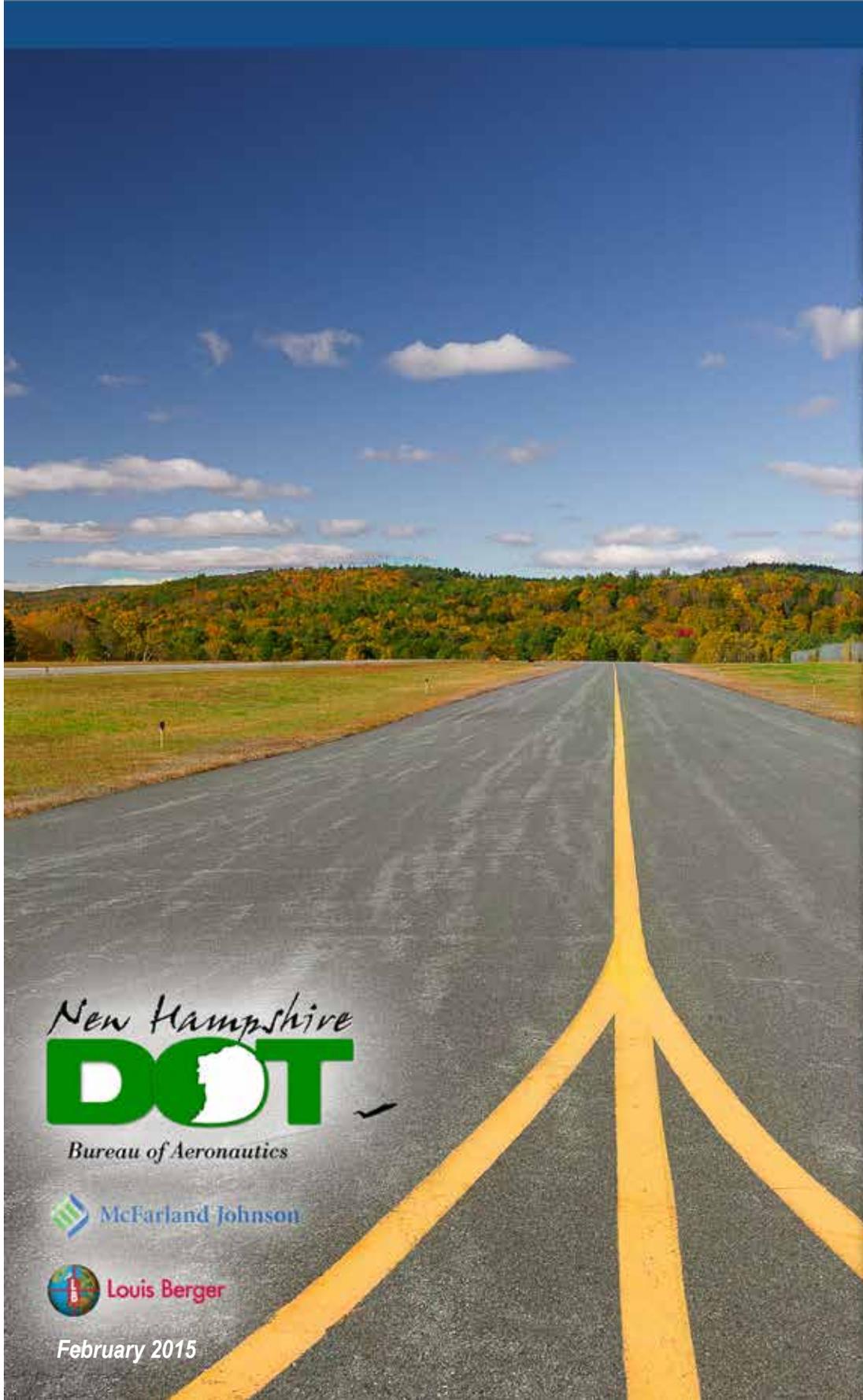




State Airport System Plan Executive Summary



New Hampshire
DOT

Bureau of Aeronautics

 McFarland Johnson

 Louis Berger

February 2015

New Hampshire's Aviation System: A Vibrant and Essential Economic Asset for NH

Since the Wright Brothers' first powered flight at Kitty Hawk, North Carolina in 1903 New Hampshire (NH) airports have played a part in the early development of aviation, including Charles Lindbergh's visit to Concord Municipal Airport following his crossing of the Atlantic Ocean and former aircraft design sites such as Gee-Bee racing aircraft. Today, the system of NH's airports has matured into a well-balanced and effective element of NH's transportation network, connecting people, communities, and businesses in New England and beyond. Millions of passengers, and tens of millions of pounds in air mail and freight, use NH airports every year. Airports are an important resource for business users, local tourism, and recreational activity. They also serve emergency services functions such as law enforcement, transport of critically ill patients by air ambulance, and command centers for search and rescue operations and natural disasters. NH's airports also support regional economic development. They create jobs and services, generate business revenues that support the local and national economy, and add to NH's tax revenues.

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THE PLAN

The New Hampshire State Airport System Plan (NHSASP) was undertaken by the New Hampshire Department of Transportation (NHDOT) Bureau of Aeronautics (BOA) to serve as the guide for maintaining and developing the system of airports in New Hampshire. The NHSASP serves both public and private aviation industry stakeholders through the goals of maintaining and expanding a sustainable, efficient, and safe system of airports. The NHSASP provides state and federal funding agencies a basis for allocating limited funds, ensuring that the needs of the NH airport system can be met.

The State of New Hampshire has long-recognized the importance of proactive planning to ensure its airports are able to actively pursue improvements that enhance the statewide transportation system. The NHSASP represents the BOA's vision to provide a comprehensive guidebook for maintaining and developing the 25 public-use airports in the state. This vision was strategically approached through extensive assessments and comprehensive analyses of the current system's performance. The resulting NHSASP recommendations strengthen the aviation system and ensure the success of NH's system of airports.

