

# CHAPTER 1: INTRODUCTION

## 1.1 INTRODUCTION

The New Hampshire State Airport System Plan (NHSASP) provides the guide to maintain and develop the system of airports in New Hampshire. The interaction between airports of all sizes and capabilities is the fundamental purpose behind the national air transportation system. When airport activity occurs in a cluster or grouping, it can be seen as an airport system. An airport system can exist on a regional level such as New England, or on a state level such as New Hampshire. For system planning, the focus shifts from the intricate detail found in an individual airport master plan to a more broad-based analysis of connectivity and access between airports within the system.

Market demands and socioeconomic conditions are different for every airport, and as such, facility demands will differ also. Of the 19,786 airports in the US, fewer than 3,000 are able to accommodate jet activity, and fewer than 500 provide any form of scheduled passenger service. However, this in no way means that any of the airports that do not have these capabilities are less vital to the national aviation system as a whole. One key purpose of the system planning process is to define each airport's role within the system. The role of an airport helps to profile the user base and identify the types of facilities and infrastructure needed. In doing this, funding agencies (both State and Federal) are able to best allocate limited funds to ensure states and their airports have the necessary facilities to serve the needs of their users.

## 1.2 SYSTEM PLAN ELEMENTS

System planning is different than a traditional airport planning study since it focuses on the interaction of multiple airports. In place of facility requirements and development alternatives, a system plan measures the existing and future performance (effectiveness) of the airport system based on predetermined parameters. The following sections are included as part of this system plan:

- **Facility and Service Objectives** – The initial task in the development of a system plan is establishing the framework for the desired airport system in terms of facilities and services provided. Establishing facility objectives will serve as the benchmark to measure the effectiveness of the current and future system.
- **Inventory** – In order to establish a baseline for the subsequent analysis and recommendations, a comprehensive system-wide inventory of system airports and aviation assets was completed. The inventory analysis focused on the elements identified in the facility and service objectives as well as collecting data needed for the analysis of airport economic benefits.
- **Current System Performance** – Data collected during the inventory process is measured against the desired facility and service objectives. The analysis provides an overview of how the system is currently performing based on the established objectives. The resulting analysis identifies the areas that do not meet the desired objectives (i.e. system deficiencies).

### **Small-scale aviation offers crucial gateway**

**“Small, noncommercial general aviation airports are a necessity, not a luxury, in small... towns. Pilots and airport supporters say the airport are necessary for spraying crops, watching for and fighting fires, bringing hunters and fishermen in, and helping businesses transport goods. The facilities are especially vital for emergency medical flights and patient transfers.”**

**– Great Falls Tribune, 29 SEP 2009**

## Tens of thousands

of general aviation aircraft, including corporate jets, medical evacuation helicopter, and airplanes owned by individuals for business and personal use are flown in the United States. In fact, three out of every four takeoffs and landings at U.S. airports are conducted by general aviation aircraft, and most of these flights occur at general aviation airports.

Source: FAA General Aviation Airports: A National Asset 2012

- **Forecast** – The forecasts developed as part of the system plan focus on big picture, state level items such as, the number of based aircraft and overall socioeconomic conditions in order to estimate projected growth rates.
- **Future System Performance** – The deficiencies identified in the current system performance are combined with the forecast for an analysis of potential improvements to the airport system. Proposed improvements in the New Hampshire airport system are reevaluated to demonstrate how the system will perform against the same desired objectives in the future.
- **System Plan Recommendations** – Proposed system improvements to determine the future system performance will be combined with system wide policy guidance and operational strategies to summarize the recommendations for the NHSASP.
- **Economic Benefits Study** – The data collection conducted as part of the inventory was expanded to include employment, spending and activity data, which are used to calculate economic benefits. The economic contributions are identified for each system airport as well as the entire State of New Hampshire.

Each of these elements is presented with supporting analysis as chapters in this report and additional information can be found in the various appendices.

