



**The Nelson A. Rockefeller Center at Dartmouth College**  
*The Center for Public Policy and the Social Sciences*

## Policy Research Shop

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### New Hampshire Rural Airports

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### *A Report on General and Commercial Aviation in New Hampshire*

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Presented to the Grafton County Commission

Michael Cryans, Chair

Omer Ahern, Jr., Commissioner

Ray Burton, Commissioner

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Prepared by:

Stephen Prager '14

Andres Ramirez '14

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*Contact*

Nelson A. Rockefeller Center, 6082 Rockefeller Hall, Dartmouth College, Hanover, NH 03755  
<http://rockefeller.dartmouth.edu/shop/> • Email: [Ronald.G.Shaiko@Dartmouth.edu](mailto:Ronald.G.Shaiko@Dartmouth.edu)



TABLE OF CONTENTS

<b>EXECUTIVE SUMMARY</b>	<b>1</b>
<b>1. INTRODUCTION</b>	<b>1</b>
<b>2. AIRPORT FUNDING IN THE U.S. – GENERAL OVERVIEW</b>	<b>1</b>
<b>3. METHODOLOGY</b>	<b>4</b>
<b>4. AIRPORTS IN NEW HAMPSHIRE</b>	<b>5</b>
4.1 GENERAL AIRPORT FUNDING IN NEW HAMPSHIRE	5
4.2 FUNDING SOURCES AND PRIMARY NEEDS AMONG INTERVIEWED AIRPORTS	7
<b>5. CONCLUSION</b>	<b>9</b>
<b>REFERENCES</b>	<b>10</b>



## **EXECUTIVE SUMMARY**

The majority of New Hampshire's 143 airports are small, unpaved, private facilities. However, this report focuses primarily on the state's twenty-four public access airports, which together comprise most of the state's aviation activity. The quality of these twenty-four airports differs enormously, with facilities across the state ranging from helipads and two-mile long paved runways to tiny landing strips on grass, water, and ice. The funding sources these airports utilize are similarly diverse and in many cases insufficient, creating general inefficiency within the state's aviation structure. In order to examine the issues these airports currently face more thoroughly, our team called 11 of the public access airports in New Hampshire and interviewed their staff to find out more about their current sources of funding and their greatest needs. We concluded that New Hampshire airports, most of which are tiny and face many infrastructure problems that they currently have a limited ability to address, should organize their existing funding sources more effectively as well as seek innovative new opportunities for acquiring more funds.

### **1. INTRODUCTION**

Currently one of the biggest issues faced by America's airports is the lack of steady, long-term funding. For several years, the federal government has not passed a comprehensive bill, instead choosing to extend the previous bill year after year. This causes a large amount of uncertainty and inefficiency, particularly for airports with multi-year projects in the works. The current Airport Improvement Program (AIP) has been extended for a sixteenth time to temporarily fund AIP activities until it is reauthorized. These extensions, which have ranged from three to six months, prevent the FAA from authorizing grants on a continual basis and force the prioritization of funding within the region based upon the amount of grant money authorized during the temporary extension. Thus, airports are essentially unable to implement several projects over the long term and in some cases must attempt to gradually phase in projects in order to complete them.

Particularly in New Hampshire, this has been a significant problem as of late. Airports in New Hampshire are on the whole underfunded and have pressing infrastructure and personnel needs. These issues are only exacerbated by the lack of long-term federal or state funding.

### **2. AIRPORT FUNDING IN THE U.S. – GENERAL OVERVIEW**

Typically, rural airports across the United States acquire federal funding to subsidize flights that would otherwise not garner revenue. The Airports and Airwaves Trust Fund, or AATF, for example, helps finance the FAA's investment in rural airport facilities, safety and technological enhancements in air traffic control, and conducting annual



assessments and quality control for the airports. In addition, the Trust Fund allocates funds towards the FAA’s capital programs and operations account, including the Facilities and Equipment (F&E) account in charge of advancing air traffic control systems, the Research, Engineering, and Development (RE&D) account responsible for research on aviation security and modifications, and the Airport Improvement Program (AIP) that provides funds for airport development and safety. The AATF also apportions money to the Essential Air Service (EAS), a program that guarantees rural airport access to the national air transportation system.<sup>1</sup>

