

Chapter 3 - Statewide Forecasts

3.1 Introduction

A forecast provides an estimate of future conditions that can be anticipated. It is an essential component of any significant planning exercise. However, it is critical that decision-makers temper decisions based on forecasts with an understanding of the general limitations associated with forecasting. Forecasts for this CSASP is to the year 2025.

To create a typical forecast, basic assumptions are made that something can be known about the future by understanding the past. In general, the forecaster identifies cause and effect relationships that are indicated by a high level of correlation between elements over a significant period of time. These forecasts are generally both useful and reliable.

The forecaster, however, is faced with two fundamental and important limitations. The first involves the relevance and accuracy of past data that will be used to develop an estimation of future conditions. The second involves the possibility of significant unforeseen but influential outside factors presenting themselves over time. These factors, depending on how significant, may make the forecasts invalid or just require minor adjustments to maintain a reliable estimation. The forecaster is responsible for mitigating these factors, by limiting the factors used to ones that show a high correlation and by searching for and considering the effects of outside significant factors. The validity of a forecast is determined by reviewing the information available.

There are several techniques available to create a forecast, but not all techniques are appropriate for all forecasting situations. Although these forecasts can range from a simple “expert opinion” to a sophisticated computer model and statistical analysis, the forecaster should choose whichever method or combination of methods is appropriate to the forecast being performed. By maintaining sensitivity to both the forecast technique limitations and the information available, a valid and reliable forecast can be generated. For the CSASP forecasts, two methods were used, a market share analysis for passenger enplanements and a straight-line regression analysis for aircraft operations and based aircraft. The base year used for the forecasts is 2004.

3.2 Economic Growth and Population

3.2.1 Statewide Population and Housing Projections

The 2000 census data reports that Connecticut’s population increased from 3,287,116 in 1990 to 3,405,565 in 2000. This growth represents an annual growth rate of 0.36 percent. Connecticut Department of Transportation projections call for an 8.5 percent increase in the total state population from 3,405,656 in 2000 to 3,773,970 in 2025.¹ The current

¹ Connecticut Department of Transportation - Projections

forecast of an average annual growth rate of 0.43 percent for the period of 2000 to 2025 indicates that the trend of slow steady growth will continue.

The number of households in Connecticut increased by 5.8 percent, from 1,230,491 in 1990 to 1,301,670 in 2000.² It is projected for this trend to continue into the future, with the growth from 2000 to 2025 projected to increase by 16 percent, to 1,509,901 households.³ While the number of households is increasing, the average number of people per household in the state has been steadily decreasing. The average persons per household decreased from 2.67 in 1990 to 2.62 in 2000 and this trend is expected to continue with this average being 2.5 persons in 2025.⁴

3.2.2 Economic Status of Connecticut

In recent years, Connecticut has been recovering from the economic recession of 1989-1992, when employment declined from its peak back to a level consistent with the mid-1980's. From 1990 to 2000, new jobs were created at a slow but steady pace.

Connecticut's economy had started to see a slight decline in early 2001 and suffered an additional setback because of the September 11, 2001 terrorist attacks on the World Trade Center and the Pentagon. These attacks have caused a noticeable decline in air travel. As of 2004, the yearly air passenger traffic was down 9 percent from the same period in 2000.⁵ This decline in passenger traffic has resulted in a substantial number of jobs in travel-related occupations being lost.

From 1990 to 2000, statewide employment decreased from 1,677,941 to 1,652,920 jobs.⁶ This is a decrease of 1.5 percent during the ten year period, which is an average annual decrease of 0.15 percent. In 2000, approximately 83 percent of the jobs created were in the non-retail field with the other 17 percent being in the retail field.⁷

It is projected that employment in Connecticut will increase at a slow annual growth rate of 0.84 percent from the 2000 employment level to 2,011,840 in 2025.⁸ The distribution of the jobs in 2025 is expected to remain approximately 83 percent non-retail and 17 percent retail in Connecticut.

3.3 Overview of the Aviation Industry

Airlines are facing the most difficult economic environment in their history. Since early 2001, due to the depressed economy and the events of September 11, 2001, the airlines

² Ibid.

³ Ibid.

⁴ Ibid.

⁵ "Monthly Traffic Passenger Report" - Air Traffic Association

⁶ Connecticut Department of Transportation - Projections

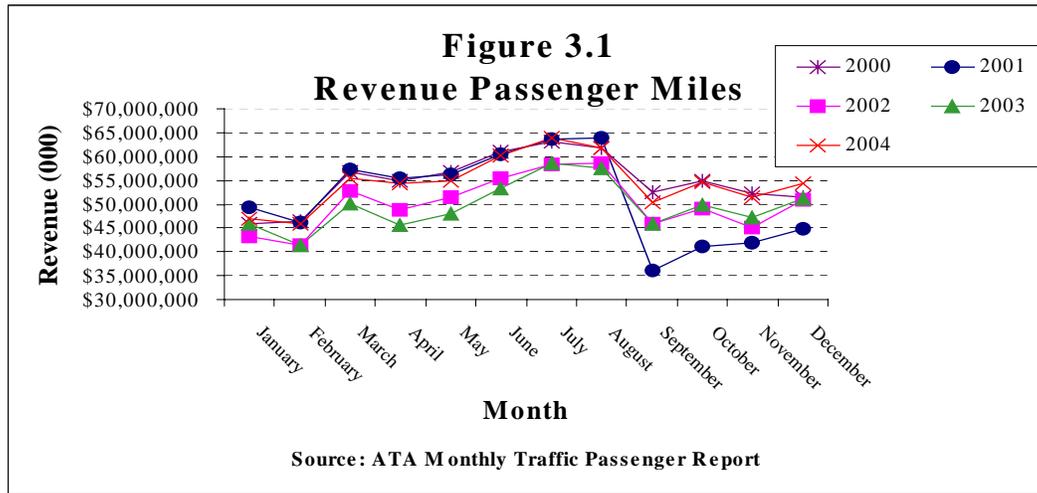
⁷ Ibid.

⁸ Ibid

continue to struggle. Projections for a return to profitability for the industry look to 2006 at the earliest.

After a 7.7 billion loss in 2001, an \$11 billion-dollar loss in 2002 and a \$3.6 billion loss in 2003, the airline industry continues to struggle in the post September 11, 2001 environment.⁹ In 2004, U.S. Airlines lost \$9.1 billion, representing the fourth consecutive year in the red and bringing the cumulative 2001-2004 losses to a staggering \$32.2 billion.¹⁰ These losses erased the \$23.0 billion that airlines earned between 1995 and 2000 and have left the industry deeply indebted.¹¹

Amid a dismal pricing environment, 2004 proved to be a record year for volumes, as both traffic and capacity surpassed 2000 levels. The 2004 revenue passenger miles (RPM) exceeded the 2000 level by 5.7 percent. Passenger enplanements also surpasses 2000 levels by approximately 5 percent.¹² Under current conditions, notwithstanding some modest fare increase in 2005, the industry will not record a full-year profit until at least 2006.



Cargo proved to be a bright spot in 2004, as revenue ton miles (RTM's) grew by 4.6 percent in scheduled service. International volumes grew 6.6 percent and domestic volumes rose 2.7 percent.¹³

Typically, an airline recovery would follow the strengthening of the U.S. economy. The events of September 11, 2001 and their aftermath have made this recovery less certain. Since there has been no event to affect the airline industry as September 11, 2001 has, there is no precedent to show how and when the industry will recover. While the

⁹ “2005 Economic Report, New Thinking for a New Century” – Air Transport Association

¹⁰ Ibid.