This NHSASP also includes tools to assist the work of the BOA, as well as airport and aviation stakeholders. These tools are comprised of guides and lists that address specific issues airport sponsors, BOA staff, or other aviation stakeholders may face.

In the end, the NHSASP is one of many resources to support needed change, but not necessarily be the driving force. The BOA's vision for the state's system of airports, as represented in this NHSASP document, cannot and will not be implemented without local stakeholder support.

STUDY GOALS

1. Provide a Safe, Secure, and Efficient Aviation System – This is accomplished through compliance with Federal Aviation Administration (FAA) and Transportation Security Administration (TSA) regulations and guidelines.

2. Maximize Economic Value of New Hampshire's Airport System – The NHSASP explores development opportunities that will help foster job creation both on and off airports.

3. Promote and Educate Stakeholders on the Importance of the State's Aviation System - The NHSASP is one of many resources for ongoing advocacy of the State's airports with the general public, local businesses, and policy makers.

4. Enhance, Preserve, and Maintain State Aviation System Assets - Airports must address encroachment from land development, community and municipal opposition, funding challenges, and vegetative growth, otherwise capacity and/or economic value of the airports will be reduced.

5. Maximize and Diversify Connectivity for State's Aviation Users – Airports represent just one piece of transportation connectivity in NH, providing connectivity with other modes of transportation throughout the state such as highways, busses, and rail, thus linking communities, businesses, and people.



Economic Analysis

A key component of the NHSASP was the detailed economic impact analysis of airports in NH. This differed from the 2003 NHSASP, which summarized capital improvement costs associated with implementing airport facility recommendations, but did not measure the economic benefits of the system. Airports are an integral part of the overall transportation infrastructure serving NH, providing air access to all areas of the state. Airports also support local economic development through direct job creation and the promotion of tourism, as well as supporting economic development initiatives in the local and regional economies they serve.

Extensive economic data was collected from airport surveys to create a substantive and realistic estimate of the economic benefits of aviation in New Hampshire. The airport surveys also targeted on-airport tenants and transient aircraft, in order to capture visitor information and spending. ,

Using the IMPLAN input-output economic model on the collected data, the model calculated overall economic output of the system, including number of jobs, tax revenues, and the time savings of aviation. The findings showed the 25 airports provided over \$1.16 billion dollars of economic benefits to NH annually. This represents about 2 percent of NH's overall annual economic output and over 9,200 jobs. In addition to direct airport impacts, NH companies manufacturing equipment, parts, and other commodities for aviation add another \$1 billion of indirect economic output and over 3,600 additional jobs to NH. Given the measurable impact airports and the aviation industry have on NH, supporting the system of airports is paramount to NH's economic and transportation needs.



Data Sources & Assumptions

- On-Airport Employment - Surveys
- Airport Capital Spending - NHDOT & Airport Management Survey
- Airport and Tenant Operations and Maintenance spending - Surveys & Similar Airport Data
- Visitors and Visitor Spending - Visitor Surveys & Manchester-Boston Regional Airport Data (Extrapolated)
- Travel Time Savings
 - Average Number of Passengers per Business Flight: 3.4
 - 2 Hours To and From their Destination
 - Value of Travel Time: \$59/Hour

MULTIPLIER EFFECT:

The Multiplier Effect Consists of:

- 1** The Direct Effect of the NH Airport System is the On-Airport Economic Activity Including the Airport Employment, and Employment at Airport Tenants.
- 2** The Indirect Impact is the Change in Economic Activity in those Sectors that Supply Services, Materials, and Machinery Necessary to Support the Directly Affected Industries.
- 3** The Induced Impact is the Effect of Increased Consumer Spending by Wage Earners in the Directly and Indirectly Affected Industries.



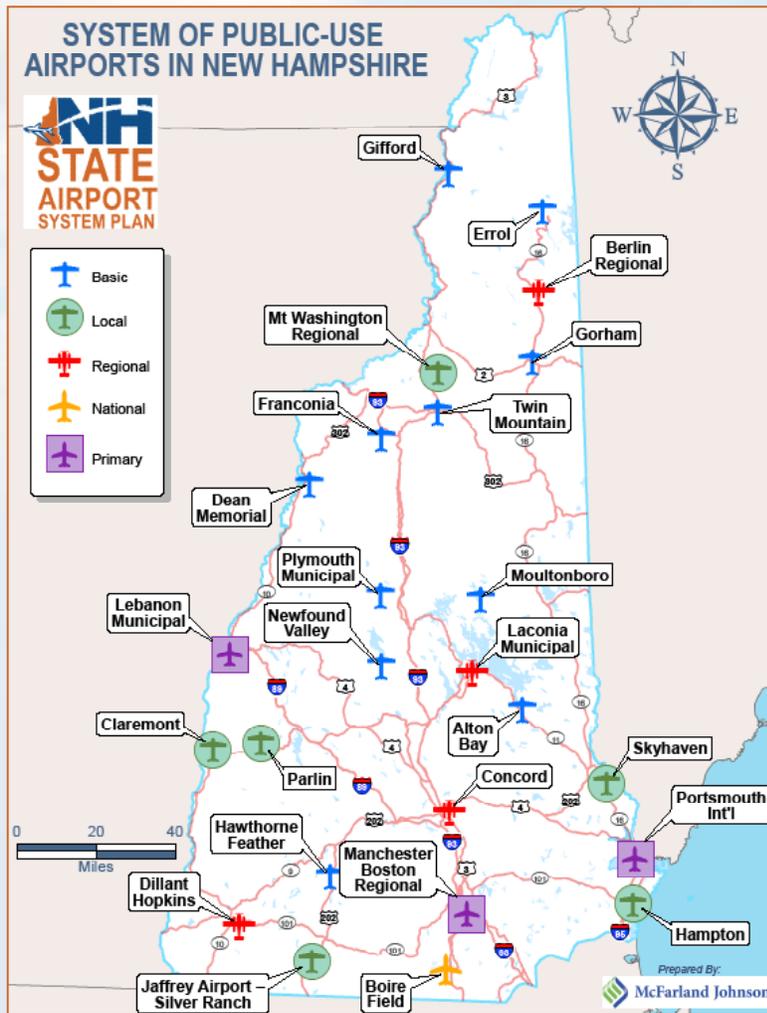
	New Hampshire Businesses Output /Sales Revenue	Jobs	Travel Time Savings	NH State Tax Revenues
Primary Airports	\$1,060,360,000	8,507	\$3,620,000	\$25,500,000
GA - National	\$46,400,000	351	\$3,200,000	\$770,000
GA - Regional	\$45,520,000	357	\$6,230,000	\$450,000
GA - Local	\$4,930,000	40	\$940,000	\$60,000
GA - Basic	\$910,000	9	\$90,000	\$50,000
General Aviation Airports	\$101,080,000	776	\$10,470,000	\$1,360,000
Aircraft Registration				\$1,100,000
Total NHSASP	\$1,161,440,000	9,283	\$14,090,000	\$27,960,000
Aircraft Manufacturing	\$998,900,000	3,671		\$4,230,000
Grand Total	\$2,160,340,000	12,954	\$14,090,000	\$32,190,000

