary airports transferred and received transfers in FY 2013.



Size of Nonprimary Airports Transferring Funds

The larger national or regional airports received more NPEs than were transferred. On the other hand, the local and basic airports transferred more NPEs than they received. The figure also confirms that the larger airports are generally using their NPE, while smaller airports are transferring it.

Average NPEs Transferred FY2001 -FY 2013



State Owned Airports

One anomaly found in the study is the practice of transferring between state owned airports. For those states that own multiple airports (Alaska, Rhode Island, and Vermont), the transfers seem to be intended to provide flexible funding within the state system. With an average transfer amount of $1.8 million per airport, the State of Alaska transfers the most funding within the state on a per airport basis.

State Owned NPE Transfers, FY 2001-FY 2012

State	Number of State Owned Airports	Number of Airports Earning Entitlements (including non-state owned)	Number of Airports Transferring Funds to Another Airport	Average Transferred
Alaska	235	228	196	$ 1,800,000
Vermont	9	11	9	$ 730,000
Rhode Island	4	5	6	$ 350,000

Nonprimary Airports That Have Not Taken a Grant Since at Least FY 2001

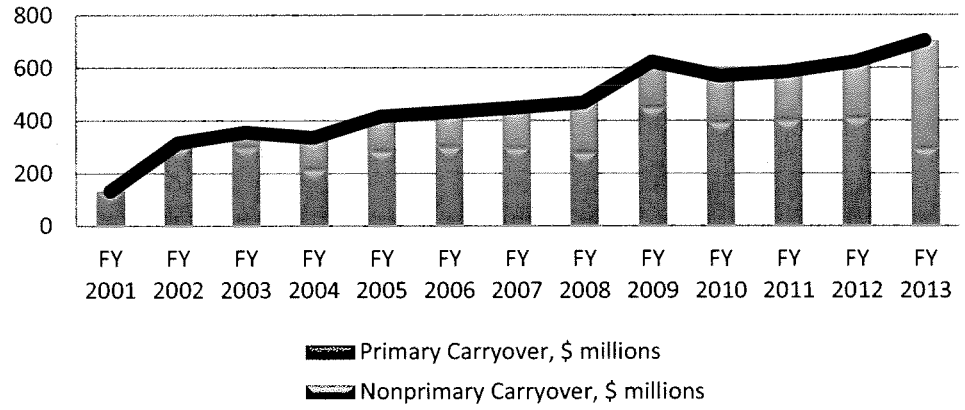
With the advent of the NPE program, many small airports received AIP grants. However, in the years since 2001, 251 of the 2,169 nonprimary airports that are not in block grant states have not taken a grant since the AIP program started in the 1980s. Of these airports, approximately 200 are accruing NPEs that are rarely allowed to expire. In most cases, the funds are transferred to other airports in the state or geographic area. Less than 20 of these airports are in the 3 states listed in the previous table, and earn NPEs that are transferred to other airports owned by the state. It is possible that some of the airports in block grant states have taken AIP grants through the SBGP. It is also possible that some of these may be supported by state aviation programs. However, it may be appropriate for FAA to consider separating the NPIAS from determining the annual AIP entitlement amount for nonprimary airports.

Entitlement Carryover

Consistent with title 49 U.S.C., § 47117(f), if a sponsor does not need to use all of its entitlements in the current fiscal year, it can carry over those funds to use in the next fiscal year. Historically, an airport planning a big project would carry over its entitlement. This reduced the airport's request for discretionary funding, making it more likely that the project could be funded. There are also some projects that are eligible and have the need for discretionary funding, which can lead an airport to carry over its entitlements until discretionary funding is available to fully fund the project.

Before AIR-21, carryover averaged about $117 million per year, ranging about 10-15 percent of the available entitlements. Between FY 2001 and FY 2002, total carryover grew from $132 million to $315 million. By FY 2013, total carryover grew to over $700 million or 30 percent of the total entitlements.

Total Primary and Nonprimary Carryover
FY 2001-FY 2013



Primary Airport Carryover

AIR-21 doubled the primary passenger entitlement with a resulting increase in primary carryover. The primary carryover spiked following the economic downturn in FY 2009, but has since gradually fallen to 35 percent of the primary entitlement, similar to amounts seen in FY 2005.

