



# Chapter 1

## Introduction

### 1.0 OVERVIEW

Early in 2009, the Airport Commission of Forsyth County (ACFC) initiated an update to the Smith Reynolds Master Plan, which was last completed in 1994. The need for this update was essentially twofold. The primary reason was to create a plan that the ACFC could utilize as a guide as they continue moving forward with their development and marketing initiatives. Secondly, the update serves both the FAA's and state's requirements to conduct periodic updates to the airport's future development plan.

Although the development of a master plan and associated airport layout plan (ALP) set serves many objectives, one of the most significant purposes of this study is to allow the airport to meet federal assurances for grant funding eligibility. Back in 1982, the federal government adopted the Airport and Airway Improvement Act; this act allowed federal funds to be distributed through a grant program to airports throughout the country. These federal grants did not require repayment provided that certain rules were followed and adhered to (assurances). Over the years, the grant legislation has been revised, renamed, and expanded and presently includes 39 separate assurances that must be met in order to be considered "compliant". The current grant program, referred to as the AIP program, provides grant funding to cover up to 90% of costs required to address airport safety, capacity, security, or environmental concerns. Grant assurance number 29 states that the airport sponsor will develop and maintain an ALP which denotes the airport's boundaries along with all existing and future development within. The ALP and any revision or modification thereof must be reviewed and approved via signature by an authorized representative of the Secretary. The purpose of the master plan document is to identify in detail the justifications, methodologies, and reasoning for the developments shown within the airport layout plan set. In addition to grant funding, the airport's master plan serves a variety of functions, including projecting future aviation activity, being a tool for financial planning, and guiding adjacent land uses. The primary planning objective of this master plan update was to create a 20-year development program that would maintain a safe, efficient, economical, and environmentally acceptable airport facility for Forsyth County. By achieving this objective, the document should provide guidance to satisfy the aviation demand in a financially feasible and responsible manner, while at the same time addressing the aviation, environmental, and socioeconomic issues of the community. In support of this goal, the following objectives were considered:

- ➔ Identifying the needed airside, landside, and airspace improvements and recommend options to further optimize the economic aspects of the airport while enhancing the safety and operational capability.
- ➔ Establishing an implementation schedule for short-, intermediate-, and long-term improvements and insure that they are financially feasible.



- Identifying short-term requirements and recommend actions to optimize short-term funding opportunities.
- Ensuring that short-term actions and recommendations do not preclude long-range planning options.
- Incorporating the interests of the public and government agencies into the planning process.
- Remaining sensitive to the overall environmental characteristics and needs of the area surrounding the airport.
- Incorporating current comprehensive land use (both on- and off-airport property) and recommend developments that are compatible with existing and future land uses.

Multiple opportunities were available for community and governmental representatives to participate in this study through representatives serving on the study's master plan steering committee (MPSC) and through community workshop/public meetings. Additionally, a public meeting was conducted which allowed an opportunity for public comments on the presented study information. It is important to note that the study results and the future developments presented in this report represent a plan to guide the ACFC in meeting demands as they develop; therefore, no development should be undertaken until there is a clearly identified need for it.

## **1.1 KEY ISSUES**

This master plan provides a comprehensive overview of the airport's needs over the next 20 years, including issues related to the timing of proposed development, development costs, methods of financing and management options to provide a clear plan of action. Prior to the start of this master plan update, there were a number of key issues identified by the ACFC that required particular attention. These items include but were not limited to:

- Evaluating airfield development options that address the primary and secondary runway length requirements, runway safety area standards, and future airfield capacity.
- Evaluating the Runway 15 approach and location of the runway's existing relocated threshold.
- Evaluating the long-term development options for general aviation and airport support facilities while maximizing access to these facilities.
- Evaluating the significance of Runway 4-22 to existing operations.
- Evaluating runway to taxiway separation and safety requirements for parallel Taxiway A.
- Evaluating the terminal landside area for improvements to access, parking, and circulation to the terminal complex, as well as to adjacent businesses.
- Discuss the need for a new terminal and control tower facilities and identify potential development areas for each.
- Develop and briefly discuss a plan for the airport to continue monitoring, updating, and implementing its pavement management program.
- Evaluating Taxiway F extension to open up and create developable land for potential airport tenants.
- Evaluate existing and alternative funding sources for airport development.



- Evaluating land acquisition associated with FAR Part 77 surfaces, specifically runway approaches and transitional surface areas; as well as for noise mitigation with neighboring residential areas.
- Building a strong public and political consensus as to the value of the airport; develop a public information and involvement program to further enhance the ACFC as a “good neighbor and good steward” of the airport.
- Organize and implement the use of a Master Plan Advisory Committee to facilitate the decision making process for the master planning process.
- Optimize the operational efficiency, effectiveness and safety of the airport.
- Create an approach and plan that identifies the best short-term, intermediate and long-range development for the airport.
- Create strong local and regional support from the business community.

## **1.2 PROCESS**

This master plan update provides a systematic outline of the development actions required to maintain and further develop airfield and landside facilities. This process provides the officials responsible for the scheduling, budgeting, and ultimate funding of airport improvement projects with an advance notice of the future needs of the airport. By phasing the airport improvements, the development can be conducted in an orderly and timely fashion.

This airport master plan update for INT was prepared in accordance with the requirements of the FAA, the North Carolina Department of Aviation, and Forsyth County. All portions of this document are based on the criteria set forth in the FAA Advisory Circulars (AC) 150/5070-6B, Airport Master Plans, and AC 150/5300-13, Airport Design. To accomplish the objectives identified, the study has included the following tasks:

- Develop a 20-year capital improvement program that is technically correct, environmentally sound, financially viable, and implementable with particular attention given to the 5-year (short-term) development plan.
- Identify the role of the airport in the local, regional, and national aviation system; meeting the long-range aviation needs of the region while acting as an economic catalyst to the area.
- Develop alternative options for airport development that address current and future demand, including issues relating to the timing and costs of proposed development based upon appropriate activity triggers.
- Provide potential utilization of or re-use options for existing infrastructure and airport facilities.
- Provide overview of land use compatibility issues in the airport environs.
- Develop an Airport Layout Plan (ALP) drawing set meeting FAA and NCDOA criterion.
- Develop a process that allows for public participation.
- Optimize the airport’s operational efficiency, safety, security, and effectiveness in serving the region.
- Establish guidelines to support a continuous planning process.

*SMITH REYNOLDS AIRPORT*  
*MASTER PLAN UPDATE*



Throughout this process, reviews of this master plan report were conducted at key points such as at the completion of the forecasts and during the development of the alternatives. This ensured that input was received from key stakeholders, such as the Airport Commission of Forsyth County, NCDOA, and FAA. The individual report chapters provide a detailed explanation of these key steps. It should be noted that each step in the master plan process built upon information and decisions made during previous steps. Taken as a whole, they address the key issues identified above and demonstrate how study objectives were met.