UNDERSTANDING THE SYSTEM

The NH air transportation system is comprised of 25 public-use airports distributed throughout the state. Each airport serves a market of users, which is based upon each facility's infrastructure, service offerings, and location. In this context, each system airport has a role in the statewide system. The NHSASP builds upon the nature of differing airport roles using FAA's National Plan of Integrated Airports System (NPIAS) basis of defining airport roles. NH and grouping NHSASP airports into two primary categories, general aviation and commercial service. Within the general aviation segment, the NHSASP stratifies the system into four sub-categories. Airport roles for the NHSASP are categorized as follows:

- General Aviation Basic Airports
- General Aviation Local Airports
- General Aviation Regional Airports
- General Aviation National Airports
- Primary Commercial Service Airport

Within these categories, each airport in the NH state airport system works together to provide a functioning system of facilities and services that meet user demand within a regional, national, and international context. The airport roles provide a framework for the individual airport to meet short- and long-term aviation demand. Based on these role definitions, the NHSASP measures system-wide performance by setting minimum facilities and services objectives for each system role. Working collectively with the BOA, these minimums set the bar for baseline performance of the system. In this way, these minimum objectives reflect the state's vision and goals for the future of the NH airport system, and chart the course to implement improvements that would make that future a reality.



BASIC: Basic Airports provide the most essential elements necessary to support aviation in the state. Many times the only public landing site for many miles, Basic Airports typically focus on serving smaller aircraft for clear weather flying. Users that rely on these airports as a base of operations often support other system airports by purchasing fuel and/or maintenance services elsewhere in the system.

LOCAL: Local Airports provide a greater variety of services based on local demand, such as: flight training, recreation, medical evacuation, tourism and/or business aviation services. Local Airports typically serve a greater diversity of aircraft than Basic Airports, experience higher activity levels by twin-engine piston aircraft and may accommodate occasional light turbine aircraft.

REGIONAL: Regional Airports provide all the capabilities offered by Basic and Local Airports, yet with more advanced facilities that can accommodate a greater variety and volume of aircraft in the active fleet. Regional Airports serve a range of recreational use, flight training, and sophisticated corporate aviation activities. Regional Airports are also more proximate to population centers making them attractive alternatives to larger airports for access to larger employers and desired by active business travelers.

NATIONAL: National Airports are the largest general aviation airports in the state, offering the infrastructure needed to provide aircraft access to broader national locations and even international markets when the demand warrants. Typically, National Airports are those where demand by sophisticated aircraft, business/corporate aircraft operators, and activity volume has resulted in expansion of airside and landside facilities that can adequately meet the needs of the most active aircraft operator clientele.

PRIMARY: Primary Airports fulfill the highest level of access for aviation users in the state, with a main focus on providing access to air transportation for passengers through scheduled commercial airline service. Additionally, Primary Airports also encompass all the capabilities and facilities of all General Aviation Airports in the system, and may also provide commercial air cargo services.

