



Appendix 2-A – Sample Airport Survey



New Hampshire State System Plan Update and Economic Analysis

Commercial Service Airport Survey

This survey is intended to supplement existing information gathered from the Division of Aeronautics on your facility and will be used to update the State's on-going Airport System Plan. The information requested in this survey covers several categories including Operational, Environmental, Local Government, and Economic.

Airport: _____

Individual Completing Survey: _____

Address and Phone: _____

A. OPERATIONAL

1. Does the current air service provide useful and adequate service to the region you serve? Yes _____
No _____

If no, please explain: _____

2. What specific markets are not served now that you feel could support future scheduled jet service, and which airline(s) would you like to see serve this market?

3. Are you currently marketing airlines to provide or increase service? Yes ___ No ___

If yes, please indicate where and what airline: _____

4. Are you aware of any operational limitations imposed on airlines at the airport due to physical facility constraints or instrument approaches? Yes ___ No ___

If yes, please briefly explain: _____

5. Does your facility meet current FAA Design Criteria for the following:

Runway Safety Area? Yes ___ No ___ Unknown ___

Runway Protection Zone? Yes ___ No ___ Unknown ___

Runway Object Free Area? Yes ___ No ___ Unknown ___

Other? Yes ___ No ___ Explain: _____



6. Are there existing penetrations to your FAR Part 77 Imaginary Surfaces? Yes ___ No ___

If yes, do these penetrations impact your airport in terms of runway length (such as displaced or relocated thresholds) or instrument approach minimums?

If yes, please briefly explain: _____

7. Do you expect to FAA to upgrade, any of your existing instrument approaches or publish any new approaches over the next several years? Yes _____ No _____

If yes, please explain: _____

B. ENVIRONMENTAL

8. Are there any environmental limitations to development on-airport (e.g. wetlands)? Yes ___ No ___

If yes, please briefly explain: _____

9. Are there any environmental limitations to development off-airport? Yes ___ No ___

If yes, please briefly explain: _____

10. Do you have a perceived noise issue or aircraft over-flight issue? Yes ___ No ___

If yes, please briefly explain: _____

C. GOVERNMENTAL

11. Has airport related zoning been established in the town(s) in which your airport is located? Yes _____
No _____

If yes, could you provide a copy of the zoning ordinance?



12. If no zoning exists, have considerations been given to establish a zoning ordinance? Yes ____ No ____

If yes, please describe and note time frame: _____

13. In general, is there local political support for the airport? Yes ____ No ____

If no, how has it affected the airport and its operations? _____

If yes, how has it helped the airport? _____

D. ECONOMIC

14. Please indicate the percentage of use by the following categories:

Commercial Service:	_____
Business/Corporate:	_____
Charter:	_____
Cargo:	_____
Recreational:	_____
Instructional:	_____
Agriculture	_____
Med/Police/Government	_____
Other (explain):	_____
Total:	100%

15. If you have business/corporate traffic, please indicate the types of aircraft used and daily/weekly frequency:



16. Are you aware of small single and twin engine aircraft being used for business purposes that operate to or from the airport? Yes ____ No ____

If yes, could you speculate on the percentage of small GA operations that are business oriented? _____

What percentage of your recreational users also use their aircraft for business purposes? _____%

17. What is the primary “draw” of the airport? (rank order)

Commercial Passenger Service _____

Cargo _____

Recreation/Tourism _____

Aircraft Service _____

Business _____

Close to Population Centers _____

Other _____

—

21. Does your airport have a terminal building for passengers? Yes ____ No ____

If yes, how large is the building/public area? _____

22. Please check the types of businesses and services that are provided at the airport:

Bus Service: _____

Taxi Service: _____

Limousine Service: _____

Rental Car: _____

Other (explain): _____

23. Please indicate the total number of businesses and services at your airport. _____

24. Is a list of airport-based business and service contacts available from your office? Yes ____ No ____

25. What is the estimated volume of aviation fuel sold at your airport last year? _____ gallons
_____ \$

26. Please check the utilities that are available at your airport.

Water ____ Sewer ____ Gas ____

Electricity ____ Fiber Optic Cable ____



27. Does your airport currently lease apron, hanger space or land? Yes ___ (move to question 27 A)
 No ___ (move to question 28)

27A. Please indicate lease rates, etc. for the following items:

	<u>Square Feet Occupied</u>	<u>SF Available</u>	<u>Lease Rate/SF</u>
Hanger Space	_____	_____	_____
Apron Space	_____	_____	_____
Land	_____	_____	_____
Office Space	_____	_____	_____
Commercial Space	_____	_____	_____
Other Space	_____	_____	_____

27B. If you currently lease land at your facility, please list the use(s) of that land. _____

28. Does your airport have non-aviation property used by commercial enterprises? Yes ___ No ___

29. Please add any additional comments or information you deem pertinent to this survey:



New Hampshire State System Plan Update and Economic Analysis

General Aviation Airport Survey

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Airport: _____

Contact Completing Survey: _____

Address and Phone: _____

A. OPERATIONAL

1. Do you maintain the following activity statistics for your airport:

Annual Aircraft Operations? Yes ___ No ___

Based Aircraft Counts? Yes ___ No ___

Local Itinerant Operations Split? Yes ___ No ___

2. If you answered yes to any of the above elements, could you provide the past three years of data?

Yes _____ No ___

3. Please explain the trends in aircraft activity at your facility over the past five years:

4. Please explain the trends in based aircraft at your facility over the past five years:



5. Are there any limitations to development at your facility currently or in the future? (please explain):

6. Does your facility meet current FAA Design Criteria for the following:

Runway Safety Area? Yes ___ No ___ Unknown ___
Runway Protection Zone? Yes ___ No ___ Unknown ___
Runway Object Free Area? Yes ___ No ___ Unknown ___
Other? Yes ___ No ___ Explain:

7. Are there existing penetrations to your FAR Part 77 Imaginary Surfaces? Yes _____ No ___

If yes, do these penetrations impact your airport in terms of runway length (such as displaced or relocated thresholds) or instrument approach minimums? Please explain: _____

8. If there are no instrument approaches to your facility, do you have plans (through the FAA) to develop an instrument approach? Yes _____ No ___

If yes, please explain: _____

9. If you have existing instrument approaches, do you expect to upgrade any of your instrument approaches over the next several years? Yes _____ No ___

If yes, please explain: _____

B. ENVIRONMENTAL

10. Are there any environmental limitations to development on-airport (e.g wetlands, etc.)? Yes _ No ___

If yes, please briefly explain: _____



11. Are there any environmental limitations to development off-airport? Yes ___ No ___

If yes, please briefly explain: _____

12. Do you have a perceived noise issue or aircraft over-flight issue? Yes _____ No ___

If yes, please explain: _____

C. GOVERNMENTAL

13. Has airport related zoning been established in the town(s) in which your airport is located?
Yes ___ No ___

If yes, could you provide a copy of the zoning ordinance?

14. If no zoning exists, have considerations been given to establishing a zoning ordinance? Yes ___ No ___

If yes, please describe and note timeframe: _____

15. In general, is there local political support for the airport? Yes _____ No _____

If no, how has it affected the airport and its operations? _____

If yes, how has it helped the airport? _____

D. ECONOMIC



16. Please indicate the percentage of use by the following categories:

Business/Corporate: _____
 Charter: _____
 Cargo: _____
 Recreational: _____
 Instructional: _____
 Agriculture: _____
 Med/Police/Government: _____
 Other (explain): _____
 Total: 100%

17. If you have corporate traffic, please indicate the types of aircraft used and daily/weekly frequency:

18. Are you aware of small single and twin engine aircraft being used for business purposes that operate to or from the airport? Yes ____ No ____

If yes, could you speculate on the percentage of small GA operations that are business oriented? _____

What percentage of your recreational users also use their aircraft for business purposes? _____%

19. What is the primary “draw” of the airport?

Commercial Passenger Service: _____
 Cargo: _____
 Recreation/Tourism: _____
 Aircraft Service: _____
 Business: _____
 Close to Population Centers: _____
 Other: _____

21. Does your airport have a terminal building for passengers? Yes ____ No ____

If yes, how large is the building/public area? _____

22. Please check the types of businesses and services that are provided at the airport:

Bus Service: _____
 Taxi Service: _____
 Limousine Service: _____
 Rental Car: _____
 Other (explain): _____

23. Please indicate the total number of businesses and services based at your airport. _____



24. Is a list of airport-based business and service contacts available from your office? Yes ___ No ___

25. What is the estimated volume of aviation fuel sold at your airport last year? _____ gallons
 _____ \$

26. Please check the utilities that are available at your airport.

Water ___ Sewer ___ Gas ___
 Electricity ___ Fiber Optic Cable ___

27. Does your airport currently lease apron, hanger space or land? Yes ___ (move to question 27 A)
 No ___

27A. Please indicate lease rates, etc. for the following items:

	<u>Square Feet Occupied</u>	<u>SF Available</u>	<u>Lease Rate/SF</u>
Hanger Space	_____	_____	_____
Apron Space	_____	_____	_____
Land	_____	_____	_____
Office Space	_____	_____	_____
Commercial Space	_____	_____	_____
Other Space	_____	_____	_____

27B. If you currently lease land at your facility, please list the use(s) of that land. _____

