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#### **EXECUTIVE SUMMARY**

The primary objective of this business plan for the Waterbury-Oxford Airport (OXC) is to identify operational and economic development opportunities to assist the Connecticut Department of Transportation (ConnDOT) with optimizing the overall benefits of the Airport for the community it serves. By providing recommendations and steps for implementation, this plan aims to improve the Airport's financial performance and long term viability as a provider of aviation facilities and services to its users and customers.

A deliberate process was utilized for the development of this business plan which is described further in Section 1. The initial steps in the process looked to understand the facility's profile, existing characteristics, and the airport market area. Subsequent elements in the process included conducting a SWOT analysis, identifying lease opportunities and constraints, developing market valuations, and understanding the economic contributions, all of which contributed to the findings and recommendations which are presented on both a system-wide and airport specific levels.

This business plan effort initiated (October 2010) prior to the enactment of the Connecticut Airport Authority (CAA). During the course of developing the business plan, the CAA was created (July 2011) and as of May 2012 is transitioning the operation of the Airports from ConnDOT to CAA. Due to the timing of preparation and delivery, as the overall structure of CAA is finalized and put into place, the contents of this plan, including the recommendations should also be considered by the CAA, when and where applicable.

#### **Airport Profile**

The Waterbury-Oxford Airport (OXC) is a public-use, publically owned General Aviation (GA) airport on 424 acres located approximately seven miles southwest of Waterbury Connecticut in the county of New Haven. A small northern portion of the Airport is located within the Town of Middlebury. The Airport consists of a single 5,800 foot long asphalt runway with ILS and GPS approach capabilities, a full parallel taxiway, an air traffic control tower, and numerous aviation support facilities.

Designated as a GA airport in the FAA's National Plan of Integrated Airport Systems (NPIAS), the primary role of Waterbury-Oxford Airport is to serve GA corporate business and recreational activity. Notably, the Airport contains the highest concentration of GA activity in the entire State of Connecticut.

#### **Existing Airport Characteristics**

To a large degree, an airport's characteristics are directly related to its ability to achieve its mission which for Waterbury-Oxford is to provide an efficient, effective, convenient, and safe aviation facility. The characteristics set the baseline understanding of the facility for the business plan effort and include documentation of physical characteristics, documents existing airport tenants, the existing management structure, as well as historical airport operational and baseline financial data.



Due to a number of factors, mainly the economic downturn, general aviation has seen a drop in the level of aircraft operations in recent years. Although operations in 2010 were 18% less than their peak of 58,335 in 2007, comparatively speaking, with regard to operations the Airport is healthier than many other GA Airports nationally. Historically, the Airport has experienced a fluctuation on the revenues and expenses of the baseline financial data with the FY10-11 data reporting a deficit of \$324,100.

#### **Airport Market Area**

For the purpose of this business plan, Waterbury-Oxford's market area is comprised of 12 airports in the surrounding area that are comparable in size, function, or service level. In broader terms, Waterbury-Oxford's market area includes the surrounding airports from which Waterbury-Oxford draws business from and vice versa.

There are a total of 1670 based aircraft within the market area of Waterbury-Oxford Airport and the full business plan provides a comparison of based aircraft and operations data between OXC and the airports within its market. Also presented is a further comparison of the typical services/amenities offered within the market since a correlation can often be made between an airport's market share and the level of services it offers. The SWOT Analysis identified what participants considered some of the Airport's limiting factors in terms of weaknesses and constraints. A culmination of these factors was used to provide recommendations that are intended to guide and to improve the Airport's ability to attract business and increase its market share of based aircraft, operations, and services.

#### **SWOT Analysis**

Prior to the development of alternatives and recommendations regarding the operational and economic development opportunities at Waterbury-Oxford Airport, it was necessary to bring airport stakeholders together to discuss various aspects of the Airport's existing operating and business environments. As mentioned, a SWOT Analysis (Strengths, Weaknesses, Opportunities and Threats) hosted in a workshop format was facilitated by the study's business planning team. The SWOT Analysis Workshop for Waterbury-Oxford was conducted on December 15, 2010.

The information obtained by the team was used to define operational and economic development opportunities which will assist the Airport and the Airport Operator in optimizing the Airport's assets and achieving the Operator's mission. The results of the SWOT analysis provided a comprehensive and balanced description of the business environment the Airport is operating within and was used by the study team to help identify focus areas for the business plan and make recommendations to help the Airport capitalize on their strengths and identify potential opportunities.

The SWOT workshops were conducted at each of the State of Connecticut's five GA airports, and the results from each airport were generally guided by two common themes; those specific to the facility, and those concerning the entire system of airports owned and operated by the State.



#### **Lease Opportunities and Constraints**

Understanding the opportunities and constraints of a property can assist in determining its best possible use and value. Since even privately-developed facilities at Waterbury-Oxford Airport must meet state and national environmental requirements, it is important to understand the impacts any development may cause. Based on existing data available for the Airport, this section of the business plan identifies potential development sites and their characteristics in terms of opportunities and constraints. The information found in this section can be used as a marketing tool for potential developers as well as the Airport itself in meeting the challenges of long term airport facility planning.

Several factors were used to assess each parcel for its development potential. These factors are discussed in depth in the report, and include: FAA Airport Design Standards; FAR Part 77 (Obstructions to navigation); Federal obligations; Site topography; Utility availability or constraints (e.g., buried gas lines); Ground and airside access; Compatible land use; and Environmental considerations. The summary figure of Lease Opportunities and Constraints for OXC can be found on the following page. Specific descriptions are in the full business plan.

ConnDOT is encouraged to promote any available development areas at the Airport using various outlets: online (ConnDOT website, CERC's Site Finder site (see Findings and Recommendations), local business associates websites, brochures, pamphlets etc.. This business plan provides individual summary sheets for the parcels identified, but it should be noted that the delineation of these parcels is not definite. Thus, flexibility should be given to proposals that may look to combine or reconfigure a given parcel to accommodate the needs of the proposer.

#### **Airport Valuation**

A summary airport valuation report was completed for Waterbury-Oxford Airport as of January 1, 2011. (A copy of the complete report can be found in the Appendix of this business plan.) The function of the report, completed for each GA airport as part of the business plan development effort, pertains to all relevant classes of airside property in both improved and unimproved condition at Danielson, Hartford-Brainard, Waterbury-Oxford, Groton-New London, and Windham Airports. Information from the valuation was used to generally determine rates and charges, rental rates and other economic determinants which can be used to measure expected revenue in the context of the opportunities identified as part of this business plan.

Lease Opportunities FIGURE Here.



#### **Economic Contribution**

GA airports constitute important assets for state and local economies. Not only do they provide on-airport jobs, they indirectly support additional employment throughout the State. A study by the Alliance for Aviation across America, a non-profit coalition of 5,500 members supporting GA interests, found that GA contributes \$2.4 billion total or \$726 per capita to Connecticut's economy. While the study's methodology is not fully documented, it asserts that the economic contribution is generated by 176 aviation-related businesses - fixed base operations (FBOs), repair stations, and charter operators – at 22 GA airports in Connecticut.

As part of the assessment of the economic contribution of OXC on the state and local economy, the on-airport effects, as well as the multiplier effects were quantified. Additional qualitative contributions are also reported.

The overview of the economic contribution of the Waterbury-Oxford Airport is presented below as well as the associated tax revenues.

#### **Overview Economic Contribution, 2010**

		New Haven Count	У			
	Jobs	Labor Income (\$000s)	Output (\$000s)	Jobs	Labor Income (\$000s)	Output (\$000s)
On-Airport Jobs	704	\$65,311	\$109,183	704	\$65,311	\$109,183
Operations and Maintenance Spending	6	\$309	\$840	8	\$379	\$1,036
Capital Spending	70	\$3,800	\$8,785	75	\$4,100	\$9,635
Airport Tenant Spending	682	\$33,721	\$86,483	816	\$41,450	\$108,109
Visitor Spending	68	\$2,373	\$ 6,741	72	\$2,629	\$7,473
Total	1529	\$105,515	\$212,032	1675	\$113,869	\$235,436

#### **Overview Connecticut Tax Revenues**

Tax Type	(\$000s)
Personal Income Tax	\$5,381
Sales Tax	\$2,118
Corporate Income Tax	\$417
Total	\$7,916



#### **Findings and Recommendations**

Consistent with the objective of this business plan, the culmination of the tasks completed throughout the business planning process provided a thorough understanding of the background and operational characteristics of the Waterbury-Oxford Airport. That understanding identified strengths, weaknesses, including issues and opportunities on both facility specific and systemwide levels. In summary, this business plan was developed through a process that revealed issues and challenges, while identifying the benefits and opportunities of the Airport.

The facility specific findings and recommendations are relative to the operational characteristics, circumstances and historical trends of the Airport in particular, while the system-wide recommendations are relative to the entire state-owned airport system and would require implementation on a state level.

Since ConnDOT owns and operates a system of airports it is important to review the financial activity and economic contributions of the GA airports as a whole. The following tables show the historical system financial performance and the Economic Benefits of the GA Airport System airport by airport. The findings and recommendations of this business plan look to enhance both the financial performance of each airport and their economic contribution.

#### **Historical System Financial Performance**

Davidson Davidson	\$61,647	\$40,881	\$19,486	\$20.207	\$20,012
Danielson Revenues	\$01,047	\$40,881	\$19,480	\$29,397	\$39,012
Groton-New London Revenues	668,543	548,372	461,184	454,722	513,759
Hartford-Brainard Revenues	445,012	496,550	431,880	458,193	481,258
Waterbury-Oxford Revenues	567,859	574,098	526,600	658,008	608,610
Windham Revenues	59,979	63,786	64,225	63,842	69,232
Total System Revenues	\$1,803,040	\$1,723,687	\$1,503,375	\$1,664,162	\$1,711,871
Danielson Expenses	40.0.0	400.000	4	4	4
Dameison Expenses	\$61,043	\$62,937	\$92,508	\$90,302	\$101,634
Groton-New London Expenses	758,790	797,904	1,040,271	849,067	798,766
Hartford-Brainard Expenses	419,579	445,527	689,405	848,803	728,642
Waterbury-Oxford Expenses	565,408	634,908	905,240	931,405	932,710
Windham Expenses	178,992	183,872	186,510	153,124	156,857
Total System Expenses	\$1,983,812	\$2,125,148	\$2,913,934	\$2,872,701	\$2,718,609
System Operating Surplus/(Deficit)	(\$180,772)	(\$401,461)	(\$1,410,559)	(\$1,208,539)	(\$1,006,738)

Source: Consultant Calculations



## **Summary of Economic Benefits of the GA Airport System**

	Jobs	Output
Danielson Airport	25	\$2,000,000
Windham Airport	65	\$7,500,000
Hartford-Brainard Airport	368	\$44,800,000
Groton-New London Airport	909	\$119,500,000
Waterbury-Oxford Airport	1,675	\$235,400,000
Total System Economic Benefits	3,042	\$409,200,000

**Source: Consultant Calculations** 

The system of GA airports assessed operated at an annual deficit of approximately \$1.0 million in FY10-11 and an average deficit of approximately \$842,000 over the last five years. A significant portion of the deficit can be attributed to a more accurate accounting allocation of fringe benefits. In 2010, the system of GA airports did however provide an estimated \$409 million in economic output activity and 3,042 jobs to the State of Connecticut.

Section 7 of this business plan provides the details on the findings and recommendations as well as a business plan summary. The following table provides a summary of the business plan recommendations.

#### **Summary of Business Plan Recommendations**

Recommendation	Priority	Impact
System Wide Recommendati	ons	
Complete the transition of the airports from ConnDOT to the Authority as soon as possible	In-progress	Efficiency in Governance
New or revised position, centralized role overseeing development opportunities at the airports	Immediate	Coordinated and Focused Efforts
Improve and shorten lease development process. This should be completed prior to soliciting for any airport development	Immediate	Reduce loss of development opportunities
Improve Airport operational recordkeeping and fully assess the financial reporting during the transition to the Authority	Near-term < 1 year	Better tracking of operational trends and market share
Track surrounding airports rates and charges and give the Authority full control for updating and setting rates and charges at each airport. Implement recommended rate increases	Near-term <1 year	Revenue increase



Develop and coordinate State economic development initiatives to include Airport Development Zones, Available Parcel Marketing Sheets, and Upload Available Properties to CERC's Site Finder	Immediate and On-going	Increase development opportunities
Maximize participation with industry association marketing and partnerships	On-going	Increase airport activity
Establish Statewide Aviation Group	Mid-term < 3 years	Increase aviation awareness in CT
Active pursuit of prospective users and tenants	On-going	Increase airport activity and aviation awareness
Facility Specific Recommenda	tions	
Improve Airport operational recordkeeping and monitor based aircraft market share	Near-term < 1 year	Better tracking of operational trends and market share
Staffing levels should be monitored to ensure that Airport needs are being met in a timely and cost efficient manner	Near-term < 1 year	Potential additional expense
Pursue the development of recommended parcels (Parcels A, B, and C), non-aviation development on Parcel E, and pursue a U.S. Customs facility at the Airport	Mid-term < 3 years	Revenue increase
In addition to scheduled capital projects, the capital plan should consider efforts to lower the approach minimums at the Airport (relocation of utilities, and other necessary steps (i.e. Obstruction removal)	Near-term < 1 year	Additional expense
Implement proposed rates and charges	Near-term < 1 year	Revenue increase
Continue active local marketing and outreach	On-going	Increase airport activity and aviation awareness



#### 1.0 INTRODUCTION

The primary objective of this business plan for Waterbury-Oxford Airport (OXC) is to identify operational and economic development opportunities to assist the Connecticut Department Transportation (ConnDOT) with optimizing the overall benefits of Airport the for the community it serves. This business plan is intended to be consistent with the Bureau's mission to provide the most



efficient, effective, convenient and safe use of State Aviation facilities. This mission is also in line with FAA grant assurances since Airport owners or sponsors, such as ConnDOT who accept funds from FAA-administered airport financial assistance programs must agree to certain obligations which include maintaining and operating the Airport safely and efficiently. By providing recommendations and steps for implementation, the plan aims to improve the Airport's financial performance and long term viability as a provider of aviation facilities and services to its users and customers.

**Note:** This business plan effort initiated (October 2010) prior to the enactment of the Connecticut Airport Authority (CAA). During the course of developing the business plan, the CAA was created (July 2011) and as of May 2012 is transitioning the operation of the Airports from ConnDOT to CAA. Therefore, acknowledgement of the CAA is not found throughout this entire document.

Moreover, with limited references to the CAA, the findings and recommendations of this plan were in large part directed toward the ConnDOT Bureau of Aviation since they were deliberately based upon ConnDOT's structure and operation of the airports that was in place at the start of the business plan process.

Due to the timing of preparation and delivery, as the overall structure of CAA is finalized and put into place, the contents of this plan, including the recommendations should also be considered by the CAA, when and where applicable.



#### 1.1 Business Plan Process

In order to meet the objective of this plan and ensure that it examines the entire field of airport issues at Waterbury-Oxford, the following process was used in developing the business plan:

- Existing Airport Characteristics
  - Physical Characteristics
  - Airport Tenants
  - Organizational Structure
  - Historical Airport Data
  - Baseline Financial Data
- Airport Market Area
- → SWOT Analysis
- Lease Opportunities and Constraints
- → Economic Contribution
- → Findings & Recommendations
  - o System-wide
  - o Facility Specific

Land Use, Environ. & Development Review Goals & Study Design Development Draft **Options** Existing **Financial** and Final SWOT Analysis Markets Rusiness **Analysis** Strategic **Plans** Analysis **Previous Studies** Lease Reviews, Minimum Standards Economic Implement and Market CT State Airport System Plan Impact/ Airport Master Plan Results **Airport** Conditions Recent Market Appraisals **Business Plans** Legend = Study Constraints = Critical Path = Final Product

Figure 1-1: Airport Business Planning Process



## **1.2** Airport Profile

The Waterbury-Oxford Airport (OXC) is a public-use, publically owned General Aviation (GA) airport on 424 acres located approximately seven miles southwest of Waterbury Connecticut in the county of New Haven. A small northern portion of the Airport is located within the Town of Middlebury. The Airport consists of a single 5,800 foot long asphalt runway with ILS and GPS approach capabilities, a full parallel taxiway, an air traffic control tower, and numerous aviation support facilities. The Airport is operated by the State of Connecticut Department of Transportation.

Designated as a GA airport in the FAA's National Plan of Integrated Airport Systems (NPIAS), the primary role of Waterbury-Oxford Airport is to serve GA corporate business and recreational activity. Notably, the Airport contains the highest concentration of GA activity in the entire State of Connecticut. OXC provides maintenance, fuel, aircraft storage, and support facilities to meet the demand of corporate jet, and multi and single engine aircraft.

Shown in Figure 1-2, the service area of Waterbury-Oxford remains consistent with, and is derived from the Connecticut State Airport System Plan that was completed in 2006. The land use surrounding the Airport is mostly industrial with a few residences.