¹¹ Ibid

¹² Ibid

¹³ “2005 Economic Report, New Thinking for a New Century” – Air Transport Association .

industry statistics are recovering to or exceeding the 2000 levels, the airline industry is still struggling to be profitable.

It should be noted that for the purposes of this report, it is assumed that commercial airline service in Connecticut will continue to be provided at the airports that presently provide this service. These airports are Bradley International and Tweed-New Haven Airports. However, with the current economic hardships of the aviation industry and the industry trend to go away from turbo-prop aircraft and towards small commercial regional jets, service could be discontinued at the smaller regional airports. As can be seen by Groton-New London Airport losing commercial service because an airline determined the service not to be profitable enough to continue. This needs to be stated to account for the possibility of this scenario occurring and to determine the impact it could have on the aviation system in Connecticut. However, while the cessation of service at these airports will be reviewed, for the purposes of this CSASP it has been assumed that this service will continue at these airports during the planning period.

3.4 Forecasting Methods

As stated above there are two forecasting methods being used in this CSASP. These are market share analysis for enplanements and trend analysis for aircraft operations and based aircraft.

Bradley International and Tweed-New Haven Airports will have commercial service (enplaned passengers), aircraft operations, based aircraft and general aviation forecasts performed for them. In addition, a cargo forecast was performed for Bradley International Airport. For the other public use airports, forecasts were performed for based aircraft and aircraft operations.

Trend Analysis: This methodology assumes that historical aviation trends over time can be used to project future aviation activity levels. Trend analysis evaluates the history of operations at the airport and projects a future trend based on that history. This method can be modified by external factors such as airport improvements. Trend Analysis has been used to project the year 2025 number of aircraft operations and based aircraft at the airport. When using this method, the most recent completed airport master plan was reviewed to ensure that the CSASP forecasts are consistent with the master plan projections.

A based aircraft can be defined as an aircraft that is permanently based at an airport. The based aircraft forecast was performed by relating the number of based aircraft at an airport to population in the Connecticut. A ratio was developed designating the number of based aircraft per 1000 persons in Connecticut in 1990, 1995, 2000 and 2003. This ratio was then applied to the projected population totals for 2015, 2020 and 2025. The projections indicate the numbers of based aircraft expected in the future.

An operation can be defined as a landing or a departure from an airport. Aircraft operation forecasts were performed using trend analysis as well. The most recent airport master plan for the airport was consulted and the growth rate for aircraft operations was determined as stated in the master plan. If this growth rate was deemed reasonable (depending on the length of time since the plan's completion), then this growth rate was used for the forecasts. If this growth rate was not deemed reasonable, it was used as a starting point for developing new forecasts, and a new growth rate was determined based upon the airport and its facilities.

Market Share Analysis: A market share analysis was used to forecast passenger enplanements at the commercial service airports in Connecticut. This analysis considers past history and how much of the market a certain airport has captured historically. This trend is projected into the future using a high, medium and low growth percentage market share. These percentages are selected looking at the past enplanement history at the airport among other factors, such as, number of commercial service operators and facilities available at the airport. This analysis has been used to forecast the anticipated number of enplaned passengers for Bradley International and Tweed – New Haven Regional Airports.

For the market share analysis of enplaned passengers the “market” airports considered were Bradley International, Tweed-New Haven Regional and T.F. Green (Rhode Island) Airports. Data for the last twenty years was collected from past / present master plans, airport personnel and Federal Aviation Administration (FAA) records. This data was then analyzed to determine a market share that would best represent what may be expected in the future for the airport. A low, moderate and high market share forecast was prepared. To determine which forecast would best represent the projected growth at the airport, several factors were reviewed, such as ongoing or scheduled improvement projects, present and past master plans, FAA Traffic Area Forecasts (TAF) and the economic outlook for Connecticut.

3.5 Forecasts for State Owned Airports

3.5.1 Bradley International Airport

For Bradley International Airport (BDL) there are four sets of forecasts that have been prepared, aircraft operations, commercial service, cargo and general aviation.

3.5.1.1 Aircraft Operations

The operations forecast was taken from the 2002 Bradley Master Plan Update and projected to 2025. Table 3.1 represents historical and forecast totals for aircraft operations at the airport. The total number of aircraft operations is forecast to increase from 147,500 operations in 2002 to 214,700 operations in 2025.

Year	Operations					Total (Rounded)
	Majors / Nationals	Commuters	General Aviation	Military	Cargo	
2000	73,040	40,220	31,863	5,811	18,802	169,700
2002	67,773	30,782	27,757	6,162	14,998	147,500
2007	72,350	29,600	29,600	6,000	19,650	157,200
2012	82,700	36,500	29,900	6,000	21,150	176,300
2022	102,700	43,000	32,500	6,000	22,900	207,100
2025*	107,050	43,750	33,100	6,000	24,800	214,700

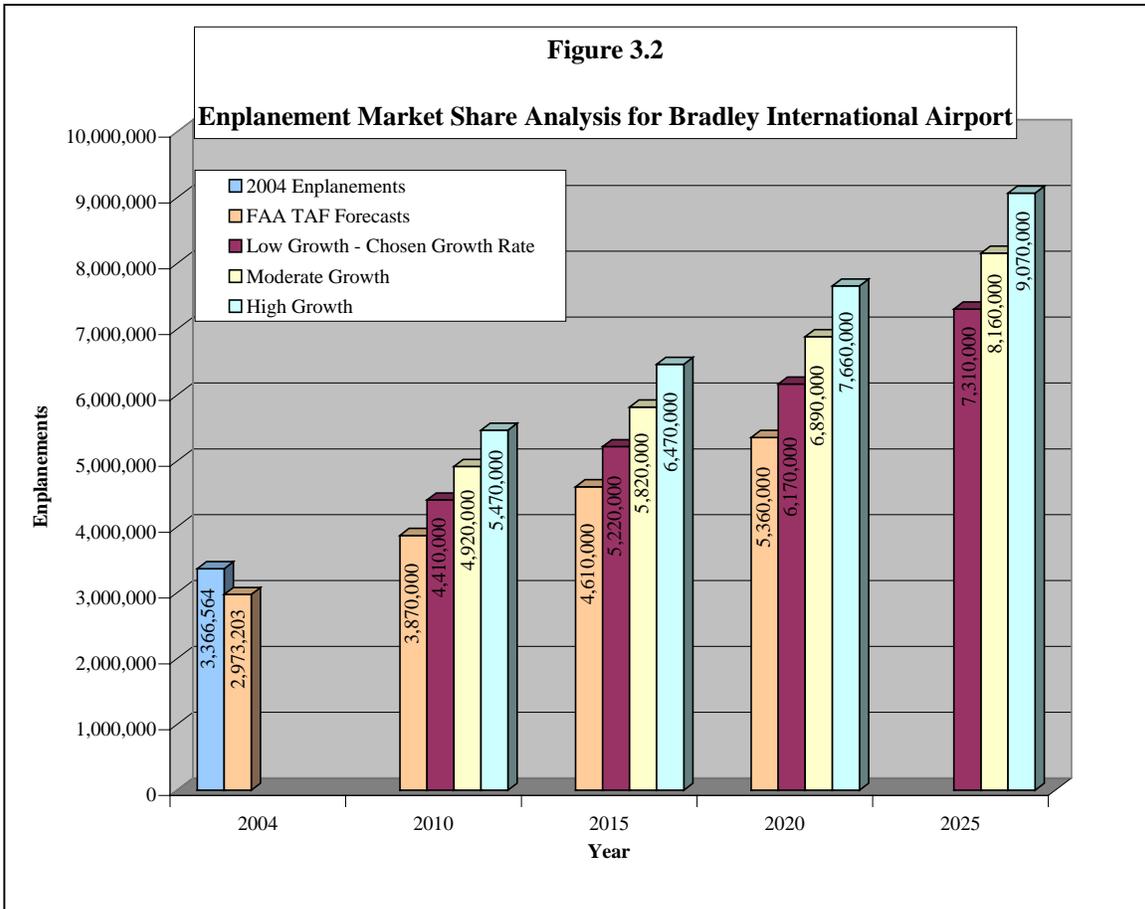
Source: Bradley Master Plan Update
* Projected from BDL MPU data