MINIMUM AND RECOMMENDED FACILITIES BY AIRPORT ROLE

UNDERSTANDING THE SYSTEM

Airport Category		Facility and Services Standards			
Primary Airport	National Airport	Basic Airport	<p>Minimum Facilities/Services</p> <p>Runway - Gravel, Turf, Water, Ice, or Paved Runway Length \geq 1,500 Feet Aircraft Parking Area Windsock Open Seasonally</p>	<p>Airport Manager Contact Info Available Posted Emergency Contact List Basic Shelter – 100 SF Public Telephone</p>	
			<p>Recommended Facilities/Services</p> <p>Open All Year 100LL Fuel on Site Rotating Beacon</p>		<p>Terminal Building – Heated 15:1 Clear Approach Slope Plan for Ensuring Safe Operating Environment (Hazard/Facility Inspections)</p>
		<p>All Minimum Facility Standards Plus Recommended Facilities/Services of GA Basic</p>			
		Local Airport	<p>Runway - Paved Runway Length \geq 2,500 Feet Pavement Strength – 6,000 lbs. (Single Wheel Landing Gear Configuration) Paved Aircraft Parking Area – 4 Aircraft Spaces Hangar Storage for Winter-Based Aircraft Runway Lights Taxiway Reflectors</p>	<p>Rotating Airport Beacon Lighted Windsock Non-Precision Instrument Approach Procedure Posted Emergency Contact List Open All Year Part-Time Airport Manager Available During Normal Working Hours Basic Terminal Building – 250 SF 100LL Fuel on Site</p>	<p>Recommended Facilities/Services</p> <p>Runway Length 3,200 feet Pavement Strength of 12,000 lbs (Single Wheel Landing Gear Configuration) Paved Aircraft Parking Area - 6 Aircraft Spaces Runway Lights – Pilot Controlled Low Intensity Taxiway Lights Basic Terminal Building 500 SF One Instrument Approach Procedure Self-Serve 100LL Fuel available 24/7</p>
			<p>Runway Length \geq 4,200 feet Pavement Strength - 12,000 lbs (Single Wheel Landing Gear Configuration) Emergency Contact List – Posted and Distributed Terminal Building of Moderate Size – 500 SF One Straight-In Instrument Approach Procedure Medium Intensity Runway/Taxiway Lights</p>	<p>Snow Removal Equipment Storage Building Full-Time Airport Manager On Site During Normal Working Hours, Available 24/7 Full Service Fixed Based Operator Secure Aircraft Parking Apron - 10 Jet/Turboprop Aircraft Partially Fenced Perimeter</p>	
		<p>All Minimum Facility Standards & Recommended Facilities/Services of GA Local</p>			
		Regional Airport	<p>Runway Length \geq 4,600 feet Pavement Strength of 30,000 lbs (Single Wheel Landing Gear Configuration) Terminal Building of Moderate Size 1,000 SF Straight-In Instrument Approach Procedure to Two Runway Ends Secure Aircraft Parking Apron - 15 Jet/Turboprop Aircraft</p>	<p>Self-Serve Jet-A Fuel Available 24/7 VGSI on Each Runway End Complete Perimeter Fencing Part-time Airport Operations & Maintenance Staff Local Fire Department Trained in Basic Airport Rescue and Fire Fighting (ARFF) Procedures Hangar Parking for Transient Aircraft 20:1 Clear Approach Slope</p>	<p>Recommended Facilities/Services</p> <p>Runway Length \geq 5,500 feet Pavement Strength of 30,000 lbs (Single Wheel Landing Gear Configuration) Medium Intensity Runway/Taxiway Lights Medium Intensity Approach Lighting System Full-Time Airport Professional Manager On Site During Business Hours, Available 24/7 Terminal Building – 2,500 SF</p>
			<p>Runway Length \geq 6,000 feet Pavement Strength - 60,000 lbs High Intensity Runway Lights/Medium Intensity Taxiway Lights Medium Intensity Approach Light System w/Sequenced Flashers Terminal Building – 5,000 SF Full-Time On-Site Airport Security Secure Aircraft Parking Apron - 40 Jet/Turboprop Aircraft Intermodal Ground Transportation Options</p>	<p>Instrument Approach Procedures to All Runways, at Least Two Vertically Guided Air Traffic Control Tower ARFF – On Site 24/7 Access to Customs Airport Emergency Plan 34:1 Clear Approach Slope Other Facilities and Services as Required by Users</p>	
		<p>All Minimum Facility Standards & Recommended Facilities/Services of GA Regional</p>			
		Local Airport	<p>Runway Length \geq 7,000 feet Pavement Strength - 250,000 lbs (Dual Tandem Landing Gear Conf.) High Intensity Runway Lights/Medium Intensity Taxiway Lights Full-Time Airport Professional Manager On Site During Business Hours, Available 24/7 Emergency Contact List – Posted and Distributed Full-Time Airport Operations & Maintenance Staff Airport Maintenance Building Self-Serve Jet-A and 100LL Fuel Available 24/7 Hangar/Storage for All Winter-Based Aircraft Hangar Parking for Transient Aircraft</p>	<p>Instrument Approach Procedures to All Runways, at Least Two Vertically Guided Complete Perimeter Fence Rental Cars On-Site Terminal Building – 5,000 SF Secure Aircraft Parking Apron - 40 Jet/Turboprop Aircraft Intermodal Ground Transportation Options ARFF – On Site 24/7 Access to Customs Airport Emergency Plan 34:1 Clear Approach Slope</p>	<p>Recommended Facilities/Services</p> <p>Runway and Taxiway Characteristics Determined by Users (Minimum B757/B767) Category III Instrument Landing System Approach to One Runway 50:1 Clear Approach Slope High Intensity Approach Lighting System With Sequenced Flashing Lights Air Traffic Control Tower- 24/7</p>
			<p>Runway and Taxiway Characteristics Determined by Users (Minimum B757/B767) Category III Instrument Landing System Approach to One Runway 50:1 Clear Approach Slope High Intensity Approach Lighting System With Sequenced Flashing Lights Air Traffic Control Tower- 24/7</p>	<p>Scheduled Airline Passenger Service (Passenger/Baggage Security Screening) Passenger Terminal Building with Concessions Aircraft Cargo Handling Facilities US Customs and Border Protection Facility On-Site Other Facilities and Services as Required by Users</p>	

Inventory of State Airports

A comprehensive inventory of the New Hampshire State Airport System's physical infrastructure was critical to developing baseline performance and fundamental knowledge for the NHSASP. The inventory effort relied upon site visits, an extensive survey effort, face-to-face interviews, and active support from Airport Sponsors and the BOA to build the most up-to-date information for each system airport. Site visits provided an opportunity to discuss the issues facing airports and foster an understanding of the diverse activity occurring at each facility. The detailed survey questionnaire collected quantitative data such as airport facilities and activity, as well as qualitative information on topics such as community relations and aviation outreach,

The information to the right summarizes the key findings about the existing system of NH airports.



