

## FOREWORD

### Introduction

A Master Plan provides long-range recommendations for the improvement and development of an airport. This Airport Master Plan Update (AMPU) includes a detailed report and a set of drawings that identify, schedule, and illustrate each project anticipated at the Waterbury-Oxford Airport (OXC) over a 20-year period. This AMPU was prepared for the Connecticut Department of Transportation (ConnDOT), operator of the facility.



The previous OXC Master Plan was completed in 1995, and included many recommended projects. Most of the 1995 recommendations have since been developed, including new hangars of various types, an Air Traffic Control Tower, new taxiways, aircraft parking aprons, Runway Safety Area (RSA) extensions, and the closure of crosswind Runway 13-31.

Much of the data used to develop the previous plan are now outdated, and the community and region the Airport serves today are different from that of 1995. As such, one of the goals of this AMPU is to identify and analyze the socioeconomic changes that have occurred in the Naugatuck Valley Region of Connecticut, and particularly in the immediate area surrounding the Airport in the Towns of Oxford, Middlebury, and Southbury. This information, combined with the current airport condition and activity, serves as the basis for the development of this updated study.



A primary product of this AMPU is a drawing that illustrates the existing airport features and all recommended developments. This drawing is called the Airport Layout Plan (ALP), which must be formally approved by the State and the Federal Aviation Administration (FAA). The ALP is supported by a number of additional drawings that illustrate surrounding airspace, adjacent land use, and airport property. Combined, these exhibits are termed the ALP Drawing Set.

The AMPU document follows a standard format, and is based on the design criteria outlined in the following guidance materials and regulations:

- FAA Advisory Circular 150/5070-6B, Airport Master Plans
- FAA Advisory Circular 150/5300-13, Airport Design
- Federal Aviation Regulation (FAR), Part 77, Objects Affecting Navigable Airspace

This foreword provides background information on the study's purpose, process, and issues, and is organized into the following sections:

- Study Purpose
- FAA Planning Policy and Process
- Key Study Considerations and Activities
- Public Involvement Activities
- Related Study – Airport Noise and Compatibility Plan
- Study Organization

### **Study Purpose**

The overall purpose of the AMPU is to provide guidelines for future airport developments that satisfy anticipated aviation demand, and are compatible with the environment and consistent with community interests. The AMPU provides an effective graphic presentation of the potential short- and long-term developments of OXC, and establishes a schedule of priorities, while addressing adjacent land use issues and environmental concerns through public and municipal input.

Although the AMPU presents a conceptual development plan covering a 20-year period, it does not represent a commitment by the State to undertake the recommended projects or guarantee financial support for implementation. However, ConnDOT and FAA approval of the AMPU is a prerequisite for pursuit of the recommended projects.

ConnDOT's Bureau of Policy and Planning, in concert with the Bureau of Aviation and Ports, undertook the development of the AMPU to determine the future role of the Airport, and to provide direction for the continuing improvement of the facility, as compatible with the local community. The Master Plan study is evidence that ConnDOT recognizes the importance of aviation in the regional economy and the associated challenges inherent in providing for future aviation needs. Maintaining an airport is a costly investment that demands a sound and realistic master plan. With this AMPU, the Airport can foster its role as both a transportation asset and a centerpiece of the aviation industry in the Central Naugatuck Valley.

### **FAA Planning Policy and Process**

FAA planning policy states that all master plans for public-use airports should cover a long-range (i.e., 20-year) planning horizon, but should be updated on a 10-year basis. As the previous document was completed in 1995, an update is on-schedule in compliance with the policy. The policy is intended to foster a comprehensive approach to airport improvements, establish realistic development goals, and provide a forum for community involvement. The FAA's goal is to ensure that all projects at public-use airports are consistent with an approved long-range plan.

Furthermore, to ensure that airport sponsors regularly update their plans, the FAA requires master plan updates as a prerequisite for receiving federal aid for developments and

improvements. Federal aid is administered by the FAA through the Aviation Trust Fund and the Airport Improvement Program (AIP). The AIP is the primary source of grant money for airfield capital projects at the Waterbury-Oxford Airport.