NEW YORK

SHARON

CORNALL

GOSHEN

TOPPINOTUS

REV HARTFOR

MOUNTANAMADOW

ARSTRE
WORK

CONSIDER

MOUNTANAMADOW

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MATERIARY - PLYMOUTH

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SELECTION

MATERIARY - PLYMOUTH

MATERIA

Figure 1-2: Waterbury-Oxford Service Area

Source: Connecticut State Airport System Plan (2006)



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#### 2.0 EXISTING AIRPORT CHARACTERISTICS

To a large degree, an airport's characteristics are directly related to its ability to achieve its mission which for Waterbury-Oxford is to provide an efficient, effective, convenient, and safe aviation facility. This section and associated subsections indentify the existing characteristics of the Airport. Characteristics are divided into the following:

- → Physical Characteristics
- → Existing Tenants
- → Management Structure
- → Historical Airport Data
- → Baseline Financial Data

## 2.1 Physical Characteristics

## 2.1.1 Runways & Taxiways

Waterbury-Oxford has one paved runway. Runway 18/36 is 5,800 feet long by 100 feet wide and accommodates the portion of GA business aircraft for which 5,800 feet of runway length is sufficient for takeoff and landing. The runway is served by a full parallel taxiway to the west and a partial parallel taxiway to the east. Exit taxiways provide access to aircraft storage, parking aprons, and aviation related support facilities.

#### 2.1.2 Navigational Aids

Integral parts of an airport system are the visual and navigational aids (NAVAIDS) provided to assist pilots in navigating en route and on the airfield. OXC is equipped with various NAVAIDS and airfield lighting equipment. Runway 18/36 is equipped with a four light Precision Approach Path Indicator (PAPI) for Runway 36, and a four box Visual Approach Slope Indicator (VASI) for Runway 18. Runway End Identifier Lights (REILS) are installed on Runway 36. High Intensity Runway edge lights (HIRLs) are installed on Runway 18/36. Runway 36 is equipped with an instrument landing systems and offers ILS, Localizer, and RNAV/GPS Instrument Approach procedures.

The Airport is equipped with a rotating beacon located on the air traffic control tower which is situated on the west side of the Airport.

Also located on the Airport is an Automated Weather Observing System (AWOS) that provides pilots up-to-date weather information at the Airport including: visibility, wind, precipitation, temperature, dew point, altimeter setting, cloud height, and sky condition.



## 2.2 Existing Airport Tenants

Waterbury-Oxford Airport is home to several tenants who provide various amenities and services. Each airport tenant supports the economic welfare of the Airport and surrounding community. The primary tenants at OXC include:

- → Key Air
- → Double Diamond
- → Executive Flight Service
- PJ Aero
- → Oxford T's
- → Midwest ATC (Air Traffic Control Tower)

#### **Key Air**

As full service Fixed Based Operator (FBO), Key Air features a state-of-the-art facility with an executive terminal, hangar space, and a full range of aviation services. Waterbury-Oxford serves as headquarters for Key Air, who also has numerous subtenants, at the Airport that provide various services. Services provided



**Key Air Hangars** 

through Key Air include fuel sales, aircraft rental, aircraft maintenance, flight training, aircraft management, and charter services. The 121 Restaurant and Bar located at OXC is also a subtenant of Key Air, offering a full menu and catering services.

#### **Double Diamond**

Double Diamond is a Specialized Aviation Service Operator (SASO) that provides aircraft management and charter services at the Airport.

#### **Executive Flight Service/ PJ Aero**

Executive Flight Service, doing business as PJ Aero is a tenant that provides aircraft interior services.

#### Oxford T's

Oxford T's is an aircraft storage operator located at Waterbury-Oxford and provides for the storage of aircraft on the Airport.

#### Midwest Air Traffic Control (ATC) Service

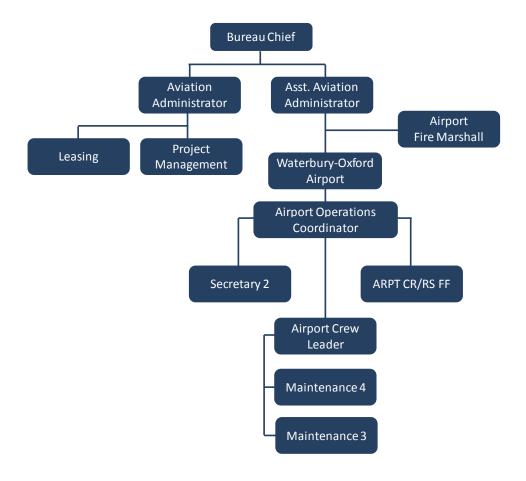
With operations from 0600-2100 daily, Midwest ATC provides contracted air traffic control services at the Airport.



# 2.3 Management Structure

Waterbury-Oxford Airport is owned by the Connecticut Department of Transportation (ConnDOT) and operated by the ConnDOT Bureau of Aviation. The current organizational structure for the management of the facility is shown below.

Figure 2-1: Waterbury-Oxford Airport Organizational Structure





# 2.4 Historical Airport Data

## 2.4.1 Based Aircraft and Operations

Due to a number of factors, the GA industry often changes on National, State, and local levels. For this reason, it is important to look at historical data as it relates to based aircraft and operations to understand industry trends and to develop a realistic forecast for the future. Figure 2-2 identifies the historical based aircraft and operations data at Waterbury-Oxford.

Figure 2-2: Waterbury-Oxford Historical Based Aircraft & Operations

Year	Total Operations	Based Single Engine	Based Multi Engine	Based Jet	Based Helicopter	Total Based Aircraft
2002	53,241	-	-	-	-	239*
2003	55,170	-	-	-	-	242*
2004	52,237	-	-	-	-	239*
2005	55,701	-	-	-	-	239*
2006	55,696	-	-	-	-	254*
2007	58,335	-	-	-	-	241*
2008	50,330	-	-	-	-	199*
2009	47,313	191	7	61	4	262
2010	47,446	189	7	56	4	256

"\*" = FAA TAF DATA

Source: Air Traffic Activity System (ATADS) & ConnDOT Prepared: March 2011

# 2.4.2 Airport Studies, Plans, and Projects

The following table presents the studies, plans, and projects that have been conducted for the Airport in recent history.

Figure 2-3: Airport Studies/Plans/Projects

Study/Plan/Project	Year Conducted
Airport Master Plan Update	2007
Airport Minimum Standards	2008
State Airport System Plan	2006

Source: ConnDOT Prepared: March 2011



## 2.5 Baseline Financial Data

In order to make recommendations to improve the financial vitality of Waterbury-Oxford Airport it is necessary to examine historical airport revenue and expense data. Baseline financial information serves as a point of reference when measuring future airport financial performance and to some degree, provides an indication of financial trends at the Airport. Historical airport financial data was provided by ConnDOT and is shown in Figure 2-4.

Figure 2-4: Historical Revenue and Expenses

Waterbury-Oxford Airport	FY 06-07	FY 07-08	FY 08-09	FY 09-10	FY 10-11
Total Revenues	\$567,859	\$574,098	\$526,600	\$658,008	\$608,610
Expenses					
Personnel	\$360,235	\$383,712	\$398,088	\$377,516	\$406,493
Overtime	\$57,263	\$110,671	\$115,034	\$141,297	\$133,724
Fringe	-	-	\$284,581	\$311,105	\$327,236
Other Expenses	\$100,776	\$118,071	\$84,082	\$80,101	\$45,173
Building Expense	\$47,134	\$22,454	\$23,455	\$21,386	\$20,084
Total Expenses	\$565,408	\$634,908	\$905,240	\$931,405	\$932,710
Operating Surplus/Deficit	\$2,451	(\$60,810)	(\$378,640)	(\$273,397)	(\$324,100)

Source: ConnDOT



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#### 3.0 AIRPORT MARKET AREA

For the purpose of this business plan, Waterbury-Oxford's market area is comprised of airports in the surrounding area that are comparable in size, function, or service level. In broader terms, Waterbury-Oxford's market area includes the surrounding airports from which Waterbury-Oxford draws business from and vice versa. Figures 3-1 and 3-2 provide characteristics of the airports within Waterbury-Oxford's market area. These airports include:

- → Bradley International Airport, CT (BDL);
- Candlelight Farms Airport, CT (11N);
- Chester Airport, CT (SNC);
- Danbury Municipal Airport, CT (DXR);
- → Goodspeed Airport, CT (42B);
- → Hartford-Brainard Airport, CT (HFD);
- → Igor Sikorsky Memorial Airport, CT (BDR);
- → Meriden Markham Municipal Airport, CT (MMK);
- → Robertson Field, CT (4B8);
- → Simsbury Airport, CT (4B9);
- → Tweed-New Haven Airport, CT (HVN); and
- → Westchester County Airport, NY (HPN).

There are a total of 1,670 based aircraft within the market area of Waterbury-Oxford Airport. Figure 3-1 provides a comparison of based aircraft and operations data between Waterbury-Oxford and the airports within its market. Figure 3-2 provides a further comparison of the typical services/amenities offered within the market. Often, a correlation can be made between an airport's market share and the level of services it offers. However, due to various constraints at a particular facility, it may be difficult for a particular airport to compete for business in a specific service area. The SWOT Analysis and Constraints sections of this plan describe the Airport's limiting factors while the recommendations of this plan considers these factors and provides guidance to improve the Airport's ability to attract business and increase its market share of based aircraft, operations, and services.

Figure 3-1: Airport Market Area Aircraft & Operations Comparison

		Based Aircraft								
Airport	ID	State	Primary RWY (L x W)	Secondary RWY (L x W)	SE	ME	Jet	Total	General Aviation Operations* (est.)	Control Tower
Waterbury-Oxford	охс	СТ	5,800' X 100'	-	189	7	61	257	46,241	Yes
Bradley International	BDL	СТ	9,510′ X 200′	6,847' x 150'	2	9	33	44	46,927	Yes
Candlelight Farms	11N	СТ	2,900′ X 50′	-	14	0	0	14	11,000	No
Chester	SNC	СТ	2,566′ X 50′	-	116	6	0	122	15,827	No
Danbury Municipal	DXR	СТ	4,422′ X 150′	3,135′ x 100′	210	48	6	264	83,201	No
Goodspeed	42B	СТ	2,120′ X 50′	Water RWY	29	1	0	30	6,230	No
Hartford-Brainard	HFD	СТ	4,417′ X 150′	2314' x 71'	144	11	2	157	70,946	Yes
Igor Sikorsky Memorial	BDR	СТ	4,677′ X 150′	4,759′ x 150′	140	21	24	185	73,055	Yes
Meriden Markham Municipal	ММК	СТ	3,100′ x 75′	-	63	2	0	65	16,208	No
Robertson Field	4B8	СТ	3,612′ X 75′	-	103	7	0	110	59,145	No
Simsbury	4B9	СТ	2,205′ X 50′	-	50	2	0	52	12,775	No
Tweed-New Haven	HVN	СТ	5,600′ X 150′	3,626' x 100'	52	5	1	58	35,084	Yes
Westchester County	HPN	NY	6,548′ X 150′	4,451' x 150'	176	61	75	312	170,891	Yes

Source: FAA 5010 Data/Airnav.com

Prepared: May 2011

Figure 3-2: Airport Market Area Services Comparison

Airport	Fuel	Fuel	Aircraft	Avionics	Aircraft	Aircraft	Flight	Aircraft	Aircraft	Instrument	ILS
7 in port	100LL	Jet A	Maintenance	Repairs	Tie downs	Hangars	Instruction	Rental	Charter	Approach	Approach
Waterbury-Oxford	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Bradley International	Yes	Yes	Yes	Yes	Yes	Yes	No	No	Yes	Yes	Yes
Candlelight Farms	No	No	No	No	Yes	No	Yes	Yes	No	No	No
Chester	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	No
Danbury Municipal	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No
Goodspeed	No	No	No	No	Yes	No	Yes	Yes	Yes	No	No
Hartford-Brainard	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No
Hopedale	No	No	No	No	Yes	No	No	No	No	Yes	No
Igor Sikorsky Memorial	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Meriden Markham Municipal	Yes	No	Yes	No	Yes	No	Yes	Yes	Yes	Yes	No
Robertson Field	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	No	No
Simsbury	Yes	No	Yes	No	Yes	No	Yes	Yes	No	No	No
Tweed-New Haven	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Westchester County	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Source: FAA 5010 Data/Airnav.com, Consultant Calculations

Prepared: May 2011



Figure 3-3: OXC Airport Advantages and Disadvantages

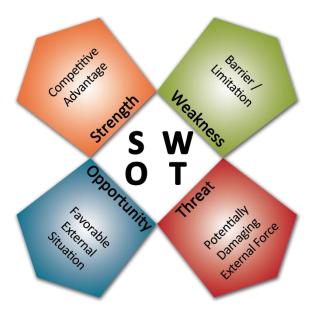
- Garage and a second personal and a second	
Advantage	Disadvantage
Provides 10 out of 11 Services compared with other market area airports	No Avionics Repair (6 of 14 market area airports provide avionics repair)
One of 5 out of 14 market area airports with an ILS	Additional development area is limited
Proximity to NY Metropolitan Area	No U.S. Customs services
3 <sup>rd</sup> longest runway of all market area airports	
One of 6 out of 14 market area airports with an Air Traffic Control Tower	
2 <sup>nd</sup> most based jet aircraft in its market area	
Lower operating fees relative to NY metro airports	

Source: The Louis Berger Group Prepared: May 2012



#### 4.0 SWOT ANALYSIS FOR WATERBURY-OXFORD AIRPORT

Prior to the development of alternatives and recommendations regarding the operational and economic development opportunities Waterbury Oxford Airport, it was necessary to bring airport stakeholders together to discuss various aspects of the Airport's existing operating and business environments. A SWOT Analysis Weaknesses, Opportunities (Strengths, Threats) hosted in a workshop format was facilitated by the study's business planning team. The results of the analysis will assist the Airport with capitalizing on their strengths and identifying potential opportunities. Additionally, this process identified weaknesses and threats in the airport environment. It is typical that the



various items identified by any one participant in the SWOT workshop had the consensus of the participants. Therefore, the items identified were used to reinforce the SWOT summary contained herein.

For this effort, the participants in the SWOT workshop included Airport Management, Connecticut Department of Transportation Bureau of Aviation staff members, and a cross section of airport stakeholders. The primary goal of the workshop was to engage the stakeholders in what they believe are the Strengths, Weaknesses, Opportunities and Threats (constraints) facing the Airport.

The information obtained by the team was used to define operational and economic development opportunities which will assist the Airport and Connecticut Department of Transportation in optimizing the Airport's assets and achieving the Bureau's mission. The result of the SWOT analysis provided a comprehensive and balanced description of the business environment the Airport is operating within and was used by the study team to help identify focus areas for the Business Plan.

The following section describes the components of a SWOT analysis and presents the results of the analysis conducted for Waterbury Oxford Airport. Following the results of the SWOT analysis is a summary of findings.



## **4.1** SWOT Components

When using the SWOT model as an analytical management tool for an organization, Strengths and Weaknesses are evaluated from an internal perspective whereas Opportunities and Threats are generally external to the organization.

Strengths (internal) represent competitive advantages of the Airport. When evaluating the competitive advantages, participants were asked to think in terms of capabilities, marketing, quality, qualifications, business processes, and systems. For example, identifying the answers to the following:

- → What are the Airport's advantages?
- → What does the Airport do well?
- → What do other people see as the Airport's strengths?

Weaknesses (internal) represent organizational barriers or limitations to the Airport. Participants were asked to think in terms of disadvantages, lack of competitive strength, reputation, morale/leadership, process, and systems. For example, identifying the answers to the following:

- → What can be improved? What is done poorly?
- → What should be avoided?
- → What could be done more effectively /efficiently?
- → If you could change one thing what would it be?

Opportunities (external) represent a favorable external situation. Participants were asked to think in terms of market developments, industry trends, partnerships, and competitor vulnerabilities. For example, identifying the answers to the following:

- → What good opportunities are open to you?
- → What trends could you take advantage of?
- → How can you turn airport strengths into opportunities?

Threats or Constraints (external) represent potentially damaging external forces. Participants were asked to think in terms of the economic downturn, demographic shifts, and new regulations. For example, identifying the answers to the following:

- → What obstacles do you face?
- → Could weaknesses threaten your airport?
- → What trends could harm the Airport business environment?