Airside Facilities

Runways

8 Runways over 5,000' (Jet Activity)

5 Airports Have Crosswind Runways

5 Turf Runways: All Non-NPIAS, 1 Seasonal Ice Runway

Taxiways

10 Airports have Full Parallel Taxiways

Runway Lighting

18 Airports have Runway Edge Lights

Landside

Tiedowns

Laconia (82), Concord (78), Dillant-Hopkins (54), Boire (252)

Hangars (Multi and Single Unit)

Dillant-Hopkins, Claremont (12), Mt. Washington (14), Laconia (17)

T-Hangars

Pease, Skyhaven, Lebanon (30+), Laconia (47), Dillant-Hopkins (52)

Airports with Hangar Wait Lists: 5 Airports

Airports without Hangars: 15 Airports

Services

Fuel

AvGas: 17 Airports

Jet-A: 8 Airports

24 Hour Fuel: 13 Airports (Self-Serve Tanks)

Berlin is Only Great North Woods Airport with Both AvGas & Jet-A

Hampton is Only NH Airport Offering Mogas (No Ethanol)

FBO Services: 15 Airports Provide Aviation Services

Flight Instruction: 12 Airports

Aircraft Maintenance: 15 Airports

Top Activity Highlights

Based Aircraft

Concord (90), Pease (114), Lebanon (161), Boire (234)

Aircraft Operations

Boire (55,764), Concord (60,000), Manchester (63,955)

Passenger Enplanements

Manchester 1,190,100
Lebanon 10,614
Pease 22,500

Approach Support

Air Traffic Control Towers: 4 Airports

Instrument Approaches

7 Precision

13 Non-Precision

Visual Glide Slope Indicators

11 Airports

Weather Reporting

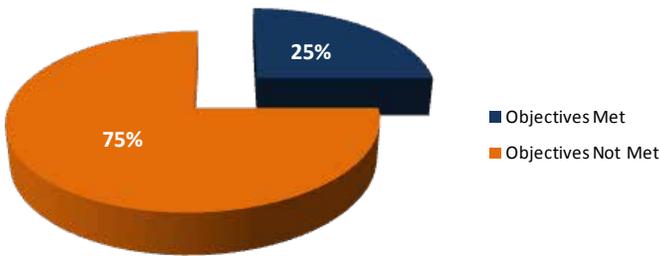
12 Airports

Airport Beacons

15 Airports

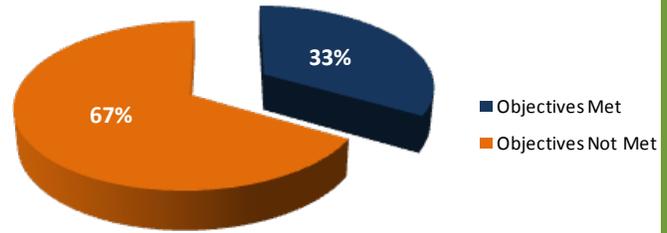
BASIC

General Aviation Basic Airports
Percent of Total Objectives Met



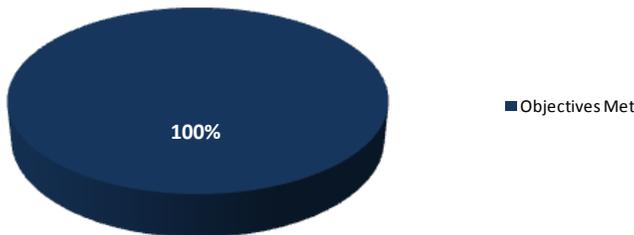
LOCAL

General Aviation Local Airports
Percent of Total Objectives Met



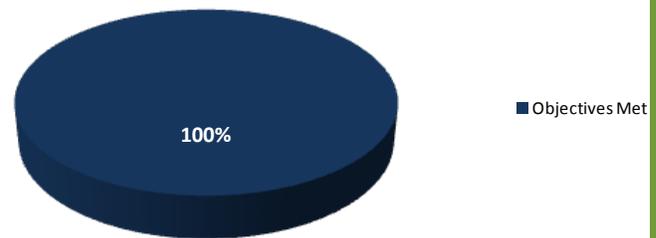
REGIONAL

General Aviation Regional Airports
Percent of Total Objectives Met



NATIONAL

General Aviation National Airports
Percent of Total Objectives Met

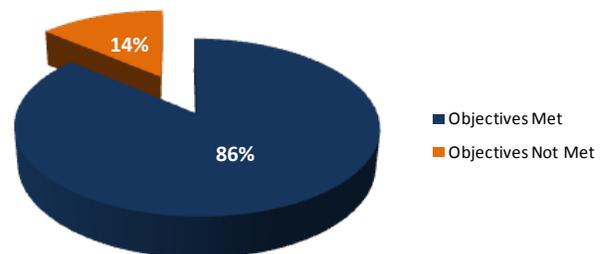


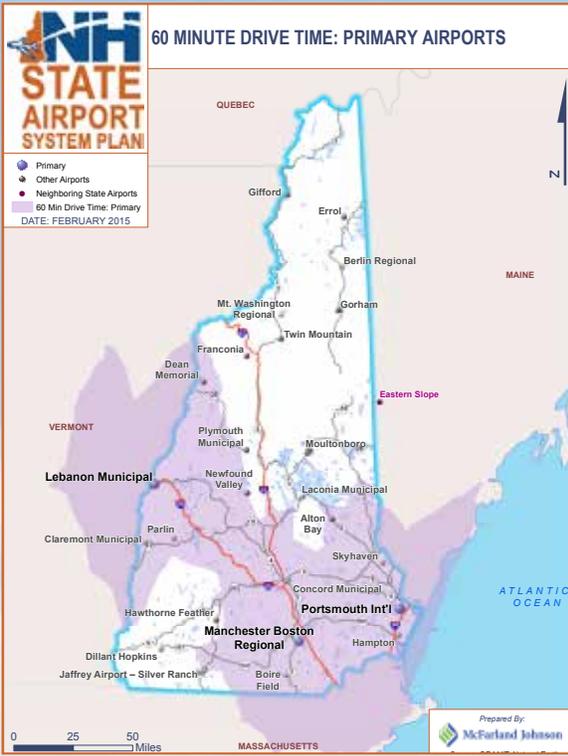
Drawing on the comprehensive inventory of the NH state airport system, the NHSASP measured the existing system-wide performance by querying whether each system airport met the minimum facilities and services objectives for their system role. The analysis produced a set of performance report cards that clearly illustrated the performance of the existing system by airport role.