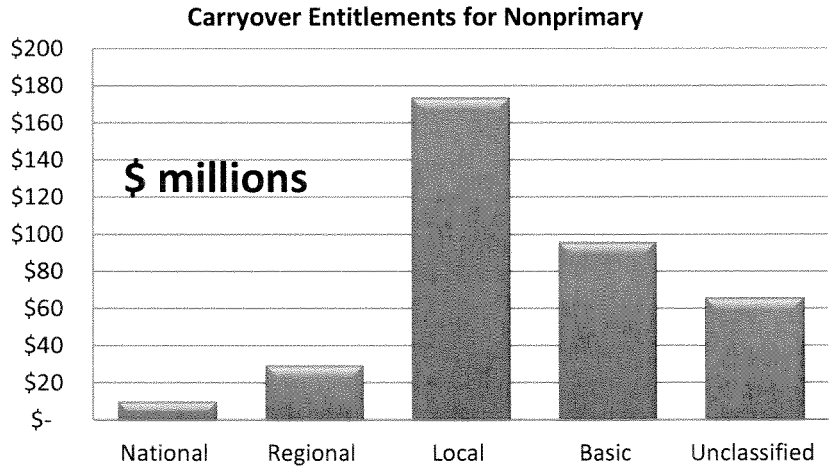
Primary carryover appears to be driven by four factors:

- The types of projects that the airport is focused on addressing and the degree of confidence about when (and at what levels) AIP funds may be available;
- The availability of funds for local match;
- The degree of focus the airport may have on non-AIP eligible projects (such as revenue-generating facilities); and
- By the nation's economic condition with projects delayed as airports defer taking on debt or increasing operating costs.

Nonprimary Airport Carryover

Since the creation of the NPE program in FY 2001, the amount of carryover has increased every year with carryover now exceeding the amount of NPEs allocated[6]. Within 1 year after the NPE program began, the nonprimary carryover began to climb. The nonprimary carryover percent has climbed from 5 percent of the total NPE in FY 2002, to 51 percent in FY 2012, to 100 percent in FY 2013[7]. The total amount of carryover for all nonprimary airports in FY 2013 was $376 million, which averages about $150,000 or the yearly maximum entitlement for a nonprimary airport.

At this point, it is too early to determine whether the spike in FY 2013 is an anomaly, or whether the nonprimary airports will continue to carry over their entitlements at such high rates. As shown in the chart below, the smaller nonprimary airports carried over more of the NPE than the larger nonprimary airports.[8]



[6] This is possible because the amounts carried over each year can include not just the current year entitlement, but also entitlements that were carried over from previous years.
[7] See footnote 6.
[8] The chart does not include those airports in block grant states. This is because FAA issues grants to the block grant states each fiscal year, eliminating the need for carryover.

Findings

Listed below are 12 findings related to transfers, grants, and carryover.

Transfers

1. State owned airports frequently transfer entitlement funds between airports.
2. Transfers require ongoing relationships with other airports or with state aviation departments to facilitate the transfers.
3. Up to about $30 million is accrued each year by airports that have not taken grants, which is then transferred to other airports.
4. Fifty-one percent of nonprimary airports in non-block grant states have transferred some of their NPE funds.
5. Forty-six percent of nonprimary airports in non-block grant states did not transfer any of their NPE funds.
6. Three percent of nonprimary airports in non-block grant states did not receive any NPE.

No Grants

1. Nearly 15 years after the NPE program's inception, there are approximately 250 nonprimary airports that have not taken a grant. Of these 250, about 200 are accruing NPEs based on their stated development needs.
2. The allocation of NPEs to airports that have not taken grants but continue to show stated development needs (and thus accrue NPE funds) may be, in part, due to the block grant program but also may be creating artificial development needs in the NPIAS amounting to about 10 percent of the program funding.

Carryover

1. When nonprimary and primary airports do not use their entitlements in a fiscal year, the airports return the funds to FAA. The FAA then uses those funds for current year projects. This return/reuse of funds in a future year is called carryover. Because carryover generally occurs late in the fiscal year, large amounts of carryover reduce the overall efficiency of the program.
2. Both nonprimary and primary airports may carry over entitlement funds in order to subsequently fund a larger project.
3. The amount of carryover appears to be directly related to how early AIP funds are available in a fiscal year. In years when FAA is unable to distribute funds until later (due to partial year authorizations or continuing resolutions), many airport sponsors are unable to bid projects and complete construction before winter sets in. In this case, they are more likely to carry over the funds to the following year.
4. Large amounts of carryover also impact future years since FAA must then protect the carryover amounts available to the airports at the start of the grant season, significantly reducing the amount of discretionary funds available at the inception of the program each year.