# 4.2 SWOT Analysis Workshop

The SWOT Analysis Workshop for Waterbury-Oxford Airport was conducted on December 15, 2010. To facilitate the session and ensure all participants understood the intent of the workshop, a SWOT workshop primer was presented. During this phase of the session the SWOT components were discussed and the objective of the workshop was defined. After the primer session, the facilitator began the workshop and the results are as follows:

#### Strengths

- 1. The continued development of the Airport has created jobs within the community.
- 2. Surrounding Town land use.
- 3. Completion of the Part 150 Noise Study and land acquisition.
- 4. The current runway length is sufficient, 6,000 feet for landing would be ideal.
- 5. Airport is in close proximity to the New York City Metropolitan area.
- 6. The current tax structure of the State is favorable towards GA.
- 7. Highway access is sufficient.
- 8. Air traffic control tower.
- 9. Secured by a perimeter fence.
- 10. The existence of the Airport has been positive for the area.
- 11. The Airport enjoys the support and cooperation of the local surrounding governments.
- 12. The 10 Town adopted emergency plan includes the Airport in its emergency measure and response.
- 13. Airport has a full service restaurant that also caters to aircraft operators and Fixed Base Operators (FBO).

#### Weaknesses

- 1. Airport oversight from too many agencies.
- 2. The Airport has declared distances during wet pavement operations.
- The power lines off the end of the runway restrict the approach minimums and limit many flight departments from selecting Waterbury as a location to land or house their aircraft.
- 4. No Medium Intensity Approach Lighting System (MALS)
- 5. No Instrument Landing System (ILS) to Runway 18 due to terrain obstructions.
- 6. There is limited signage leading potential travelers to the Airport.
- 7. There is no radar in the tower due to the cost of operation and installation.
- 8. Most of the property that can be developed for airport use has been developed.
- 9. No inner perimeter roadway which could facilitate fueling support and minimize runway crossings.
- 10. There is a lack of highway access from the south.
- 11. There is relatively no Airport marketing.
- 12. The fuel supply and delivery is limited. (Pennsylvania and New Jersey)
- 13. No deicing facility.



#### **Opportunities**

- 1. Maintain favorable tax structure (e.g. sales tax on aircraft sales, personal property, and maintenance).
- 2. Attracting businesses to the Airport (e.g. crew training, avionics repair, and other aviation related businesses).
- 3. Encourage private funding for development at the Airport and surrounding area.
- 4. There are a significant number of industrial parks surrounding the Airport.
- 5. Investigate establishing a foreign trade zone or getting a customs inspection station on the Airport to attract more business travelers.
- 6. Construct a deicing facility.
- 7. Continue the clean fill program. Areas filled create potential airport development sites.
- 8. Executive and Keystone tenants desire expansion opportunities.
- 9. There are some positive trends concerning aircraft charter services.
- 10. Marketing the Airport through NBAA and other professional aviation outlets.
- 11. The new administration on the State level seems to be supportive of the Connecticut GA airports.
- 12. The Town would support an enterprise zone.
- 13. Airport needs a "gateway" welcoming the community to the Airport.
- 14. Broaden the constituency of the Airport through increasing the awareness of the Airport and its facilities such as the restaurant.

#### **Threats (Constraints)**

- 1. There is too much oversight of the Airport from too many agencies. This creates delays and missed opportunities.
- 2. The terrain surrounding the Airport limits development.
- 3. CEPA process should be refined and become more efficient.
- 4. Environmental issues.
- 5. Fuel pricing and the economy.
- 6. Incompatible land use development.

While the lists of items identified above are not all inclusive, they are generally representative of the Airport stakeholder's points of view.



## 4.3 SWOT Results and Summary

The primary objective of the SWOT Analysis Workshop was to facilitate an open and objective environment for airport stakeholders to have a meaningful discussion concerning the Strengths, Weaknesses, Opportunities, and Threats of the Airport. This SWOT process yielded valuable insight and information which was used throughout the business planning process. The SWOT workshops were conducted at each of the State of Connecticut's five GA airports, and the results from each airport were generally guided by two common themes; those specific to the facility, and those concerning the entire system of airports owned and operated by the State.

## **4.3.1** SWOT – System Summary

All stakeholders at each airport were in agreement that one competitive advantage they have in the State of Connecticut is the sales and use tax exemption that currently exists. It was acknowledged that this exemption acts as a catalyst in attracting business to the airports from surrounding states. Many aircraft owners and operators have made a conscious decision to base their aircraft at these airports based on this exemption. It was further expressed by the group that a repeal of the exemption could potentially lead the owners and operators seek new locations to base their aircraft and have them serviced.

The second item that was brought to the attention of the team by the stakeholders was the belief that the "system of government" currently in place which is responsible for the approval of projects is not as efficient as it could be. The stakeholders expressed that this creates significant delays in project approvals and prevents capitalistic ventures coming to fruition. Some examples cited were land use approvals which have delayed the continued design, development, and construction of hangars and other ancillary facilities used at the airports. Many attendees cited a lack of efficient turnaround and authorization by State Government for development project approvals as a major problem. They expressed that the inefficiencies have resulted in developers cancelling development plans after missing a "window of opportunity".

#### **4.3.2** SWOT – Facility Summary

The Waterbury-Oxford Airport has experienced some growth over the past few years. Its proximity to the Metropolitan New York area has allowed management to create a market that attracts corporate activity which has resulted in sustained growth. In addition, the favorable tax structure described earlier, and the level of cooperation and support the Airport receives from the surrounding communities contributes to the Airport meeting its goals. For example, when an emergency response plan was written, ten (10) municipalities came together and included the Airport in the discussion so resources could be shared among each of the districts. This shows a level of cooperation between the community and the Airport which is extremely important. The Airport and businesses located on the Airport are also viewed as valued employers within the community.



Maintaining the Airport and its activities at the current levels is seen as a challenge. Overregulation and involvement by too many agencies is seen as a major hindrance to future airport expansion. Potential development by outside developers is being slowed due to the many levels of government. However, improving the ability to move forward with development projects that are currently being evaluated could potentially attract business, even in a down economy.

Working on the current infrastructure is also viewed as another priority. Some improvements such as evaluating the benefits of installing a Medium Intensity Approach Lighting System (MALS); installing radar in the tower to improve efficiency and increase safety; and adding a deicing facility would make the Airport more attractive to the types of tenants the Airport is seeking to attract.

In addition to the infrastructure improvements, there are several opportunities that the Airport can capitalize on moving forward. The local FBOs and air charter providers are seeing positive trends and desire to expand their respective operations. This is problematic in that most of the available land has already been developed or is unusable due to the slope of the terrain. There is however, a "clean fill" program that creates areas of level and stable ground that could be used for future development. This newly created land could be used to add more hangar space, a deicing facility, or a number of other types of aeronautical businesses that are typically based on airports.

A number of industrial parks are in close proximity to the Airport. These could present an opportunity for developers and businesses that utilize the Airport for transportation of goods and services. Stakeholders also mentioned the development of Foreign Trade Zones (FTZs) where there are special customs procedures for U.S. plants engaged in international traderelated activities. The premise behind the FTZ is that it assists to offset customs advantages available to overseas producers who compete with domestic industry. The development of an FTZ in the vicinity of the Airport would provide an opportunity for businesses to take advantage of both the Airport and the FTZ, and compete with other businesses on an international level. Subsequently, the development of an FTZ would result in the Airport's ability to provide U.S. Customs services for aircraft requiring to clear customs since currently the Airport does not have U.S. Customs onsite.

In conclusion, the input from this SWOT workshop provided guidance throughout the business planning process in the development of recommendations.



#### 5.0 LEASE OPPORTUNITIES & CONSTRAINTS

Understanding the opportunities and constraints of a property can assist in determining its best possible use and value. Since even privately-developed facilities at Waterbury-Oxford Airport must meet state and national environmental requirements, it is important to understand the impacts any development may cause. Based on existing data available for the Airport, this section identifies potential development sites and their characteristics in terms of opportunities and constraints. Opportunities generally include items such as available access and infrastructure, while constraints include items that will negatively impact the cost of potential development of a site to the degree that development is either logically infeasible, or the regulatory burdens on a particular site make the site unattractive from a development standpoint, at the present time. The information found herein can be used as a marketing tool for potential developers as well as the Airport itself in meeting the challenges of long term airport facility planning.

## **5.1** Airport Development Factors

Several factors were used to assess each parcel for its development potential; these factors are discussed below and include:

- → FAA Airport Design Standards;
- → FAR Part 77 (Obstructions to navigation);
- → Federal obligations
- → Site topography;
- → Utility availability or constraints (e.g., buried gas lines);
- Ground and airside access;
- → Compatible land use
- → Environmental considerations.

FAA Design Standards- Airport design criteria set forth by the FAA include safety factors that must be incorporated into the siting parameters of an airport development area. Included in these safety factors are FAA defined surfaces (Figure 5-1) that must remain clear for the safety of the aircraft operating at the Airport, such as:

#### Runway Safety Area (RSA)

The RSA is a defined surface surrounding a runway prepared for reducing the risk of damage to airplanes in the event of an undershoot, overshoot, or excursion from the runway. This area must also support snow removal, aircraft rescue, and firefighting equipment. The RSA should be free of objects, except for objects that must be located in the area because of their function.



#### Runway Object Free Area (ROFA)

The ROFA is a ground area surrounding runways that should be clear of objects (e.g., roads & buildings), except for objects that need to be within the area due to their function.

#### **Runway Protection Zone (RPZ)**

Areas off the runway ends used to enhance the protection of people and property on the ground. The RPZ is ideally achieved through airport owner control, and the clearing of objects and undesired activities.

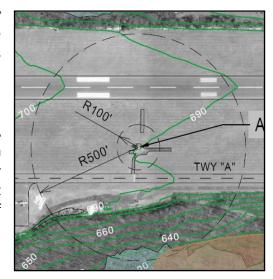
Runway Safety Area Runway Protection Protection Zone Zone Object Free Area

Figure 5-1: FAA Runway Surfaces

Source: CHA Prepared: May 2011

Note that ConnDOT has an ongoing voluntary acquisition program of the homes located within the RPZ beyond the Runway 18 end (i.e., north end). This program will bring the RPZ to FAA design standards.

The Automated Weather Observing System (AWOS) wind tower near the Runway 36 end. Per FAA regulations, an accurate sensor reading requires a clear 100-foot radius area in which no buildings may reside. Within 500-feet, any structures should be at least 15-feet below the tower height. The location of the AWOS does not appear to affect any potential development at Waterbury-Oxford Airport.



#### **FAR Part 77 (Obstructions to Navigation)**

There are several Federal Aviation Regulations (FAR) Part 77 surfaces that protect the runway from airspace obstructions beyond the areas described above. The two surfaces that would potentially be affected by development are the Primary Surface and the Transitional Surface. The primary surface is similar to the OFA in size and function. The Transitional Surface extends



outward and upward, at right angles to the runway centerline from the sides of the Primary Surface at a 7 to 1 slope. Coordination with the FAA, through an airspace and obstruction evaluation will typically resolve any minor penetrations of the transitional surface through the use of an obstruction light or applicable marking; thus adhering to FAA design standards.

### **Federal Obligations**

Since Waterbury-Oxford Airport has accepted federal funding, the Airport is considered federally obligated and any airport property described as part of an airport or defined by an Airport Layout Plan (ALP) is obligated for aeronautical purposes. Furthermore, the National Environmental Policy Act (NEPA) will be triggered by any development.

In situations where an approved ALP or Land Use Plan indicates that portion(s) of airport property are in excess to the Airport's present or future aeronautical needs, non-aeronautical development may occur. However, FAA Land Releases will most likely be required for any parcel that is recommended for non-aviation development, whether it is a long-term lease or an outright sell. A justification will be necessary for each parcel, detailing why the property is not needed for future aviation use and the benefit to the Airport of releasing the property from aeronautical use.

#### **Topography**

The ground must be reasonably level in order to be properly developed. Aprons and hangars have strict requirements, generally needing grades below two percent. The existing topography affects the cost of projects due to the amount of grading or filling that will be required to create level ground as well as proper drainage.

The topography of available land at the Airport is such that proposed development is limited and difficult. The Airport was built on the top of a small ridge, was cleared, and then graded to construct the runway. Consequently, the areas surrounding the airfield are significantly lower in elevation, between 20 and 100 feet. These adverse grades reduce the amount of available property for both aviation and non-aviation development.

Figure 5-2: Runway RPZ & Acquisition Area



Source: CHA Prepared: May 2011



The adjacent image illustrates how the ground drops off from the edges of the northwest aircraft parking apron. The elevation of the apron is approximately 720 feet mean sea level (MSL); while the associated vehicle parking lot has an elevation of 690 feet MSL. Such elevation discrepancies are found along both sides of the runway.



# **Utilities Availability**

Buildings may need electricity, water, sewer, and other utilities for their tenants. If not readily available, the utilities may be available to the parcel through an extension from existing infrastructure. Otherwise, they may require new laterals and service lines, which would increase development costs. Although not typically desired, local wells and septic systems may be feasible.

Currently, the Airport and its tenants have access to municipal water and sewer system. Power, gas, phone, and cable are also available throughout the Airport property. The water and sewer lines are owned by the Heritage Water Company.

#### **Ground Access**

Roads and parking lots for each of the parcels are essential. The development potential is generally low if such basic infrastructure must be provided by the tenant or developer. Currently, the Airport has existing public roads located on airport property that provide access to all development sites on the Airport property. Including Airport Access Road, Tarby Lane, and Juliano Drive. New developments would likely on required driveway to connect to these existing roads.

#### **Airside Access**

For aviation development, access to the airfield is imperative. Parcels may only need a small taxiway extension or apron to access the existing taxiway system. It is not considered feasible for aircraft to access the airfield by passing over roads, unpaved areas, or through an adjoining leased property. The potential development sites at OXC are service by existing parallel Taxiways A and B.

#### **Zoning & Compatible Land Use**

Development must be compatible with the Airport and its activities. The most common compatibility concern is noise. Therefore, additional residential development is not recommended near an airport and is prohibited on the Airport property. Any non-aviation development would also need to be compatible with the existing uses. This assessment



assumes that the existing zoning will not be modified. Note that the State-owned airport property is not subject to municipal zoning or site plan approval regulations.

The Airport property is surrounded by a mix of open, wooded, residential, commercial, and industrial land uses. The land to the south of the Airport is predominately wooded and/open, with light industrial establishments. Excluding I-84, residences exist along the roadways surrounding the Airport. The highest density of housing is located to the north, in the Middlebury neighborhood of Triangle Hills. Beginning in 2010, a voluntary acquisition program was undertaken to relocate residents of Triangle Hills from within the Runway Protection Zone (RPZ) and the noise impact area of the Airport. This program is scheduled to continue through 2015.

The entire airport property is zoned Industrial which allows for corporate offices, banks, financial industries, and manufacturing and assembly facilities. Although airports are not listed as an allowable use, the local zoning regulations do not pertain since the Airport is stateowned.

#### **Environmental Considerations**

The impacts of development on the existing environment must be taken into consideration. While there are many considerations, the most common impacts are to wetlands, floodplains, cultural resources, and any sensitive habitat. When trees are removed, natural habitats, including: threatened or endangered species may get disturbed. For landside development, it is assumed that wetlands must be avoided, and permits would only be feasible for minor impacts (e.g., culvert of a minor stream). Since the Airport is State owned, wetland and other permits are regulated directly by the Connecticut Department of Energy and Environmental Protection (CT DEEP), not the local municipal wetland commission.

According to the United States Fish and Wildlife Service and Connecticut Natural Diversity Database, there are no federally-listed threatened or endangered species, state listed species, or significant natural communities within the Airport property. However, it was acknowledged that the region experiences occasional transient bald eagles. If necessary, field surveys during nesting and other periods must be conducted to identify the presence or absence of critical species and to assess the suitability of the habitat to support the species.

As part of the 2007 Airport Master Plan, the entire property was delineated for wetlands, which indentified wetlands on the western, southern, southeastern, and eastern edges of the Airport. Although these wetlands are proximate to the Airport's runways and taxiways, they are separated by areas of upland vegetation or topographic variation. Any development in a wetland area would require mitigation, a U.S. ACOE Wetland Permit, and a CT DEEP Inland Wetlands Permit. Since an on-site mitigation area is likely unavailable on airport property, offsite areas would be to be reviewed for suitability of wetland mitigation. Since impacts to wetlands are unlikely to receive approvals by CT DEEP, proposed development should avoid known wetlands and associated buffer areas if applicable. Figure 5-4 on the following page depicts airport wetlands and their relation to airport land parcels.



Floodplains can be detrimental to development, as the property at one point may be flooded and new impervious surfaces increase flooding potential. For this review, development sites are not recommended within the 100-year floodplain.

The 100-year and 500-year floodplains for the tributaries of Little River are located to the south of Runway 36, primarily beyond the limits of Figure 5-4. All potential development sites are located in upland areas and outside of the floodplains.

The Connecticut State Historic Preservation Office (CTSHPO) ensures that any future development will not disturb any archaeological resources without mitigation. In addition, the Farmland Protection Policy Act (FPPA) preserves highly productive soils by requiring they be given proper consideration before they are converted to non-farming uses by federal programs.

CTSHPO does not anticipate any cultural resource impacts from future development at the Airport. Prime Farmland is not located on the Airport property.