The pie charts presented on this page summarize the report cards and show that the Basic and Local airports have a moderate portion of the minimum and recommended facilities outlined for each airport role still outstanding. However, Primary airports have only a small portion of minimum and recommended facilities still to meet. In contrast, the Regional and National airports meet all of these requirements.

PRIMARY

Primary Airports
Percent of Total Objectives Met





- Geographic & Population Coverage: 58% and 80%, Respectively
- Covers 42 of Top 50 Employers



- Geographic & Population Coverage: 10% and 14%, Respectively
- Covers 49 of Top 50 Employers



- Geographic & Population Coverage: 67% and 84%, Respectively
- Covers 49 of Top 50 Employers

GEOGRAPHIC MARKETS

The NHSASP evaluated the effectiveness of system airports in serving the various geographic regions of the state. Geographic service areas were created in two sizes, 30 minute drive time and 60 minute drive times. The 60-minute drive time was applied to Primary Airports only due to the commercial service offering having a broader catchment reach... General aviation airports generally serve a market area of a 30-minute drive which corresponds with FAA's 20 mile radius established as part of the National Plan of Integrated Airport System criteria.

The 30- and 60-minute drive times were applied to general aviation and primary airports respectively for geographic market areas for system airports using Geographic Information System (GIS) software. Population and NH fifty top employers were identified within these market areas. The result is a quantifiable measure of the people and businesses that are served by the system as a whole.

The figures included here illustrate geographic service areas by Primary Airports and General Aviation Airports of all types. Also shown are those areas that lie outside these service areas (i.e. gaps in service), which amounts to just ten percent of the state's population and one of the top fifty employers.



- Geographic & Population Gap: 14% and 5%, Respectively
- Covers Top 50 Employers

Defining the Gaps

Accessibility to airport infrastructure as required by business users of the state's airport system was analyzed. Seven components of airport infrastructure and service levels were selected as critical features for these users. These features were deemed necessary for higher levels of aviation activity and air access. Selection of these components ensured the airports were not a limiting factor in allowing aircraft, especially business aircraft, to access the state's airports in all weather conditions. These seven features are:

- Runways of 3,200 Feet
- Runways of 5,000 Feet
- On-Site Weather Reporting Systems
- Non-Precision Approach Capability
- Precision Approach Capability
- AvGas Fuel Service
- Jet-A Fuel Service

The evaluation of each of the components included the geographic area, population, and any top 50 employers served so as to understand where gaps exist within the system and to what extent. The findings of the analysis showed that certain elements were well-covered, while others showed a gap in service. The analysis also identified potential candidates for facility projects that could improve geographic coverage and access to people, businesses, and regions of the state currently underserved.



- Geographic & Population Gap: 27% and 8%, Respectively
- Covers 47 of Top 50 Employers



- Geographic & Population Gap: 19% and 5%, Respectively
- Covers 49 of Top 50 Employers



- Geographic & Population Gap: 27% and 8%, Respectively
- Covers 47 of Top 50 Employers



- Geographic & Population Gap: 39% and 9%, Respectively
- Covers 47 of Top 50 Employers



- Geographic & Population Gap: 19% and 5%, Respectively
- Covers 49 of Top 50 Employers



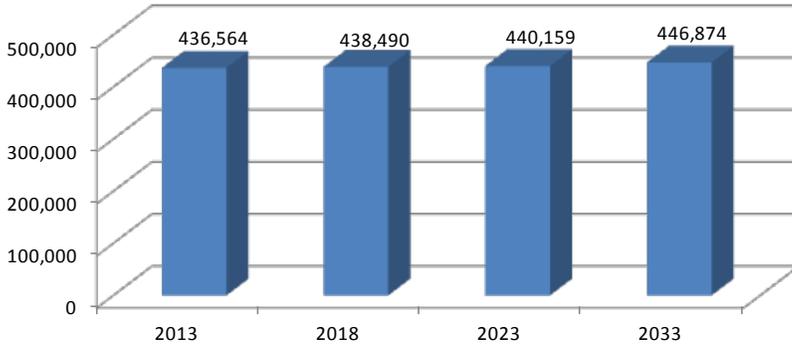
- Geographic & Population Gap: 12% and 4%, Respectively
- Covers Top 50 Employers

WHAT IS THE FUTURE?

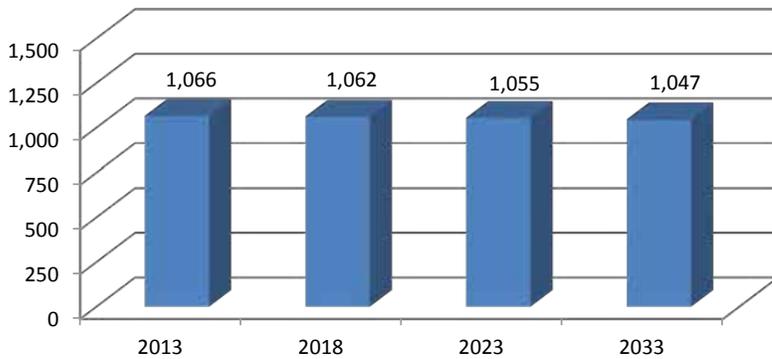
Projections of future aviation activity in NH were completed as part of the NHSASP. The aviation forecasts focused on based aircraft and aircraft operations at each of the airports for the purpose of identifying future facility requirements. The forecasts used historical activity information collected for each airport and identified trends within that data. Growth factors developed by the FAA, which incorporate aviation trends and other regional and national data, were applied to the historical data.

The resulting projections show that NH aviation forecasts, like other New England States, will remain relatively stable and grow slowly over the next twenty years. This is an improvement given the significant negative effect of the 2008 recession on aviation in NH and New England, as well as nationally. The slow increase in aviation activity will allow airports to manage future growth, by developing and maintaining their facilities over the next twenty years.