Policy Considerations

Changing the Nonprimary Airport Entitlement and Method of Calculation

Since the introduction of NPE in FY2001, the smaller general aviation airports have been using the funding for low priority projects, transferring it to other airports, or are allowing it to expire. (Transferring entitlements between airports is specifically allowed by statute.)

Nonprimary airports are carrying over their entitlement funding at an increasing rate. For the first time, (FY 2013) the nonprimary airports carried over more than the nonprimary airports earned in entitlements. In a few cases the airports were banking funds for future projects, but in many cases the funding was simply carried over.

The yearly amount ($150,000) and the total amount that an airport is allowed to "bank" ($600,000) is not enough to fund an airfield project such as rehabilitating or extending a runway.

At the same time, the $600,000 banked funding is perceived to be too large for most airports to consider transferring funding to another airport. As a result, the airports are requesting low priority projects (such as terminal projects) that are generally not needed at the smaller airports.

When Vision 100 reauthorization allowed airports to use NPEs for revenue producing projects, airports increasingly requested funding for hangars, fuel farms, and terminals. These projects have largely been completed.

The NPE has come at the expense of the state apportionment, which had been used to fund high priority projects within a state. Since the NPE is calculated *first* out of the General Aviation apportionment, the state apportionment has dropped each year.

Despite the availability of funds, some airports have continued to earn entitlements (based on reported development needs) and consistently transferred those entitlements to other airports.

If the intent is to optimize federal funding to the nonprimary airports, the four policy options are:

Option a. The NPE could become a *subset* of the total state apportionment, thus returning the distribution of the General Aviation Apportionment fund according to state population and area. Any returned NPE would stay within the state in which it is earned.

Option b. The NPE could be eliminated, replaced by a minimum funding amount to the individual states.

Option c. The NPE amount could be varied, depending on the type of airport. For example, an unpaved airport with few operations would receive less than a large airport, such as Teterboro.

Option d. The NPE program could remain unchanged.

Chapter 4: Primary Airport Apportionment

Requirement

Section 155(b)(5) of the FMRA requires an analysis on the feasibility and advisability of apportioning passenger entitlements based on the ratio of its passengers to the total passengers and then calculating the entitlement based on the total passenger entitlement funding in FY 2009.

Background

Each year, on average, about 390 airports qualify as a primary airport. These airports range from one of the busiest airports in the United States and the world (Hartsfield-Jackson Atlanta International) where about 871,000 passengers per week board airplanes (6 percent of the total passenger enplanements in the United States) to the Gustavus, Alaska airport where an average of 194 passengers per week board an airplane.

The enplanements by hub size are shown on the adjacent chart.

Primary Airports (FY 2013)

Airport Classification	Number of Airports	Percentage of Total CY 2011 Enplanements
Large Hub	30	72%
Medium Hub	33	16%
Small Hub	71	8%
Nonhub	250	3%
Total	**384**	

Note: a very small percentage of enplanements occur at nonprimary and non-NPIAS airports.

Changing the Passenger Entitlement Formulas

Currently, the minimum passenger entitlement a primary airport receives is $1 million per year and the maximum is $26 million (when AIP is $3.2 billion or more[9]).

Although the study required using the FY 2009 passenger entitlements (when the passenger entitlements totaled $849 million), the passenger entitlements in FY 2013 totaled $850 million, so there is little difference between the two amounts.

The FAA found that by using the percentage method, the largest airports like Hartsfield-Jackson Atlanta International, which handle the most passenger traffic in the United States, would see calculated entitlements nearly double to over $53 million. However, only the busiest 12 airports would see an increase in entitlements with the remaining airports seeing a decrease. The Gustavus, Alaska, airport would see a decrease in passenger entitlements from $1,000,000 to $11,000. This assumes that the minimum and maximum primary entitlement limits are not retained.

Except for the 12 primary airports enplaning the most passengers, 372 primary airports would see an average annual entitlement decrease.

Findings

A comparison of entitlement calculations based on current formulas and using the ratio (or market share) percentage of enplanement method resulted in three findings:

1. The majority of passenger traffic is concentrated at the largest airports.

[9] Under title 49 U.S.C., § 47114(c)(1), the maximum and minimum entitlements drop to $22 million and $650,000 when AIP funding is below $3.2 billion.

2. The majority of the entitlement funding would be concentrated in the largest airports using the ratio (or market share) approach with all but 12 airports seeing a reduction in passenger entitlements.
3. Smaller airports would see a significant reduction in the annual yearly passenger entitlements.

