

SECTION 1 - INTRODUCTION AND PROPOSED ACTION

1.0 INTRODUCTION

The Nashua Airport Authority (the Authority), appointed by the Mayor of the City of Nashua and confirmed by the Board of Aldermen, is tasked with setting policy and procedures to operate the Nashua Municipal Airport – Boire Field (the Airport) for the City in conjunction with the rules and regulations of the Federal Aviation Administration (FAA) and New Hampshire Department of Transportation, Bureau of Aeronautics (NHDOT/BA).

In 1989 and 2000, Airport Master Plan reports¹ were prepared to evaluate the Airport's aging infrastructure and begin the process of identifying its existing conditions and unconstrained facility needs. Each of these studies determined that improvements need to be made in order to comply with FAA design standards, to facilitate aircraft operations, ease airspace congestion, and decrease aircraft delays. In 2003, the Airport undertook a runway feasibility study to validate these prior studies and produced a Runway Feasibility Report² to serve as a technical supplement to the aforementioned Airport Master Plan and related reports.

Prior to construction or reconstruction of a runway, the FAA requires that the runway and its appurtenant facilities comply, to the maximum extent practicable, with all current design standards for runways as published in the FAA Advisory Circular (AC) 150/5300-13, as amended (referred to hereafter as the Design AC), Federal Aviation Regulation (FAR) 14 CFR Part 77 (referred to hereafter as Part 77), and FAA Order 8260.3B, Change 19, United States Terminal Instrument Procedures (referred to hereafter as TERPS).

Note: All figures used to graphically depict improvements or other concepts in this report are located at the end of the report in Appendix A.

1.1 LOCUS

The Airport is classified by the FAA as a General Aviation (GA) airport providing services to the corporate, recreational, student, medical, and military flyer. It is located in the City of Nashua, Hillsborough County, New Hampshire, as depicted in Figure 1-1. Nashua is located in southern New Hampshire abutting the northern Massachusetts border, approximately 40 miles northwest of Boston. Nashua is bordered by Hollis, NH to the west, Merrimack, NH to the north, Hudson, NH to the east, and Tyngsboro, MA to the south (see Figure 1-1). In 2000, Nashua had a population over 86,000 people, and the city hosts a number of universities,

¹ *Master Plan Update*, 1989, prepared by Hoyle, Tanner & Associates, Inc., Hamilton Engineering & Associates, and The Smart Associates; and *Airport Master Plan Technical Supplement*, May 2000, prepared by Hoyle, Tanner & Associates, Inc. and DuBois & King, Inc.

² *Runway Feasibility Report*, March 2007, prepared by Gale Associates, Inc.

commercial establishments, and is considered a part of the Boston High-Tech Corridor.

The Airport is conveniently located, being bounded on the east by the Everett Turnpike (Route 3), connecting it to major transportation corridors to the north and south, and state Route 101A (Amherst Street) connecting it to major and minor feeder routes to the east and west.

The Airport itself is bounded to the east by Charron Avenue, by the Boston and Maine Railroad to the north, by Deerwood Drive to the west, and by Perimeter Road and Pine Hill Road to the south. Perimeter Road provides access to the Airport's terminal area.

The Airport was originally built in 1939 and consists of approximately 390 acres. It has one runway, Runway 14-32, a 5,500-foot long, bi-directional runway serving GA aircraft. In 2008, the Airport had approximately 400 based aircraft and averages approximately 300 aircraft operations on a normal day. The Airport is the second busiest GA airport in New England behind only L. G. Hanscom Field in Bedford, MA.

1.2 PUBLIC PARTICIPATION

The Airport participated in several forums with environmental regulators through a committee organized by the New Hampshire Department of Transportation (NHDOT) called the Natural Resource Agency Coordination Committee (NRACC). This committee meets monthly in Concord, NH to review proposals from around the state that may have impacts on various regulated environmental resources. Committee members include officials from the NH Dept. of Transportation (NHDOT), NH Dept. of Environmental Services (NHDES), NH Fish and Game, NH Office of Energy and Planning, NH Natural Heritage Bureau, US Army Corps of Engineers, US Environmental Protection Agency, US Fish and Wildlife Service, Federal Highway Administration, and others as the agenda may dictate.