28. Please add any additional comments or information you deem pertinent to this survey: _____



Appendix 2-B – ARC Designations for Various Aircraft Types

ARC DESIGNATIONS FOR VARIOUS AIRCRAFT TYPES



A-I
Piper Cub J3



ARC A-I
Cessna C182 Skylane



ARC B-I
Beech Baron 58



ARC B-II
Beech King Air



ARC B/C-II
Dassault Falcon 200

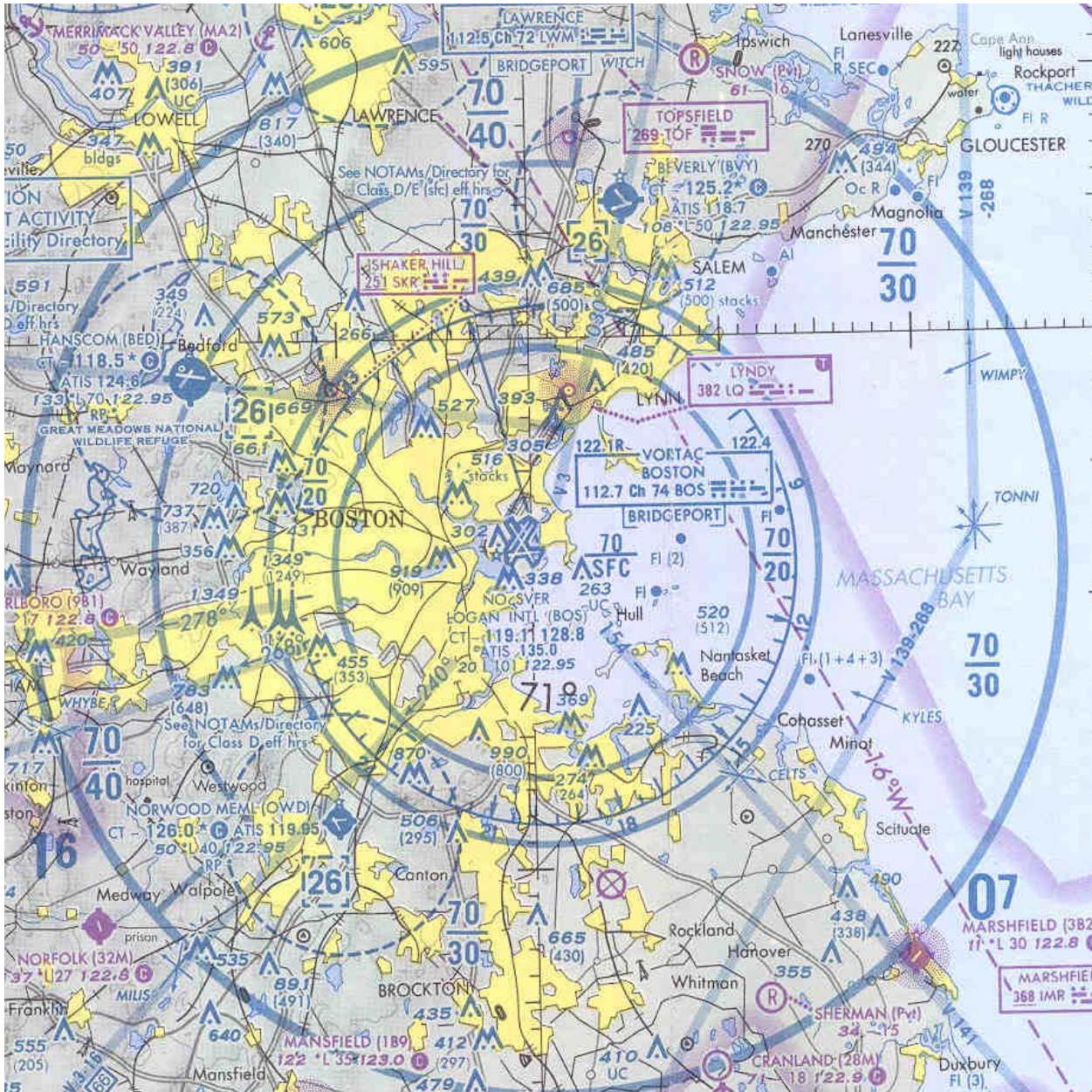


ARC C-III
Boeing 737



Appendix 2-C – Airspace

Class B Airspace – Boston



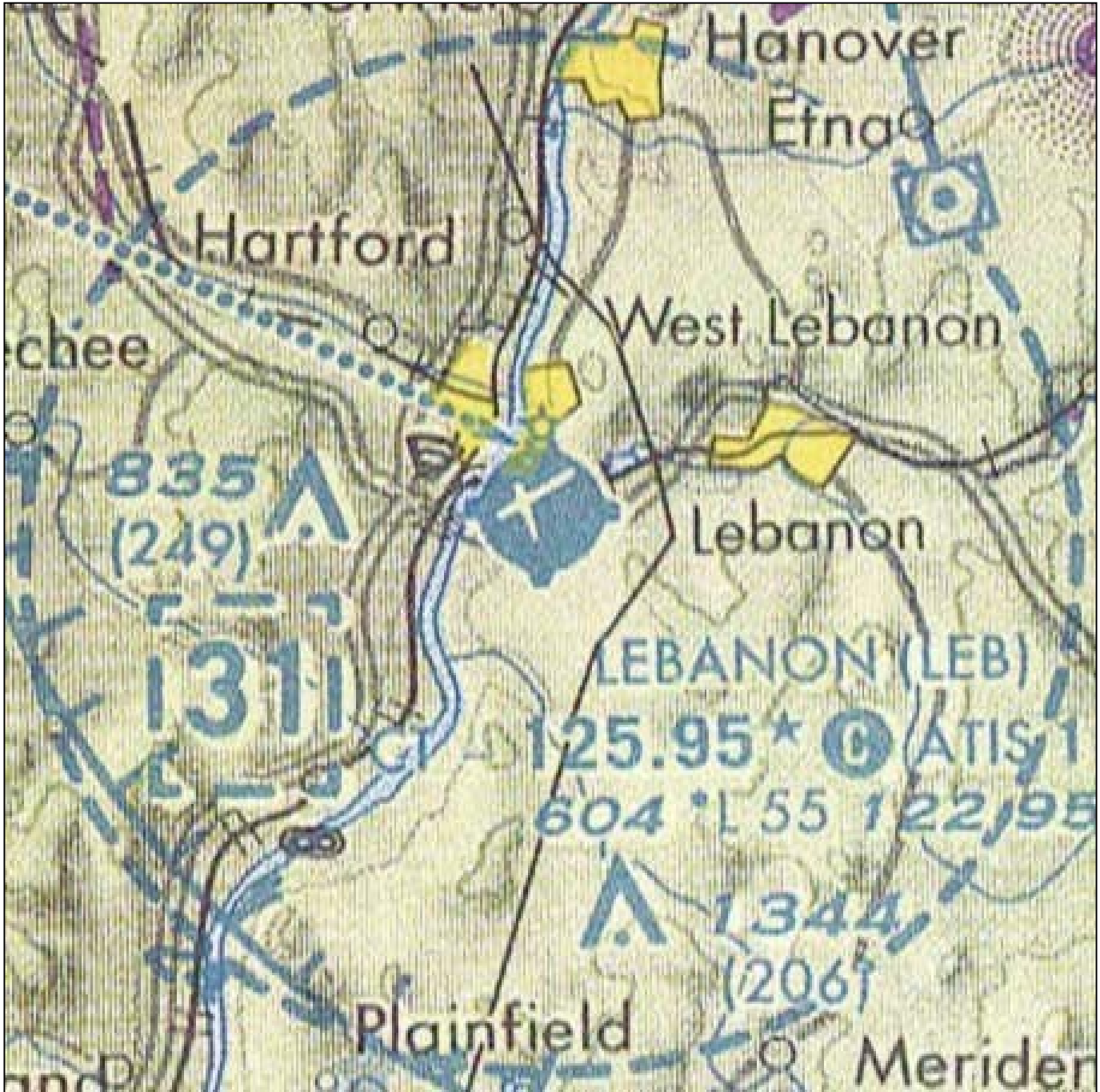
Source: National Oceanic and Atmospheric Administration, New York Aeronautical Sectional Chart

Class C Airspace - Manchester



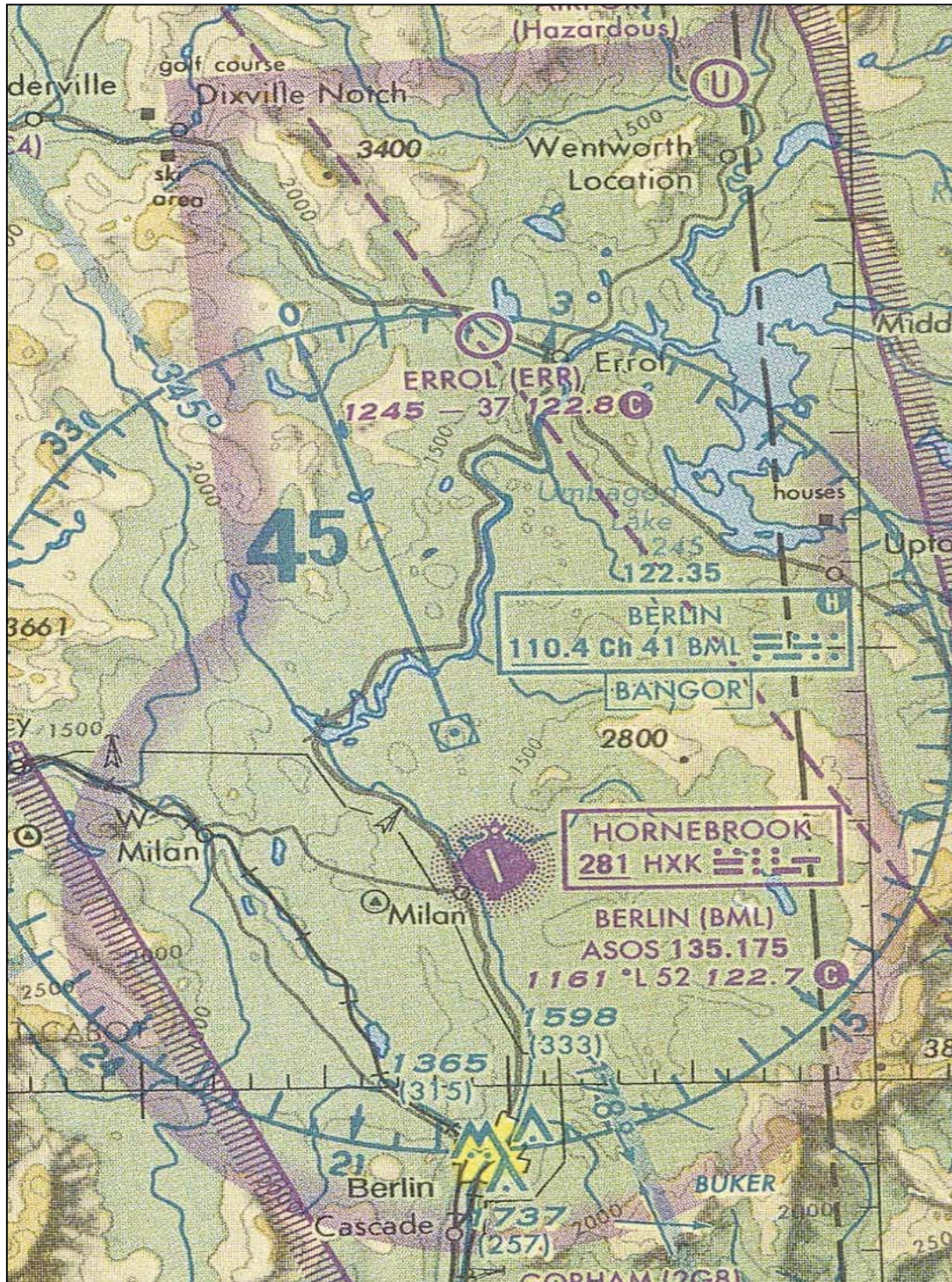
Source: National Oceanic and Atmospheric Administration, New York Aeronautical Sectional Chart

Class D Airspace - Lebanon



Source: National Oceanic and Atmospheric Administration, New York Aeronautical Sectional Chart

Class E/G Airspace – Berlin



Source: National Oceanic and Atmospheric Administration, New York Aeronautical Sectional Chart.