3.5.1.2 Commercial Service

A market share analysis was performed for Bradley International Airport to project its enplanement levels to 2025. The market share looked at a high, moderate and low growth scenario for the airport and compared this to the TAF developed by the FAA. These numbers represent different time frames for the airport and the corresponding market share for that period. Since 1980 BDL's market share was an average of 64% of the market, with the high being 74% in 1983 and the low being 51% in 2003. The low forecast assumes a market share of 56% that yields an enplanement level of 7.3 million passengers in 2025. The moderate forecast assumes BDL will capture 65% of the market, which correlates to 8.2 million enplanements in 2025. For the high forecast a

market share of 73% was used that yields enplanement numbers of 9.1 million passengers in 2025. See Figure 3.2 for a representation of this data.

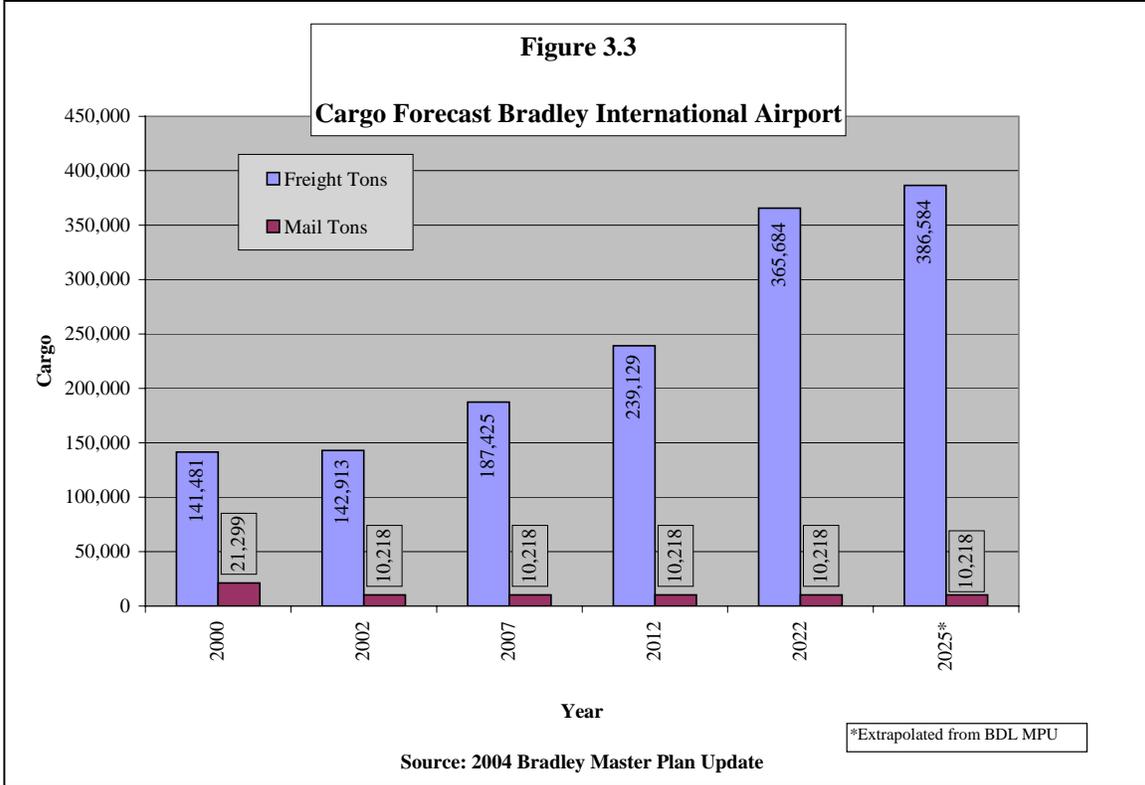
After consideration of ongoing and scheduled projects at the airport, the Draft Bradley International Airport master plan data (currently being finalized), FAA TAF projections and the economic outlook for Connecticut, it was decided that the low growth scenario would be the most reasonable for the airport. This projects that the enplanement numbers will be 4.6 million in 2015, 6.2 million in 2020 and 7.3 million in 2025. In 2020, the furthest year out for the TAF, there is a 15% difference between the TAF numbers and the low growth forecast in this plan.



The commercial service operations (majors / nationals), as can be seen in Table 3.1, are projected to grow from 67,773 in 2002 to 107,050 operations in 2025. The commercial service forecasts follow the trends for passenger and all cargo activity at the Airport. Every attempt was made to be conservative in developing the operational forecast since any significant increase in activity is likely to require a significant increase in airfield capacity. For this forecast, the average load factor was allowed to increase to nearly 72%.

3.5.1.3 Cargo

The Cargo forecasts referred to in this report are from the Draft Bradley International Airport master plan update. These forecasts depict the possible growth of cargo tonnage



at BDL for the future. Figure 3.3 shows the projected growth at BDL for freight tons and mail in revenue tons miles (RTM). At BDL, over 96 percent of the air freight is transported on flights by all-cargo carriers, and three quarters of that traffic moves on flights by U.S. domestic integrated carriers (FedEx, UPS and others). Due to BDL’s strategic location between two international gateways, New York’s John F. Kennedy International Airport (JFK) and Boston-Logan Airport (BOS), it is expected that BDL’s cargo tonnage will continue to increase in the future as projected. This increase is projected due not only to the location of BDL, but also the fact that the airport is not as congested as others in the region servicing air cargo, such as, JFK and BOS airports.

3.5.1.4 Based Aircraft

In 1990 there were 83 based aircraft at BDL, and in 2003, there were 83 based aircraft at BDL. This is an average of 0.025 based aircraft per 1000 persons in Connecticut for the stated future years. It can be reasoned that this ratio will remain similar into the future, which corresponds to 94 based aircraft in 2025. Table 3.2 represents this forecast.

Table 3.2		
Based Aircraft at Bradley International Airport		
Year	Population	Based Aircraft
1990	3,287,116	83
1995	3,274,662	94
2003	3,448,619	83
2015	3,620,470	91
2020	3,696,560	92
2025	3,773,970	94

3.5.1.5 General Aviation

The forecast for the number of general aviation (GA) operations at BDL is projected to increase from 27,757 in 2002 to 33,100 operations in 2025. This growth appears to be justified based on the type of GA activity at the airport. This activity is typically high-end GA (jets and multi-engine aircraft) and virtually all the activity is itinerant. The lack of local operations, which is usually associated with training activity, is understandable due to the commercial activity at the airport. Most training activity would be conducted at other general aviation airports in the area. Hartford-Brainard is one of these airports, which attracts this type of training and is more suited for this type of activity.

3.5.2 Groton-New London Airport

For Groton-New London Regional Airport (GON) there are two sets of forecasts that have been prepared, general aviation and based aircraft. While GON retains its Part 139 certification (commercial service), there are presently no operators offering scheduled commercial service. Therefore for this report, no commercial service forecasts will be prepared.

3.5.2.1 Based Aircraft

For the based aircraft at GON, a correlation was made between the population in Connecticut and the number of based aircraft at the airport. In 1990, there were 94 based aircraft at the airport. This number fell to 37 based aircraft in 2000, but rebounded to 51 in 2003. This is an average of 0.02 based aircraft per 1000 persons in Connecticut. Due to the services available at the airport, a slightly higher ratio of 0.025 based aircraft per 1000 persons in Connecticut was used for the forecasts. It is assumed that this ratio will remain similar for the study time frame, which corresponds to 94 based aircraft in 2025. Table 3.3 represents this forecast.