The Airport met with the NRACC early in the process of developing the study to obtain input on the scope of the study, then again to discuss the findings in the alternatives analysis and to discuss potential mitigation, and finally to discuss the Airport's conceptual mitigation plans. The purpose of meeting with the group was to assure that the relevant agencies were informed early in the planning process of the Airport's plans, and to obtain their input for the benefit of the study.

A public informational meeting was held by the Airport on March 24, 2009 that was attended by 17 people. The meeting was advertised in the Nashua Telegraph, a daily paper of local circulation. The meeting was held in classroom at the Daniel Webster College. The purpose of the meeting was to inform the public of the study findings and to obtain public input. Most of the questions were of a general nature and a copy of the meeting summary along with the agenda and a copy of the meeting notice are included in Appendix B.

1.3 PROPOSED ACTION

The proposed action at the Airport includes a number of improvements primarily focused on the runway environment but also includes improvements to the terminal area in response to market demand and sound airport design.

Runway 14-32 is oriented on a northwest to southeast axis. For ease of reference, the Runway 32 end is referred to as the southeasterly end of the runway and the Runway 14 end is referred to as the northwesterly end.

All proposed improvements included in the Proposed Action are depicted graphically in Figure 1-2.

1. Relocate, shift and reconstruct the runway, parallel taxiway, and all connector taxiways. To accomplish this action, the following improvements are proposed:
 - a. Extend the runway to a total length of 6,000 feet by adding a 500-foot extension at the Runway 14 end;
 - b. Relocate the reconstructed runway's centerline 300 feet to the north to achieve the FAA required standard runway-to-taxiway separation of 400 feet and to allow the existing runway to remain operational during construction of the new runway;
 - c. Shift the runway 115 feet to the west so that the full localizer critical area remains on airport property;
 - d. Relocate the Glide Slope to the infield area between the reconstructed runway and parallel taxiway;
 - e. Reposition the Medium-Intensity Approach Lighting System with Runway Alignment Indicator Lights (MALSR) to accommodate the reconstructed runway's new centerline location;
 - f. Relocate all NAVAIDS and Landing Aids to coincide with the relocated runway centerline;
 - g. Remove the existing runway when the new runway is operational;
 - h. Relocate the parallel taxiway after removal of the existing runway so that the relocated taxiway is 400 feet from the new runway; and
 - i. Remove the existing parallel taxiway.
2. Expand the existing aircraft parking apron along its full length by 65 feet (approximately 340,000 square feet);
3. Construct T-hangars and associated taxilanes and automobile parking areas adjacent to the "India" Apron, to include:
 - a. One 5-unit T-hangar (40' X 200')
 - b. One 3-unit T-hangar (40' X 150')
 - c. Four 8-unit nested T-hangars (50' X 170')
 - d. One 10-unit nested T-hangar (50' X 220')
 - e. One 10-unit nested T-hangar (50' X 240')
 - f. One 20-unit nested T-hangar (50' X 450')

4. Acquire avigation easements over properties that have been identified as having obstructions to the Airport's Part 77 Approach and Transitional Surfaces, and TERPS Surfaces;
5. Remove vegetative obstructions to the Part 77 Approach and Transitional Surfaces, and TERPS Surfaces; and
6. Install obstruction lights on obstructions to the Part 77 Transitional Surface that cannot be removed, or otherwise mitigated.

1.4 AUTHORITY

This report was prepared in accordance with the requirements of the National Environmental Policy Act (NEPA) pursuant to FAA Order 5050.4B, *National Environmental Policy Act Implementing Instructions for Airport Actions*³; and FAA Order 1050.1E, Change 1 *Environmental Impacts: Policies and Procedures*. The FAA is responsible for implementing NEPA at airports through Order 5050.4B.

³ *Order 5050.4B, U.S. Department of Transportation, Federal Aviation Administration, National Environmental Policy Act Implementing Instructions for Airport Actions*, April 28, 2006.