In fact, the AMPU itself was funded by the FAA through the AIP. As a condition of receiving funding for the study, ConnDOT assured the FAA that airport development recommendations would conform to FAA standards. Therefore, this study is prepared in conformance with relevant FAA standards, guidelines, and methodologies. A list of these standards and guidelines is provided in the grant application.

### **NEPA / CEPA Environmental Process**

The National Environmental Policy Act (NEPA) and the Connecticut Environmental Policy Act (CEPA) were established to ensure that federal and state funded projects consider and address environmental issues. As a public-use State-owned airport, NEPA and CEPA are applicable to all developments at OXC. As such, the AMPU includes a chapter dedicated to environmental concerns, covering areas ranging from noise and land use compatibility to wetlands and endangered species. The AMPU reviews each area of concern to help select recommendations that avoid or minimize impacts, or that can be otherwise mitigated.

However, the AMPU document itself does not include the required analysis under NEPA/CEPA, which would likely be the subject of a separate study prior to individual project implementation. Rather, the AMPU identifies potential environmentally sensitive areas and summarizes potential affects that would require future environmental evaluation and approvals.

### **Study and Airport Funding**

As previously discussed, the AMPU study was funded by the FAA through the AIP, with the remaining cost provided by ConnDOT. The FAA grant was accepted in the fiscal year 2003. No municipal funding is used for any projects at OXC.

The AIP defines eligible airports as those considered essential in the national airport system. This is determined by an airports inclusion in the National Plan of Integrated Airport Systems (NPIAS), which is comprised of all commercial service and reliever airports, as well as select general aviation airports. Approximately 3,300 of the 17,000 registered landing sites in the United States are currently included in the NPIAS.

The AIP provides funding for airport safety and capacity projects at public-use airports of all sizes. AIP eligible capital projects include master plans, environmental studies, runway and taxiway development and rehabilitation, airport lighting and security, aircraft parking aprons and access roads, and navigational aids.

As of 2004, a limited component of the AIP program (i.e., Non-Primary Entitlements) may also be used for revenue generating facilities, such as fuel farms and hangars. However, all hangars

constructed at OXC in recent years were developed by the private sector through lease agreements with ConnDOT. This process is anticipated to continue at the Airport.

The AMPU identifies a comprehensive list of recommended capital projects over a 20-year planning period, including estimated construction costs. The anticipated funding source is identified for all recommended projects. It should be noted that general airport maintenance and operating expenses are not considered capital projects, and are not currently eligible for AIP funding; those costs are the responsibility of the State.

### **Key Study Considerations and Activities**

The following issues were identified during the project scoping phase, and provide emphasis and focus for the AMPU. Some of the issues are common to all airport master plans, while others are unique to the Waterbury-Oxford Airport.

- Re-assessment of the Airport's role in serving the Connecticut Naugatuck Valley and wider metropolitan region. An airport user survey is used to identify the mix of both local aircraft owners and operators and non-local users that store aircraft at OXC due to available facilities and services.
- Review the land use, development, and socioeconomic changes that have occurred in the Oxford/Middlebury area over the last decade, as well as the changes and development that have occurred at the Airport.
- Update the noise analysis for the Airport based on current data provided by the new Air Traffic Control Tower. The aircraft noise issue is of high importance to the surrounding towns. AMPU data is also be used in a separate airport noise study (discussed below).
- Utilize the current airport activity data and airport tenant survey data to prepare new long-range activity forecasts for the Airport.



- Provide new airport photography, mapping, and obstruction data (i.e., object heights) for use in all AMPU activities.
- Conduct an updated airspace obstruction evaluation and review the feasibility of eliminating or mitigating object penetrations.
- Identify the benefits, impacts and costs of an Approach Lighting System (ALS) for Runway 36, in association with the relocation or burial of the power lines to the south of the Airport.
- Investigate the feasibility of an Instrument Landing System (ILS) for Runway 18 (without an ALS), including cost, obstruction, and impact considerations.

- Conduct a field review of wetlands located on-airport property, and prepare a comprehensive mitigation plan identifying potential mitigation sites for projects identified in the AMPU.
- Identify the economic impact of the facility in terms of number of jobs, payroll, and economic activity associated with the Airport.
- Review airport operation issues, procedures, and new regulations that may impact the management of the Airport, including the following:
  - Fuel storage procedures
  - Security regulations and procedures
  - Operation of gliders, ultra lights, and parachuting activity
  - Wildlife management procedures
  - Review of tenant leases and associated terms and conditions

### **Public Involvement Activities**

A goal of the AMPU is to consider input from a broad spectrum of the community, including airport users and businesses, local municipalities, regulatory agencies, and the general public. As such, the study included a detailed outreach program that consisted of the following efforts.