Table 3.3		
Based Aircraft at Groton-New London Airport		
Year	Population	Based Aircraft
1990	3,287,116	94
1995	3,274,662	40
2003	3,448,619	51
2015	3,620,470	91
2020	3,696,560	92
2025	3,773,970	94

3.5.2.2 General Aviation

As can be seen in Table 3.4, the forecast for the number of GA operations at GON is expected to grow from 66,200 operations in 2004 to 114,600 operations in 2025. This represents an average increase for the itinerant and local GA operations at the airport of 2.8 percent per year between 2004 and 2025. As can be seen in Table 3.3 the itinerant and local GA split is approximately 54/46, this split is expected to remain similar through the study period. An increasing portion of the GA activity at the airport is corporate operations using the airport because of the facilities available. There is also a large amount of pilot flight training activity at GON.

Table 3.4						
Annual Aircraft Operations at Groton-New London Airport						
Year	<i>Itinerant</i>			<i>Local</i>		Total (Rounded)
	Commercial/ Air Taxi	General Aviation	Military	General Aviation	Military	
2000	4,344	33,199	2,125	32,693	1,876	74,200
2004*	2,863	30,218	2,298	29,084	1,692	66,200
2015	3,450	40,950	2,500	39,400	2,000	88,300
2020	3,750	47,000	2,500	45,250	2,000	100,500
2025	4,100	54,000	2,500	51,950	2,000	114,600

* No commercial service

3.5.3 Hartford – Brainard Airport

For Hartford-Brainard Airport (HFD) there are two sets of forecasts that have been prepared. Because there is no scheduled commercial service at this airport, the forecasts consist of aircraft operations and based aircraft.

3.5.3.1 Based Aircraft

Hartford-Brainard Airport is projected to have 208 based aircraft in 2025, up from a level of 185 in 2003. This was determined by looking at the population in Connecticut versus the number of based aircraft in the past and projecting that ratio into the future. In 1990, there were 205 based aircraft at HFD. By 2003, the number of based aircraft was 185. This translates to a ratio of 0.055 based aircraft per 1000 persons in Connecticut, which was applied to the population estimates for 2015, 2020 and 2025. Table 3.5 shows the forecasted based aircraft for HFD.

Table 3.5		
Based Aircraft at Hartford-Brainard Airport		
Year	Population	Based Aircraft
1990	3,287,116	205
1995	3,274,662	173
2003	3,448,619	185
2015	3,620,470	199
2020	3,696,560	203
2025	3,773,970	208

3.5.3.2 Aircraft Operations

The operations forecast was developed using the 1999 Airport Master Plan as a base and updating the operational numbers accordingly. Table 3.6 represents the historical and forecast totals for itinerant and local operations at the airport. In the forecasts, the total number of aircraft operations is forecast to increase from 101,000 in 2004 to 137,800 in 2025 (for an average increase of 1.5 percent per year from 2004 to 2025). The majority of operations at HFD are general aviation with air taxi and military operations being a percentage (average of 4% of total operations) of the overall operations. The air taxi operations at the airport are forecasted to increase from 3,642 in 2000 to 4,490 in 2025 (an average increase of 1 percent per year). The military operations at the airport were assumed to remain steady through the study period.

Table 3.6						
Annual Aircraft Operations at Hartford-Brainard Airport						
Year	<i>Itinerant</i>			<i>Local</i>		Total (Rounded)
	Air Taxi	General Aviation	Military	General Aviation	Military	
2000	1,392	74,035	614	50,976	126	127,100
2004	3,642	53,560	237	43,488	86	101,000
2015	4,050	63,200	320	51,200	220	119,000
2020	4,250	60,100	320	55,200	220	120,100
2025	4,500	73,350	320	59,450	220	137,800

3.5.4 Waterbury – Oxford Airport

For Waterbury-Oxford Airport (OXC) there are two sets of forecasts that have been prepared. Because there is no scheduled commercial service at the airport, the forecasts prepared consist of aircraft operations and based aircraft. In an effort to try and have the latest data available OXC's forecast will differ slightly from others in this report. The forecast numbers will be taken from the ongoing AMPU, which have been approved by the FAA.

3.5.4.1 Based Aircraft

The based aircraft forecast for OXC airport has changed significantly since the last AMPU was performed in 1995. The increase in the number of corporate jets at the airport has been dramatic. This has been due to the demand from New York area airports that cannot accommodate hangers for additional corporate jets. Because of this, businesses have looked at basing their planes at other airports in the region. Oxford airport is within close proximity to the New York region and along with a private commitment from the FBO to build hangers for storing these aircraft has been seen as a prime location to base these planes. For this reason, the based aircraft projections for the 1995 AMPU were outdated early in the forecast timeframe. Table 3.7 shows the total number of based aircraft forecasted for OXC through 2023. Of these based aircraft, in 2003 there were 37 business jets and that number is expected to grow to 72 in 2023. This is a large number of jets for a general aviation airport.

Table 3.7	
Based Aircraft for Waterbury-Oxford Airport	
Year	Based Aircraft
2003	242
2008	268
2013	274
2018	280
2023	287

3.5.4.2 Aircraft Operations

The forecasts for OXC were taken from the ongoing AMPU. These forecasts were derived from an assessment of survey activities of based aircraft and aircraft operations,

Table 3.8						
Annual Aircraft Operations at Waterbury-Oxford Airport						
Year	Itinerant			Local		Total (Rounded)
	Air Taxi	General Aviation	Military	General Aviation	Military	
[^] 2000	2,200	44,750	470	100,000	0	147,400
* 2003	3,410	32,229	200	29,430	680	65,900
2008	5,000	35,600	200	30,950	680	72,400
2013	5,550	38,500	200	32,200	680	77,100
2023	6,750	44,500	200	34,900	680	87,000
[^] - From Terminal Area Forecasts - FAA * - Assumed higher than reported due to runway closings caused by construction						

on-going and planned terminal area improvements, anticipated trends in the general aviation market, and physical constraints of existing developable land resources at the Airport. The aircraft operations forecast was developed based on traffic counts provided by the FAA contract air traffic control tower (ATCT) at the Airport. In 2003, 55,172 operations were recorded by the ATCT. However, due to the tower not being open from 9:00 p.m. to 6:00 a.m. and the construction occurring at the airport, these operational numbers were deemed low. Thus, the 2003 activity was increased to 65,900 operations. From this base year forecasts were projected showing a growth in operations at the airport totaling 87,000 in 2023, an increase of 32 percent as shown in Table 3.8.

3.5.5 Windham Airport

Two sets of forecasts have been prepared for Windham Airport (IJD). Since there is no scheduled commercial service at the airport, the forecasts prepared consist of aircraft operations and based aircraft. Because Windham does not have a control tower, the airport operations forecast consist of only total operations and are not broken out by local and itinerant operations.

3.5.5.1 Based Aircraft

The forecast for based aircraft at Windham airport was taken from the 1999 master plan update. It was decided to use the 1999 master plan update forecast because the projected number of based aircraft using the population ratio method, as done with other based aircraft forecasts in this CSASP, was determined to be too low. Due to the airports

Table 3.9	
Based Aircraft for Windham Airport	
Year	Based Aircraft
1990	81
1995	69
2004	64
2015	77
2020	81
2025	85

Source: 1999 Airport Master Plan Update

runways, location and navigational aids the 1999 master plan update forecasts were more reasonable. This forecast projects the based aircraft at the airport to increase from 64 in 2004 to 85 in 2025, as can be seen in Table 3.9.