Policy Considerations

Two options are identified for consideration below.

Option a. If the intent is to have all the airports receive at least as much as it allocated under law today, then the percentage of enplanement method would have to be modified to include maximum and minimum entitlements, with other modifications within the primary airport category using hub size.

For example, the formula could require that a certain percent be provided to the large, medium, small, and nonhub airports to ensure that higher amounts are distributed to the smaller primary airports.

Option b. If the intent is to change the calculation of passenger entitlements, then the primary entitlement threshold could be raised from 10,001 passengers to 70,000 passengers which is currently the point where the minimum entitlements increase above $1 million. The 148 nonhub primary airports that enplane fewer than 70,000 passengers could receive something less than $1,000,000 (e.g. $750,000). The nonprimary commercial service airports with between 2,500 and 10,000 could receive $500,000.

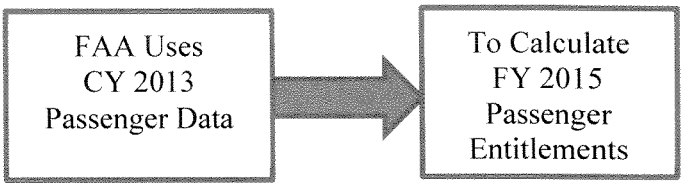
Chapter 5: Reviewing Passenger Enplanements

Requirement

Section 155(b)(6) of the FMRA requires FAA to document and review the methods used by airports to reach the 10,000 passenger enplanement threshold. The review included whether such airports subsidize commercial flights to reach this threshold at every airport in the United States that reported between 10,000 and 15,000 passenger enplanements during each of the 2 most recent calendar years for which such data is available.

Passenger Enplanement Data Collection

Passenger data is collected for a full calendar year and that data determines the category of an airport for the following Federal fiscal year.



Data Sources

The FAA uses passenger enplanement data from its Air Carrier Activity Information System (ACAIS) revenue passenger boarding and all-cargo database to determine the airport's category (commercial service or general aviation) and to allocate AIP entitlement funds to eligible airports.

The ACAIS data comes from two sources:

1. Required air carrier reporting to the U.S. Department of Transportation's (DOT) Bureau of Transportation Statistics (BTS) on Form 41, Schedule T-100, T-100(f), or Form 298C; or
2. Voluntary submittal of FAA Form 1800-31, Airport Activity Survey (By selected Air Carriers) from title 14 Code of Federal Regulations (CFR), part 135, on-demand operators.

The BTS provides most of the revenue passenger enplanement data used by FAA. Large air carriers, commuters, and foreign air carriers report their activity data to BTS. The data consists of passenger and cargo capacities and traffic actually carried, by geographic entity (such as Domestic, Latin America, Atlantic, and Pacific) and type of service (such as scheduled and/or nonscheduled) for each month.

In addition on-demand aircraft operators (part 135 carriers) report annually to FAA using FAA Form 1800-31. The reported data makes up about 0.1 percent of all of the passenger data used by FAA. In CY 2012, out of 732 million passenger enplanements, less than .01 percent (about 948,500 passengers) were reported voluntarily by on-demand aircraft operators on FAA Form 1800-31.

Annual Validation Process and Schedule

The data obtained from the above sources are merged into the ACAIS database, then reviewed by FAA staff and the individual airports, and is completed before the beginning of the fiscal year.

Purpose of Passenger Enplanement Data

The FAA uses the final data to calculate passenger entitlement funds. If an airport with scheduled service meets the 10,001 passenger threshold, the minimum entitlement (in FY 2014) is $1,000,000. For an airport with 10,000 or fewer passengers, the entitlement drops to a maximum of $150,000. Therefore, an airport that is close to reaching 10,001 enplanements near the end of a calendar year has a significant incentive to employ a variety of methods to meet the 10,001 enplanement threshold.

Methods Used by Airports to Reach the 10,000 Passenger Enplanement Threshold

The ways that an airport can try to increase enplanements are to:

- promote scheduled air service provided by the federally funded Essential Air Service (EAS) program if the community is eligible to receive EAS;
- pursue a short-term Federal grant through the Small Community Air Service Development Program (SCASDP);
- reach out to part 135 on-demand aircraft operators that used the airport and ask them to voluntarily report their revenue passenger data;
- review data reported by the air carriers; and
- take other steps to increase enplanements.