The Larkin State Trail, located beyond the southern boundary of the Airport property, is an 11 mile, multi-use recreational trail, owned and maintained by the CT DEEP State Parks Division. The trail is considered a Section 4(f) resource to the US Department of Transportation, which attempts to minimize any impacts to the resource; therefore, all proposed development avoids such impacts.

## 5.2 Existing Leases and Recommendations

Figure 5-5 displays the existing leases on the Airport property. It is likely that those leases will be renewed when they expire; however, at that time, it is also a potential opportunity for a new tenant to provide the same or alternative service(s). In 2007, Keystone Aviation, the Airport's primary tenant and Fixed Base Operator (FBO), proposed a plan for a major new development of conventional hangars on Parcel 12; this development completed a lengthy environmental review process in 2011, and construction may commence in 2012. Figure 5-4 on the following page depicts land parcels available for additional development at the Airport.



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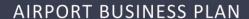




Figure 5-5: Existing Airport Leases

Parcel	Existing Tenant	Description	Lease Expires
1	Koystono	Terminal & Hangar A	2028
1	Keystone	Terrilliai & Harigai A	2020
2	Keystone	Hangar B & C	2028
2A	Keystone	Parking	2028
3	Keystone	Hangar D	2028
4	Keystone	Parking	2035
5	Keystone	Hangar F	2035
5A	Keystone	Parking	2035
5B	Keystone	Parking	2035
5C	Keystone	Parking	2035
5D	Keystone	Parking	2035
5E	Keystone	Pump Station	2035
6	Keystone	Hangar E, ATCT, & Fuel Trucks	2035
7	Keystone	Fuel Farm	2035
8	Keystone	Hangar G	2044
9	Keystone	T-Hangars	2035
10	Double Diamond	Hangar & Office	2043
11	Keystone	Restaurant	2030
12	Keystone	Proposed Hangars H& I	N/A
13	Executive Flight	Hangar & Office	2015
14	Oxford T's Inc.	T-Hangars	2013
15	Joyce Van Lines	Parking	2013

Source: ConnDOT Prepared: May 2011

Since the Key Air Hangar G (Parcel 8) and Restaurant (Parcel 11) were under construction when the base photo for Figure 5-4 was acquired, a current photo of these new facilities is shown in Figure 5-6 on the following page.

Figure 5-6: Aerial Photograph - Parcel 8 & Parcel 11

Source: CHA Prepared: May 2011

Figure 5-7 displays the most feasible sites to be developed and their recommended use. Considering the property characteristics, much of the available property is undesirable for development. Furthermore, a majority of the desirable property along the airfield is already planned for development which leaves little to no additional available land for substantial new airport developments.

There are currently three tie-down locations for based aircraft operated by the State, including: the northeast ramp, the south ramp, and the northwest ramp. The majority of the main ramp is leased by Keystone Aviation and services the majority of transient aircraft. To enable additional corporate/business aviation development, it is recommended that one of the existing State aprons be specifically designated for development, with the other two reserved for use by light aircraft. The smaller size of the south ramp is prohibitory to development. Thus, it is recommended that either the northeast (Parcel A) ramp or northwest (Parcel C) ramp be developed.

Figure 5-7: Recommended Parcel Usage

Parcel	Current Use	Recommended Use
А	GA Tie-down Apron	Aviation – Hangars
В	Wooded	Aviation – Support
С	GA Tie-down Apron	Aviation - Hangars
D	Open Space	Non-Aviation
E	Wooded	Non-Aviation



#### Parcels A and B

Parcel A is a 3.8 acre area that is currently comprised of the northeast tie-down ramp and an automobile parking lot. This parcel could be developed into a series of hangars (t-hangars or conventional hangars.) Consideration can be given to the automobile parking lot utilized for alternative development, since it has already been graded. Adjacent to Parcel A, Parcel B is a 2.1 acre parcel that could be used to support any alternative development on Parcel A. Due to the significant grade discrepancy, bringing Parcel B to grade in order to support hangar development would likely be costly. The elevation difference is approximately 30 feet. A parking lot could be constructed on Parcel B with a stair case or elevator to access Parcel A. It should be noted that there are rock outcrops in the parcel's vicinity.

Aside from necessary tree removal, there are no environmental concerns associated with the parcel. Electric, water, and sewer could be extended from Juliana Drive or the other parcels as needed. Any hangar development in this area should avoid penetrating the transitional surface; otherwise coordination with the FAA would be required. As mentioned previously, due to the need to retain tiedown areas for light single-engine aircraft it is recommended that only Parcel A or C be developed, not both.

#### Parcel C

Parcel C is 7.7 acre site that is currently being utilized as a paved tie-down ramp for GA aircraft and vehicle parking. Beyond the apron, the elevation drops 30 feet to the west to the parking lot. The existing paved area could be used for aviation development such as conventional hangars. Any hangar development in this area should avoid penetrating the transitional surface; otherwise coordination with the FAA would be required. As mentioned previously, due to the need to retain tiedown areas for light single-engine aircraft it is recommended that only Parcel A or C be developed, not both.

#### Parcel D

Parcel D is a 1.5 acre site located in the northwest corner of the Airport property along Christian Street. The site is currently an open area. The parcel is equipped with adequate vehicle access and utilities. Due to the elevation change between Taxiway D and the airfield, meeting FAA design requirements for aviation development would be difficult. Thus, this parcel may be better suited for non-aviation development but would require an FAA Land Release. It is intended that Taxiway D be redesigned, which may allow for this parcel to be larger or render the parcel unusable; however, the configuration has not yet been determined

#### Parcel E

Parcel E is a 5.9 acre, wooded area along Juliano Drive in the northeast corner of the property. Since airfield access is not readily available from this parcel it is better suited for non-aviation related development, which would require an FAA Land Release. There are no environmental concerns associated with the parcel aside from any necessary tree removal. The parcel



elevation declines to the northwest from 680 feet to 650 feet and any utilities would require an extension from existing infrastructure.

# **5.3** Opportunities & Constraints Summary

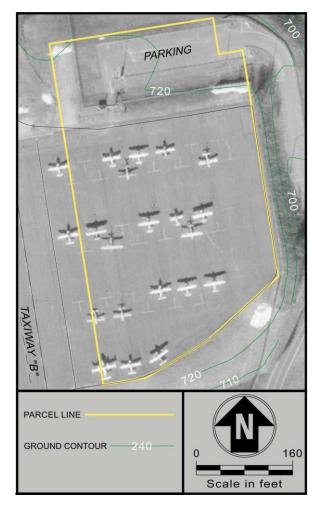
Considering property characteristics and on-going or existing development plans, current opportunities at OXC for outside land developers are limited. However, through the use of this section and Figure 5-4 in particular, ConnDOT is still encouraged to promote any available development areas at the Airport using various outlets: online (ConnDOT website, CERC's Site Finder site...see Findings and Recommendations), local business associates websites, brochures, pamphlets etc. When used in conjunction with Figure 5-4, the following pages provide individual development parcel summary sheets that can be used to attract future development at the Airport.

The development parcels identified in this section were primarily based upon existing data and an existing Airport Layout Plan (ALP). The parcel limits as shown are generally intended for identification purposes. In some cases there may be an opportunity to combine adjacent parcels to meet the specific area needs and intended use of a potential developer. Furthermore, the primary limitation of a parcel's future use is whether or not the parcel has airside access. Typically, parcels with airside access are reserved for aeronautical use, while parcels separated from the airside such that an airside connection is not feasible or likely, are considered for non-aviation development. Therefore, the recommended uses identified herein are largely suggestions. The characteristics of future development including the parcel size and usage are ultimately agreed upon by the Airport Sponsor, the developer or interested party, and with approval by the FAA.



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# Waterbury-Oxford Airport Parcel A

Location: East of Runway 18 End

Access: Via Juliano Road and Parking Lot

**Road Frontage:** None

**Approximate Area:** 3.8 Acres

Predominant Soil Type: Charlton-Chatfield

complex

**Current Land Use:** Tiedowns

Wetlands Present: None

Floodplains: None

**Vegetation Cover:** 0%

**Topography:** Relatively Flat

Public Sewer: Extend from Existing

Infrastructure

**Public Water:** Extend from Existing

Infrastructure

**Electricity:** Extend from Existing Infrastructure

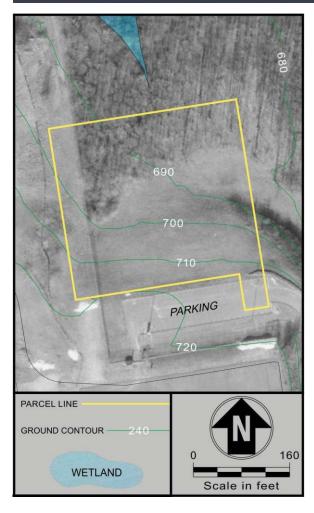
**Airside Access:** Apron to Taxiway Needed

**Zoning:** Industrial

**Potential Obstruction:** Transitional Surface –

**Install Obstruction Light** 

**Comments:** May be combined with Parcel B for a larger development.



# Waterbury-Oxford Airport Parcel B

Location: East of Runway 18 End

Access: Via Juliano Road and Parking Lot

**Road Frontage:** None

**Approximate Area:** 2.1 Acres

Predominant Soil Type: Charlton-Chatfield

complex

Current Land Use: Wooded

Wetlands Present: Minor

Floodplains: None

**Vegetation Cover:** Approximately 95%

**Topography:** Up to 30' Variation, Terrain

Declines to the North

**Public Sewer:** Extend from Existing

Infrastructure

**Public Water:** Extend from Existing

Infrastructure

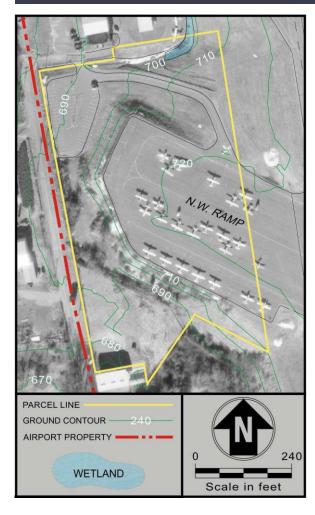
**Electricity:** Extend from Existing Infrastructure

Airside Access: Apron to Taxiway Needed

**Zoning:** Industrial

Potential Obstruction: None

**Comments:** May be used as support (i.e. parking lot) to Parcel A. Elevation difference prohibitive to airfield development.



# Waterbury-Oxford Airport Parcel C

**Location:** West of Runway 18 End

Access: Road and Parking Lot Available

**Road Frontage:** 

**Approximate Area:** 7.7 Acres

Predominant Soil Type: Charlton-Chatfield

complex

**Current Land Use:** Tiedowns

Wetlands Present: None

Floodplains: None

**Vegetation Cover:** Approximately 20%

**Topography:** Up to 30' Variation, Terrain

Declines to the West

**Public Sewer:** Extend from Existing

Infrastructure

**Public Water:** Extend from Existing

Infrastructure

**Electricity:** Extend from Existing Infrastructure

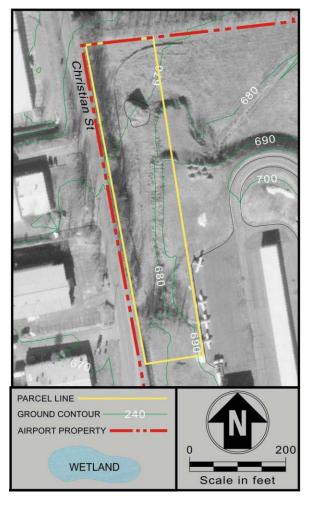
Airside Access: Available

**Zoning:** Industrial

**Potential Obstruction:** Transitional Surface –

**Install Obstruction Light** 

**Comments:** None



# Waterbury-Oxford Airport Parcel D

Location: West of Runway 18 End

**Access:** Via Christian Street

Road Frontage: Approximately 660 Linear Feet

**Approximate Area:** 1.5 Acres

**Predominant Soil Type:** Charlton-Chatfield

complex

**Current Land Use:** Open Space

Wetlands Present: None

Floodplains: None

**Vegetation Cover:** 100% - No Pavement

**Topography:** Relatively Flat

**Public Sewer:** Extend from Existing

Infrastructure

**Public Water:** Extend from Existing

Infrastructure

**Electricity:** Extend from Existing Infrastructure

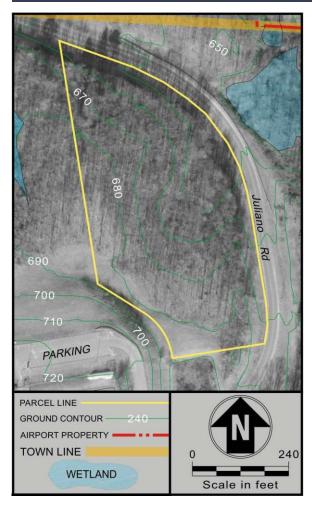
Airside Access: Limited

**Zoning:** Industrial

**Potential Obstruction:** None

**Comments:** FAA Land Release required for non-aviation development. This area may be smaller or larger depending on land needed for the Taxiway D redevelopment.





# Waterbury-Oxford Airport Parcel E

**Location:** Northeast Airport Property

Access: Via Juliano Road

**Road Frontage:** Approximately 1,000 Linear

Feet

**Approximate Area:** 5.9 Acres

Predominant Soil Type: Charlton-Chatfield

complex

**Current Land Use: Wooded** 

Wetlands Present: None

Floodplains: None

**Vegetation Cover:** 100% - No Pavement

**Topography:** Up to 30' Variation, Terrain

Declines to the Northwest

**Public Sewer:** Extend from Existing

Infrastructure

**Public Water:** Extend from Existing

Infrastructure

**Electricity:** Extend from Existing Infrastructure

Airside Access: Not Available

**Zoning:** Industrial

Potential Obstruction: None

**Comments:** FAA Land Release required for non-aviation development.



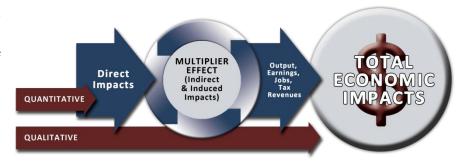
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# 6.0 ECONOMIC CONTRIBUTION OF WATERBURY-OXFORD AIRPORT

GA airports constitute important assets for state and local economies. Not only do they provide on-airport jobs, they indirectly support additional employment throughout the State. GA combines the flexibility of highway travel with the speed of air travel and with increasing highway congestion and time-consuming security screenings at commercial airports, GA airports offer a welcome alternative for many local businesses, which use the airports to transport key personnel or clients, or to ship products. GA airports also serve visitors, including recreational pilots, flight school students, and visitors to local tourism attractions, who contribute to the region's economy by purchasing goods and services from local businesses.

A study by the Alliance for Aviation across America, a coalition non-profit 5,500 members that supports GΑ interests, found that GA contributes \$2.4 billion total or \$726 capita to the per



Connecticut's economy.<sup>1</sup> While the study's methodology is not fully documented, the study asserts that the economic contribution is generated by 176 aviation-related businesses - fixed base operations (FBOs), repair stations, and charter operators — at 22 GA airports in Connecticut.

Focusing on the Waterbury-Oxford Airport in Oxford, CT, this assessment starts with an overview of the demographic and economic characteristics of the Town of Oxford and the County of New Haven to provide context for the economic contribution assessment that follows. Subsequently, the on-airport effects as well as multiplier effects triggered by the four following activities are quantified: airport operations and maintenance expenditures; airport capital expenditures; airport tenant expenditures; and visitor spending by pilots and passengers. The economic effects are expressed in terms of jobs, labor income and output or sales revenue. In addition, the State tax revenues associated with the Airport will be estimated using effective tax rates. Finally, additional benefits are discussed qualitatively. A description of the methodology can be found in Appendix A.

 $<sup>{}^{1}</sup>http://www.aviationacrossamerica.org/States/Connecticut/Summary\_of\_Economic\_Impact\_of\_General\_Aviation\_in\_Connecticut.aspx; Accessed on August 18, 2011$ 



#### 6.1 **Demographic and Economic Profile**

To provide context for the economic contribution assessment, an overview of the municipality and larger metropolitan region in which the Airport is located is presented.

#### **Town of Oxford**

The Waterbury-Oxford Airport is located in the Town of Oxford, Connecticut. Based on the 2010 Census, Oxford's population was 12,683, accounting for only 1.5 percent of the New Haven County's total population. In the past decade population increased by 22.6 percent from 9,821 residents in 2000.