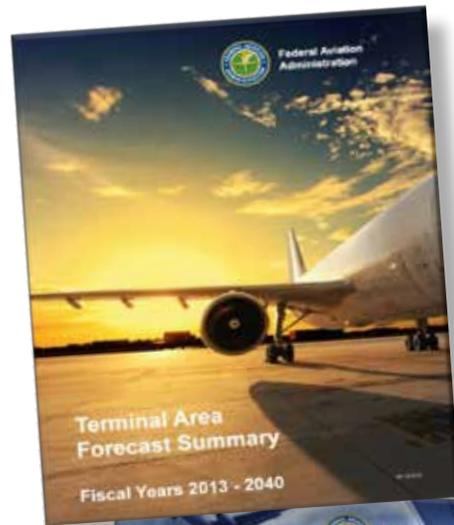
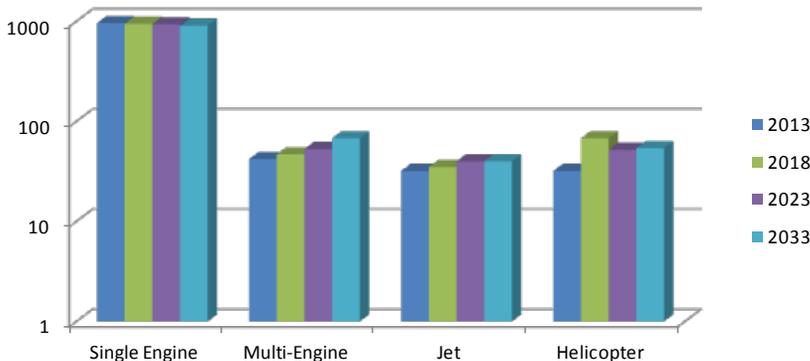
Statewide Annual Operations Forecast



Statewide Based Aircraft Forecast



Statewide Based Aircraft Fleet Mix Forecast



Future Performance

Analysis of the seven air access features provided direction on minimizing performance gaps in the future. As such, the NHSASP was able to use that analysis to formulate sensible solutions that address system coverage and performance issues in the future. For example, while a gap in the precision approach component was identified in the northern part of the state, with improvements in approach technology, there are now approach options that allow pilots to navigate the rugged terrain of northern NH. Satellite based approaches will provide safer and better approaches meeting precision or near precision approach needs for the northern airports in NH. Details on this solution and others can be found in the NHSASP document. By adding these air access features, the NH airport system will provide enhanced access to business and recreational users.

Role changes for four airports were recommended to enhance aviation facilities and services and to better serve several regions in NH. First, in the case of Dillant-Hopkins Airport in Keene, the change from Regional to National reflects that the airport operates at the higher role given the aviation activity and airport facilities, thereby supporting the economic and transportation needs of the region. Secondly, Moultonboro Airport supports Laconia Municipal Airport in serving second-home owners, recreational flights, and tourism along the north side of Lake Winnepesaukee, Changing from Basic to Local better supports this activity. Similarly, Dean Memorial Airport was also recommended to change from Basic to Local to support the region's growing business base. Finally, changing the role of Mt. Washington Regional Airport from Local to Regional will better serve the region for tourism and business access by allowing a second full service airport within the region. Overall, the enhanced facilities suggested at these airports will help to fill air access gaps for Jet-A fuel and minimum runway lengths in those regions.



Neighboring States

Airports in neighboring states affect aviation in NH, especially in based aircraft and fuel sales. It is important that the BOA and Airport Sponsors monitor the policies of adjacent states to ensure that NH airports remain competitive. The one exception is Eastern Slope Regional Airport in Fryeburg, ME, which was built to replace a NH airport. Today it serves both NH and ME and has a bi-state authority leading its future. With some enhancements to the bi-state authority, this airport could continue to fully support NH and ME aviation.





Dean Memorial Airport improves:

- Geographic Service Coverage: 831 SQMI
- Population Service Coverage: 26,974

Mt. Washington Regional Airport improves:

- Geographic Service Coverage: 717 SQMI
- Population Service Coverage: 17,726



Mt. Washington Regional Airport improves:

- Geographic Service Coverage: 717 SQMI
- Population Service Coverage: 17,726



Claremont Municipal Airport improves:

- Geographic Service Coverage: 191 SQMI
- Population Service Coverage: 9,428



Dean Memorial Airport improves:

- Geographic Service Coverage: 506 SQMI
- Population Service Coverage: 13,526

WHAT DO WE NEED?

WHAT DO WE NEED?

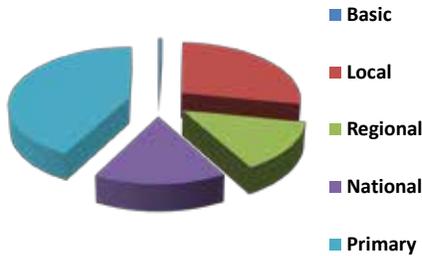
Cost estimates were prepared for each airport to provide the minimum and recommended facilities within their role. The estimates were prepared using system-wide historic construction cost information. A three-phase, twenty-year program was developed with Phase I focusing on implementing the minimum facilities in the first five years and then incorporating the recommended facilities over Phase II (next five years) and Phase III (remaining 10 years).

In addition to these costs, the BOA must also fund federally eligible airport projects derived from airport master plans, a pavement maintenance program for the state's paved runways, and various planning, environmental and special studies. The overall cost to fund these projects, including the NHSASP recommended projects, totals \$509 million dollars over the next twenty years.