### **Advisory Committee**

A study Advisory Committee (AC) was established at the outset of the AMPU whose role it was to provide well-balanced input to the planning process that addressed the concerns of the community and needs of users. Over the course of the study, several AC meetings were held that included both presentations and open discussions. Meeting reports were provided to document the discussion. These meetings were open to the public and the date and time of the meetings was published on the study website. The following organizations were represented on the AC:

- Federal Aviation Administration (FAA)
- Connecticut Department of Transportation (ConnDOT)
- Connecticut Department of Environmental Protection (ConnDEP)
- Connecticut Office of Policy and Management (OPM)
- Council of Governments of the Central Naugatuck Valley (COGCNV)
- Town of Middlebury representative
- Town of Oxford representative
- Town of Southbury representative
- Airport Tenants
- Air Traffic Control Tower (ATCT)

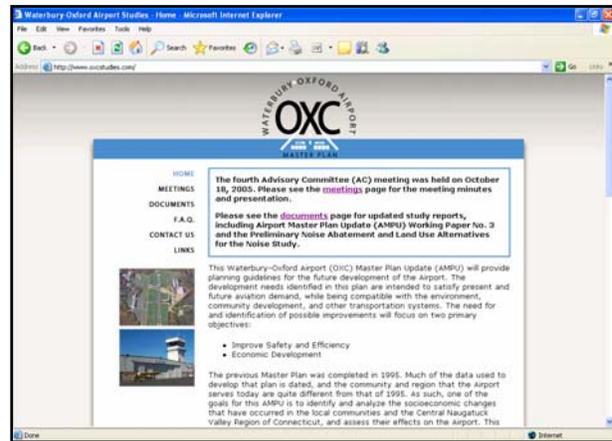
## Public Informational Meetings

To ensure the general public had the opportunity to comment on draft AMPU findings, two Public Informational Meetings (PIMs) were held. The first PIM was held at the study mid-point and the second after the release of the draft AMPU.

The PIMs provided an open forum for reviews, questions, and comments from the general public. The meetings had an “Open House” period, a technical presentation, and a question and answer period. Public notice advertisements and a project newsletter were published for each meeting.

## Study Web Page

A custom website was designed specifically for the AMPU to provide narrative and graphic information, with regular updates throughout the study duration. The website provides readily accessible information, including project newsletters, meeting announcements and minutes, contact information, related links, draft and final AMPU reports, and photographs. The website also contains an email address for submitting comments. The registered domain is [www.oxcstudies.com](http://www.oxcstudies.com).



## Study Organization

The AMPU is organized into the following report chapters:

- Introduction
- Inventory of Existing Conditions
- Forecasts of Aviation Demand
- Demand/Capacity Analysis & Facility Requirements
- Airport Development Alternatives
- Environmental Overview
- Refinement and Selection of the Recommended Plan
- Airport Layout Plan

## Related Study – Airport Noise and Compatibility Plan

In addition to the AMPU, ConnDOT concurrently prepared a detailed *Noise and Land Use Compatibility Plan* for OXC. This study follows procedures established in Federal Aviation Regulations (FAR) Part 150, and is thus commonly referred to as a Part 150 Noise Study. Based on previous studies for the Airport, it is known that the Airport generates off-airport noise in

sensitive residential areas. To evaluate and address noise impacts, ConnDOT committed to study airport noise and land use in order to develop a plan that endeavors to better manage and possibly reduce noise exposure in the surrounding communities.

The Part 150 study investigates airport operational procedures and land use planning concepts that may reduce existing and future noise exposure. The objective of the noise study is to prepare a comprehensive Noise Compatibility Plan (NCP) that is intended to manage airport noise and associated impacts. The noise study was funded by the FAA, sponsored by ConnDOT, and is tailored to the specific issues of OXC. The study is structured to be integrated with the AMPU without duplication of services. Information on the Noise Study is available at [www.oxcstudies.com](http://www.oxcstudies.com).