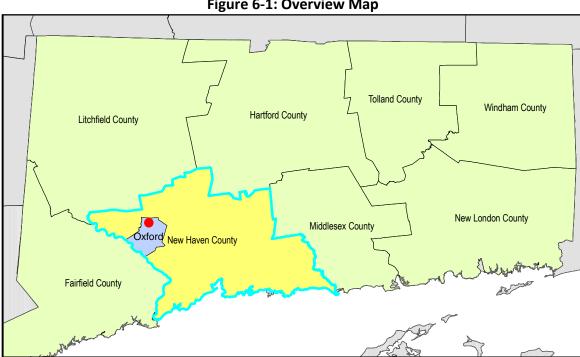


Figure 6-1: Overview Map

Total employment in Oxford amounted to 2,637 in 2009.<sup>2</sup> In 2005, services accounted for the largest employment share (28.2 percent of total workers), followed by construction, trade, manufacturing and transportation and utilities with all more or less equal shares (ranging from 17.9 percent to 13.9 percent). According to the Connecticut Economic Resource Center, Inc. (CERC), the largest employers in 2006 included Joyce Van Lines, a moving company; PTA Corporation, which is a plastics injection molder with a production plant in Oxford; and Morse Watchman Inc, a security system developer and distributor.

The Airport is located about four miles to the north of the center of Oxford; 10 miles to the southwest of the center of Waterbury, which is the fifth largest city in the State; and less than 20 miles from New Haven, the second most populous city in Connecticut. Dining and lodging

<sup>&</sup>lt;sup>2</sup> CERC Town Profile 2011



directly near the Airport are convenient for visitors arriving by aircraft. The nearest hotel is approximately two miles from the Airport, while the nearest restaurant is on-airport. However, additional restaurants in close proximity of the Airport are limited.

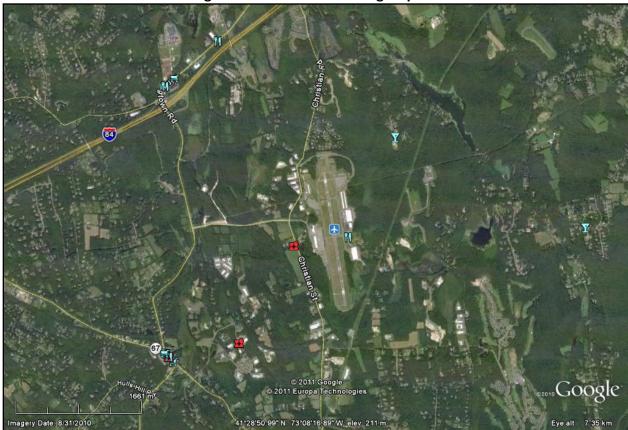


Figure 6-2: Area Surrounding Airport

Source: Google Earth

#### New Haven County - New Haven-Milford, CT, MSA

The New Haven-Milford metropolitan statistical area (MSA) is composed of a single county, New Haven. The New Haven MSA is included in the New York-Newark-Bridgeport Combined Statistical Area. New Haven County consists of 27 municipalities. In 2010, New Haven County had a population of 862,477, which is 24.1 percent of the statewide population.<sup>3</sup> The County is densely populated with about 1,400 persons per square mile. Two of Connecticut largest cities are located within the County: the City of New Haven, which is the second largest city in the state and the city of Waterbury, which ranks fifth. Between 2000 and 2010 the County's population increased by 4.7 percent, a rate similar to the population growth rate in the state as a whole. The median age is 38, while the statewide median age is 40. According to the 2005-2009 American Community Survey, almost one third (32.0 percent) of the residents aged 26 and older have earned bachelor degrees. As many as 38.7 percent of the workers<sup>4</sup> who reside

<sup>&</sup>lt;sup>3</sup> U.S. Bureau of Census

<sup>4&</sup>quot; Workers" is defined here to include only employed civilians age 16 and over



within the county, have managerial, professional or related occupations. Median household income (in 2009 dollars) of New Haven County Residents equaled \$61,234. Figure 6-3 shows a comparison between New Haven County and the State of Connecticut as a whole in terms of occupations and education. As illustrated, household income is slightly lower in the County compared to the State as a whole.

Figure 6-3: Economic and Social Characteristics of New Haven County & Connecticut Residents

	New Haven County	Connecticut
OCCUPATION		
Civilian employed population 16 years and over	420,526	1,745,261
Management, professional, and related occupations	38.7%	39.6%
Service occupations	16.2%	16.4%
Sales and office occupations	25.3%	25.4%
Farming, fishing, and forestry occupations	0.1%	0.2%
Construction, extraction, maintenance, and repair occupations	8.0%	8.1%
Production, transportation, and material moving occupations	11.6%	10.3%
EDUCATIONAL ATTAINMENT		
Population 25 years and over	566,194	2,344,192
Less than 9th grade	4.5%	4.7%
9th to 12th grade, no diploma	7.6%	7.1%
High school graduate (includes equivalency)	31.2%	28.8%
Some college, no degree	17.7%	17.1%
Associate's degree	7.0%	7.3%
Bachelor's degree	17.5%	19.9%
Graduate or professional degree	14.5%	15.2%
INCOME		
Median household income (dollars)	\$61,234	\$ 67,721
Mean household income (dollars)	\$79,503	\$ 94,026

Source: 2005-2009 American Community Survey

In 2009 according to the Bureau of Economic Analysis, there were a total of 378,949 jobs located in the County. The average annual wage of these local jobs was \$48,215. As expected, not all of these jobs were held by New Haven County residents. According to "LED On the



Map", a tool from the U.S. Bureau of Census Longitudinal Employer-Household Dynamics program, two thirds of these workers reside within New Haven County. Fairfield and Hartford counties are the place of residence of 9.3 percent of the workers each.

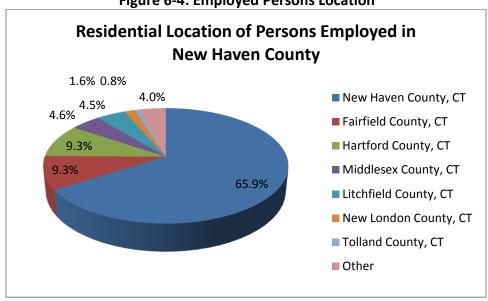


Figure 6-4: Employed Persons Location

Source: LED On the Map



# **6.2** Economic Contribution

As part of the assessment of the economic contribution of the Airport on the State and local economy, we quantified the on-airport effects (6.2.1) as well as multiplier effects (6.2.2). Additional contributions are discussed qualitatively (6.2.3).

# **6.2.1** On-Airport Effects

On-airport full- and part-time employment totaled 675 in 2010. The State of Connecticut employed six full-time persons at the Waterbury-Oxford Airport to manage and maintain the Airport. In addition to these permanent jobs, the State also supported one part-time seasonal jobs during the summer months. Most of the on-airport employment was associated with Airport tenant businesses, which collectively employed a total of 698 employees, including 631 full-time and 67 part-time employees. Tenants include Key Air, Double Diamond and Executive Flight which provide aircraft fueling and maintenance, hangar rental, aircraft sales, charter and flight training. As mentioned, there is also a restaurant at the Airport. The combined employee compensation in 2010, including wages, salaries and benefits is estimated as \$64.5 million.

# **6.2.2** Multiplier Effects

While often less visibly associated with the Airport than on-airport employment, jobs generated by multiplier effect often account for a major part of the Airport's contribution to the region's economy. Multiplier effects are generated when spending at local businesses is re-circulated through the local economy because these businesses purchase inputs from other local businesses and their employees purchase household goods and services locally. In the case of the Waterbury-Oxford Airport, the multiplier effects are triggered by four activities: (1) airport operations and maintenance expenditures; (2) airport capital expenditures; (3) airport tenant expenditures; and (4) visitor spending by pilots, passengers and students. These four types of spending generate additional jobs, income, sales and tax revenues in New Haven County and in throughout Connecticut. These additional effects were estimated using input-output modeling techniques and the IMPLAN modeling system as described in Appendix A.

#### **Airport Operation and Maintenance Expenditures**

In 2010, non-labor operation and maintenance expenditures for the Waterbury-Oxford Airport amounted to \$121,200. Expenditures included building expenses such as electricity and maintenance as well as non-building expenditures. In that same year, labor expenditures, including fringe benefits, for 6 full-time permanent employees and 1 seasonal employee amounted to \$829,918. Since vendors and employees used a portion of their income to make local purchases, additional economic activity is generated (i.e., multiplier effects).

Taking into account the multiplier effects, the estimated economic contribution of Airport management and maintenance expenditures equals 6 jobs, \$309,000 in labor income, and \$840,000 in output in New Haven County. In Connecticut as a whole, the economic



contribution of these expenditures is estimated as 8 jobs, \$379,000 in labor income, and \$1,036,000 in output. State tax revenues associated with these expenditures including personal income tax, corporate income tax and sales tax total \$0.03 million.

#### **Airport Capital Expenditures**

In 2010 capital improvements at Waterbury-Oxford Airport totaled \$5.0 million. This greatly exceeds previous years as capital spending was \$2 million in 2008 and \$1.4 million in 2009.

Considering the multiplier effect, the total economic contribution of the airport capital expenditures equals 71 jobs, \$3.8 million in labor income, and \$8.8 million in output in New Haven County. In Connecticut as a whole, the economic contribution of these expenditures is estimated as 75 jobs, \$4.1 million in labor income, and \$9.6 million in output. State tax revenues contributed by these expenditures including personal income tax, corporate income tax and sales tax total \$0.3 million.

#### **Airport Tenants**

As described above, there are nine on-airport tenant businesses that collectively employ 698 workers. Of these employees, 631 are full-time and 67 are part-time. Using industry average wages, the estimated compensation for these employees is \$64.5 million. Again, since these tenants and their employees purchase goods and services at other local business, additional economic activity is generated through the multiplier effect.

Taking into account the multiplier effect, the spending by the on-airport tenants and their employees, equals 682 jobs, \$33.7 million in labor income, \$86.5 million in output in New Haven County. In Connecticut as a whole, the economic contribution of these expenditures is estimated as 816 jobs, \$41.5 million in labor income, \$108.1 million in output. State tax revenues associated with these expenditures including personal income tax, corporate income tax and sales tax total \$7.9 million.

#### **Visitors**

A small number of jobs are directly supported by non-resident airport users, which include visitors who come to the region by aircraft and land at Waterbury-Oxford Airport as well as those who arrive by other means to attend training at on-airport schools. As these visitors purchase goods and services at off-airport businesses, they consequently support jobs at these businesses. Furthermore, additional multiplier effects are generated as the vendors and vendor employees make additional local purchases.



Based on FAA data, there were a total of 26,000 GA itinerant operations at the Waterbury-Oxford Airport in 2010. An estimated 6,500 visiting aircraft landed at Waterbury-Oxford in 2010, which corresponds an average of 18 aircraft per day.<sup>5</sup>

We used the following assumptions regarding visitors arriving by aircraft:

- → Average of 3 visitors per aircraft
- → 25 percent of visitors stay overnight; the remainder are day trippers
- → Average off-airport visitor spending of \$231 per person per trip

Based on the above assumptions, the total spending by visitors, including students, at New Haven County businesses was estimated as \$4.6 million. Assumptions for the number of visitors, average length of stay, and off-airport spending per aircraft used in this estimate are detailed in the Appendix A.

Taking into account the multiplier effect, the total economic contribution of visitor spending equals 68 jobs, \$2.4 million in labor income, and \$6.7 million in output in New Haven County. In Connecticut as a whole, the economic contribution of these expenditures is estimated as 72 jobs, \$2.6 million in labor income, and \$7.5 million in output. State tax revenues associated with these expenditures including personal income tax, corporate income tax and sales tax total \$0.2 million.

#### **6.2.3** Other Effects

In addition to the economic effects listed above, the Airport provides benefits to residents and businesses that are not easily quantifiable. According to airport management as much as 50 percent of the 47,400 operations at Waterbury-Oxford in 2010 were for business purposes.

Many businesses rely on the Airport for the transportation of goods or persons. However, the degree of dependency varies among businesses and is difficult to quantify. For some of these businesses, the dependency may be so strong that they would relocate if not for the Airport. For other businesses, the Airport may be responsible for cost savings or increases in market share and revenues, supporting an undetermined portion of the business's employees.

Examples of Connecticut companies that are frequent airport users include Bearing Distributors, a distribution of industrial product with several locations in the state; Murphy Sloman & Company, an accounting firm located in Branford. Executive Aircraft Interiors, a Connecticut based aircraft interior business, and Stellar Avionics Services, an aircraft repair service located at the Tweed - New Haven Airport, both service Waterbury based aircraft on a regular basis.

<sup>&</sup>lt;sup>5</sup> This estimate is calculated as follows 1) 26,000 operations divided by 2 equals 13,000 landings; 2) 13,000 times 50 percent equals 6,500 visiting aircraft; This is based on the assumption that 50 percent of the arriving itinerant aircraft are based at the Airport and that the remaining 50 percent are not.



Figure 6-5: Overview of Airport Activities

Activity Daily Weekly Monthly Occasional/ Nev.						
	— Dully	vveekiy	Wientiny	Seasonal	- Never	
Recreational flying	Х					
Aerial agricultural spraying					Х	
Corporate/business activity	Х					
Aerial inspections (pipeline, electric. etc.)	Х					
Air cargo		х				
Flight training and instruction	Х					
Gateway for resort visitors				Х		
Staging area for community events				Х		
Police/law enforcement				Х		
Prisoner transport					Х	
Military exercises/training	Х					
Aviation career training/education	Х			Х		
Search & rescue/Civil Air Patrol	Х					
Environmental patrol (i.e., wildlife, fisheries)				Х		
Emergency medical evacuation/patient transfer		х				
Medical doctor transport				Х		
Forest/wildland firefighting					Х	
Aerial photography/surveying			х			
Real estate tours				Х		
Aerial advertising/banner towing					Х	
Youth outreach (Young Eagles, scouting, etc.)				Х		
Air shows (static)				Х		

Source: Waterbury-Oxford Airport

Additional non-quantifiable benefits include improvements in quality of life for residents by providing staging area for community events, access to recreational flying and flight training, and emergency medical evacuation. Figure 6-5 presents the activities that are supported by the Airport and their frequency.



#### 6.2.4 Conclusion

With full and part-time employment totaling more than 700 in 2010, the Waterbury-Oxford Airport is an economic asset to New Haven County, and the State of Connecticut. An estimated 6,500 visiting aircraft landed at Waterbury-Oxford in 2010, carrying recreational pilots, business travelers, and visitors. Indirectly, the Airport supports almost 1,000 jobs in Connecticut through its \$5.0 million capital improvements and multiplier effects triggered by airport management, tenant and visitor spending. The total economic contribution of the Waterbury-Oxford Airport in 2010 amounted to more than 1,675 jobs and \$235.4 million of output, including \$113.9 million of labor income, and \$7.9 million in state tax revenues in the State of Connecticut. Perhaps even more important are the less quantifiable impacts of the airport. It is estimated that 50 percent of the 47,400 operations at Waterbury-Oxford in 2010 were for business purposes with frequent users including Bearing Distributors.

The overview of the economic contribution of the Airport is presented in Figure 6-6. The associated tax revenues are presented in Figure 6-7.

Figure 6-6: Overview Economic Contribution, 2010

	New Haven County			Connecticut		
	Jobs	Labor Income (\$000s)	Output (\$000s)	Jobs	Labor Income (\$000s)	Output (\$000s)
On-Airport Jobs	704	\$65,311	\$109,183	704	\$65,311	\$109,183
Operations and Maintenance Spending	6	\$309	\$840	8	\$379	\$1,036
Capital Spending	70	\$3,800	\$8,785	75	\$4,100	\$9,635
Airport Tenant Spending	682	\$33,721	\$86,483	816	\$41,450	\$108,109
Visitor Spending	68	\$2,373	\$ 6,741	72	\$2,629	\$7,473
Total	1529	\$105,515	\$212,032	1675	\$113,869	\$235,436

**Figure 6-7: Overview Connecticut Tax Revenues** 

Tax Type	(\$000s)
Personal Income Tax	\$5,381
Sales Tax	\$2,118
Corporate Income Tax	\$417
Total	\$7,916



# 7.0 FINDINGS & RECOMMENDATIONS

Consistent with the objective of this Business Plan, this section provides the culmination of the tasks completed throughout the business planning process which provided a thorough understanding of the background and operational characteristics of Waterbury-Oxford Airport. Such understanding has identified strengths, weaknesses, including issues and opportunities on both facility specific and system-wide levels. Specifically, this Business Plan was developed through an intentional process to aide in the uncovering of issues and challenges, while identifying the benefits and opportunities of the Airport. As a recap, this process included the following:

- → Section 1 Introduction
- → Section 2 Existing Airport Characteristics
- → Section 3 Airport Market Area
- → Section 4 SWOT Analysis
- → Section 5 Lease Opportunities and Constraints
- → Section 6 Economic Contribution of Waterbury-Oxford Airport

The facility specific findings and recommendations are relative to the operational characteristics, circumstances and historical trends of the Airport in particular, while the system-wide recommendations are relative to the entire state-owned airport system and would require implementation on a state level.