Appendix 2-D – Historical FAA AIP Grants



AIP Grant Information

REGION: ANE STATE: NH CITY: MANCHESTER LOCID: MHT
 AIRPORT: MANCHESTER
 SITE NO: 13332.*A NPIAS: 330011 TYPE: PRIMARY HUB: SMALL

FY	GRANTS	DISCRETIONARY	ENTITLEMENT	TOTAL
1982	1	0	198,336	198,336
1983	3	861,478	225,584	1,087,062
1984	1	161,287	234,518	395,805
1986	1	125,361	686,092	811,453
1987	2	0	296,697	296,697
1988	1	38,468	771,435	809,903
1990	3	172,020	1,781,046	1,953,066
1991	2	4,320,303	1,288,391	5,608,694
1992	4	8,961,139	1,333,157	10,294,296
1993	7	15,966,751	1,540,586	17,507,337
1994	4	4,529,279	701,354	5,230,633
1995	3	1,411,872	2,712,012	4,123,884
1996	2	2,265,898	381,304	2,647,202
1997	3	8,227,076	3,377,335	11,604,411
1999	2	3,039,000	1,725,000	4,764,000
2000	3	8,048,657	2,294,466	10,343,123
TOTAL	42	58,128,589	19,547,313	77,675,902

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AIP Grant Information

REGION: ANE STATE: NH CITY: LEBANON LOCID: LEB
 AIRPORT: LEBANON MUNICIPAL
 SITE NO: 13317.*A NPIAS: 330010 TYPE: PRIMARY HUB: NON

FY	GRANTS	DISCRETIONARY	ENTITLEMENT	TOTAL
1983	1	1,779,161	143,821	1,922,982
1984	1	47,970	0	47,970
1985	1	125,516	0	125,516
1986	1	199,513	0	199,513
1987	2	261,393	0	261,393
1988	1	8,892	433,800	442,692
1989	2	1,486,633	476,227	1,962,860
1991	1	2,133,648	300,000	2,433,648
1992	1	412,775	325,541	738,316
1993	1	0	312,305	312,305
1995	1	3,300	319,901	323,201
1996	1	0	391,019	391,019
1997	1	1,413,863	1,111,892	2,525,755
1998	2	21,544	510,434	531,978
1999	1	0	500,000	500,000
2000	2	0	812,850	812,850
TOTAL	20	7,894,208	5,637,790	13,531,998

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AIP Grant Information

REGION: ANE STATE: NH CITY: PORTSMOUTH LOCID: PSM
 AIRPORT: PEASE INTERNATIONAL TRADEPORT
 SITE NO: 13386.*A NPIAS: 330016 TYPE: GENERAL AVIATION HUB:

FY	GRANTS	DISCRETIONARY	ENTITLEMENT	TOTAL
1990	1	573,583	0	573,583
1992	2	280,396	120,639	401,035
1993	3	3,005,939	0	3,005,939
1994	1	3,800,000	0	3,800,000
1995	1	3,999,484	378,246	4,377,730
1996	3	3,626,535	383,697	4,010,232
1997	2	4,658,609	0	4,658,609
1998	2	1,744,375	348,367	2,092,742
1999	2	1,558,528	0	1,558,528
2000	2	1,981,702	1,633	1,983,335
TOTAL	19	25,229,151	1,232,582	26,461,733

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AIP Grant Information

REGION: ANE STATE: NH CITY: NASHUA LOCID: ASH
 AIRPORT: BOIRE FIELD
 SITE NO: 13350.*A NPIAS: 330012 TYPE: RELIEVER HUB: LARGE

FY	GRANTS	DISCRETIONARY	ENTITLEMENT	TOTAL
1982	1	79,675	0	79,675
1983	1	544,410	0	544,410
1984	1	472,500	0	472,500
1985	1	447,754	0	447,754
1986	1	130,663	46,469	177,132
1987	2	794,216	0	794,216
1988	2	276,036	0	276,036
1990	1	525,934	0	525,934
1991	2	504,292	0	504,292
1992	2	420,243	0	420,243
1993	1	916,267	0	916,267
1996	1	443,303	0	443,303
1997	1	0	46,622	46,622
1999	2	0	178,486	178,486
2000	1	0	236,481	236,481
TOTAL	20	5,555,293	508,058	6,063,351

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AIP Grant Information

REGION: ANE STATE: NH CITY: CONCORD LOCID: CON
 AIRPORT: CONCORD MUNICIPAL
 SITE NO: 13224.*A NPIAS: 330004 TYPE: GENERAL AVIATION HUB:

FY	GRANTS	DISCRETIONARY	ENTITLEMENT	TOTAL
1983	1	83,150	0	83,150
1984	1	173,517	0	173,517
1986	1	0	52,466	52,466
1989	1	0	109,670	109,670
1990	1	97,070	1,339,123	1,436,193
1991	1	0	670,114	670,114
1993	1	285,977	0	285,977
1994	2	22,266	289,117	311,383
1996	1	0	46,017	46,017
1998	1	0	143,523	143,523
1999	1	0	97,790	97,790
2000	1	0	131,580	131,580
TOTAL	13	661,980	2,879,400	3,541,380

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AIP Grant Information

REGION: ANE STATE: NH CITY: ROCHESTER LOCID: DAW
 AIRPORT: SKYHAVEN
 SITE NO: 13395.*A NPIAS: 330015 TYPE: GENERAL AVIATION HUB:

FY	GRANTS	DISCRETIONARY	ENTITLEMENT	TOTAL
1982	1	38,156	174,113	212,269
1984	2	9,770	179,622	189,392
1985	1	814,361	352,938	1,167,299
1986	1	0	171,191	171,191
1993	2	59,702	75,510	135,212
1995	1	0	13,500	13,500
1996	1	0	270,268	270,268
1997	1	0	113,427	113,427
1999	1	0	226,632	226,632
2000	1	0	66,195	66,195
TOTAL	12	921,989	1,643,396	2,565,385

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AIP Grant Information

REGION: ANE STATE: NH CITY: KEENE LOCID: EEN
 AIRPORT: DILLANT-HOPKINS
 SITE NO: 13306.*A NPIAS: 330008 TYPE: GENERAL AVIATION HUB:

FY	GRANTS	DISCRETIONARY	ENTITLEMENT	TOTAL
1983	1	123,812	0	123,812
1984	1	37,780	0	37,780
1985	1	27,675	0	27,675
1987	2	134,177	0	134,177
1989	1	2,829,994	0	2,829,994
1992	1	240,445	0	240,445
1993	2	234,506	516,908	751,414
1994	1	379,397	0	379,397
1995	2	400,500	279,463	679,963
1997	2	623,000	476,980	1,099,980
1998	1	0	43,986	43,986
1999	1	0	235,980	235,980
TOTAL	16	5,031,286	1,553,317	6,584,603

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AIP Grant Information

REGION: ANE STATE: NH CITY: CLAREMONT LOCID: CNH
 AIRPORT: CLAREMONT MUNICIPAL
 SITE NO: 13218.*A NPIAS: 330002 TYPE: GENERAL AVIATION HUB:

FY	GRANTS	DISCRETIONARY	ENTITLEMENT	TOTAL
1984	1	29,741	85,500	115,241
1988	1	12,786	172,800	185,586
1992	1	16,924	489,600	506,524
1993	1	0	137,185	137,185
1994	1	292,926	39,175	332,101
1995	1	0	80,640	80,640
1996	1	25,348	140,400	165,748
1997	1	0	37,800	37,800
1998	1	0	108,900	108,900
2000	2	1,207	505,800	507,007
TOTAL	11	378,932	1,797,800	2,176,732

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AIP Grant Information

REGION: ANE STATE: NH CITY: LACONIA LOCID: LCI
 AIRPORT: LACONIA MUNICIPAL
 SITE NO: 13312.*A NPIAS: 330009 TYPE: GENERAL AVIATION HUB:

FY	GRANTS	DISCRETIONARY	ENTITLEMENT	TOTAL
1983	2	1,308,784	0	1,308,784
1984	1	166,459	0	166,459
1985	2	1,035,067	0	1,035,067
1986	2	661,550	0	661,550
2000	1	0	86,524	86,524
2001	1	0	65,764	65,764
TOTAL	9	3,171,860	152,288	3,324,148

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AIP Grant Information

REGION: ANE STATE: NH CITY: BERLIN LOCID: BML
 AIRPORT: BERLIN MUNICIPAL
 SITE NO: 13201.*A NPIAS: 330001 TYPE: GENERAL AVIATION HUB:

FY	GRANTS	DISCRETIONARY	ENTITLEMENT	TOTAL
1983	1	0	22,002	22,002
1984	1	21,560	28,030	49,590
1985	1	1,040,089	0	1,040,089
1988	1	0	267,670	267,670
1992	1	0	148,887	148,887
1995	1	46,151	441,053	487,204
1998	1	0	82,683	82,683
1999	2	18,831	458,119	476,950
TOTAL	9	1,126,631	1,448,444	2,575,075

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AIP Grant Information

REGION: ANE STATE: NH CITY: WHITEFIELD LOCID: HIE
 AIRPORT: MOUNT WASHINGTON REGIONAL
 SITE NO: 13452.*A NPIAS: 330017 TYPE: GENERAL AVIATION HUB:

FY	GRANTS	DISCRETIONARY	ENTITLEMENT	TOTAL
1983	1	156,605	208,776	365,381
1986	1	0	29,352	29,352
1993	1	161,310	0	161,310
1995	1	0	58,666	58,666
1996	1	7,551	45,237	52,788
1997	1	0	147,803	147,803
1999	1	0	44,922	44,922
2001	1	0	118,620	118,620
TOTAL	8	325,466	653,376	978,842

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Appendix 4-A – Aircraft Owner Survey



1. List Make and Model of each aircraft owned?

2. Where is(are) aircraft based?

3. Ownership of the aircraft?

(Private) (Joint Ownership) (Business)

4. How is the aircraft primarily used?

(Business) (Recreational) (Air Taxi) (Training)

5. How many hours per year is(are) the aircraft flown.

(Business) (Recreational) (Air Taxi) (Training)

6. Please list the New Hampshire airports that you visit frequently during the year _____

7. How important do you rank the following airport facilities (please rank each separately on a scale of 5 to 0, 5 being most important and 0 representing none)?