The AATF is primarily funded by excise taxes paid by users of the national airspace system that would suffice as a resolute source of funding for aviation systems apart from the General Fund. Excise taxes include:

- Ticket taxes imposed on commercial, domestic passenger transportation by air
- Ticket Taxes imposed in commercial, domestic passenger transportation by air
- A use of international travel facilities tax
- A cargo tax imposed on freight transportation by air
- Fuels taxes imposed on gasoline used in commercial aviation and noncommercial aviation
- Fuels taxes imposed on jet fuel (kerosene) and other aviation fuels used in commercial and noncommercial aviation<sup>2</sup>

The following table breaks down the AATF by revenue source:

<b>Table 1: Trust Fund Excise Tax Revenue Sources</b>	<b>Rates effective as of January 1, 2011</b>
Domestic passenger ticket tax	7.5 percent
Domestic flight segment tax (excluding flights to or from rural airports)	\$3.70 per passenger per segment; indexed to the Consumer Price Index
Tax on flights between the continental United States and Alaska or Hawaii (or between Alaska and Hawaii)	\$8.20 per passenger; indexed to the Consumer Price Index
Tax on international arrivals and departures	\$16.30 per person; indexed to the Consumer Price Index
Tax on mileage awards (frequent flyer awards tax)	7.5 percent of value of miles
Domestic commercial fuel tax	\$0.043 per gallon
Domestic general aviation gasoline tax	\$0.193 per gallon
Domestic general aviation jet fuel tax	\$0.218 per gallon
Tax on domestic cargo or mail	6.25 percent on the price paid for transportation of domestic cargo or mail



As an independent source, the AATF is expected to increase with long-term use and fund investments for airwave systems. The Trust Fund is essential for the livelihood of many rural airports, and the longevity of the funds allows for continual support of these communities who depend on the revenue and business it attracts. In the state of New Hampshire, some airports use FAA funding allocated from the AATF to subsidize costs and function normally on a day-to-day basis. As for costs, the AATF usually covers around 65 to 70 percent of expenditures, where in fiscal year 2010, the AATF funded \$10.2 billion of the \$15.5 billion total cost of the FAA program.<sup>4</sup> New Hampshire rural airports also acquire funding through the Essential Air Service (EAS) and the Airport Improvement Program (AIP), funded by the AATF, to subsidize airport expenditures.

The EAS, for example, services the Lebanon airport and hundreds of other rural communities across the United States in order to maintain a minimal level of scheduled air services.<sup>5</sup> The Department of Transportation mandates these airports be serviced by certified airlines, such as Cape Air, in order to maintain commercial service in these communities and maintain a link to the national air transportation system. However, airports funded by the EAS must follow Federal Aviation Administration (FAA) guidelines and specific provisions, including meeting minimum passenger and flight quotas, as well as accommodate passengers with adequate flight times and destinations. Currently, the EAS will receive \$199 million a year until fiscal year 2015, when the FAA decides to reapportion funding.<sup>6</sup>

Additionally, the FAA funds the AIP, a crucial program that offers grants to aid from 75 to 95 percent of costs for eligible airports. Improvements usually consist of increasing airport security, expansion projects, and environmentally friendly developments. Eligibility consists of individual public-use airports with the following criteria:

- Publicly owned, or
- Privately owned but designated by FAA as a reliever, or
- Privately owned but having scheduled service and at least 2,500 annual enplanements.<sup>7</sup>



Listed below is a table that breaks down AIP projects by eligibility:

<b>Eligible Projects</b>	<b>Ineligible Projects</b>
Runway construction/rehabilitation	Maintenance equipment and vehicles
Taxiway construction/rehabilitation	Office and office equipment
Apron construction/rehabilitation	Fuel farms*
Airfield lighting	Landscaping
Airfield signage	Artworks
Airfield drainage	Aircraft hangars*
Land acquisition	Industrial park development
Weather observation stations (AWOS)	Marketing plans
NAVAIDs such as REILs and PAPIs	Training
Planning studies	Improvements for commercial enterprises
Environmental studies	Maintenance or repairs of buildings
Safety area improvements	
Airport layout plans (ALPs)	
Access roads only located on airport property	
Removing, lowering, moving, marking, and lighting hazards	
Glycol Recovery Trucks/Glycol Vacuum Trucks** (11/29/2007)	