3.5.5.2 Aircraft Operations

Because Windham airport does not have a control tower, it is difficult to accurately track aircraft operations. Therefore the forecasted operations for Windham airport are taken from the 1999 master plan update. The update uses the FAA Aviation Forecast for 1998-2009 and the Long Range Aviation Forecast FY 2010-2020. This forecast shows the historic operations at Windham as being 30,690 in 2000 and 33,100 in 2004. The FAA forecast projects the aircraft operations to increase to 38,600 in 2015. It was extrapolated that the operations would ultimately increase to 43,700 in 2025, as can be seen in Table 3.10. This represents an average growth rate of 1.26 percent per year through the study period.

Table 3.10	
Annual Aircraft Operations at Windham Airport	
Year	Total Operations
2000	30,690
2004	33,100
2015	38,600
2020	40,400
2025*	43,700

Source: 1999 Airport Master Plan Update
* Extrapolated

3.5.6 Danielson Airport

Two sets of forecasts have been prepared for Danielson Airport (5B3). Because there is no scheduled commercial service at the airport, the forecasts prepared consist of aircraft operations and based aircraft. The last Airport Layout Plan (ALP) completed for Danielson was in 1988. The forecasts from this plan accurately reflect the based aircraft at the airport today. Therefore the forecasts from the 1988 ALP are used and projected to determine the number of based aircraft for the study period. Danielson does not have a

control tower, therefore the operational forecast consist of only total operations and are not broken out by local and itinerant operations.

3.5.6.1 Based Aircraft

The based aircraft for Danielson from the 1988 ALP were projected to grow from 40 in 1986 to 57 in 2005. In 2003, there were 62 based aircraft at the airport, which is slightly higher than the the 1988 ALP forecasted. The increase from 40 in 1986 to 57 in 2005 is an increase of 42 percent over the twenty years of the 1988 ALP study period. This equates to an average annual increase of 2.1 percent. A slightly lower growth rate of 1.8 percent was used to project the Danielson Airport forecast for the period 2003 to 2025. If this average growth rate is applied, the forecast estimates that there will be 80 aircraft in 2015 and ultimately 95 aircraft based at the airport, as can be seen in Table 3.11.

Table 3.11	
Based Aircraft at Danielson Airport	
Year	Based Aircraft
1990	44
1995	48
2003	62
2015	80
2020	87
2025	95

3.5.6.2 Aircraft Operations

Due to the lack of a control tower at Danielson, it is difficult to accurately track aircraft operations. Because of this the aircraft operations forecasts for Danielson will be only total operations and will not separate local and itinerant operations.

The 1988 ALP forecasted the aircraft operations at Danielson to be 37,905 by 2005. In 2004, the aircraft operations were reported on FAA Form 5010 to be 21,700, significantly less than the 1988 ALP forecasted. Since the forecasted operations from the 1988 ALP have not been realized, new forecasts were created as part of the CSASP. These forecasts were produced using the 1988 ALP as a base, which used an average growth rate of 1.9 percent per year. Because actual growth did not match the predicted growth at the airport, a growth rate of 1.5 percent per year was used in this CSASP to project the anticipated aircraft operations for the study period. This forecast projects aircraft operations to increase to 25,600 in 2015 and eventually 29,700 by 2025. These projections can be seen in Table 3.12.

Table 3.12	
Annual Aircraft Operations at Danielson Airport	
Year	Total Operations
2000	20,464
2004	21,700
2015	25,600
2020	27,600
2025	29,700

3.6 *Municipally Owned Airports*

3.6.1 **Tweed – New Haven Regional Airport**

For Tweed-New Haven Regional Airport (HVN) there are four sets of forecasts that have been prepared: aircraft operations, commercial service, general aviation and based aircraft.

3.6.1.1 *Aircraft Operations*

The operations forecast was developed using the 2002 HVN Airport Master Plan as a base and updating the operational numbers as warranted to match the market share forecasts developed for this CSASP. Table 3.13 represents historical and forecasted totals for itinerant and local aircraft operations at the airport. The total number of aircraft operations is forecast to increase from 64,600 operations in 2004 to 93,600 operations in 2025 (for an average increase of 1.8% per year). The commercial operations increase by an average of 4.2% per year from 2004 to 2025, similar to a level experienced in the early 90’s.

Year	<i>Itinerant</i>			<i>Local</i>		Total (Rounded)
	Commercial	General Aviation	Military	General Aviation	Military	
2000	5,260	26,874	54	29,326	256	61,800
2004	3,670	31,522	150	28,976	300	64,600
2015	6,050	38,000	150	34,900	300	79,400
2020	7,250	41,300	150	38,000	300	87,000
2025	8,350	44,200	150	40,600	300	93,600

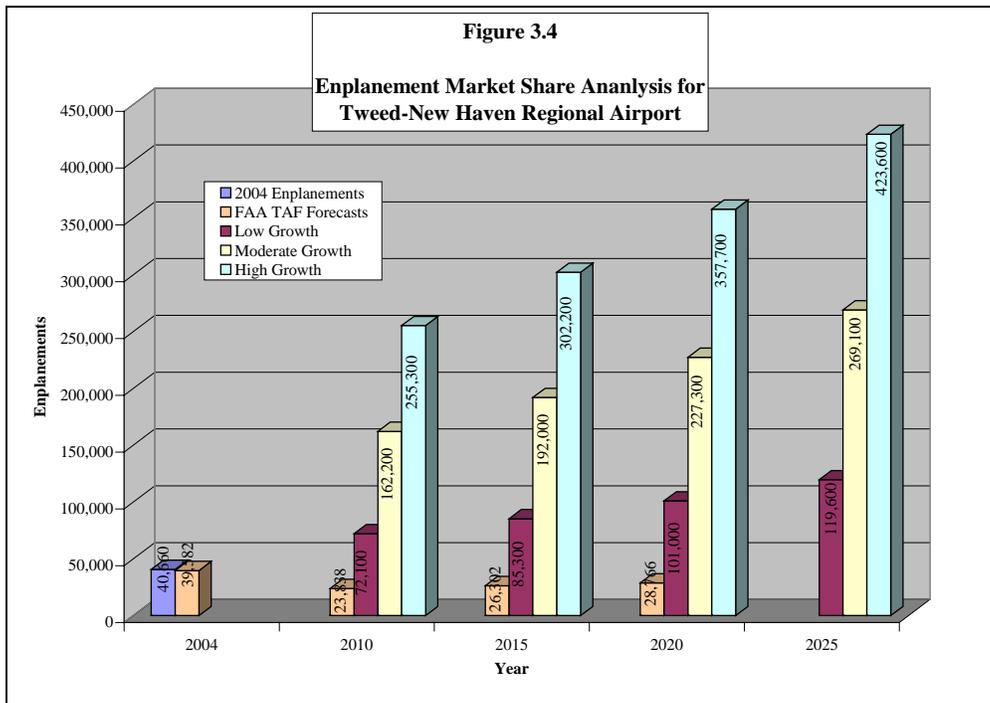
The general aviation operations are forecast to increase an average of 1.7% per year from 2004 to 2025. Military operations at the airport were assumed to remain steady through the study period.

3.6.1.2 *Commercial Service*

A market share analysis was performed for HVN to project its expected enplanement levels for 2025. The market share looks at a high, moderate and low growth scenario for the airport and compares these to the TAF developed by the FAA. These market share percentages represent different times frames for the airport and the corresponding share for that period. From 1980 to 2004 HVN’s market share has averaged 1.9% of the

market, with the high being 4% in 1985 and the low being 0.3% in 2003. The low forecast assumes that the market share will stay at 0.96 percent, which correlates to 119,600 enplanements in 2025. The moderate forecast assumes a market share of 2.19 percent of the market, which correlates into 269,000 enplanements in 2025. For the high forecast, a 3.4 percent market share was assumed that correlates into a 2025 enplanement level of 423,500 passengers. See Figure 3.5 for a representation of this data.