Restaurant facility _____, Fuel Cost _____, Instrument Approaches _____, Quality of FBO Services _____, Convenient for business _____, Paved runways _____.

8. If the aircraft is used for business, please provide:

Type and location of business _____

Number of employees located in New Hampshire _____

Total amount spent for air travel per year \$ _____

9. How is the aircraft used for business (please rank each separately on a scale of 5 to 0, 5 being most important and 0 representing none)?

To make commercial airline connections _____

For the transportation of business personnel _____

For the transportation of materials or products _____

To fly directly to business clients to save time _____

10. How is the aircraft stored? Hangar , "T" Hangar , Ramp , Grass . Annual cost for storage \$ _____.

11. What is the approximate estimated annual cost of maintenance for your aircraft \$ _____.

12. Where is the major maintenance on the aircraft conducted? Based airport , In state , Out of state . Please indicate Airport _____.

13. Where is fuel primarily purchased? Based airport , In state , Out of state , Corporate self fuel . Please indicate Airport _____.

14. What is the approximate number of gallons of fuel purchased per year _____.

15. What additional airport facilities do you believe are needed at your home based airport (please rank each separately on a scale of 5 to 0, 5 being most important and 0 representing none)?

More hangar space _____, Longer runways _____, More aircraft parking ramps _____, Airfield and Approach Lighting _____,

Instrument Approaches _____, Other _____.

16. If flying in the north country of New Hampshire, does the Yankee One/Two Military Operating Area restrictions affect your flying?

Yes , No . If yes please describe why:

Please fill out all questions, fold and tape and return it by SEPTEMBER 7, 2001. Please make sure the return Business Reply Mail address is on the outside of the envelope. THANK YOU.

FROM NEW HAMPSHIRE DEPARTMENT OF TRANSPORTATION DIVISION OF AERONAUTICS: In an effort to provide an effective statewide aviation program the Division of Aeronautics has retained an aviation consultant to update the State Airport System Plan. As a part of this study an aircraft owner survey has been developed to inquire how the aviation industry uses airport services that are provided within the state.

The information that is received will be kept in strict confidence and will only be used to generate the final report. Please fill out and return this survey to us by **September 7, 2001**. No postage is needed. We thank you in advance for your cooperation. Happy flying and clear skies to everyone.



	number of responses	% of respondents	
3. Ownership of Aircraft			
Private	80	66%	
Joint ownership	13	11%	
Business	28	23%	
<i>Total</i>	<i>121</i>	<i>100%</i>	
4. How is the aircraft primarily used?			
Business	37	27%	
Recreation	92	68%	
Air Taxi	3	2%	
Training	3	2%	
<i>Total</i>	<i>135</i>	<i>100%</i>	
10. How is the aircraft stored			
Hangar	66	52%	
T-Hangar	26	21%	
Ramp	27	21%	
Grass	7	6%	
<i>Total</i>	<i>126</i>	<i>100%</i>	
12. Where is maintenance conducted?			
Based Airport	78	61%	
In State	24	19%	
Out of State	26	20%	
<i>Total</i>	<i>128</i>	<i>100%</i>	
13. Where is fuel primarily purchased?			
Based Airport	90	68%	
In State	31	23%	
Out of State	10	8%	
Corp. self fuel	2	2%	
<i>Total</i>	<i>133</i>	<i>100%</i>	
	Ranking scale	# of responses	% of respondents
Restaurant	0	23	19%
	1	13	11%
	2	16	13%
	3	32	27%
	4	20	17%
	5	16	13%
<i>Total</i>		<i>120</i>	<i>100%</i>
Fuel cost	0	12	10%
	1	2	2%
	2	5	4%
	3	20	17%
	4	30	25%
	5	51	43%
<i>Total</i>		<i>120</i>	<i>100%</i>
Instrument approaches	0	39	33%
	1	2	2%
	2	4	3%
	3	19	16%
	4	14	12%



	5	42	35%
<i>Total</i>		120	100%
FBO Services	0	20	17%
	1	4	3%
	2	13	11%
	3	27	23%
	4	27	23%
	5	29	24%
<i>Total</i>		120	100%
Convenient for business	0	57	48%
	1	3	3%
	2	8	7%
	3	18	15%
	4	15	13%
	5	19	16%
<i>Total</i>		120	100%
Paved Runways	0	29	24%
	1	6	5%
	2	7	6%
	3	8	7%
	4	15	13%
	5	55	46%
<i>Total</i>		120	100%
9. How is the aircraft used for business?			
Commercial airline connections	0	107	89%
	1	6	5%
	2	3	3%
	3	2	2%
	4	1	1%
	5	1	1%
<i>Total</i>		120	100%
Transport of personnel	0	86	72%
	1	3	3%
	2	0	0%
	3	4	3%
	4	4	3%
	5	23	19%
<i>Total</i>		120	100%
Transport of materials	0	93	78%
	1	2	2%
	2	7	6%
	3	9	8%
	4	3	3%
	5	6	5%
<i>Total</i>		120	100%
Fly direct to business clients	0	84	70%
	1	0	0%



	2	1	1%
	3	3	3%
	4	4	3%
	5	28	23%
<i>Total</i>		120	100%
15. What additional facilities do you believe are needed at your home base airport?			
More hangar space	0	47	39%
	1	2	2%
	2	1	1%
	3	11	9%
	4	6	5%
	5	53	44%
<i>Total</i>		120	100%
Longer runways	0	86	72%
	1	4	3%
	2	5	4%
	3	9	8%
	4	6	5%
	5	10	8%
<i>Total</i>		120	100%
More aircraft parking ramps	0	73	61%
	1	2	2%
	2	14	12%
	3	13	11%
	4	9	8%
	5	9	8%
<i>Total</i>		120	100%
Airfield and Approach Lighting	0	82	68%
	1	8	7%
	2	4	3%
	3	5	4%
	4	6	5%
	5	15	13%
<i>Total</i>		120	100%
Instrument Approaches	0	85	71%
	1	3	3%
	2	3	3%
	3	7	6%
	4	5	4%
	5	17	14%
<i>Total</i>		120	100%
16. If flying in the north country of NH, does the Yankee One/Two MOA restrictions affect your flying?			
Yes	25		
No	95		
<i>Total</i>	120		



Appendix 4-B – Itinerant Aircraft Survey



ITINERANT AIRCRAFT SURVEY

1. Name of Airport where you flew into today:

2. Please indicate the type of aircraft you flew for this flight?

3. Where is aircraft based?

4. Please list the origination airport where you started your trip.

5. Ownership of the aircraft?(Private) (Fractional Share)
(Business) (Rental)
6. How is the aircraft primarily used? (Business) (Recreational)
(Air Taxi) (Training)

7. If you flew the aircraft for business reasons, please provide:
Type and location of business _____
Total number of employees of the company _____
Total amount you spend for business air travel per year \$ _____

8. How important do you rank the following airport facilities (*please rank each separately on a scale of 5 to 0, 5=most important and 0=least important*)?
Restaurant Facility _____, Fuel Cost _____, Instrument Approaches _____, Quality of FBO Services _____,
Convenient for business _____, Paved runways _____.

9. During your visit to this airport what airport services were used?
Fuel , Tiedown , Hangar Rental , Maintenance , Rental Car , FBO pilots lounge/flight planning , Restaurant ,
Air Carrier Terminal .

10. Did you overnight during your stay in the area? Yes , No .

11. Approximately how much did you spend during your visit? \$ _____.

12. Why did you fly to this airport? (*please rank each separately on a scale of 5 to 0, 5=most important and 0=least important*)

To make commercial airline connections _____
 For the transportation of business personnel _____
 For the transportation of materials or products _____
 To fly directly to business clients to save time _____
 Other _____

13. What additional airport facilities need to be enhanced at the airport that you flew into today? (*please rank each separately on a scale of 5 to 0, 5=most important and 0=least important*)

More hangar space _____, Longer runways _____, More aircraft parking ramps _____, Airfield and Approach
 Lighting _____, Instrument Approaches _____, Other _____.

14. Please list the New Hampshire airports that you visit frequently during the year:

FROM NEW HAMPSHIRE DEPARTMENT OF TRANSPORTATION DIVISION OF AERONAUTICS:

In an effort to provide an effective statewide aviation program the Division of Aeronautics has retained an aviation consultant to update the State Airport System Plan. As a part of this study an aircraft owner survey has been developed to inquire how the aviation industry uses airport services that are provided within the state.

The information that is received will be kept in strict confidence and will only be used to generate the final report. Please fill out and return this survey to us by **September 7, 2001**. No postage is needed. We thank you in advance for your cooperation. Happy flying and clear skies to everyone.

Please fill out all the questions, fold and tape the end and return it postage free by September 7, 2001. Please make sure the return Business Reply Mail address is on the outside of the envelope. THANK YOU.