8

### **3. METHODOLOGY**

In order to obtain more information about each airport in New Hampshire’s individual needs and funding sources, our team called 11 public access airports: Skyhaven, Portsmouth, Concord, Claremont, Franconia, Gorham, Alton Bay, Haverhill, Hampton, Lebanon, and Plymouth. Although we reached out to all 24 of the airports, we had difficulty reaching many of them because of their small staff – on many occasions there was no one available to take our call because the one or two part-time staff members in the office were either out for the day or preoccupied with another task. When we reached an airport, we spoke with either the manager or private owner and asked them a set of questions about their existing funding sources, the current scale of their operations, and the state of their infrastructure. We also inquired into any additional projects that airports were undertaking individually to raise extra revenues.



#### **4. AIRPORTS IN NEW HAMPSHIRE**

The twenty-four public access airports that currently exist in New Hampshire are noticeably diverse in many different ways. Fifteen of the airports are publicly owned and nine are privately owned. Twelve are part of the National Plan of Integrated Airport Systems (NPIAS), which makes them eligible for some forms of federal funding. Eighteen have paved runways and seventeen have lighted runways. Thirteen of these airports have some form of instrument approach used for landing, and eight have runways longer than 5000 feet. Four of these airports have control towers and currently two (Manchester and Lebanon) offer commercial service. About twelve airports have at least one full-time staff member, such as an airport manager, on daily duty.

The quality of the facilities from airport to airport also varies greatly. Some of the amenities that different airports possess include aircraft parking and storage, hangars, maintenance facilities, fueling, aircraft sales and rental, flight instruction, air charter service, car rental, and restaurants. Several dozen small businesses known as Fixed Base Operators usually provide many aviation-related services for a fee, making many of the state's airports the focal point of an industrial park or business district.

In terms of their functions, smaller community airports are often used by a variety of people and groups such as business executives wishing to travel quickly to faraway meeting, vacationers wanting a direct route to their destination, and police, fire, and civil defense agencies requiring training grounds or headquarters for search and rescue missions for downed aircraft or missing persons. Many airports also provide a site for more traditional uses such as leisure flying, pilot training, flying clubs, and aeronautical photography. Most citizens think of an airport as a bustling commercial entity that services large jets, but it is important to realize that the overwhelming majority of aircraft in New Hampshire and the whole United States are smaller, general aviation (GA) airplanes based at small, local airports.

##### *4.1 General Airport Funding in New Hampshire*

A mix of federal, state and local programs fund airport maintenance and expansion in New Hampshire. The Federal Aviation Administration's (FAA) Airport Improvement Program (AIP) contributes approximately \$15 million a year through three different grants to the NPIAS airports in the state. The AIP provides *entitlement* grants to commercial airports based primarily on passenger enplanements and to general aviation airports of up to \$150,000 a year per airport. New Hampshire also receives about \$1.1 million in an *apportionment* block grant, which is administered by the New Hampshire Department of Transportation's Bureau of Aeronautics. *Discretionary* grants account for



a large portion of funding and are awarded by the FAA to airports for specific projects such as Boire Field's two year, \$15M runway relocation project in Nashua.<sup>9</sup>

The twelve public airports not eligible for federal funding (as they are not members of NPIAS) often find it significantly difficult to meet their maintenance and operating needs. The most reliable funding sources for these airports are aircraft registration fees. Previously, a nominal amount of money (less than \$100,000 in total) was provided to these airports through state grants. However, these grants have disappeared steadily over the past 20 years, leaving almost no state grants at all available today.<sup>10</sup> To survive without help from some kind of state or federal grant, each airport must be creative in making ends meet. Frequently this is accomplished by charging fees for the various services and events sponsored by the airport. In addition, many of these smaller airports get by with the help of volunteers who donate their own time and money to keep the airport running.

The FAA recently mandated that all commercial service airports must have their runway safety areas under compliance with their standards by 2015. Due to this requirement, projects that would bring runway safety areas into compliance were prioritized and will tie up a large portion of discretionary funds for the FAA New England Region from 2012 to 2015. This reduces the already small amount of discretionary funds available to other airports even more, and is especially an issue for the General Aviation airports. As a consequence of the resulting uncertainty in funding, airports in NH cannot plan most of their operations more than three months ahead.