It should be noted that the forecasts were produced assuming air carrier service will continue to be provided at HVN. This will depend on the economic viability of the airline industry as a whole and US Airways and Delta's feeling of whether the service is providing enough economic return (due to Delta's ongoing financial struggles, the company has decided to suspend services from HVN on January 1, 2006). It should also be noted that HVN is located in an area of Connecticut that has a large population and has a great potential to attract more enplanements from the commercial service area. The New England Regional Airport System Plan (NERASP) has recognized this and



forecasted that HVN could see an increase of up to 314,000 to 556,500 enplanements.¹⁴

Ongoing projects, the HVN 2002 Airport Master Plan, FAA TAF projections, NERASP, environmental considerations and the economic outlook for Connecticut were considered when determining which scenario would be appropriate for the airport. It cannot be overlooked that HVN is located in a densely populated region of Connecticut and has the potential to draw a large number of travelers to its airport, assuming attractive air service were available. However, while the airport is located in a densely populated region of the State, it is also located in an area of extreme environmental sensitivity, the Connecticut

¹⁴ - New England Regional Airport System Plan - New England Regional Airport Forecasts - September 28, 2005

Coastal Area Management Zone (CAM). Because the airport is located in the CAM, it is felt that obtaining permits for any projects regarding expansion or increased use of the airport would be difficult. If there are not reasonable expectations that HVN can extend the runway for departures by constructing paved Runway Safety Area's (RSA) as the current master plan identifies; the low growth scenario is anticipated to be the most appropriate. This scenario projects that enplanements would grow to be 85,200 in 2015, 100,900 in 2020 and 119,600 in 2025.

If HVN were to be able to extend their runway, by constructing paved RSA's, and lower the airports approach minimums as the Master Plan identifies, the airport could become more attractive to additional air carriers . However, it should be noted, that runway length alone does not guarantee scheduled commercial service at an airport, as there are numerous airports that have runways that are longer than HVN's and do not provide scheduled service. Instead, the combined effects of the planned airport improvements and the airports location may increase the attractiveness of the airport and therefore potentially increase enplanements. If HVN completed these projects, the moderate growth scenario is more viable for the airport. This scenario shows enplanements growing to 191,800 in 2015 and ultimately 269,000 in 2025.

As can be seen in both of these scenarios, the projected enplanements are substantially higher than the FAA's TAF numbers. In 2020 the low growth scenario is triple and the moderate growth scenario is six times the TAF projections. The reason the CSASP forecasts are significantly higher than the TAF numbers is the location of the airport and the potential for expanded service.

For the purposes of this CSASP, the moderate growth scenario has been chosen. HVN is aggressively seeking to improve the airports operating capacity and continually trying to entice airlines to operate from the airport. Therefore, the moderate scenario forecasts are most appropriate.

For the moderate growth scenario the commercial service operations, as can be seen in Table 3.13, are expected to grow from 3,670 operations in 2004 to 8,350 operations in 2025. This represents an average increase of 4.2% per year. The commercial service operational forecasts follow the trends forecasted for enplanement activity at the airport.

3.6.1.3 Based Aircraft

As can be seen in Table 3.14 the forecast for based aircraft is projected to grow from 72 in 2003 to 91 in 2025. In 1990, there were 84 based aircraft at HVN and in 2003, there were 72 based aircraft. This corresponds to 0.024 based aircraft per 1000 persons in Connecticut. Applying this ratio to the future population projections correlates to 91 based aircraft in the year 2025.

Table 3.14		
Based Aircraft at Tweed-New Haven Regional Airport		
Year	Population	Based Aircraft
1990	3,287,116	84
1995	3,274,662	84
2003	3,448,619	72
2015	3,620,470	87
2020	3,696,560	89
2025	3,773,970	91

3.6.1.4 General Aviation

The forecast for the number of GA operations at HVN is forecast to grow from 60,500 operations in 2004 to 84,800 operations in 2025. This represents an increase of the itinerant and local GA operations at the airport by an average of 1.7 percent per year between 2004 and 2025. The split of itinerant versus local GA operations in 2004 was 49 / 45 percent itinerant / local (the offset is accounted for by the commercials). This relationship is expected to remain similar through the study period. A large portion of the GA activity is smaller aircraft using the airport because of the facilities available and the airports location. However, if the master plan projects were completed, this could attract more corporate air traffic to the airport, which could further increase the number of based aircraft. Table 3.13 depicts the general aviation operational forecast.

3.6.2 Igor I. Sikorsky Memorial Airport

For Igor I. Sikorsky Memorial Airport (BDR) there are two sets of forecasts that have been prepared. Because there is no scheduled commercial service at this airport, the forecasts prepared consist of aircraft operations and based aircraft.

Sikorsky Memorial Airport is similar to Groton-New London and Tweed-New Haven Regional Airports, in that, it also is located on Connecticut’s southern coast and lies within the Connecticut Coastal Management Area (CCMA). The other similarity is that Sikorsky provided commercial service, similar to that provided by Groton-New London and Tweed-New Haven Airports, to the region until 1999 when the air service provider suspended service. While no commercial service operator presently operates out of BDR, there is the potential to attract commercial service to the airport. BDR (Similar to Tweed-New Haven) is located in a densely populated region of Connecticut and has the

potential to draw a large number of travelers to its airport, assuming air carrier service could be reinstated. Presently however, limitations at the airport such as limited runway safety areas and lack of adequate runway length diminishes the potential for air carrier service returning. Since no air carrier service is presently operating out of BDR, no commercial service forecasts will be created for the airport. As a note, the 1995 Sikorsky Memorial Airport Master Plan update forecasted passenger enplanements to reach a level of 80,300 (constrained forecast). This shows the potential of passenger service at BDR if airfield improvements can be made.

3.6.2.1 Based Aircraft

As can be seen in Table 3.15, the forecast for based aircraft is projected to grow from 248 in 2004 to 283 in 2025. In 1990, there were 236 based aircraft at BDR, in 2003 this number grew to 248. A ratio of 0.075 based aircraft per 1000 persons in Connecticut was used for forecasting the based aircraft. By applying this ratio to the projected population, the number of based aircraft is projected to grow to 272 in 2015 and ultimately 283 in 2025.

Table 3.15		
Based Aircraft at Sikorsky Memorial Airport		
Year	Population	Based Aircraft
1990	3,287,116	236
2000	3,405,565	209
2003	3,448,619	248
2015	3,620,470	272
2020	3,696,560	277
2025	3,773,970	283

By applying this ratio to the projected population, the number of based aircraft is projected to grow to 272 in 2015 and ultimately 283 in 2025.

3.6.2.2 Aircraft Operations

The operations forecast were developed using the BDR 1995 Airport Master Plan Update as a base and updating the operational numbers accordingly. Table 3.16 represents the historical and forecast totals for itinerant and local operations at the airport. The forecasts project the total number of aircraft operations to increase from 80,500 operations in 2004 to 109,400 operations in 2025 (for an average increase of 1.5 percent per year). The majority of operations at BDR are general aviation with air taxi and military being a percentage (average of 4.6 percent of total operations) of the overall operations. The general aviation operations at the airport are expected to grow from 76,746 in 2004 to 103,800 in 2025. This is an average increase of 1.45 percent per year for the study period. The air taxi operations at the airport were forecasted to increase from 2,681 operations in 2004 to 4,900 operations in 2025 (an average increase of 2.9 percent per year). The itinerant / local split for the airport was 46 / 54 percent itinerant / local in 2004, this is projected to change during the study period to 43 / 57 percent itinerant / local in 2025. The military operations at the airport were assumed to remain steady through the study period.