Federally Funded Programs for Airports to Develop or Sustain Air Service

It can be challenging for an airline to establish or sustain air service in smaller communities, primarily due to the airline's high fixed costs for labor and equipment that exceed passenger revenues. Congress established two programs to help support air service to small communities: the EAS program, which provides about $100 million in subsidies per year; and SCASDP that provides about $10 million per year in grants.

Essential Air Service

The EAS program was put into place to guarantee that small communities that were served by certificated air carriers before deregulation maintain a minimal level of scheduled air service.[10] The DOT currently subsidizes air carriers to serve 159 rural communities (including Alaska) across the country. EAS-eligible communities are currently in 35 states and Puerto Rico with equipment ranging from as small as 3-seat aircraft to Boeing 737 aircraft in Alaska to mostly 9-seat or 50-seat aircraft outside of Alaska. No new communities are permitted to join the program, except for those in Alaska and Hawaii.

Small Community Air Service Development Program

The Wendell H. Ford Aviation Investment and Reform Act for the 21st Century (AIR-21) established the SCASDP as a program designed to help smaller communities enhance their air service and address issues related to high air fares. In order to meet basic eligibility requirements, the airport serving the community cannot be larger than a small hub airport as of calendar year 1997, and the community has to have insufficient air carrier service or unreasonably high air fares. Communities can also present characteristics, such as geographic diversity or unique circumstances, that demonstrate the need for, and feasibility of, grant assistance from SCASDP.

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[10] Additional information on the EAS Program may be found on its Web site: http://www.dot.gov/policy/aviation-policy/small-community-rural-air-service/essential-air-service.

Optimize Part 135 On-Demand Aircraft Operator Data

The data reported by on-demand operators (also known as air taxi operators or part 135 carriers) is about 0.1 percent of all of the passenger data used by FAA; about 948,500 boardings were voluntarily reported in CY 2013. The FAA has considered not counting the on-demand boardings. However, for smaller airports at or just above the 10,001 enplanement mark, counting every on-demand enplanement is critical. Of the 46 airports enplaning between 9,000 and 15,000 passengers, 35 of these airports received nearly 9,000 on-demand passengers. Four of the 46 would have fallen below 10,001 passengers without including the air taxi passengers. The result of falling below 10,001 passengers is the difference between receiving $1 million in primary entitlement funding or $150,000 in NPE funding.

Review Data Reported by the Air Carriers

Although a much less successful way to increase enplanements, an airport that is near the 10,001 enplanement mark will sometimes review the air carrier data to verify its accuracy. This may occasionally result in a change, generally where a daily or weekly flight was inaccurately credited to another airport or omitted from the reporting. Another opportunity available to the airport during this review is if the airport has a drop in enplanements in a calendar year that is unrelated to passenger demand. For example, a few years ago, Telluride Regional Airport in Colorado was closed for 5 weeks during the summer for a major runway reconstruction. Although a major ski resort airport, the loss of summer traffic caused the total enplanements for the year to drop below 10,001. Using the special provisions in title 49 U.S.C., § 47114(c)(1)(E), the airport received the same entitlement it had the previous fiscal year because the drop in traffic was unrelated to underlying passenger demand.

Take Other Steps to Increase Enplanements

Occasionally, even with possible participation in the EAS program or the SCASDP, and careful scrutiny of enplanement data, an airport may approach the end of a calendar year below 10,001 enplanements. In those cases, the airports may take other steps to try to reach primary status. The most well-known option is to subsidize airfares to offer highly discounted fares between the airport and another airport that is also near the threshold.

For example, a part 135 carrier offered $15 fares to tour the surrounding region to boost the airport's enplanement numbers. The issue is that either the part 135 carrier is deliberately operating at a loss, which is prohibited if the carrier is publicly traded, or the airport is subsidizing the flights. An airport is not allowed to use airport funds to directly subsidize flights, which is prohibited by FAA's "Policy and Procedures Concerning the Use of Airport Revenue," 64 Fed. Reg. 7696 (February 16, 1999). However, a community organization such as the Chamber of Commerce can subsidize flights without violating any federal airport policy.

However, under the FAA's Air Carrier Incentive Program, airports are permitted to offer "fee reduction, fee waiver, or use of airport revenue for acceptable promotional costs, where the purpose is to encourage an air carrier to increase service at the airport."[11]

[11] The FAA's "Air Carrier Incentive Program Guidebook" is available online at: http://www.faa.gov/airports/airport_compliance/media/air-carrier-incentive-2010.pdf.