What was thought by many to be the strongest hope for the airports to secure themselves financially crumbled when the NH Legislature in 2010 denied the establishment of a dedicated state aeronautical fund (House Bill 1506) for the 12 airports not eligible for state funding. Revenue for the fund was to be generated strictly by aviation activities, and the bill would have ensured that funds collected from aviation activities would have been used for aviation funding only (as of now, 75% of aircraft registration fees and 100% of aircraft fuel taxes are redirected into the state general fund). Many states, such as Iowa and already have similar bills in place. Although the fund was successfully established in 2011 when the bill was reintroduced, it does not receive any money from state funds at all, instead relying only on outside forms of funds to meet its objectives. Although this is certainly a step forward for airports that are not eligible for federal funds, adding provisions that would allow state money to be allocated to the fund would help to address badly needed repairs and safety requirements at the state's smaller airports.

This is even more of a necessary goal considering the limited impact of other measures designed to help these smaller airports. Within the past few years, NHDOT has instituted an 80/20 matching fund policy where the state will fund 80% of repairs and





improvements so long as the airport is able to fund 20% of the cost. This is much more beneficial than the 50/50 program of the past, especially to small airports which often simply do not have the means to fund as much as 50% of major infrastructure renovations, but the sharp reduction of state grants has compromised the benefits of this program as funding is no longer given out as frequently.

Also, a long-sought-after instrument landing system (ILS) is currently not available anywhere in northern NH. An ILS equipped airport is sorely needed to provide a safe haven for an airplane attempting to make an emergency landing in harsh weather, but no airports in the northern part of the state currently possess the funds to install one of these systems. In addition, data collected from a survey distributed by the New Hampshire American Society of Civil Engineers suggests that such a system could stimulate travel to northern NH during the winter seasons and thus could help spur the tourist activity that remains so vital to this part of the state.

#### *4.2 Funding Sources and Primary Needs Among Interviewed Airports*

Once we finished calling and questioning the 11 airports that we reached, we created the following table, which breaks down the airports we called, their primary sources of funding, and their biggest needs.

<b><i>Airport</i></b>	<b><i>Sources of Funding</i></b>	<b><i>Biggest Needs</i></b>
Alton Bay	State block grants, participates in AIP	Upgrade hangar and terminal facilities
Claremont	State block grants, federal funding	Lack of hangar and terminal facilities; continue funding landscape projects
Concord	Land Leases, Fixed base operator, participates in AIP	Renovate/Construct New Facilities
Franconia	Sale plane storing operations, general membership fees	Basic land acquisition and maintenance
Gorham	State licensing fees, local funding	No funding because it sits on water
Hampton	Privately funded, registration fees	Maintenance of terminals and runways; irrigation
Haverhill	Local funding, participates in AIP, State block grants	Upgrade terminal facilities
Lebanon	Local Funding, participates in AIP and EAS	Environmental assessments; improvement of runways
Plymouth	Local funding, private donations	Major maintenance on runways; enhance facilities



Portsmouth	Participates in AIP	Rehabilitation of infrastructure and runways
Skyhaven	Participates in AIP	Rehabilitation of infrastructure and runways

When calling each airport, our team initiated the interview with the question of funding. Airports such as Alton Bay, Concord, Haverhill, Lebanon, Portsmouth, and Skyhaven participate in the AIP program and continually strive to meet FAA standards of aviation. When asked, these airports were actually unaware of what the AATF was but knew of the programs the AATF funded through the FAA. Alton Bay and Haverhill, for example, receive federal funding through state block grants as well as money from the AIP, but are unsure of exact allocations from each source. Lebanon, however, is primarily funded by the AIP at about 90 percent, with the EAS, the NH Department of Transportation and local funding financing the rest of their budget. The AIP provides money for improvements to the Lebanon airport that would otherwise not generate revenue. The AIP is also the primary source of funds for capital improvements for Portsmouth and Skyhaven airports. Concord also receives AIP funding as well as revenue from land leases. The city of Concord manages to generate some extra cash as it owns all the land at the airport and leases land to different local businesses and airports. Land is also leased to the National Guard, state police, and private tenants, although these sources are much less prominent.