Table 3.16						
Annual Aircraft Operations at Sikorsky Memorial Airport						
Year	Itinerant			Local		Total (Rounded)
	Air Taxi	General Aviation	Military	General Aviation	Military	
2000	1,582	42,602	322	45,775	89	90,400
2004	2,681	33,359	760	43,387	312	80,500
2015	3,650	37,600	320	52,200	330	94,100
2020	4,250	39,750	320	56,800	330	101,500
2025	4,900	42,000	320	61,800	330	109,400

3.6.3 Danbury Municipal Airport

For Danbury Municipal Airport (DXR) there is no scheduled service offered. Therefore, two sets of forecasts that have been prepared, aircraft operations and based aircraft. When determining the forecasts for the CSASP an item that should not be overlooked regarding DXR is the ongoing threshold siting survey for the airport. This survey is being undertaken to determine what actions can be undertaken to remove obstructions to the approach for runway 8. Presently this runway has obstructions that don't allow the FAA required minimum approach slope of 20:1. Because of this, FAA is requiring that DXR address this issue and obtain this minimum required approach slope. These actions could be to displace the runway threshold (e.g. shorten the runway), remove the obstructions in the approach path or a combination of both. Depending on the actions taken, they could have a significant impact on the operation of the airport and therefore the forecasts for the airport.

The results of the threshold siting survey recommended a plan to implement clearing and lighting of the obstructions. This includes the removal of obstructions (trees) on Town owned land and at select locations on the Wooster School grounds, as well as the lighting of obstructions on Town owned land. The implementation of this plan will allow Danbury to keep the runway thresholds at their present location therefor not losing any runway length.

3.6.3.1 Based Aircraft

The projected number of based aircraft at Danbury Airport is projected to increase from 224 in year 2003 to 245 in year 2025. This was determined, as with the other forecasts for based aircraft, reviewing the population in Connecticut versus the number of based aircraft in the past and projecting this ratio into the future. In addition, the 1996 master

plan was reviewed to determine if these projections correlated with past forecasts. The forecasts in this CSASP are lower than those in the master plan; this is due to the decrease over time of based aircraft at the airport. While there has been a decrease since 1990, it is expected that the number of based aircraft will grow. As can be seen in Table 3.17, in 1990 there were 253 based aircraft at DXR. The number of based aircraft dropped in 2003 to 224. This represents a ratio of 0.057 aircraft per 1000 persons in Connecticut. However, because of the airport's facilities and location it was determined that a slightly higher ratio of 0.065 based aircraft per 1000 persons in Connecticut would be more appropriate. As can be seen in Table 3.17 it is projected that the number of based aircraft will increase to 235 in 2015, and ultimately 245 in 2025.

Based Aircraft for Danbury Municipal Airport		
Year	Population	Based Aircraft
1990	3,287,116	253
2000	3,405,565	180
2003	3,448,619	229
2015	3,620,470	235
2020	3,696,560	240
2025	3,773,970	245

3.6.3.2 Aircraft Operations

The airport operations forecast was developed using the ongoing Draft FAR Part 150 Study and the 1996 DXR Airport Master Plan as a base and updating the operational data

Annual Aircraft Operations at Danbury Municipal Airport						
Year	<i>Itinerant</i>			<i>Local</i>		Total (Rounded)
	Air Taxi	General Aviation	Military	General Aviation	Military	
2000	67	52,407	59	62,829	61	115,400
2002	683	48,876	207	64,638	134	114,500
2003	132	45,313	28	41,578	14	87,100
2008^	180	62,900	100	57,700	150	121,000
2015	200	67,900	100	62,300	150	130,700
2020	200	71,700	100	65,800	150	138,000
2025	200	75,750	100	69,500	150	145,700

^ Forecast from FAR Part 150 Study

accordingly. Table 3.18 presents the historical and forecast totals for itinerant and local operations at the airport. In the forecasts, the total number of aircraft operations is forecast to increase from 87,100 operations in 2003 to 145,700 operations in 2025. This represents an average annual growth rate (AAGR) of approximately 2.44 percent, however, this growth is aggressive for the first 5 years of the forecast. In the first two

years the AAGR at the airport is expected to be approximately 15 percent, this is to return the operational numbers back to where they have historically been. Then for 2006 through 2008 this percentage will drop to 1.8 percent. Then the average annual growth is expected to be approximately 1.2 percent for the remainder of the study period. The majority of operations at DXR are general aviation with air taxi and military operations being a small percentage of the total operations (an average of 0.35 percent of the total operations). The general aviation operations, itinerant, are projected to increase from 45,313 in 2003 to 75,744 in 2025 and the general aviation operations, local, are expected to increase from 41,578 in 2003 to 69,501 in 2025. The itinerant / local split is expected to remain approximately 52 / 48 percent respectively through the study period. The military operations at the airport were assumed to remain constant through the study period.

3.6.4 Meriden-Markham Municipal Airport

For Meriden Markham Municipal Airport (MMK) there are two sets of forecasts that have been prepared, aircraft operations and based aircraft.

3.6.4.1 Based Aircraft

The number of based aircraft at Meriden Markham Airport is projected to increase from 78 in 2003 to 87 in 2025. This was determined by comparing population in Connecticut versus the number of based aircraft at the airport in the past and projecting this ratio into the future. In addition, the existing airport layout plan (ALP) (June 2000) was reviewed to determine if these projections correlated with past forecasts. The forecasts in the CSASP are lower than were looked at in the ALP. While there has not been much growth since 1997 (64 aircraft) it is expected that the based aircraft at the airport will increase. As can be seen in Table 3.19, in 1995 there were 62 based aircraft with a population of 3,274,662. In 2000, there were 64 which grew to 78 aircraft in 2003. This is a ratio of 0.02 aircraft per 1000 persons in Connecticut. It was decided to use a slightly higher ratio of 0.023 for the forecasts of based aircraft. This is due to the airports central location in the State and the facilities available. This ratio was applied to the 2015, 2020 and 2025 population estimates and the number of based aircraft was determined for these years. As can be seen in Table 3.19 it is projected that the number of based aircraft will increase to 83 in 2015 and ultimately 87 based aircraft in 2025.

Based Aircraft for Meriden Municipal Airport		
Year	Population	Based Aircraft
1995	3,274,662	62
2000	3,405,565	64
2003	3,448,619	78
2015	3,620,470	83
2020	3,696,560	85
2025	3773970	87

3.6.4.2 Aircraft Operations

The airport operations forecast was developed using the most recent airport layout plan (June 2000) as a base and updating the operational data as needed. Table 3.20 represents the historic and projected forecast totals for itinerant and local operations at the airport. In the forecasts, the total number of operations at the airport is projected to increase from 18,100 operations in 2000 to 29,500 operations in 2025. The projected forecasts for the 2000 ALP are significantly higher, 86,000 operations. However, this is due to the FAA TAF forecasts being used as a base for the forecasts. These forecasts stated that the 1997 annual operations were 58,130, which is higher than the 2005 TAF which shows this number as 18,100. Using the approach used in the 2000 ALP, these forecasts were projected to grow an average of 2 percent per year for the study. The military operations were assumed to remain constant through the study period.