Appendix 4-C – Business Survey

Edward and Kelcey and RKG Associates, Inc., - are working with the New Hampshire Department of Transportation's Division of Aeronautics to update the State Airport System Plan. The goal of the State Airport System Plan is to identify the role airports play within the New Hampshire economy. As a business owner/manager, we would like to have your input on how your local airport influences your business operations. **Please be assured that your responses will be kept in strictest confidence, to be aggregated with all other responses.**

Business Survey

DOT State Airport System Update

New Hampshire

Business Location (City/Town): _____
 # Years in Business: _____
 # Years at This Location: _____
 # of Locations: _____
 # Employees at This Location: _____
 # Employees: _____

1) What type of business do you do? **(Please Check One)**

- | | | |
|--|--|---|
| <input type="checkbox"/> Construction | <input type="checkbox"/> Manufacturing (Durable Goods)(Durable, Non-Durable) | |
| <input type="checkbox"/> Retail Trade | <input type="checkbox"/> Manufacturing (Non-Durable Goods) | |
| <input type="checkbox"/> Wholesale Trade | <input type="checkbox"/> Business Services | <input type="checkbox"/> Finance, Insurance and Real Estate |
| <input type="checkbox"/> Personal Services | <input type="checkbox"/> Service | |
| <input type="checkbox"/> Government | <input type="checkbox"/> Other _____ | |

1B) If possible, please indicate which 4-digit Standard Industrial Classification (SIC) code your business falls under. _____

2) Is your business *directly aviation related* (i.e. deals directly with aviation products or services or a majority of your business revenues are generated from aviation-related customers)? Yes No

3) What is the name of the nearest general aviation airport to your business? _____
 If unknown, please skip to Question 6

(Most people are not aware of a general aviation airport near them and would not think to include unless they were using it for business. I think it would be beneficial if this questions focuses upon the knowledge of a GA airport)

4) How far away is this airport to your business? **(Please Select One)**

- | | | |
|--|---|---------------------------------------|
| <input type="checkbox"/> Located on Airport Property | <input type="checkbox"/> Under 1 mile | <input type="checkbox"/> 1 to 5 miles |
| <input type="checkbox"/> 6 to 10 miles | <input type="checkbox"/> 11 to 25 miles | <input type="checkbox"/> 25+ miles |

5) Do you currently use this airport *in any way* for business purposes?
 Yes No Why? **Go to Question 6** _____

5A) For what purposes does your business utilize this airport? **(Check All That Apply)**

- | | |
|---|--|
| <input type="checkbox"/> Transporting Staff | <input type="checkbox"/> Delivering Products |
| <input type="checkbox"/> Transporting Clients | <input type="checkbox"/> Receiving Supplies |
| <input type="checkbox"/> Store/Service Corporate Aircraft | <input type="checkbox"/> Aviation Related Business (explain) _____ |
| <input type="checkbox"/> Other (explain) _____ | |

5B) How often do you use this airport for business purposes? **(Check One)**

- | | | | |
|--------------------------------------|--|---|---|
| <input type="checkbox"/> Once a Year | <input type="checkbox"/> 1 to 5 Times per Year | <input type="checkbox"/> 6 to 10 Times per Year | <input type="checkbox"/> 11+ Times per Year |
|--------------------------------------|--|---|---|

5C) What would be your response if the airport you use for business were no longer available for your use? **(Check All That Apply)**

- | | | |
|---|---|---|
| <input type="checkbox"/> Use Next Closest Airport | <input type="checkbox"/> Make Fewer Flights | <input type="checkbox"/> Substitute other Mode (car, truck, etc.) |
| <input type="checkbox"/> Relocate Business | <input type="checkbox"/> Go Out of Business | <input type="checkbox"/> Other (Explain) _____ |

(PLEASE SEE REVERSE SIDE)



- 6) Does your company charter/own/rent aircraft for business purposes?
 7) Yes (please specify) No (Go to question 7)
- 6A) If you own an aircraft, please indicate:
 Type of aircraft owned:
 Where the aircraft is based:
 What NH airports are used:
 Number of trips monthly/annually:
- 6B) If you rent/charter aircraft for business use, please indicate what airport is used: _____

 Please indicate the number of trips you use an aircraft for businesses purposes based upon the Questions 6B
 Monthly
 Annually
- 7) Does your company use one of New Hampshire's commercial airports (Manchester, Pease and Lebanon) for business purposes?
 Yes No (If No, Go to Question 8)
- 7A) If you have used one of the state's commercial airports, please indicate which one(s) you have used. **(Check All That Apply)**
 Manchester Airport Pease Tradeport Lebanon Airport
- 7B) For what purpose did you use the airport?
 Transporting Staff Delivering Products
 Transporting Clients Receiving Supplies
 Store/Service Corporate Aircraft Aviation Related Business **(Explain)** _____
 Other **(Explain)** _____
- 7C) How often do you use this airport for business purposes? **(Check One)**
 Once a Year 1 to 5 Times per Year 6 to 10 Times per Year 11+ Times per Year
- 8) Please rank the following criteria in terms of which were most important in selecting the current location for your business:

Criteria	Very Important	Important	Somewhat Important	Unimportant
State and Local Incentives	1	2	3	4
Highway Accessibility	1	2	3	4
Skilled Labor	1	2	3	4
Construction Costs	1	2	3	4
Labor Costs	1	2	3	4
Energy Availability and Cost	1	2	3	4
Tax Exemptions	1	2	3	4
Airport Accessibility	1	2	3	4
Availability of Land	1	2	3	4
ocation (Good Exposure)	1	2	3	4
Close to Population Centers	1	2	3	4
Other _____	1	2	3	4

In the space below, please provide us your comments on the impact of your local airport on your business:

THANK YOU FOR YOUR ASSISTANCE IN COMPLETING THIS SURVEY. YOUR RESPONSES WILL HELP DETERMINE THE ROLE THAT AIRPORTS PLAY WITHIN NEW HAMPSHIRE'S ECONOMY. IF YOU HAVE ANY QUESTIONS REGARDING THE SURVEY OR PROJECT, PLEASE CALL DARREN MOCHRIE AT RKG ASSOCIATES, INC. AT (800) 555-7541. PLEASE MAIL OR FAX THE COMPLETED SURVEY FORMS BY (INSERT DATE HERE) TO:

Darren Mochrie
 RKG Associates, Inc.
 277 Mast Road
 Durham, New Hampshire 03824
 Fax: (603) 868-6463



Appendix 5-A – Regional Economic Performance Measures



Change in Employment, Population and Per Capita Income: 1990-1999/2000					
New Hampshire Economic Regions					
Region	Population				
	1990	2000	# Change	% Change	Score
Rockingham	160,231	180,866	20,635	12.9%	9
South	216,479	240,815	24,336	11.2%	8
Nashua	171,478	190,088	18,610	10.9%	7
Lakes	86,100	94,690	8,590	10.0%	6
Central	95,836	104,152	8,316	8.7%	5
Stafford	120,510	129,663	9,153	7.6%	4
Upper Valley	76,573	81,326	4,753	6.2%	3
North Country	76,573	81,326	4,753	6.2%	2
Southwest	88,342	92,652	4,310	4.9%	1
Region	Employment				
	1990	1999	# Change	% Change	Score
Central	57,820	73,780	15,960	27.6%	9
Lakes	25,300	29,320	4,020	15.9%	8
Rockingham	134,880	149,810	14,930	11.1%	7
North Country	55,380	60,590	5,210	9.4%	6
South	96,090	103,010	6,920	7.2%	5
Upper Valley	39,970	42,820	2,850	7.1%	4
Nashua	93,560	97,430	3,870	4.1%	3
Stafford	54,420	56,330	1,910	3.5%	2
Southwest	37,150	37,440	290	0.8%	1
Region	Per Capita Income				
	1990	2000	\$ Change	% Change	Score
Rockingham	\$18,212	\$28,709	\$10,497	57.6%	9
Upper Valley	\$14,806	\$22,781	\$7,975	53.9%	8
South	\$16,492	\$24,946	\$8,454	51.3%	7
Stafford	\$14,086	\$21,244	\$7,158	50.8%	6
Central	\$15,826	\$23,453	\$7,627	48.2%	5
Nashua	\$18,617	\$27,237	\$8,620	46.3%	4
Southwest	\$14,349	\$20,824	\$6,475	45.1%	3
North Country	\$12,404	\$17,843	\$5,439	43.8%	2
Lakes	\$13,771	\$18,976	\$5,205	37.8%	1

Source: Claritas, Inc., New Hampshire Employment Security and RKG Associates, Inc.

Relationship Between Regional Economic Growth and Current and Projected Airport Economic Impact											
New Hampshire Airports											
Overall Ranking	Region	Mean Regional Ec. Growth Score	Name	Ownership	Location	# Runways	Surface Type	Runway Length (ft)	Projected Operations	Projected Based Aircraft	Estimated Airport Ec. Impact*
1	Rockingham	8.3	Hampton Airfield	Private	Hampton	1	Turf	2,100	Positive	Positive	Low
			Pease Tradeport	Public	Portsmouth/Newington	1	Asphalt	11,300	Positive	Positive	High
2	South	6.7	Manchester	Public	Manchester	2	Asphalt	7,573 & 7,001	Positive	Positive	High
3	Central	6.3	Concord Municipal	Public	Concord	2	Asphalt	3,200 & 6,005	Positive	Positive	High
4	Lakes	5.0	Laconia Mun. Airport	Public	Laconia	1	Asphalt	5286	Positive	Positive	High
			Lakes Region	Private	Wolfeboro	1	Asphalt	2,540	Positive	Positive	Low
			Newfound Valley	Private	Bristol	1	Asphalt	1,800	Positive	Positive	Low
			Moultonboro Airport	Private	Moultonboro	1	Asphalt	3625	Positive	Positive	Low
5	Upper Valley	5.0	Lebanon Mun. Airport	Public	Lebanon	2	Asphalt	5,496 & 5,200	Positive	Positive	Medium
			Parlin Field	Public	Newport	2	Turf & Asphalt	1,950 & 3,450	Positive	Positive	Low
			Claremont Mun. Airport	Public	Claremont	1	Asphalt	3,100	Positive	Positive	Medium
6	Nashua	4.7	Boire Field	Public	Nashua	1	Asphalt	5,500	Positive	Positive	High
7	Strafford	4.0	Skyhaven Airport	Public	Rochester	1	Asphalt	4,001	Positive	Positive	Low
8	North Country	3.3	Berlin Mun. Airport	Public	Berlin	1	Asphalt	5,200	Positive	Positive	Medium
			Colebrook Airport	Private	Colebrook	1	Turf	2,440	Positive	Stable	Low
			Errol Airport	Private	Errol	1	Gravel	3,680	Positive	Stable	Low
			Franconia Airport	Private	Franconia	1	Turf	2,305	Positive	Positive	Low
			Gorham Airport	Public	Gorham	1	Turf	2,800	Positive	Stable	Low
			Mt. Wash. Regional	Public	Whitefield	1	Asphalt	3,495	Positive	Positive	Medium
			Plymouth Mun. Airport	Public	Plymouth	1	Turf	2,380	Positive	Positive	Low
			Twin Mountain Airport	Private	Twin Mountain	1	Asphalt	2,640	Positive	Stable	Low
9	Southwest	1.7	Dillant-Hopkins	Public	Keene	2	Asphalt	6,201 & 4,001	Positive	Positive	Medium
			Hawthorne-Feather	Private	Antrim	1	Asphalt	3,260	Positive	Positive	Low
			Jaffrey-Silver Ranch	Private	Jaffrey	1	Asphalt	2,982	Positive	Positive	Low