For the airports that do not receive AIP funding, most funds come through private donations or state block grants. For example, Claremont uses state block grants as well as indirect funding for its safety based projects. Claremont also receives federal funding, but has recently downshifted to local communities, reducing amounts received at the federal level. However, airports like Hampton and Franconia receive their funds through private donations from privately owned individual owners, sale plane storing operations, and general membership fees. Despite not participating in FAA programs, these airports have maintained some adequate budgets. Unfortunately, because its airport sits on water, Gorham airport cannot accept federal funds due to environmental problems. It is funded by whatever it can get back from state licensing fees and what the town may be able to provide for maintenance.

The second question our team asked the rural airports was about their biggest needs in terms of aviation funding. Most airports mentioned a lack of funds for reparations of terminal facilities and maintenance of runways. For instance, the Claremont and Concord airports have extremely run-down facilities, many of which date back to the early 1920s, that are in major need of reconstruction. Many of these facilities have essentially outlived their usefulness but continue to be used due to a lack of additional resources. Furthermore, some of the facilities are so out of date and unkempt that certain FAA



standards required for the upkeep of airports are not being met, such as obstruction hazards from trees. Increased funding would allow for landscaping projects to recognize and correct these problems as they change and evolve. Other airports such as the Hampton airport, require funding for irrigation of their grass field, which is a common problem for other New Hampshire airports. When fields get to dry, airports have dust problems, affecting aviation substantially. This is easily amendable by upgrading to an underground irrigation system. Most importantly, many rural airports in New Hampshire require rehabilitation of runways. With added investment in runway pavement and crack filling projects, airport runways would become safer and more efficient, especially at night and during the harsh winter months.

## **5. CONCLUSION**

Through the assessment of the 11 airports interviewed, our team was able to generalize the main concerns that New Hampshire rural airports need due to lack of funding. Though many participate in FAA programs, some rely solely on private donations and local funding. These airports play crucial roles in these towns, servicing area business communities, private business owners, providing jets to Canada and the west coast, and providing airlines flying towards Burlington and Manchester. Most importantly, Dartmouth-Hitchcock medical services would be reduced, as they are frequent users of the Lebanon and Plymouth airports for flying out patients. In order to maintain these important services, the New Hampshire Legislature should pass a bill similar to House Bill 1506 to continue funding smaller, non-federally funded airports. The state needs to support the growth of commercial service airports by providing resources necessary for that growth. New Hampshire should also maintain the Essential Air Service and try to expand the eligibility towards other airports that do not currently receive FAA funding. Additionally, to further stimulate airport revenue, airports could approve land leases for restaurants to establish near their vicinity and gain profit, a project currently undertaken by the Lebanon airport. Lebanon also charters operations that will run outside of the terminal to rent planes starting next month. These efforts, combined with FAA programs, could provide a smooth-running funding apparatus to sustain these airports and their facilities.



## REFERENCES

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<sup>2</sup>Sec. 9502(b)(1). The Airport and Airway Trust fund also is credited with interest under sec. 9602(b). Unless otherwise stated, all section references are to the Internal Revenue Code of 1986, as amended.

<sup>3</sup>Ibid. 1

<sup>4</sup>Ibid. 1

<sup>5</sup>"Essential Air Service Program." Office of Aviation Analysis, 19 July 2010. Web. 26 June 2012. <[http://ostpxweb.dot.gov/aviation/x-50%20role\\_files/essentialairservice.htm](http://ostpxweb.dot.gov/aviation/x-50%20role_files/essentialairservice.htm)>.

<sup>6</sup>*Final FAA Reauthorization Deal Modifies Essential Air Service*. National Association of Development Organizations, n.d. Web. 26 June 2012. <<http://www.nado.org/final-faa-reauthorization-deal-modifies-essential-air-service/>>.

<sup>7</sup>"Overview: What Is AIP?" Federal Aviation Administration, 10 May 2012. Web. 26 June 2012. <<http://www.faa.gov/airports/aip/overview/>>.

<sup>8</sup>Ibid. 7

<sup>9</sup>"New Hampshire's Infrastructure Report Card." American Society for Civil Engineers, 15 June 2011. Web. 26 June 2012. <<http://ascenh.org/uploads/docs/2011-ASCE-ReportCard.pdf>>.

<sup>10</sup>Ibid. 9