As mentioned in the Introduction to this Business Plan, when an Airport sponsor accepts a grant from the Federal Aviation Administration for an airport improvement project, the sponsor binds itself legally to what are identified as sponsor assurances which effectively dictate the terms of the agreement between the sponsor and the FAA. Generally, these obligations require a prescribed use, operation, and maintenance of the Airport and remain in effect throughout the useful life of the assets developed under the improvement project, but do not exceed 20 years. Acquired property on the other hand is treated differently and all property acquired under the Airport improvement program with federal funds, remains obligated under this program in perpetuity. Release from the obligations for property acquisitions can prove to be a lengthy and expensive process. A copy of these assurances can be found in the Appendix of this Business Plan.

All recommendations found herein are intended to optimize the overall benefits and economic impact the Airport provides to the community and State, in a cost efficient and effective manner, while maintaining the need to meet the FAA's sponsor assurances. They are identified and provided in three primary categories which include:

- Operations and Management;
- Policy and Finance; and
- → Marketing and Outreach.



# 7.1 System Wide Findings & Recommendations

The system-wide findings, recommendations and associated rationale can be found in the following subsections.

#### 7.1.1 Operations and Management

#### Governance

During the development of this Business Plan the Governor of the State of Connecticut signed Public Act 11-84, *An Act Concerning the Connecticut Airport Authority* to govern Bradley International, Danielson, Groton-New London, Hartford-Brainard, Waterbury-Oxford, and Windham Airports. An excerpt from the Public Act is shown below:

#### **PUBLIC ACT 11-84**

#### AN ACT CONCERNING THE CONNECTICUT AIRPORT AUTHORITY

Sec. 2. Effective July 1, 2011. There is hereby established and created a body politic and corporate, constituting a public instrumentality and political subdivision of the state of Connecticut established and created for the performance of an essential public and governmental function, to be known as the Connecticut Airport Authority. The authority shall not be construed to be a department, institution or agency of the state.

In general, the governance of the State owned and operated GA airports has historically provided for safe, secure and efficient facilities. During the SWOT analysis, concerns from most airports regarding governance stemmed from the slow business process to implement development and lease opportunities at the facilities. Something that the CAA should be able to significantly improve by removing the multi-layered process that is currently in place (see also Leasing Policy and Capital Development section).

The existing structure with the Assistant Airport Administrator overseeing the system of GA airports is appropriate for the five GA airports. While this study did not include a review of Bradley International, the CAA should consider the continued sharing of resources for Administration, Financial and Project Management for all of their Airports under the CAA.

One additional position for the GA airports would be a centralized role overseeing lease and economic development opportunities at the GA airports. This position would report to the now called Assistant Airport Administrator. The CAA will ultimately need to decide on titles that fit within their overall organizational structure.

### **Centralized Role Overseeing Lease and Economic Development Opportunities at GA Airports**

The GA airports could benefit from a dedicated economic development position. As ConnDOT transitions to the CAA, this position would allow a focused approach to business development at the GA airports to include the regular review of leases, rates, and charges. This person, in conjunction with the Airport Managers, would be the primary point of contact to initiate,



market, and develop new business opportunities including the development of relationships and a formalized plan to coordinate with state and local economic development agencies, local chambers, and tourism organizations in the promotion of the airports.

See also State and Local Economic Development Initiatives section.

#### **Airport Recordkeeping**

Like any business, financial and operations related data should be managed in an organized and professional manner. Under the present structure, operating budgets and expenditures for the GA Airports are spread across three State agencies and multiple financial systems including ConnDOT, and within ConnDOT they are spread across multiple bureaus including the Bureau of Aviation. This made construction of certain financial trends and allocations requested for the study challenging.

As part of standing up the CAA work is ongoing to pull all of this together under the same system as Bradley. The GA airports presently are integrated with the State transportation fund and not an enterprise fund but they are heading in that direction under CAA. The present structure is professional and in compliance with appropriate accounting standards.

In developing the business plan, gaps in historical airport operational data records were found that made trend analysis difficult to construct. Reporting on airport operational activity can be accomplished by setting up a standard reporting format. Standard reporting can be accomplished by identifying a limited number of areas to report on to include: total operations; total fuel gallons; based aircraft; revenues, expenses, and net income. This information should be reported for the reporting period (monthly basis) and then compared to the previous year's same period. A quarterly reporting cycle to present the historical data is adequate.

#### 7.1.2 Policy and Finance

#### **Tax Impacts and Proposals**

Currently, the State of Connecticut does not impose a personal property tax on aircraft, or repair services for aircraft. This has had a positive effect on GA in Connecticut and has resulted in aircraft operators flying to Connecticut from other states to have aircraft repair work completed in order to benefit from the favorable tax treatment. This demonstrates that aviation taxes in New England are especially debilitating since aircraft owners can travel to nearby and bordering states with aviation tax exemptions to save money on aircraft related parts and maintenance services.

If the exemption were eliminated, repair stations in Connecticut would likely lose business to neighboring states such as Massachusetts, Rhode Island or New York that have more favorable tax policies. In fact, a survey sponsored by the National Business Aviation Association found



that 93 percent of operators with aircraft based in Connecticut would move their aircraft to neighboring states if an aircraft property tax proposal were passed.

To avoid the likeliness of aircraft owners moving their aircraft out of state, the likelihood of a subsequent reduction in fuel sales, and the possible loss of aviation related jobs in Connecticut, this Business Plan recommends that the State maintain the aviation tax exemptions currently in place in order to promote statewide GA initiatives, and to remain competitive in the market.

In addition, the State should continuously monitor all aviation related tax proposals at the federal, state and local levels, and any potential negative impact on the system and the economic benefits of the activities generated by the Airports. A current federal issue is the potential loss of the Contract Tower Program. This Program currently provides air traffic control services at Groton, Hartford and Waterbury Airports and the loss of this program would shift the cost to the State, or the airports becoming uncontrolled fields. The operational and economic impacts of such a loss would be significant for the State's system of GA airports.

#### **Leasing Policy and Capital Development**

Well planned airport development including leasing properties is extremely important to ensuring the viability and sustainability to today's airports. Encouraging positive growth and attracting businesses to develop on-airport projects can be a challenge but the rewards generally are commensurate to the effort put forward in the process. A key aspect of business development is consummating the negotiations between the Airport operator, which in this case is the State of Connecticut and prospective tenants. Ensuring the process is fair and equitable but will provide the Airport with enough revenue to maintain the facilities and provide the required services are important.

Currently, the existing process for executing a lease agreement from start to finish is extremely cumbersome and incorporates some twenty-two (22) separate steps in order to validate and execute a lease agreement. There are six (6) Departments within the State plus the potential lessee that must review the lease agreements in their entirety before the lease can be executed and signed. The current Departments within the State involved with the leasing process are as follows:

- 1. DOT Bureau of Aviation Leasing Unit
- 2. DOT Contract Administration
- 3. DOT Legal Unit
- 4. State Office of Policy and Management
- 5. State Properties Review Board
- 6. Attorney General's Office

The number of steps in the lease review and execution process can increase considerably if there are several points of the lease that are under negotiation between the State and the potential lessee. This can effectively tie up the lease in the review and approval process for



quite some time and there have been cases based on airport management accounts where during this period markets have changed and the opportunity for the potential investor has passed. It is for this reason minimizing the length of time for lease execution from start to finish is extremely important and why the leasing process needs to be unencumbered to ensure potential opportunities are not lost do due to negotiation inactivity or a stalled process. Obviously, the complexity of the lease deal can play a role in the time it takes to execute, but an initial target should be 6 months or less.

Just as every airport is different, so are the needs for attracting new businesses. Drafting a lease that meets the particular needs of the Airport and its potential tenant is very important. It is recommended the State and airport management have a boiler plate lease prepared and inplace with draft language for standard aeronautical and non-aeronautical leases. The Airport should evaluate the different types of lease areas to meet the needs of the aeronautical and non-aeronautical leasing components as content for each lease will differ. Once the various types of boiler plate lease documents are established and as negotiations occur, additional language and specific provisions can be added but generally speaking the basis for the lease should remain unchanged. This will ensure the continuity of the leasing policy and expedite the leasing process to allow for an efficient negotiation and lease execution.

Each airport will be unique in the number and types of leases based on the diversity of the tenants. Below are some examples of different types of airport leases.

- → Hangar Leases
- → T-Hangar Leases
- Land Leases
- → Fixed Base Operations (FBO) Lease
- → Aeronautical or Non-Aeronautical

Additional areas of consideration for the Bureau of Aviation are the evaluation of the terms of the lease with respect to the amount of investment by the lessee and the type of area being leased. For example, long term leases should be reserved for investors willing to make significant improvements to the property including hangars, buildings, and aircraft parking aprons. Rent abatement for a given portion of improvements can be expected based on the level of investment made by the investor, but revenue such as land rent should be considered in order to assist the Airport in maintaining positive cash flow.

During a review of existing leases, it was noted that in many cases rent was being assessed at one or two rates which generally consisted of land rent or building rent. It is recommended that rent be charged based on the type of asset being leased. Some examples include:

- → Hangar Space (T-hangar or convention box type hangars)
- → Aircraft Parking Apron
- → Office Space
- → Unimproved Property



#### → Improved Property

Given the significant number of lease agreements and tenants at each airport, keeping track of lease inception and termination dates, insurances, and other pertinent data can be time consuming. Ensuring this information is reviewed and updated as required is very important. While there are many components of an executed lease that are important, one of the most time sensitive and critical is its termination date. In order to maximize the revenue airport facilities and property can produce it is important that leases set to expire within the next year are evaluated and given priority. Without having ample time to review the lease, gather market data, negotiate new terms with the lessee, or place the property out to bid via request for proposals can create problems and ultimately place the Airport at a disadvantage. In many cases exercising month to month terms, or multi-year options may not be in the best interest of the Airport depending on current market data and operational activity.

The leasing policies and the revenue these policies have the potential to generate, have a direct correlation with the capital improvement and development program for an airport. Capital development programs can be funded based on a number of factors to include:

**Revenue Generation** – The current or potential revenue the Airport can be expected to provide places the Airport higher on the list for funding when it competes with other airports within a single sponsor system such as the five GA airports in the State of Connecticut's system. Simply stated the more revenue an airport can generate the more capital investment the Airport requires to sustain these revenues. (e.g., more aircraft operations results in higher pavement costs or higher passenger traffic require more facilities investment).

**Safety of Aeronautical Areas** – The safety conditions of the aeronautical areas such as runways, taxiways, and aircraft parking aprons are of significant importance when it comes to capital investment. Airport sponsors have a responsibility to ensure the safe operation of their facility and in many cases obligated through the FAA's Airport Improvement Program. While participation in the Airport Improvement Program is voluntary, participation requires airports follow certain obligations as identified in the FAA grant assurance program.

**Operational Capacity** – The amount of aeronautical capacity an airport currently provides or has the potential to provide, are key factors in the level of capital development and investment the Airport should expect to receive. Trends in aviation and the local business climate can dictate the need for increased or decreased airport capacity.

The continuous improvement and streamlining of the leasing process over time will have a positive effect on the leasing of property and facilities at airports within the State of Connecticut's aviation system. The results will be a quicker reaction time to investor and market demand; using staff more proactively to address lease issues; and charging rates that are market appropriate for the property or asset being leased (aeronautical vs. non-



aeronautical). The leasing process should be improved prior to soliciting for lease development opportunities that are part of this business plan.

#### **Continuity of Rate Setting for Leases**

The State should continue to utilize a consistent rate setting methodology by way of regularly conducting appraisals and valuations of property for lease development and renewals. This is a current practice and should be maintained. Airport valuations were completed for each Airport in this business plan and a copy is contained in the Appendix of this report.

## **Rates and Charges**

Providing competitive rates and charges is key to maximizing airport revenue, and helps maintain existing based aircraft owners while attracting new business in the form of transient users. Incremental revenues can be generated through increases in certain regulated or contracted fees, such as fees for aircraft tie-downs, aircraft landing, and fuel flowage. In fact, a proposal was submitted by the Bureau that came as a result of a meeting with the Office of Policy and Management concerning revenue options for the Bureau of Aviation. At the time, the proposal indicated that a proposed adjustment to the rates and charges at the State owned GA airports would result in a \$218,000 annual increase in revenue for the entire system. However, complex external variables such as the fluctuating cost of aviation fuel, and the effect of economic uncertainty on GA makes quantifying forecasted revenues resulting from rate increases both difficult, and subjective. Nonetheless, improvements can still be made in this regard. The facility specific recommendations suggest that updating rates and charges would result in increased revenue for each Airport.

Due to the current protracted legislative procedure required to adjust airport rates and charges, it has been difficult for the Bureau of Aviation to maximize the revenues generated from typical airport related fees. During the course of this business planning process, it was brought to our attention that the rates were only increased once in the last twenty years. Anecdotal evidence also suggests that this may be suppressing the rates of airports in the market area.

To ensure that each of the system airports are remaining competitive, close monitoring of prevailing rates and charges are necessary. It is recommended that rates and charges at surrounding airports be tracked on a monthly or at least quarterly basis and a new, more timely, and less bureaucratic policy be adopted that allows the adjustment of airport rates and charges in a manner that is effective and reasonable. Granting the Connecticut Airport Authority full authority to amend and approve airport rates and charges is one solution that must be implemented.



# Financial and Economic Contribution Review of the GA Airport System

Since ConnDOT owns and operates a system of airports it is important to review the financial activity and economic contributions of the GA airports as a whole. Figure 7-1 shows the historical system financial performance, and Figure 7-2 shows the Economic Benefits of the GA Airport System.

Figure 7-1: Historical System Financial Performance

System Operating Surplus/(Deficit)	(\$180,772)	(\$401,461)	(\$1,410,559)	(\$1,208,539)	(\$1,006,738)
Total System Expenses	\$1,983,812	\$2,125,148	\$2,913,934	\$2,872,701	\$2,718,609
Windham Expenses	178,992	183,872	186,510	153,124	156,857
Waterbury-Oxford Expenses	565,408	634,908	905,240	931,405	932,710
Hartford-Brainard Expenses	419,579	445,527	689,405	848,803	728,642
Groton-New London Expenses	758,790	797,904	1,040,271	849,067	798,766
Danielson Expenses	\$61,043	\$62,937	\$92,508	\$90,302	\$101,634
Total System Revenues	\$1,803,040	\$1,723,687	\$1,503,375	\$1,664,162	\$1,711,871
Windham Revenues	59,979	63,786	64,225	63,842	69,232
Waterbury-Oxford Revenues	567,859	574,098	526,600	658,008	608,610
Hartford-Brainard Revenues	445,012	496,550	431,880	458,193	481,258
Groton-New London Revenues	668,543	548,372	461,184	454,722	513,759
Danielson Revenues	\$61,647	\$40,881	\$19,486	\$29,397	\$39,012
	FY 06-07	FY 07-08	FY 08-09	FY 09-10	FY 10-11

Source: Consultant Calculations

Figure 7-2: Summary of Economic Benefits of the GA Airport System

<b>Total System Economic Benefits</b>	3,042	\$409,200,000
Waterbury-Oxford Airport	1,675	\$235,400,000
Groton-New London Airport	909	\$119,500,000
Hartford-Brainard Airport	368	\$44,800,000
Windham Airport	65	\$7,500,000
Danielson Airport	25	\$2,000,000
	Jobs	Output
<u> </u>		<u> </u>

Source: Consultant Calculations



The system of GA airports assessed operated at an annual deficit of approximately \$1.0 million in FY10-11 and an average deficit of approximately \$842,000 over the last five years. A significant portion of the deficit can be attributed to a more accurate accounting allocation of fringe benefits. In 2010, the system of GA airports did however provide an estimated \$409 million in economic output activity and 3,042 jobs to the State of Connecticut. The findings and recommendation of this Business Plan all look to provide the necessary resources to help reduce the System's annual deficit while increasing the economic contribution to the State.

# 7.1.3 Marketing and Outreach

While limited marketing and outreach efforts have historically fluctuated for the GA airports, the findings of this Business Plan indicate that a focus on the areas presented in this subsection will help increase the level of awareness and promote opportunities. This subsection has categorized the findings and recommendations into the following:

- → State and Local Economic Development Initiatives
- → Industry Association Marketing and Partnerships
- → Establishment of a Statewide Aviation Group
- Statewide GA Airport Awareness
- → Active Pursuit of Prospective Users and Tenants

#### **State and Local Economic Development Initiatives**

Specific initiatives with state and local economic development groups should be developed and coordinated on a regular basis. By bringing together both the public and private sectors to establish goals and objectives, investment opportunities involving the State owned airports can be more effectively realized and acted upon.

In an effort for the system airports to maximize their contribution in strengthening their local economies, it is recommended that airport representatives work with state and local economic development officials to manage existing and future development opportunities across the airport system. This should occur on a regular basis, not just when opportunities present themselves. This will allow better communication about opportunities in a progressive, proactive manner to maximize initiatives like those from the excerpted Public Act 11-1 below.