*Based on results of airport economic impact analysis model



Population	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
New Hampshire:	1,195,579	1,230,000	1,241,000	1,253,000	1,268,000	1,285,000	1,301,705	1,268,000	1,268,000	1,285,000	1,301,705
% Change		2.88%	0.89%	0.97%	1.20%	1.34%	1.30%	1.20%	1.20%	1.34%	1.30%
# Change	34,421	34,421	11,000	12,000	15,000	17,000	16,705	15,000	15,000	17,000	16,705
Central	104,152	3,442	1,100	1,200	1,500	2,550	2,566	1,500	1,500	2,550	2,566
Lakes	94,690	3,442	1,100	1,200	1,500	2,550	2,566	1,500	1,500	2,550	2,566
Nashua	190,088	6,884	2,200	2,400	2,250	2,550	2,508	2,250	2,250	2,550	2,508
North Country	81,327	0	0	0	750	850	835	750	750	850	835
Rockingham	180,866	8,605	2,750	3,000	3,030	2,550	2,506	3,030	3,030	2,550	2,506
South	240,815	8,605	2,750	3,000	3,030	2,550	2,506	3,030	3,030	2,550	2,506
Southwest	92,652	0	0	0	750	850	835	750	750	850	835
Stratford	129,663	1,721	550	500	1,500	1,700	1,571	1,500	1,500	1,700	1,571
Upper Valley	81,325	1,721	550	500	750	850	835	750	750	850	835
			11,000	12,000	15,000	17,000	16,705	15,000	15,000	17,000	16,705
			1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Central	104,152	107,594	108,694	109,894	111,394	113,944	116,450	118,986	121,757	124,565	127,616
Lakes	94,690	98,132	99,232	100,432	101,932	104,482	106,988	109,526	112,395	115,103	119,171
Nashua	190,088	196,972	199,172	201,572	203,822	206,372	208,878	211,416	213,252	215,134	216,151
North Country	81,327	81,327	81,327	82,077	82,927	83,782	84,608	85,531	86,467	87,484	88,484
Rockingham	180,866	189,471	192,221	195,221	198,221	200,771	203,277	204,989	206,815	208,687	210,721
South	240,815	249,420	252,170	255,170	258,170	260,720	263,226	265,784	267,610	269,482	271,516
Southwest	92,652	92,652	92,652	92,652	93,402	94,252	95,087	95,933	97,779	99,651	101,685
Stratford	129,663	131,384	131,934	132,534	134,034	135,734	137,405	139,943	142,712	145,520	148,570
Upper Valley	81,325	83,047	83,597	84,197	84,947	85,797	86,632	87,478	89,324	91,196	93,230
New Hampshire:	1,195,579	1,230,000	1,241,000	1,253,000	1,268,000	1,285,000	1,301,705	1,318,627	1,337,688	1,355,807	1,376,144

Notes:

The population forecast is based on population estimates of 2001 and beyond.

The 2000 population estimate used in the report slightly understates the actual census population estimate due to the non-availability of census estimates at the time of report publication/analysis.

Therefore, although the rise in population between 2000 and 2001 is dramatic, the entire forecast is consistent with other long-range forecasts.

2001 population estimate used in this forecast is close to the actual population estimate (census).

The 2002 to 2010 population estimates in this forecast are the most reliable.

AIRPORT ECONOMIC IMPACT SUMMARY

CONCORD MUNICIPAL AIRPORT

Economic Benefits

- 30 aviation dependent jobs
- 2 known aviation dependent businesses
- 81 based aircraft
- 50,430 estimated annual operations
- Used by NASCAR racing team flight departments during racing weekends at the New Hampshire International Speedway
- Relied upon as a transportation asset by local and regional businesses
- Strong public utility asset for emergency medical, government and military use
- Provides access to the national aviation system for recreational and corporate flyers
- Provides linkage to the New Hampshire Capital region for transient flyers
- Supports New Hampshire National Guard unit

Economic Summary

The Concord Airport is an excellent example of a general aviation airport which serves in a multitude of capacities and is financially self-sufficient. Straddled within a geographic market area between Manchester Airport and Laconia Airport, Concord Airport is home to many corporate, government, military and recreational aircraft. The economic impact of the facility is substantial as over 50 NASCAR racing teams fly into the facility during race weekends at the New Hampshire International Speedway in Loudon. Additionally, the many corporate based aircraft and transient corporate flights which regularly use the facility positively impact the regional economy.

Airport Impact

It should be noted that the methodology used to determine the economic impact of each New Hampshire airport is summarized as the Airport Economic Impact Analysis within Chapter Five of the *New Hampshire State Airport System Plan Update*.

Tourism Support – Medium
Business Support – High
Public Utility - High

AIRPORT ECONOMIC IMPACT SUMMARY

NEWFOUND VALLEY – BRISTOL

Economic Benefits

- 7 based aircraft (increases to 12 during the summer months)
- Acts as a gateway to attractions and sites within the Newfound Lake region
- Occasional use of the airport by a local machine shop for distribution of machine parts and accessories

Economic Summary

As an airport with a relatively short runway, the facility primarily serves as the gateway to the Newfound Lake region for transient recreational flyers. The airport is occasionally used by a local business to distribute machined parts throughout New England and neighboring states.

Airport Impact

It should be noted that the methodology used to determine the economic impact of each New Hampshire airport is summarized as the Airport Economic Impact Analysis within Chapter Five of the *New Hampshire State Airport System Plan Update*.

Tourism Support – Low

Business Support – Low

Public Utility - Low

AIRPORT ECONOMIC IMPACT SUMMARY

LACONIA MUNICIPAL AIRPORT

Economic Benefits

- 30 aviation dependent jobs
- 5 known aviation dependent businesses
- 97 based aircraft
- 34,898 estimated annual operations
- Used by NASCAR racing team flight departments during racing weekends at the New Hampshire International Speedway
- Used by some entertainers and patrons at the nearby Meadowbrook Farm Arts Center
- Relied upon as a transportation asset by local and regional businesses
- Strong public utility asset for emergency medical, government and military use
- Provides access to the national aviation system for recreational and corporate flyers
- Provides linkage to the lakes region for transient flyers

Economic Summary

The Laconia Municipal Airport, located in the heart of New Hampshire's famous Lake Winnepesaukee lakes region, is one of the best examples of a financially self-sufficient, medium sized airport that can handle aircraft ranging from small single engine to small corporate jets. With the longest runway in the Lakes Region, an Instrument Landing System, and three fixed base operators, Laconia Municipal Airport hosts several corporate based aircraft as well as military training operations, medical emergency and government operations. The economic impact of the airport is substantial as many NASCAR racing teams fly into the facility during race weekends at the New Hampshire International Speedway in Loudon as well as many entertainment acts during shows at the neighboring Meadowbrook Farm Arts Center. The airport is also used by visitors with seasonal homes within the Lakes Region.

Airport Impact

It should be noted that the methodology used to determine the economic impact of each New Hampshire airport is summarized as the Airport Economic Impact Analysis within Chapter Five of the *New Hampshire State Airport System Plan Update*.

Tourism Support – High
Business Support – High
Public Utility - Medium

AIRPORT ECONOMIC IMPACT SUMMARY

LAKES REGION WOLFBORO AIRPORT

Economic Benefits

- 6 based aircraft (including 2 business aircraft used by a local air photo and mapping company)
- Provides linkage and access to Wolfboro and the lakes region
- Provides access to the national aviation system for recreational flyers

Economic Summary

This privately owned facility is used primarily as an access point for Wolfboro and the lakes region for transient recreational flyers. A local air photo and mapping company bases two planes at the airport during the summer months.

Airport Impact

It should be noted that the methodology used to determine the economic impact of each New Hampshire airport is summarized as the Airport Economic Impact Analysis within Chapter Five of the *New Hampshire State Airport System Plan Update*.

Tourism Support – Low

Business Support – Low

Public Utility – Low

AIRPORT ECONOMIC IMPACT SUMMARY

MOULTONBOROUGH AIRPORT

Economic Benefits

- 15 based aircraft (approximately 7 to 8 additional based aircraft during the summer months)
- Provides access to the national aviation system for recreational flyers
- Provides access to the Moultonborough and Lakes Region for recreational flyers

Economic Summary

This privately owned facility is used primarily as an access point for Moultonborough and the Lakes Region for transient recreational flyers.

Airport Impact

It should be noted that the methodology used to determine the economic impact of each New Hampshire airport is summarized as the Airport Economic Impact Analysis within Chapter Five of the *New Hampshire State Airport System Plan Update*.

Tourism Support – Low
Business Support – Low
Public Utility - Low

AIRPORT ECONOMIC IMPACT SUMMARY

BOIRE FIELD

Economic Benefits

- 400 based aircraft (including 22 corporate jet aircraft)
- Estimated 200 aviation dependent jobs
- Estimated 1999 economic impact of over \$21 million
- Daniel Webster College flight training facility
- Many corporate based aircraft from Massachusetts firms which take advantage of lower fuel and service costs and tax savings
- 123,000 estimated operations
- Heavily relied upon as a transportation asset by local and regional (northern Massachusetts) businesses
- Strong public utility asset for emergency medical, government and military use as well as by City of Nashua police, fire and public works departments
- Provides access to the national aviation system for recreational flyers
- Provides linkage to southern New Hampshire and attractions for transient flyers

Economic Summary

As one of the busiest airports in the state, Boire Field in Nashua is one of the finest examples of a large general aviation facility that contributes significantly to the local, regional and state economies. With a significant portion of the approximately 400 aircraft based at Boire Field used for business purposes, it is estimated that the facility supports about 200 aviation dependent jobs directly on site. Geographically, the airport is ideally located within close proximity to southern New Hampshire's urban population base as well as communities in north central Massachusetts. Due to prudent airport management and the revenues generated through land leases, tie-downs and fuel flow fees, the airport has managed to become financially self-sufficient.