### 1.3 GOALS AND OBJECTIVES

At the start of the planning process, the project team identified goals and objectives for the NHSASP. A total of five overall goals were identified as part of a collaborative planning process with the New Hampshire Department of Transportation Bureau of Aeronautics. The goals developed were expanded to include key attributes and desired elements identified by the project team. The following goals and objectives were identified for the NHSASP (in no particular order):

- 1) Goal: Provide a Safe, Secure and Efficient Aviation System** – A safe, secure, and efficient airport system requires compliance with Federal Aviation Administration (FAA) and Transportation Security Administration (TSA) regulations and guidelines.
- 2) Goal: Maximize Economic Value of New Hampshire's Airport System** – In addition to providing an airport system capable of accommodating increased aircraft activity, the NHSASP should explore development opportunities that will help foster job creation.
- 3) Goal: Promote and Educate Stakeholders on the Importance of the State's Aviation System** - Every resident of New Hampshire is a stakeholder in the State's airport system. The NHSASP can be used as a resource for ongoing advocacy of the State's airports with the general public, local businesses, and policy makers.
- 4) Goal: Enhance, Preserve, and Maintain State Aviation System Assets** – Airports throughout the State, both public and private, must address encroachment and other adverse impacts every day. Adverse impacts to an airport's operational viability most commonly result from land development, economic challenges and vegetative growth. These

challenges can reduce the capacity and/or economic value of airside and landside airport assets.

**5) Goal: Maximize and Diversify Connectivity for State’s Aviation Users** – Airports represent just one piece of transportation connectivity in New Hampshire. In addition to ensuring that the State’s airports are connected and accessible to the national airspace system, airports should also provide connectivity with other modes of transportation throughout the State such as highways, busses, and rail – connecting communities, businesses, and people.

These goals and objectives serve as key themes and guiding principles throughout the course of the NHSASP and will be reflected in the recommendations and project deliverables.

## 1.4 REFERENCED SYSTEM PLANS

The FAA has conducted or sponsored airport systems plans developed on both the regional and national levels. These system plans were reviewed prior to the start of the development of this study and referenced throughout the process. It is important that the policies and recommendations for New Hampshire airports be consistent and considers those outlined in the national and regional plans.

**National Plan of Integrated Airport Systems (NPIAS)** – Every two years, the FAA updates their report to Congress on the NPIAS. This plan identifies approximately 3,355 of the 19,765 airports in the US that are considered of national importance and thus eligible for federal funding. Categories of airports in the NPIAS include: Primary Commercial Service (greater than 10,000 annual enplanements), Commercial Service (between 2,500 and 10,000 annual enplanements), Reliever, and General Aviation.

**General Aviation Airports: A National Asset (ASSET)** – ASSET documents an 18-month study of the nearly 3,000 general aviation (GA) airports, heliports, and seaplane bases identified in the FAA’s NPIAS. This in-depth analysis provides the traveling public with highlights of the pivotal role GA airports play in our society, economy, and the aviation system. The study also aligns the GA airports into four categories; national, regional, local, and basic, based on their existing activity levels. The new categories better capture the diverse functions and economic contributions that GA airports make to their communities and the nation (Source: faa.gov, 2014).

**New England Regional Airport System Plan** – In 2008, a study was completed for the commercial service airports in New England to better understand the dynamics between larger airports like Boston Logan International and regional airports like Manchester and Portsmouth. This study discussed the existing airport roles and also how the airport could serve the growing needs of the region.

A similar study is underway currently for GA airports in New England. Similar to the study completed for New England’s commercial airports, this study focuses on the market dynamics and issues facing the regions GA airports. This study employs the same airport classifications identified in the ASSET study and was completed in March 2014. the NHSASP presented in this document uses draft material available from the March 2014 study.

## Business Aviation: The Unfair Advantage

“Only about 3 percent of the approximately 15,000 business aircraft registered in the U.S. are flown by America’s largest and most well-known companies, while the remaining 97 percent are operated by a broad cross-section of organizations, including governments, universities, charitable organizations and businesses – large, medium, and small. And that 97% represents the vibrant heartbeat of what keeps American business humming... or in this case, flying.” – Forbes, 6 AUG 2012