#### **PUBLIC ACT 11-1**

#### AN ACT PROMOTING ECONOMIC GROWTH AND JOB CREATION IN THE STATE.

Sec. 39. On or before October 1, 2012, and annually thereafter, the Connecticut Airport Authority shall report in accordance with the provisions of section 11-4a of the general statutes to the Commissioner of Economic and Community Development on airport development zones established pursuant to section 32-75d of the general statutes, as amended by this act. Such report shall include, but not be limited to, (1) information regarding traffic in and around such airports, impact of each zone on airport usage, and impact of each zone on employment within the airport and businesses located at the airport, (2) recommendations for any needed changes to an existing zone, and (3) recommendations for the establishment of any additional zones...



...b) Notwithstanding subsection (a) of this section, the Connecticut Airport Authority may establish additional airport development zones surrounding any of the general aviation airports, as defined in section 1 of public act 11-84, or any other airport within the duty, power and authority of the authority, as defined in section 3 of public act 11-84, upon receipt from the Commissioner of Economic and Community Development of a proposal recommending the establishment of such a zone.

It should be noted that the development of the Zones should not be a one size fits all approach. The regular interaction proposed above will provide for the dialogue to develop the specifics for each Airport's zone. Further, the lease opportunities and constraints section of this business plan identified potential development areas with recommended uses at each Airport. Individual marketing sheets summarizing the characteristics of each parcel are also provided. It is recommended that outreach efforts with private developers include the use of these marketing sheets, coupled with the market appraisal and market rent estimates provided within the valuation completed for each System Airport.

In working with economic development officials, this plan recommends that ConnDOT coordinate with the Connecticut Economic Resource Center (CERC) to upload the potential airport development areas to CERC's online database of available commercial properties called, SiteFinder (www.ctsitefinder.com). The use of all available tools, including SiteFinder, can help attract private development at the Airports and generate new revenue streams for ConnDOT while helping to grow businesses and jobs in Connecticut.

See Governance section for discussion on a centralized staffing role overseeing development opportunities at the GA airports.

#### **Industry Association Marketing and Partnerships**

At the core of the aviation industry are various organizations that represent the interests of a particular aviation function, from business users (NBAA) to private pilots (AOPA), aircraft manufacturers (GAMA) to experimental aircraft (EAA), among many others. The following are just some associations that ConnDOT should establish relationships with to allow for the promotion of the Connecticut GA airports. Existing relationships already exist in some cases, but have been identified here to point out the need for continued work to maintain the connections. Other unidentified industry partnerships should also be considered as they arise.

→ Aircraft Owners and Pilots Association (AOPA) – AOPA's website (www.aopa.org) reports their Mission Statement as: The Aircraft Owners and Pilots Association (AOPA), a not-forprofit individual membership association, effectively serves the interests and needs of its members as aircraft owners and pilots and establishes, maintains, and articulates positions of leadership to promote the economy, safety, utility, and popularity of flight in general aviation aircraft.



Connecticut has an established relationship with AOPA in regard to hosting the AOPA Aviation Summit (www.aopa.org/summit/) at Hartford-Brainard Airport in 2007 and 2011. Each event has meant approximately \$10 million in economic impact activity and is a good example of the types of partnerships that can be established with these organizations to bring events, both large and small, to the State of Connecticut.

- → National Business Aircraft Association (NBAA) NBAA's website (www.nbaa.org) reports their Mission Statement as: To serve NBAA Members by promoting the aviation interests of organizations utilizing general aviation aircraft for business purposes in the United States and worldwide. NBAA is involved in Connecticut through their support of the Connecticut Business Aviation Group (CBAG), but also holds events at various airports throughout the United States.
- → National Air Transportation Association (NATA) NATA's website (www.nata-online.org/) reports that NATA is the national association of aviation business service providers. Their Mission is: To be the leading national trade association representing the business interests of General Aviation service companies on legislative and regulatory matters at the Federal level, to provide education, services, and benefits to our members to help ensure their long-term economic success, and to provide for the well-being and continuity of the Association.
- → Experimental Aircraft Association (EAA) EAA's website (www.eaa.org/) EAA reports that: EAA is a growing and diverse organization of members with a wide range of aviation interests and backgrounds. EAA was founded in 1953 by a group of individuals in Milwaukee, Wisconsin, who were interested in building their own airplanes. Through the decades, the organization expanded its mission to include antiques, classics, warbirds, aerobatic aircraft, ultralights, helicopters, and contemporary manufactured aircraft.

One of many of their programs, the EAA offers is the EAA Young Eagles program. This Program was launched in 1992 to give interested young people, ages 8 - 17, an opportunity to go flying in a general aviation airplane. These flights are offered free of charge and are made possible through the generosity of EAA member volunteers. This program occurs at many GA airports including those in Connecticut.

There are various other aviation industry associations that can provide opportunities to promote aviation in the State of Connecticut. While sometimes these organizations may need to represent an interest that may not be in line with airport management, having an established relationship on a continual basis will help to foster positive support and benefits for aviation activity on the State.

ConnDOT should continue to work with regional representatives of these and other industry associations to identify initiatives, events and other types of activities that can be hosted at the State's airports. This should be done on a regular basis and in a proactive manner to allow for the planning and promotion of the activity. This can bring economic activity to the airports in the form of fuel sales and local spending in the surrounding communities.



#### **Establishment of a Statewide Aviation Group**

In an effort to share ideas and events, as well as advocate for general statewide aviation related causes, many states have formed an airport management association, e.g. New York Aviation Management Association (NYAMA), and Massachusetts Airport Management Association (MAMA). Since the relatively small number of airports in Connecticut would make for a small state airport management association, it is recommended that the State support and advocate for the establishment of a similar state association comprised of airport managers and staff, government officials, aviation business representatives, advocates, professionals, and others, to advance the cause of GA in Connecticut.

The Connecticut Business Aviation Group (CBAG) is an organization that already exists within the State to promote business aviation aspects. Their website (http://ctbag.org/default.aspx) reports their Mission Statement as the following:

To serve the needs, and represent the interests of the Connecticut & greater New England business aviation community. To ensure that business aviation is considered as a vital and contributing segment in the overall aviation environment and economy.

#### And their objectives include:

- To educate policy & decision makers of the group's existence; goals and contributions of business aviation in Connecticut
- → Work with Transportation Security Administration (TSA) representatives to develop security policies that support business aviation
- → Review & input into Part 150 noise study at BDL
- → Review & input into northeast airspace redesign
- → Establishment as a formal, continuing, active group
- → Establishment of business aircraft friendly customs/immigration/agriculture support at Connecticut airports
- → To provide a forum for the exchange of knowledge and ideas
- → Invitation of high profile guest speakers
- → Informal networking

The recommendation of this Business Plan would provide for collective support of the various functions of aviation in Connecticut, not just business aviation.

To the extent permissible, this plan also recommends that ConnDOT (and the new CAA) work more closely with the Connecticut Legislative Aviation Caucus and the Connecticut Business Aviation Group (CBAG) to promote the quantitative and qualitative benefits of aviation to Connecticut.

A statewide aviation group can work to develop this relationship with the Caucus, CBAG and other industry associations.



#### **Statewide GA Airport Awareness**

Through direct employment, the support of local businesses, emergency services, safety programs, educational outreach, and environmental stewardship, GA airports boost local economies and serve communities. To facilitate airport and aviation awareness this business plan recommends that ConnDOT organize and host an annual aviation expo, and/or open house at each state-owned airport whereby the airports, their tenants and airport associated organizations open their doors to the public. It is anticipated that having such an event helps to inform the local communities of the vital role that the Airport and its tenants serve in providing aviation related services to the public. Airport open houses will also serve to promote the future vitality of aviation in Connecticut by providing an educational opportunity for the children and students within the local community to consider one of the many facets of aviation as a future career path.

Additionally, this plan recommends that in an effort to promote each of the facilities and build positive relationships with the communities they serve, that the airports encourage the use of any available meeting space and common areas (classrooms, conference rooms, etc.) to host various civic groups, clubs and community organizations (boy scouts, girl scouts, etc.). Offering the use of these areas to airport tenants can also foster cooperation among airport stakeholders.

## **Active Pursuit of Prospective Users and Tenants**

While there are airport specific recommendations for lease development and opportunities, active pursuit of prospective airport users and tenants should be done continuously. In conjunction with the centralized role overseeing development opportunities at GA Airports, an annual plan that identifies targets for discussions should be established and implemented. This Plan should focus on the following areas:

→ National Promotion of Connecticut Airport System — ConnDOT should promote the Connecticut Airport System as often as possible. This has been done by them in the past at NBAA annual events such as the Schedulers and Dispatchers Conference, but do to budget limitations, has not been done in the recent past. Other national events should also include: OshKosh Air Venture (www.airventure.org) and Sun-n-Fun (www.sun-n-fun.org). These events can be attended, provided advertising information on the system, or even host a joint State of Connecticut booth that promotes not only the airports, but Tourism and Business opportunities. The Statewide and airport specific brochures developed as part of this business plan will aide in this promotion. This can be accomplished by partnering with airport tenants as appropriate.

ConnDOT and Airport Managers should seek discussions with local businesses with aviation interests, fractional aircraft ownership companies, and pilots in the region to promote the system of airports. The following provides just a few examples of what this would entail.



- → University of Connecticut Discussions from the research conducted in this business plan could not point to business development activity between the University and the GA system of airports. The University should be aware of the GA airports and their ability to support flight activities from the student, faculty and Board of Trustees as a means of transportation and also a resource to support the university establishment of a flight training program similar to Bridgewater State in Massachusetts.
- → Fractional Aircraft Ownership This type of aircraft ownership has become popular over the last decade and allows a user partial (fractional) access to an aircraft without the expenses of being a sole owner. While the destination airport is usually the customer's choice, discussions with fractional ownership firms can provide insight into the services that are required for them to use the Airport as well as a chance for ConnDOT to promote the Connecticut System of Airports. The Tri-State metropolitan area is a popular business destination, but the Airports in close proximity are at capacity for hangar storage. As can be seen with development activity at Waterbury and now Windham, aircraft management firms are utilizing outlying airports to store these aircraft and ferry them down to the metro airports when needed. This is a significant potential growth area for the Connecticut airport system and it should be marketed accordingly. Some fractional ownership firms include:
  - NetJets (www.netjets.com);
  - Citation Shares (www.citationair.com/Programs/JetShares);
  - Flex Jet (www.flexjet.com); and
  - o Flight Options (www.flightoptions.com); among others.
- → Marketing to Pilots in the Region The type and level of services offered by any airport is often a contributing factor to the level of activity an airport experiences. As an example, Danielson's self-service fueling island now makes the Airport more attractive to pilots who would not otherwise use the Airport. To this end, each State Airport should identify services that can be marketed in order to make the Airport more desirable to potential users. This can be done relatively in expensively via a press release to local trade journals and aviation industry associations. This type of promotion can be done for various activities at the GA airports including events, new businesses, new services or promotions from an existing business, etc. Included in this should be regular review and updates to a website www.airnav.com that is used widely by industry users.
- → Joint Marketing with Tenants ConnDOT and each Airport Manager should work with existing airport tenants to understand their business plan targets and objectives, and support them when appropriate. This can include an understanding of their potential expansion plans where the State can look to identify economic development incentives that could improve the financial attractiveness of future investments at the Airport. This type of activity can work with the above two areas in identifying leads that could possibly be housed by an existing tenant.



# 7.2 Facility Specific Findings & Recommendations

Specific recommendations for the Waterbury-Oxford Airport are based primarily upon the findings of the SWOT workshop conducted as part of this study, as well as existing and potential lease opportunities identified through an analysis of the Airport's current conditions, and a review of the Airport's historical revenues and expenses. The findings and recommendations that follow are provided in the categories previously outlined and focus on strategies and methods that ConnDOT can use to maximize existing and future opportunities at OXC.

## 7.2.1 Operations and Management

As mentioned in Section 3.0, for the purposes of this business plan, including Waterbury-Oxford and its 257 based aircraft, there are 13 airports and 1,670 aircraft within the market area of OXC. Although varying in service level, the airports within the market area are home to based aircraft from which Waterbury-Oxford receives air traffic, and can draw business from.

#### **Based Aircraft**

According to the information provided by the Airport, the number of based aircraft at Waterbury-Oxford has only declined by approximately 2%, from 2009 to 2010 (262 to 256). Coupled with information provided by Airport Management, the number of based aircraft at the Airport has remained relatively stable even considering the economic downturn in recent years. The Business Plan Alternatives, and Strategic Recommendations sections of this plan will look to provide scenarios and recommendations that can help the Airport sustain and increase the number of based aircraft into the future. Based on the market area identified in Section 3, Waterbury-Oxford currently holds approximately 15% of the entire market share of based aircraft. ConnDOT should continually monitor the Airport's percentage of market share and look for ways to increase or at least maintain its market share percentage of based aircraft.

#### Fleet Mix

Differing from typical GA airports whose fleets are made up of mostly single-engine, piston driven aircraft, over 20% of the based aircraft at Waterbury-Oxford are jets. Although limited historical based aircraft data was available for this plan, discussion with Airport Management suggests that the number of based aircraft has remained relatively stable in recent years. Furthermore, if the Airport's physical characteristics (i.e., runway length) remain the same, no significant changes to the fleet mix are expected.

Additionally, since the Airport has identified itself as an attractive location for jet owners to use as a base of operations, proper marketing of the Airport, and the availability of developable airside real estate could attract additional corporate flight departments whose operations would result in increased revenue for the Airport.



#### **Aircraft Operations**

Since OXC is a towered airport, records on aircraft activity are readily available. Based on prior year counts, operations since 2002 have declined by approximately 10% (53,241 to 47,446). However, due to the economic downturn, compared to other GA airports who have seen their operations decline by 20% or more, the level of operations at OXC, although down, have remained relatively healthy. Based on FAA data, local air traffic accounts for roughly 50% of the operations at the Airport, while the other 50% of the operations are itinerant. Contrary to a typical GA airport whose total operations are made up of mostly local air traffic from based aircraft and flight school activities, the fact that OXC experiences a significant amount of non-local air traffic is representative of the value the Airport provides to the people who come to the Waterbury area to visit or conduct business.

#### **Instrument Operations**

As previously mentioned, Waterbury-Oxford offers instrument approaches in the form of: ILS, Localizer, and RNAV/GPS procedures. Historical counts of the number of instrument approaches at the Airport indicate that instrument operations have continuously trended upward since 2002 when instrument operations accounted for approximately 7% of total operations. In 2010, instrument operations accounted for nearly 16% of the total operations. Compared to airports without precision approach capabilities, airports that offer a precision approach generally provide greater benefits to its users since a precision approach makes an airport safer and more accessible during inclement weather conditions. GA airports with precision approach capabilities, such as OXC typically experience a greater number of aircraft operations as a result of instrument flight training activities and increased airport use during instrument weather conditions. Conversely, airports without precision instrument approach capabilities experience less activity comparatively and are generally less attractive to a potential tenant or based aircraft owner. Therefore, in order to sustain activity levels it is recommended that Waterbury-Oxford maintain the existing approach capabilities of the Airport.

#### **Fuel Sales**

In many cases, fuel services at GA facilities provide the most important source of revenue for the Airport and FBO's that operate airport fuel farms. Piston engine aircraft in the GA fleet generally use 100 low lead AvGas, while the larger turbo-prob and jet aircraft use Jet A fuel, exclusively. Historical fuel records at Waterbury-Oxford indicate that fuel volume has dropped roughly 23% since 2006 when the annual volume of fuel for the Airport was nearly 2.5 million gallons, excluding exemptions. In 2010, annual fuel volume totaled 1,922,456 gallons. Airports with annual volumes of more than one million, typically sell jet A over AvGas at a ratio of 5 to 1 which suggests that a correlation between fuel volume and airport operations can't always be made. Since aircraft operations at the Airport have only dropped by roughly 15% and fuel volume by 23% from 2006 to 2010, historical airport records indicate that mostly likely, compared to aircraft that use 100LL, the Airport has seen a greater reduction in operations by aircraft requiring Jet A fuel.



#### **Staffing**

In order to meet the responsibility of assuring that the conveyance of all goods and services at the Airport are provided in a safe, sound, and efficient manner the Airport requires qualified and experienced aviation professionals.

The organization and staffing of an airport is as varied as the size of the facility and the community it serves. Large commercial airports require more complex organizational structures to support the activities associated with moving large volumes of people, cargo, and aircraft in and out of the facility. Conversely, the smaller the Airport the less complex the overall organization tends to be.

Waterbury-Oxford Airport is a part of a larger system of airports that reports directly to ConnDOT management. Listed below, the ConnDOT system of airports includes one (1) large commercial airport and five (5) GA airports:

- 1. Bradley International Airport (BDL
- 2. Groton-New London Airport (GON)
- 3. Waterbury-Oxford Airport (OXC)
- 4. Hartford-Brainard Airport (HFD)
- 5. Windham Airport (IJD)
- 6. Danielson Airport (LZD)

Having a system of airports has both positive and negative impacts on each airport within the system. This includes the ability to share resources with other airports within the system. The cross utilization of staff and equipment has the potential to save the State a substantial amount of money since some resources can be allocated across all system airports on an as needed basis. However, the ability to cross utilize staff resources does not necessarily ensure that staffing is adequate at each facility. Having adequate staffing goes beyond mere airport representation and allows the Airport to meet its goals most efficiently and effectively.