Airport Impact

It should be noted that the methodology used to determine the economic impact of each New Hampshire airport is summarized as the Airport Economic Impact Analysis within Chapter Five of the *New Hampshire State Airport System Plan Update*.

Tourism Support – Low
Business Support – High
Public Utility - Medium

AIRPORT ECONOMIC IMPACT SUMMARY

BERLIN MUNICIPAL AIRPORT

Economic Benefits

- 26 based aircraft
- 14,000 estimated operations
- Relied upon as a transportation asset by local and regional businesses
- Strong public utility asset for emergency medical, government and military use
- Provides access to the national aviation system for recreational flyers
- Provides linkage to local and regional sites and attractions for transient flyers

Economic Summary

As the largest airport in the North Country region, the facility fulfills a variety of aviation, public utility, tourism and business support roles. With the longest runway in the region and available jet-A fuel, the facility hosts a variety of regular corporate users, military training operations, medical emergency and government operations. For example, during the negotiations for the purchase and reopening of the Berlin and Gorham paper mills, which are the region's biggest employer, the airport hosted visits by potential investors and financial support staff.

Airport Impact

It should be noted that the methodology used to determine the economic impact of each New Hampshire airport is summarized as the Airport Economic Impact Analysis within Chapter Five of the *New Hampshire State Airport System Plan Update*.

Tourism Support – Low
Business Support – Medium
Public Utility - Medium

AIRPORT ECONOMIC IMPACT SUMMARY

COLEBROOK AIRPORT

Economic Benefits

- 6 based aircraft
- Estimated 1,500 annual operations
- Provides access to the national aviation system for recreational flyers
- Provides linkage to local and regional sites and attractions (Balsams Resort, local golf courses, fishing) for transient flyers

Economic Summary

Although the Colebrook Airport has a relatively short turf runway, many transient flyers enjoy the unique rural character (like flying back in history) of the facility as well as local and regional tourist destinations.

Airport Impact

It should be noted that the methodology used to determine the economic impact of each New Hampshire airport is summarized as the Airport Economic Impact Analysis within Chapter Five of the *New Hampshire State Airport System Plan Update*.

Tourism Support – Low
Business Support – Low
Public Utility – Low

AIRPORT ECONOMIC IMPACT SUMMARY

ERROL AIRPORT

Economic Benefits

- 6 based aircraft
- Estimated 750 annual operations
- Provides access to the national aviation system for recreational flyers
- Provides linkage to the Umbagog Lake and surrounding area

Economic Summary

As an airport with a relatively long, gravel runway, the facility serves as an access point to local and regional sites and attractions for transient recreational flyers. The airport neighbors Umbagog Lake which is considered one of the most unique and untouched natural settings in New Hampshire.

Airport Impact

It should be noted that the methodology used to determine the economic impact of each New Hampshire airport is summarized as the Airport Economic Impact Analysis within Chapter Five of the *New Hampshire State Airport System Plan Update*.

Tourism Support – Low
Business Support – Low
Public Utility – Low

AIRPORT ECONOMIC IMPACT SUMMARY

FRANCONIA AIRPORT

Economic Benefits

- Estimated 4,500 annual operations
- Strong tourism linkage with neighboring Franconia Inn which provides guests with opportunity to glide via Franconia Soaring Association
- Provides access to national aviation system for recreational flyers
- 12 based aircraft (11 gliders)

Economic Summary

The Franconia Airport, although one of the smallest facilities in the state in terms of runway length, is an excellent example of a facility which has established a unique identity for itself based on its geographic location and regional market. The facility's owners have capitalized on its proximity to the Franconia Inn, a well know bed and breakfast inn in the region, to provide guests the opportunity of a once-in-a-lifetime experience of gliding in the White Mountains.

Airport Impact

It should be noted that the methodology used to determine the economic impact of each New Hampshire airport is summarized as the Airport Economic Impact Analysis within Chapter Five of the *New Hampshire State Airport System Plan Update*.

Tourism Support – Medium

Business Support – Low

Public Utility - Low

AIRPORT ECONOMIC IMPACT SUMMARY

GORHAM AIRPORT

Economic Benefits

- Estimated 1,000 annual operations
- 4 based aircraft
- Provides access to the national aviation system for recreational flyers
- Provides linkage to the Mount Washington Region's natural and scenic assets for transient flyers

Economic Summary

As an airport with a relatively short, turf runway, the facility serves as an access point to the Mount Washington region's noted lodging, skiing and outdoor attractions for transient recreational flyers.

Airport Impact

It should be noted that the methodology used to determine the economic impact of each New Hampshire airport is summarized as the Airport Economic Impact Analysis within Chapter Five of the *New Hampshire State Airport System Plan Update*.

Tourism Support – Low
Business Support – Low
Public Utility - Low

AIRPORT ECONOMIC IMPACT SUMMARY

DEAN MEMORIAL AIRPORT

Economic Benefits

- Provides access to the national aviation system for recreational flyers
- Provides linkage to local and regional sites and attractions for transient flyers

Economic Summary

As an airport with a relatively short, turf runway, the facility serves as an access point to local and regional sites and attractions for transient recreational flyers. Although corporate operations are not predominant at the facility, Municipal officials indicate that the development of the neighboring industrial park and potential future lengthening of the runway may attract some business flights.

Airport Impact

It should be noted that the methodology used to determine the economic impact of each New Hampshire airport is summarized as the Airport Economic Impact Analysis within Chapter Five of the *New Hampshire State Airport System Plan Update*.

Tourism Support – Low
Business Support – Low
Public Utility - Low

AIRPORT ECONOMIC IMPACT SUMMARY

MOUNT WASHINGTON REGIONAL AIRPORT

Economic Benefits

- 36 aviation dependent jobs
- 3 aviation dependent businesses including Presby Environmental Plastics Limited located in the neighboring industrial park
- 36 based aircraft
- Annual operations estimated at 2,500
- Strong tourism linkage with regional hotels, resorts and ski areas including the Mountain View Grand and Bretton Woods Resort
- Provides access to national air system for recreational flyers
- Provides transportation access as a public utility for government, emergency and medical aviation operations

Economic Summary

Mount Washington Regional Airport in Whitefield, is arguably one of the best examples of a well-managed, small general aviation airport facility which provides a variety of transportation services in support of the regional economy. Due to the identified regional impact of the facility, the ten member Mount Washington Airport Commission serves a model for similar airport facilities throughout the state in that member communities share in the airport's financial risk, but also benefit from having the facility nearby.

Airport Impact

It should be noted that the methodology used to determine the economic impact of each New Hampshire airport is summarized as the Airport Economic Impact Analysis within Chapter Five of the *New Hampshire State Airport System Plan Update*.

Tourism Support - Medium
Business Support - Medium
Public Utility – Low

AIRPORT ECONOMIC IMPACT SUMMARY

PLYMOUTH MUNICIPAL AIRPORT

Economic Benefits

- 8 based aircraft (16 during summer months)
- Provides access to the national aviation system for recreational flyers
- Provides linkage to local and regional sites and attractions for transient flyers

Economic Summary

A recent study completed by the Town of Plymouth indicated positive support for the airport with the facility primarily being a tourism asset. The increase in based aircraft during the summer months is attributed primarily to the large number of seasonal residential units in the Plymouth region.

Airport Impact

It should be noted that the methodology used to determine the economic impact of each New Hampshire airport is summarized as the Airport Economic Impact Analysis within Chapter Five of the *New Hampshire State Airport System Plan Update*.

Tourism Support – Low
Business Support – Low
Public Utility - Low

AIRPORT ECONOMIC IMPACT SUMMARY

TWIN MOUNTAIN AIRPORT

Economic Benefits

- Estimated 1,000 annual operations
- Provides access to lodging, hiking, and skiing amenities located within the Franconia region
- Provides access to national aviation system for recreational flyers
- 3 based aircraft

Economic Summary

The Twin Mountain Airport is geographically located in one of the most mountainous and scenic locations in the state – quintessential New Hampshire. Many resorts, including the world famous Mount Washington Hotel, are located with the area.

Airport Impact

It should be noted that the methodology used to determine the economic impact of each New Hampshire airport is summarized as the Airport Economic Impact Analysis within Chapter Five of the *New Hampshire State Airport System Plan Update*.

Tourism Support – Medium
Business Support – Low
Public Utility - Low

AIRPORT ECONOMIC IMPACT SUMMARY

HAMPTON AIRFIELD

Economic Summary

Hampton Airfield's turf facilities are home to approximately 70 based aircraft which are primarily used for recreational purposes. Many flyers that use the facility take advantage of the seasonal homes and lodging facilities within the area.

Airport Impact

It should be noted that the methodology used to determine the economic impact of each New Hampshire airport is summarized as the Airport Economic Impact Analysis within Chapter Five of the *New Hampshire State Airport System Plan Update*.

Tourism Support – Low
Business Support – Low
Public Utility – Low

AIRPORT ECONOMIC IMPACT SUMMARY

PEASE INTERNATIONAL TRADEPORT

Economic Benefits

- 70 based aircraft
- Over 1,100 aviation dependent jobs at 21 aviation dependent business establishments
- Estimated 24,860 annual operations
- Commercial air service linkage to regional hubs
- New Hampshire Air National Guard air refueling wing
- Provides access to the national aviation system for recreational flyers
- Provides linkage to the New Hampshire Seacoast and northeastern Massachusetts regions' attractions for transient flyers

Economic Summary

Pease International Tradeport is only one of three commercial airports (Manchester Airport and Lebanon Airport) in New Hampshire. The most unique feature of the former U.S. Air Force facility is the fact that it has the longest runway in the state (11,321 feet) – capable of handling aircraft of all sizes (up to and including the space shuttle). Pease's economic impact on the region and state is significant as it is home to 21 aviation dependent businesses with over 1,100 aviation dependent jobs. In addition to commercial passenger (Pan Am Airlines), cargo, and corporate general aviation flight operations based there, Pease is home to the New Hampshire Air National Guard's KC-135 air refueling wing that provides vital air refueling for military aircraft.

Airport Impact

It should be noted that the methodology used to determine the economic impact of each New Hampshire airport is summarized as the Airport Economic Impact Analysis within Chapter Five of the *New Hampshire State Airport System Plan Update*.