Table 3.20	
Annual Aircraft Operations at Meriden Markham Airport	
Year	Total Operations
1997	18,000
2000	19,500
2015	24,200
2020	26,700
2025	29,500

3.7 Privately Owned Airports Open for Public Use

In Connecticut, 14 airports are privately owned but open for public use. The based aircraft forecast for these airports were derived in the same manner as the other based aircraft forecasts in the CSASP. For the forecast of based aircraft a ratio was determined, that linked existing based aircraft versus population in the State. An example would be Robertson Field Airport, in Plainville, which has a ratio of 0.03 aircraft per 1000 persons in Connecticut. This ratio was then applied to projected population in 2015, 2020 and 2025 to create the forecasts for based aircraft. For Robertson Field Airport this correlates to 115 in 2015, 118 in 2020 and 120 based aircraft in 2025. This same methodology was used for each of the privately owned airports open to the public. The forecasts for based aircraft can be seen in Table 3.22.

The forecast for annual operations at these 14 airports has been created for general aviation operations. This is because these airports service primarily general aviation aircraft, while other uses, such as air taxi and military are minimal. The growth rate was determined by looking at the FAA general aviation demand forecasts. The FAA projects

that general aviation will grow by 1.1 percent per year between 2003 and 2016.¹⁵ This 1.1 percent annual growth will be used for these airports in the CSASP forecasts. These forecasts can be seen in Table 3.23. As an example of this projected growth, Ellington Airport, in Ellington, had 30,300 annual operations in 2004 and this is expected to grow to 37,300 annual operations in 2025. The itinerant / local operational split at these airports is expected to be on the order of 80-90 percent local operations with the remaining being itinerant.

3.8 Summary of Forecasts

3.8.1 Commercial Service

As can be seen in Table 3.21 the number of enplanements at Connecticut airports is

Table 3.21				
Summary of Annual Enplanements				
Airport Name	2004	Projected Enplanements		
		2015	2020	2025
Bradley International Airport	3,366,564	5,220,000	6,170,000	7,310,000
Tweed-New Haven Airport	40,660	191,800	227,100	269,000
Statewide Totals	3,407,200	5,411,800	6,397,100	7,579,000

expected to increase from 3,407,200 in 2004 to 7,579,000 in 2025. This represents an average increase of 5.8 percent per year for the study. Signifying a potential increase of 120 percent above current levels handled by Connecticut airports, the majority of these enplanements are forecasted to occur at Bradley International Airport.

3.8.2 Based Aircraft

Table 3.22 (page 27) shows the projections for based aircraft for the state at the 23 public use airports. In 2003, there were 1,766 based aircraft in Connecticut, which is expected to grow to 2,069 in 2025. This represents a growth of 0.7 percent per year for the study period. In 2003, the State owned airports accounted for 38 percent of the based aircraft, the municipal airports 35 percent and the privately run airports 27 percent of the based aircraft. It is projected that in 2025 the State owned airports would account for 42 percent of the based aircraft, the municipal 34 percent and the privately run airports 24

¹⁵ "FAA Aerospace Forecasts Fiscal Years 2005-2016" - General Aviation

percent of the based aircraft. As can be seen by these distributions, the percentage of based aircraft at the State facilities are expected to rise, municipal airports remain constant and privately owned facilities are expected decrease during the study period.

3.8.3 Total Annual Aircraft Operations

The statewide annual aircraft operations are projected to grow from 852,430 in 2004 to 1,209,130 in 2025 as can be seen in Table 3.23 (page 28). This is an increase of 42 percent for the study period or an average annual increase of less than 2 percent per year. In 2004, over 50 percent of the operations in the State took place at the State owned airports, with the municipal airports accounting for 30 percent and the privately run airports totaling 20 percent. It is projected that in 2025 the State owned airports would account for approximately 52 percent of the operations, the municipal airports 31 percent and the private run airports would account for 17 percent of the statewide operations. Therefore, while aircraft operations are expected to grow over the study period, the distribution of the aircraft operations is not expected to differ greatly.

Table 3.22					
Based Aircraft Forecasts					
Airport Name	Projected Based Aircraft				
	1995	2003	2015	2020	2025
State Owned Airports					
Bradley International Airport	94	83	91	92	94
Groton-New London Airport	40	51	91	92	94
Hartford-Brainard Airport	173	185	199	203	208
Waterbury-Oxford Airport**	160	242	274	280	287
Windham Airport	69	64	77	81	85
Danielson Airport	48	62	80	87	95
Municipal Airports					
Tweed-New Haven Airport	84	72	87	89	91
Bridgeport-Sikorsky Airport	241	248	272	277	283
Danbury Municipal Airport	107	229	235	240	245
Meriden-Markham Airport	62	78	83	85	87
Pivately Owned Airports Open For Public Use					
Candlelight Farms	*	14	15	15	16
Chester Airport	*	110	117	119	122
Ellington Airport	*	20	21	21	22
Goodspeed Airport	*	37	39	40	41
Griswold Airport	*	5	5	5	6
Robertson Field Airport	*	110	115	118	120
Salmon River Airfield	*	7	7	8	8
Simsbury Airporrt	*	48	51	52	53
Skylark Airpark	*	71	75	77	79
Stonington Airpark	*	2	2	2	2
Toutant Airport	*	1	1	1	1
Waterbury-Plymouth Airport	*	10	11	11	11
Woodstock Airport	*	17	18	18	19
Mountain Meadow Airport^	*	23	0	0	0
Statewide Totals		1766	1966	2013	2069

* No data available

** Interpolated from ongoing AMPU

^ Airport Closed April, 2004

Table 3.23					
Annual Operation Forecasts					
Airport Name	Projected Annual Operations				
	2000	2004	2015	2020	2025
State Owned Airports					
Bradley International Airport***	169,700	147,500	176,100	206,100	214,700
Groton-New London Airport	74,200	66,200	88,300	100,500	114,500
Hartford-Brainard Airport	127,100	101,000	119,000	128,100	137,800
Waterbury-Oxford Airport**	147,400	65,900	72,400	77,100	87,000
Windham Airport	30,690	33,100	38,600	40,400	43,700
Danielson Airport	20,464	21,700	25,600	27,600	29,700
Municipal Airports					
Tweed-New Haven Airport	61,800	64,600	79,400	87,000	93,600
Bridgeport-Sikorsky Airport	90,400	80,500	94,200	101,400	109,300
Danbury Municipal Airport*****	114,600	87,100	130,700	138,000	145,700
Meriden-Markham Airport	18,000	19,500	24,200	26,700	29,500
Pivately Owned Airports Open For Public Use					
Candlelight Farms	11,010	11,450	12,780	13,400	14,100
Chester Airport	20,800	21,650	24,150	25,400	26,700
Ellington Airport	29,100	30,300	33,800	35,500	37,300
Goodspeed Airport	7,250	7,550	8,400	8,850	9,300
Griswold Airport	3,150	3,250	3,650	3,850	4,050
Robertson Field Airport	59,200	61,600	68,700	72,200	75,900
Salmon River Airfield	700	750	850	900	950
Simsbury Airport	9,450	9,850	11,000	11,550	12,150
Skylark Airpark	16,900	17,600	19,600	20,600	21,650
Stonington Airpark	50	50	50	50	50
Toutant Airport	130	130	130	130	130
Waterbury Airport	1,000	1,050	1,150	1,200	1,250
Woodstock Airport	100	100	100	100	100
Mountain Meadow Airport^	13,100	0	0	0	0
Statewide Totals	1,026,294	852,430	1,032,860	1,126,630	1,209,130
* No data available					
** Data from AMPU - 1995, 2003, 2008, 2013, 2023 respectively					
*** Data from AMPU - 1995, 2002, 2007, 2012, 2022 respectively					
****Forecasts from FAR Part 150 - 2000,2003,2015,2020,2025					
^ Airport Closed April, 2004					

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