Total System Costs	
System Airport Capital Improvements (Local Level)	\$372,245,000
Pavement Maintenance	\$51,500,000
Planning, Environmental and Specialty Studies	\$8,000,000
NHSASP Recommended Projects	\$77,457,000
Grand Total	\$509,202,000

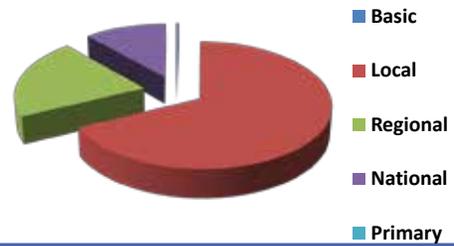
Phase I (1-5 Years): Minimum Objectives

Basic (9)	\$173,000
Local (7)	\$8,863,000
Regional (4)	\$4,462,000
National (2)	\$5,076,000
Primary (3)	\$13,629,000
Total	\$32,203,000



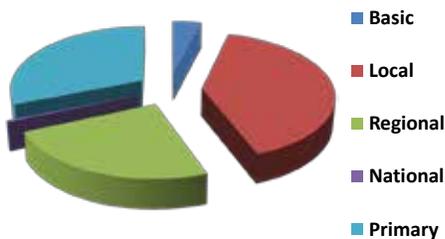
Phase II (6-10 Years): Recommended Objectives

Basic (9)	\$77,000
Local (7)	\$14,988,000
Regional (4)	\$4,638,000
National (2)	\$2,566,000
Primary (3)	\$0
Total	\$22,269,000

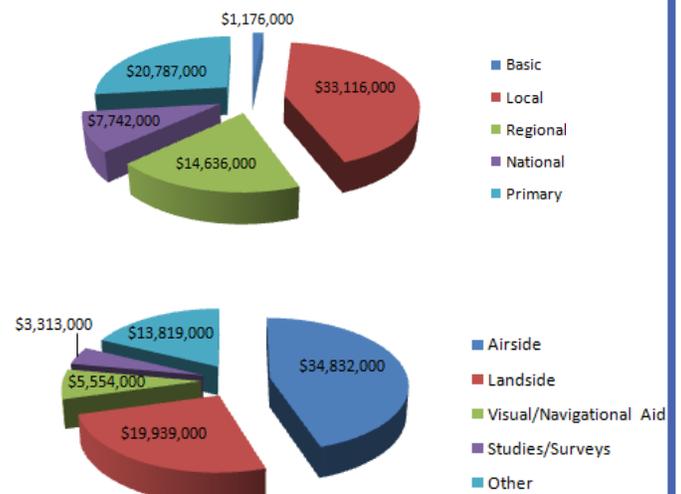


Phase III (11-20 Years): Recommended Objectives

Basic (9)	\$926,000
Local (7)	\$9,265,000
Regional (4)	\$5,536,000
National (2)	\$100,000
Primary (3)	\$7,158,000
Total	\$22,985,000



System Recommendations Cost Breakdown



SYSTEM RECOMMENDATIONS:

- Upgrade the future roles of Mt. Washington Regional Airport, Dean Memorial Airport, Dillant-Hopkins Airport, and Moultonboro Airport to further support the system capacity and services as well as close gaps related to 5,000' runway length, Jet-A fuel availability, and weather reporting.
- Evaluate the opportunity to maximize the Eastern Slope Regional Airport's (ME) contribution to NH and determine the best options to meet future facility needs.
- Study the effects of revising the aircraft registration fee in NH.
- Monitor the progress of a general aviation fuel (100LL) replacement and the potential effects on NH aviation.
- Enhance radar (or similar technology) coverage in the northern portion of the state to maximize safety.

FUNDING NEEDS

- Continue to request federal funding for airport improvement projects at eligible airports to meet their facility development needs.
- Consider options to funding currently unfunded grant programs to allow the state to be more financially self-sufficient.
- Evaluate options to enhance state-level revenue generation through modification of aircraft fuel taxes and aircraft registration fees.
- Reinstate funding programs for the non-NPIAS airports including the Tax Reimbursement Program, Grants to Airports Sponsors, and the State-Local Grant Program.

Policy Development

- Look at innovative opportunities to increase staffing through federal grant programs and the FAA; creative partnerships with local colleges and universities; and summertime interns from the New Hampshire Historical Society.
- Develop a succession planning program with the non-NPIAS airports to ensure their continued operation and support of the overall system of airports in NH.
- Explore the opportunity to develop a business planning pilot program for both a NPIAS and non-NPIAS airport in the state to enhance revenue generation for the system airports.
- Ensure that the NPIAS airports meet all FAA airport design standards, which will ensure that airports meet the highest level of safety and operational efficiency.
- Develop Airport Layout Plans for the non-NPIAS airports, which will provide data on existing airport facilities as well as future development plans for these airports.
- Update NH RSA 424 to strengthen airport protection and preservation by updating the statutes to include current FAA airspace requirements and enhance land use and zoning requirements.
- Continue development of Administrative Rules for NH RSA 422-B relating to tall towers to develop better reporting requirements and protect statewide airspace.
- Initiate a pilot program to develop sustainability studies as part of airport master plans. Such studies evaluate options to reduce the overall impacts of airports on the environment and increase self-sufficiency at airports.
- Work with airports to ensure they have comprehensive data on structural and environmental features on and around the airport that may affect future development potential of their facilities.
- Distribute several tools developed as part of the NHSASP to enhance operations and management of the system airports including:

Business Plan Tool

Emergency Plan Tool

Security Guideline Tools

On-Airport Best Safety Practices



For More information Contact :
NHDOT Bureau of Aeronautics

PO Box 483
7 Hazen Drive
Concord, NH 03302-0483
Tel: (603) 271-2552
Fax: (603) 271-1689
<http://www.nh.gov/dot/org/aerorailtransit/aeronautics/index.htm>

Project Prepared For:
**NHDOT/Division of
Aeronautics, Rail & Transit**
Patrick C. Herlihy, Director
NHDOT/Bureau of Aeronautics
Tricia L. Schoeneck Lambert
Carol L. Niewola
Rita Castonguay Hunt

Report Prepared By:
McFarland Johnson

Jorge Panteli
Scott LeCount
Rick Lucas
Louis Berger
Nicholas Stefaniak

Photograph Credits:

Daniel Peters - Front and
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