#### 7.2.2 Policy and Finance

#### Minimum Standards/Rules and Regulations

As business operators are concerned, airport sponsors such as ConnDOT, are encouraged to establish reasonable standards that are relevant to the aeronautical characteristics of the facility. Minimum standards are intended to ensure that a minimum level and quality of services offered to aircraft owners, pilots, and the general public are maintained at the Airport. Minimum Standards should be applied objectively and uniformly to all on airport commercial aeronautical activities, and should be tailored for an airport by examining the Airport's characteristics and how it differs from other airports. Minimum Standards for the Danielson Airport were most recently approved and adopted by ConnDOT on February 10, 2010.



Rules and Regulations adopted by airports are established to ensure the viability and safety of the Airport for its users. They should be reasonable, non-arbitrary, and non-discriminatory, and apply to all airport users. All aeronautical activities, as well as the management operation, and control of the Airport shall be conducted in accordance with established airport Rules and Regulations. Currently each tenant must operate in accordance with their individual operating agreement with the State. However, ConnDOT is in the process of developing specific Rules and Regulations for the Airport that would apply universally to each tenant.

## **Existing Airport Leases**

Well planned airport development including leasing properties is extremely important to ensuring the viability and sustainability to today's airports. Encouraging positive growth and attracting businesses to develop on airport projects can be a challenge but the rewards generally are commensurate to the effort put forward in the process. A key aspect of business development is consummating the negotiations between the Airport operator, which in this case is the State of Connecticut and prospective tenants. Ensuring the process is fair and equitable but will provide the Airport with enough revenue to maintain the facilities and provide the required services in important. Additionally, it is extremely important the leasing process be unencumbered by the bureaucratic process to ensure potential opportunities are not lost do due to negotiation inactivity or a stalled process.

Overall the leases for the Airport were generally complete and accurate. The lease abstracts for the Waterbury-Oxford Airport were reviewed and in some instances where additional questions remained regarding the content and terms of the lease, the complete lease agreement was referenced. Over the course of the lease review process there were some terms, rates, and charges that were identified as requiring further evaluation and discussion. The findings and recommendations based on the results of this evaluation are as follows:

- The Waterbury-Oxford Airport has experienced a great deal of private investment and development. This development along with the steep terrain surrounding the Airport has left a limited number of parcels of land available for future expansion and aeronautical services development. There are three development sites identified on the potential development areas figure in Section 5. This figure identifies one large parcel of undeveloped property to the west of Runway 18-36 and two other parcels to the northeast of the runway.
- During the lease terms review, it appeared that in many cases the leased areas owned by the Airport were only being charged one rate based on the number of square feet leased. The State should evaluate the implementation of tiered rates based on the type of space being leased. For example, the lease rates for offices, hangar space, aircraft parking aprons, and vehicle parking lots should be different as the maintenance and life costs for each asset differ and the market costs will vary as well. Additionally, these rates should be compared to the aviation appraisals and market information being



submitted with the business plan. Updates to these documents are recommended on consistent basis to ensure current market value is being received by the Airport.

- → Ensuring the State and the Airport are receiving appropriate compensation in accordance with the leases terms outlined is extremely important. Lost revenue due to errors in accounting or misrepresented sales number can create significant budgetary problems for the Airport. It is recommended that the lease terms be reviewed periodically along with insurances to ensue the minimum annual guarantees or percentage of sales due to the Airport and state are accurate.
- The future marketing and development of the non-aeronautical at the Waterbury-Oxford Airport should be evaluated and seen as a source of potential revenue. There are six sites that have been identified as having potential for development. These potential development sites are primarily located along the western and eastern perimeter of the Airport along Juliano Drive and Christian Street. Both of these sites have easy access from these roadways and have a great deal of development potential.
- The Waterbury-Oxford Airport has a large number of business jet operations to include charter activity. The lack of a U.S. Customs and Border Protection station on the Airport has limited the amount of international air traffic in and out of the Airport. Aircraft operators are forced to clear customs at other airports before arriving at Waterbury-Oxford. This is seen as an inconvenience by the aircraft owners and in many cases a reason not to permanently locate an aircraft at the Airport.

The State and Airport Management should have a boiler plate lease in place with draft language for a standard lease. The Airport should also evaluate different types of leases as aeronautical and non-aeronautical leasing components and content will differ. Once the various types of boiler plate lease documents are established and as negotiations occur, additional language and specific provisions can be added but generally speaking the basis for the lease should remain unchanged. This will ensure the continuity of the leasing policy and expedite the leasing process to allow for an efficient leasing process and execution.

#### **Airport Financial and Economic Contribution Review**

Not unlike many GA airports, Waterbury-Oxford Airport operated at an annual deficit of approximately \$324,000 in FY10-11 and an average deficit of approximately \$207,000 over the last five years. A significant portion of the deficit can be attributed to a more accurate accounting allocation of fringe benefits. In 2010, the Airport did however provide an estimated \$235 million in economic output activity and 1,672 jobs to the State of Connecticut. In order to reduce the Airport's annual deficit while increasing the economic contribution to the State all efforts should be made to increase land lease revenue, reconfiguration of aeronautical parcels, and aeronautical activity levels.



It would not be practical for this business plan to make the assumption that all potential annual revenue from undeveloped land leases can be realized in the near future. However, based on the existing characteristics of available land parcels and as demand warrants, it is recommend that ConnDOT solicit requests for proposals (RFPs) for development, redevelopment, and expansion opportunities (e.g. Hangars, t-hangars, etc.) at the Airport in the short term. This activity, along with other recommendations to promote and coordinate the Airport facilities that are available to the public will make positive contributions to the Airport's bottom line, as well as increase the economic output to the State of Connecticut.

#### **Rates and Charges**

As mentioned, one revenue enhancement strategy for Waterbury-Oxford Airport includes monitoring and adjusting rates and charges to ensure the Airport is maximizing its revenue generating ability while remaining competitive in the market. Consistent with the Bureau's previous proposal, current and suggested rates and charges are shown in the Figure 7-3. In regard to recommended rates and charges, the study team concurs with those presented in the Bureau's proposal.

Figure 7-3: Current & Proposed Airport Rates and Charges

Rate/Charge	Current	Proposed
Aircraft Tie-Down Paved (Single/Multi-Engine)	\$55/\$55/month	\$90/\$105/month
Aircraft Tie-Down Grass (Single/Multi-Engine)	\$40/\$40/month	\$70/\$85/month
Fuel Flowage Fee	\$.08/Gallon	\$0.095/Gal –AvGas \$.11/Gal-Jet
Landing Fee (Up to 5,999 lbs 99,999 lbs.)	\$8-12	\$10-40

As leases at the Airport expire, the State should continue to assure that the facilities being leased are done so at fair market value, in accordance with FAA grant assurances and in order to maximize airport revenue.

#### **Lease Development Potential**

The geographic location and the Airport's characteristics, especially in regard to runway length make Waterbury-Oxford a very attractive destination airport for corporate business type aircraft operators and the executives who prefer OXC over other regional airports with similar functions. However, extreme variations in the Airport's surrounding topography and already existing airside development leave few options for private developers interested in undeveloped Airport property. However, Section 5 identified two Airport parcels currently used for aircraft tie-downs that have redevelopment potential and an additional wooded parcel that could be developed but would require a connection to the existing taxiway system.

Based upon the professional valuation conducted as part of this effort suggested a land lease rates were provided for undeveloped primary airside parcels. Consistent with the parcels



identified for aviation development in Section 5, Figure 7-4 provides the potential revenue gained through land leases if development was pursued, based upon the recommended rates found in the conclusions of the valuation found in the appendix to this plan. Non aviation development parcels, as well as non-readily developable parcels were omitted since market rates were not prepared for these land areas.

Figure 7-4: Potential Revenues from Future Land Leases

Parcel	Size (Acres)	Rate	Potential Annual Revenue
Α	3.8	\$.30/s.f	\$49,658.00
В	2.1	\$.25/s.f	\$22,869.00
С	7.7	\$.28/s.f	\$93,915.00

Source: Consultant Calculations

Considering the most favorable characteristics of these parcels, it is recommended in the short term, ConnDOT solicit for private development on parcels A, B, and C. Cumulatively, leasing these parcels and applying the valuated rate would yield additional annual revenue of nearly \$167,000.

In addition to aviation development, it is recommended that ConnDOT solicit non-aviation development on a 5.9 acre site in the northeast area of the Airport, adjacent to Juliano Road. As identified in Section 5, Parcel E is currently a 5.9 acre vacant wooded area, with no airside access, and is currently zoned industrial.

## **Capital Program**

The table below identifies the projects included in the Airport's current 5 year Capital Improvement Plan (CIP) for Fiscal Year 2011 to Fiscal Year 2015. Most on airport, non-revenue generating projects are generally eligible to receive federal funding up to 95% of the project costs. Finally, although the projects listed on an airport's CIP represents a picture of the Airport's existing funding needs, the CIP is only a planning tool that gets updated regularly and doesn't necessarily mean that a project will occur or get funded.



Figure 7-5: Waterbury-Oxford Airport Capital Program FY11 to FY15

Projects	Total Project Cost	FAA Participation	State Participation
EV11 Proporty Purchase (Noise)	\$5,264,000	\$5,000,000	\$264,000
FY11 Property Purchase (Noise)	<b>43,204,000</b>	<b>43,000,000</b>	<b>\$204,000</b>
FY11 Purchase Snow Broom	450,000	427,500	22,500
FY12 Property Purchase (Noise)	5,264,000	5,000,000	264,000
FY13 Rehabilitate Rwy 18-36 (Des)	400,000	0	400,00
FY13 Rehabilitate Portion of Main Ramp	350,000	0	350,000
FY13 Property Purchase (Noise)	5,264,000	5,000,000	264,000
FY14 Property Purchase (Noise)	5,264,000	5,000,000	264,000
FY14 Rehabilitate Rwy 18-36	3,700,000	3,400,000	300,000
FY15 Property Purchase	2,110,000	2,000,000	110,000
Total Airport Capital Program	\$28,066,000	\$25,827,500	\$1,838,900

Source: ConnDOT

# **Utility Lines Issue**

Based on discussions with the Airport Manager and ConnDOT the power lines in the vicinity of the Airport prevent the ability to maximize the benefits of the instrument approach procedures into the Airport. This plan recommends that ConnDOT continually work together with the FAA and the utility providers to seek solutions that would allow optimal use of the instrument approaches at the Airport in the form of the lowest possible minimums.

## 7.2.3 Airport Marketing and Outreach

Like the findings and recommendations for the System-wide components of this business plan for marketing and outreach, specific local efforts need to be focused on to further promote and enhance the Airport as a regional and local asset.

Some areas for Waterbury-Oxford Airport to start were derived from the SWOT analysis workshop. This is not a comprehensive list and should be expanded as warranted from the outreach efforts, these initial areas include:

#### **Development of an Airport Viewing Area and Host Local Organization Meetings**

One way to promote public outreach and improve community relations for GA airport operators is to provide a public viewing area for people to watch aircraft land and take-off, and skydivers return. Typically equipped with picnic table(s) and litter barrel(s), a park-like airport



viewing area would provide entertainment for families, children, and aviation enthusiasts while promoting the Airport and fostering community relations.

In addition, the Airport facilities should be utilized to host local organization meetings like Boy/Girl Scout Troop meetings, Young Eagles, etc. These will generate traffic to and from the Airport and have been known to result in a flight lesson, etc. for the airport tenants. Among others, coordination should occur with:

- → Local Governments and Communities.
- → Market the Industrial Park



# 7.3 Business Plan Summary

As with any plan, whether it is a master plan or business plan, the need to be flexible is paramount since today's business climate is ever changing at a fast pace. Therefore, an organization that can effectively manage, monitor, and make adjustments to its business plan on a regular basis is more likely to realize achievements and obtain measurable outcomes. Overall, this Business Plan has identified system-wide and facility-specific recommendations for the State to implement based on the findings and information available at the time it was prepared. Again, it is important to remember that a business plan should be treated as a living document and updates should be made regularly. These recommendations seek to maximize the steps needed for the Airport's to reach their full potential and economic contributions to the State but were also developed with the need to be flexible. The recommendations of this Business Plan are summarized below:

#### **SYSTEM-WIDE SUMMARY:**

#### **Governance Structure and Efficiencies**

The governance by the new Authority should look to improve the efficiency of the business/leasing process for the GA Airports. This would also look to the continued sharing of resources for Administration, Financial and Project Management, and the GA Airports would be managed by an Administrator – GA Airports

# **Centralized Role Overseeing Development Opportunities**

This would be a new or revised position. A specialized economic development position that focuses on all five GA airports.

#### **Airport Recordkeeping**

Improve the airport operational recordkeeping and fully assess the financial reporting during the transition of the Airports to the Authority.

#### **Tax Impacts and Proposals**

Continue to monitor and assess all proposals that change the tax structure in the State to include local, state and federal taxes and programs.

# **Leasing Policy and Capital Development**

The current length of time to complete the lease process and the twenty-two steps must be reduced in order to meet with the dynamics of the business climate and close lease deals. All approvals should start and end with the new Authority. The improvement of the leasing process will have a positive effect on the leasing of property and facilities at airports within the State of



Connecticut's aviation system and should be a priority prior. The results will be a quicker reaction time to investor and market demand; using staff more proactively to address lease issues; and charging rates that are market appropriate for the property or asset being leased (aeronautical vs. non-aeronautical).

# **Rates and Charges**

To ensure that each of the system airports are remaining competitive, close monitoring of prevailing rates and charges are necessary. It is recommended that rates and charges at surrounding airports be tracked on a monthly or at least quarterly basis and a new, more timely, and less bureaucratic policy be adopted that allows the adjustment of airport rates and charges in a manner that is effective and reasonable. Granting the Connecticut Airport Authority full authority to amend and approve airport rates and charges is one solution that must be implemented. In addition, the State should continue to utilize a consistent rate setting methodology by way of regularly conducting appraisals and valuations of property for lease development and renewals.

# **State and Local Economic Development Initiatives**

Specific initiatives with state and local economic development groups should be developed and coordinated on a regular basis. By bringing together both the public and private sectors to establish goals and objectives, investment opportunities involving the State owned airports can be more effectively realized and acted upon. Initial initiatives should include:

- → Airport Development Zones; these should be custom to each Airport.
- Utilize Available Parcel Marketing Sheets.
- → Upload Available Properties to CERC's Site Finder site.

#### **Industry Association Marketing and Partnerships**

The State needs to maximize participation and coordination with national groups like AOPA, NBAA, and NATA among others. Events like AOPA's Aviation Summit are important from an economic perspective, but also look to promote the GA facilities in the State.

#### **Establishment of a Statewide Aviation Group**

The State should support and advocate for the establishment of an association comprised of airport managers and staff, government officials, aviation business representatives, advocates, professionals, and others, to advance the cause of GA in Connecticut. This would provide for collective support of the various functions of aviation in Connecticut, not just business aviation. To the extent permissible, this plan also recommends that ConnDOT (and the new CAA) work more closely with the Connecticut Legislative Aviation Caucus and the Connecticut Business Aviation Group (CBAG) to promote the quantitative and qualitative benefits of aviation to Connecticut.



#### **Active Pursuit of Prospective Users and Tenants**

While there are airport specific recommendations for lease development and opportunities, active pursuit of prospective airport users and tenants should be done continuously. In conjunction with the centralized role overseeing development opportunities at GA Airports, an annual plan that identifies targets for discussions should be established and implemented. This Plan should focus on three main areas:

- → National Promotion of Connecticut Airport System
- → Active Pursuit of Prospective Users and Tenants
- Joint Marketing with Existing Tenants

#### **FACILITY-SPECIFIC SUMMARY:**

#### **Based Aircraft**

Utilizing more accurate operational record keeping, the State should monitor based aircraft market share for Waterbury-Oxford Airport.

## **Staffing**

The adequacy of staffing levels at OXC should be monitored regularly to ensure that the Airport's needs are being met in a timely and cost efficient manner.

# **Leases, Development Opportunities and Rates**

The State should pursue the development of recommended parcels (Parcels A, B, and C), non-aviation development on Parcel E, pursue a U.S. Customs facility at the Airport, assure existing leases meet federal obligations, and implement recommended rates and charges.

#### **Capital Program**

The capital program, in addition to scheduled projects, should consider efforts needed to lower the minimums related to the relocation of utilities at the Airport.

#### **Local Marketing and Outreach**

In coordination with System-wide efforts, local marketing and outreach should occur on a regular basis by the Airport Manager overseeing the facility.

In addition, a system-wide brochure and a facility-specific brochure were developed as part of this effort to summarize key aspects of the Business Plan including: facility information, the economic benefits of the facility, and lease development opportunities to be marketed by the State.