Findings

- Though a few airports take creative steps to make sure they reach the required 10,000 passenger enplanements threshold each year, the methods used are within current policy parameters.
- The FAA reviewed all airports that had between 9,000 and 15,000 enplaned passengers in CY 2011 (FY 2013) and compared that list against airports that are currently participating in the EAS program or the SCASDP. Of the 55 airports with enplaned passengers between 9,000 and 15,000, 28 are in either EAS or SCASDP, or both.
- The number of primary airports increased sharply when the 10,000 threshold was established in 1986. In 1980, the minimum level for primary entitlements was 0.1 percent of the total U.S. enplanements. Congress changed that to more than 10,000 in 1986, when the total enplanements were 442,411,811. This increased the number of primary airports from 260 to 405 (a 56 percent increase). By FY 2012, the number had decreased to 389, primarily due to consolidation in the airline industry.

Policy Considerations

An airport that has scheduled service and enplanes 10,001 passengers receives the minimum primary entitlement of $1 million. If that same airport enplanes only 9,999 passengers, it receives the $150,000 NPE. However, there are no differences in facility needs between 9,999 and 10,001 passengers.

The issue with the current level of primary entitlement (amount and level of enplanements) is that it creates an incentive to reach the 10,000 threshold. In addition to higher primary entitlements, airports with 10,001 passengers have greater access to discretionary funding.

Two options for consideration are identified below.

Option a. No change to the primary airport threshold of 10,000 annual passengers.

Option b. Adjust the primary airport threshold and the entitlement amounts to reduce the disparity between the entitlements for primary and nonprimary airports based on activity.

This could be accomplished by adjusting the primary airport threshold and the minimum primary entitlement of $1 million with a gradual entitlement down to the NPE level of $150,000, based on activity or airport category.

Chapter 6: Other NPIAS Matters and Recommendations

Requirement

Section 155(b)(7) of the FMRA allows the report to include any other matters pertaining to the plan that the Secretary of Transportation determines appropriate.

Findings

There are no additional policy considerations included here. This is because chapters 1 through 5 cover all the policy considerations about the NPIAS.

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Appendix A: Statutory Language

The text from section 155, Study on National Plan of Integrated Airport Systems, of the FRMA is as follows:

STUDY ON NATIONAL PLAN OF INTEGRATED AIRPORT SYSTEMS

(a) IN GENERAL.—Not later than 90 days after the date of enactment of this Act, the Secretary of Transportation shall begin a study to evaluate the formulation of the national plan of integrated airport systems (in this section referred to as the ''plan'') under Section 47103 of title 49, United States Code.

(b) CONTENTS OF STUDY.—The study shall include a review of the following:
(1) The criteria used for including airports in the plan and the application of such criteria in the most recently published version of the plan.
(2) The changes in airport capital needs as shown in the 2005–2009 and 2007–2011 plans, compared with the amounts apportioned or otherwise made available to individual airports between 2005 and 2010.
(3) A comparison of the amounts received by airports under the airport improvement program in airport apportionments, State apportionments, and discretionary grants during such fiscal years with capital needs as reported in the plan.
(4) The effect of transfers of airport apportionments under title 49, United States Code.
(5) An analysis on the feasibility and advisability of apportioning amounts under section 47114(c)(1) of title 49, United States Code, to the sponsor of each primary airport for each fiscal year an amount that bears the same ratio to the amount subject to the apportionment for fiscal year 2009 as the number of passenger boardings at the airport during the prior calendar year bears to the aggregate of all passenger boardings at all primary airports during that calendar year.
(6) A documentation and review of the methods used by airports to reach the 10,000 passenger enplanement threshold, including whether such airports subsidize commercial flights to reach such threshold, at every airport in the United States that reported between 10,000 and 15,000 passenger enplanements during each of the 2 most recent calendar years for which such data is available.
(7) Any other matters pertaining to the plan that the Secretary determines appropriate.

(c) REPORT TO CONGRESS.—
(1) SUBMISSION.—Not later than 36 months after the date that the Secretary begins the study under this section, the Secretary shall submit to the Committee on Transportation and Infrastructure of the House of Representatives and the Committee on Commerce, Science, and Transportation of the Senate a report on the results of the study.
(2) CONTENTS.- The report shall include—
(A) the findings of the Secretary on each of the issues described in subsection (b);
(B) recommendations for any changes to policies and procedures for formulating the plan; and
(C) recommendations for any changes to the methods of determining the amounts to be apportioned or otherwise made available to individual airports.