Tourism Support – Low
Business Support – High
Public Utility - High

AIRPORT ECONOMIC IMPACT SUMMARY

MANCHESTER AIRPORT

Economic Benefits

- Second largest airport in New England
- 10 major national and regional commuter airlines
- 6 cargo carriers
- 3.2 million passengers in 2000
- Primary airport used by New Hampshire business and leisure air travelers
- 1,388 aviation related jobs with a gross payroll of almost \$19 million (1998)
- Total expenditures for (40) on-airport organizations of \$49.7 million (1998)
- Total estimated economic impact of \$53.3 million (1998)¹

Economic Summary

Manchester Airport is northern New England's busiest airport and one of New Hampshire's most important economic "engines". The airport has over 1,300 aviation dependent jobs which, according to an economic impact study complete for the airport in 1998, generate an economic impact of over \$53 million. In addition to supporting businesses throughout the state, the facility handles over 3 million passengers annually and is considered the prime air travel gateway to New Hampshire. Additionally, Manchester Airport serves as home for many corporate flight departments as well as filling vital public utility role for important government, emergency medical and military operations.

Airport Impact

It should be noted that the methodology used to determine the economic impact of each New Hampshire airport is summarized as the Airport Economic Impact Analysis within Chapter Five of the *New Hampshire State Airport System Plan Update*.

Tourism Support – High
Business Support – High
Public Utility - High

¹ Leigh Fisher Associates. *Economic Impact Study: Manchester Airport* (1998)



AIRPORT ECONOMIC IMPACT SUMMARY

HAWTHORNE-FEATHER AIRPARK

Economic Benefits

N/A

Economic Summary

N/A

Airport Impact

N/A

AIRPORT ECONOMIC IMPACT SUMMARY

SILVER RANCH (JAFFREY) AIRPORT

Economic Benefits

- 41 based aircraft
- 6 estimated aviation dependent jobs
- Estimated 10,648 annual operations
- Provides access to the national aviation system for corporate and recreational flyers
- Provides linkage to the Jaffrey region for transient flyers
- Annual fireworks event attracts flyers, seasonal and year round residents

Economic Summary

Historically, Silver Ranch Airport has traditionally had a significant portion of its based aircraft being corporate users with the remainder being aircraft used for recreational or personal uses. The number of corporate users has declined modestly, however, the airport is still home for many aircraft used for primarily business uses. Many transient corporate flights utilize Silver Ranch in order to access business establishments throughout the Jaffrey region. The facility serves an important public utility role in that it can accommodate emergency medical and government flights.

Airport Impact

It should be noted that the methodology used to determine the economic impact of each New Hampshire airport is summarized as the Airport Economic Impact Analysis within Chapter Five of the *New Hampshire State Airport System Plan Update*.

Tourism Support – Low
Business Support – Low
Public Utility – Medium

AIRPORT ECONOMIC IMPACT SUMMARY

DILLANT-HOPKINS (KEENE) AIRPORT

Economic Benefits

- 54 based aircraft and home to many corporate aircraft departments
- 7 aviation dependent businesses
- Estimated aviation dependent employment of over 300 jobs
- 42,646 Estimated annual operations
- Vital public utility role by supporting the Civil Air Patrol, law enforcement, military and medical flights
- Provides access to the national aviation system for recreational flyers
- Provides linkage to local and regional sites and attractions for transient flyers

Economic Summary

The primary role of the airport is to serve general aviation recreational and corporate aircraft. The airport plays an important economic role in that several corporations (including a large wholesale grocery distribution company and Troy Mills automotive) base their corporate aircraft at Dillant-Hopkins. The facility also provides a vital public utility role by facilitating aerial photography, fire surveillance flights, power line and pipeline inspection patrols, air ambulance services and law enforcement operations.

Airport Impact

It should be noted that the methodology used to determine the economic impact of each New Hampshire airport is summarized as the Airport Economic Impact Analysis within Chapter Five of the *New Hampshire State Airport System Plan Update*.

Tourism Support – Low
Business Support – Medium
Public Utility - Medium



AIRPORT ECONOMIC IMPACT SUMMARY

SKYHAVEN AIRPORT

Economic Benefits

- 80 based aircraft
- 9 estimated aviation dependent jobs
- Estimated 18,592 annual operations
- Provides access to the national aviation system for corporate and recreational flyers
- Provides linkage to the New Hampshire Seacoast region for transient flyers

Economic Summary

As the only airport and FBO in Strafford County, Skyhaven primarily serves a multitude of functions including flight training, aircraft refueling and service as well as a base for corporate and recreational aircraft. Additionally, the facility serves in a public utility role as the New Hampshire Army National Guard uses it for training purposes.

Airport Impact

It should be noted that the methodology used to determine the economic impact of each New Hampshire airport is summarized as the Airport Economic Impact Analysis within Chapter Five of the *New Hampshire State Airport System Plan Update*.

Tourism Support – Low
Business Support – Low
Public Utility - Low

AIRPORT ECONOMIC IMPACT SUMMARY

CLAREMONT AIRPORT

Economic Benefits

- 2 aviation dependent businesses
- 10,459 annual operations
- 22 based aircraft
- Provides access to the national aviation system for recreational flyers
- Provides linkage to the Upper Valley region's sites and attractions for transient flyers

Economic Summary

The Claremont Airport primarily serves recreational aircraft with many transient flyers using the facility to access the natural features and sites (Lake Sunapee and ski facilities) throughout the region. Two local Claremont businesses (Costa Tool and Optimum Manufacturing) have historically used the facility within their business operations.

Airport Impact

It should be noted that the methodology used to determine the economic impact of each New Hampshire airport is summarized as the Airport Economic Impact Analysis within Chapter Five of the *New Hampshire State Airport System Plan Update*.

Tourism Support – Low
Business Support – Low
Public Utility - Low

AIRPORT ECONOMIC IMPACT SUMMARY

LEBANON MUNICIPAL AIRPORT

Economic Benefits

- 11 aviation dependent businesses
- 76 estimated aviation dependent jobs
- 42,749 annual operations
- Strong public utility component as City of Lebanon Fire Department uses facility for training purposes
- Commercial flights available to destinations including New York and Philadelphia
- Several corporate based aircraft
- Strong public utility asset for emergency medical, government and military use
- Provides access to the national aviation system for recreational flyers
- Provides linkage to the Upper Valley region's sites and attractions for transient flyers

Economic Summary

Although the number of commercial enplanements has declined over the past few years, Lebanon Municipal Airport continues to be one of three commercial airports in New Hampshire (along with Pease Tradeport and Manchester Airport) and the only commercial facility in the Upper Valley and eastern Vermont region. The airport impacts the regional economy by supporting 11 businesses and almost 80 aviation dependent jobs.

Airport Impact

It should be noted that the methodology used to determine the economic impact of each New Hampshire airport is summarized as the Airport Economic Impact Analysis within Chapter Five of the *New Hampshire State Airport System Plan Update*.

Tourism Support – Low
Business Support – Medium
Public Utility - Medium

AIRPORT ECONOMIC IMPACT SUMMARY

PARLIN FIELD (NEWPORT)

Economic Benefits

- 11 based aircraft
- Provides access to the national aviation system for recreational flyers
- Provides linkage to the lake Sunapee Region sites (lakes and Sunapee Ski area) and attractions for transient flyers
- Several aviation and non-aviation related special events at the airport attract thousands of people annually

Economic Summary

As the airport's sponsor, the Town and part-time airport manager have positioned the facility as the "gateway to Lake Sunapee" region. Complete with annual scheduled aviation and non-aviation related special events at the facility, including the very successful balloon festival, the airport attracts thousands of seasonal and year round residents and tourists. Within the past year a restaurant has opened in order to cater to aviation-related guests and, according to the Town Manager, business has been good.

Airport Impact

It should be noted that the methodology used to determine the economic impact of each New Hampshire airport is summarized as the Airport Economic Impact Analysis within Chapter Five of the *New Hampshire State Airport System Plan Update*.

Tourism Support – Low
Business Support – Low
Public Utility - Low



Appendix 5-B – FAA Presentation Regarding Future GA Activity

**FAA GENERAL AVIATION FORECASTS:
2002-2013**



John M. Rodgers

Director, Office of Aviation Policy and Plans

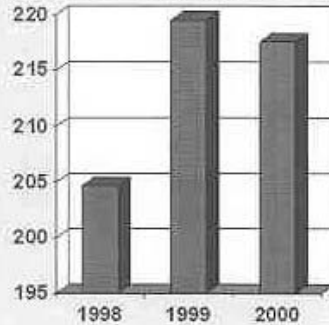
Topics for Discussion

- **General Aviation and Air Taxi Activity Survey (GA Survey)**
- **Mixed Results in 2000/2001**
- **Uncertain Future Environment**
- **Forecast Approach / Methodology**
- **General Aviation Forecast(s)**

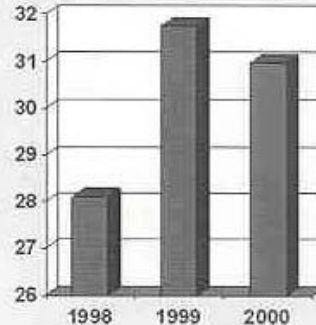


Results from CY 2000 GA Survey

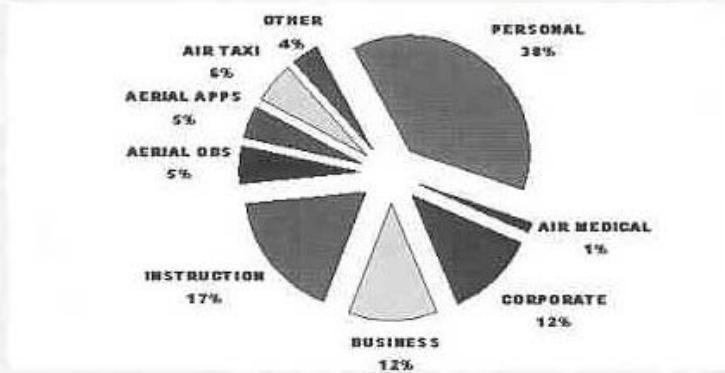
ACTIVE FLEET IN THOUSANDS



HOURS FLOWN IN MILLIONS



Hours Distribution by Use





Mixed News for GA in 2000-2001

- *GA billings set a record for the fourth consecutive year*
- *Turbojet shipments were up for the fifth consecutive year*
- *Total pilot certificates held were up for the fifth consecutive year*

But

Mixed News for GA in 2000-2001

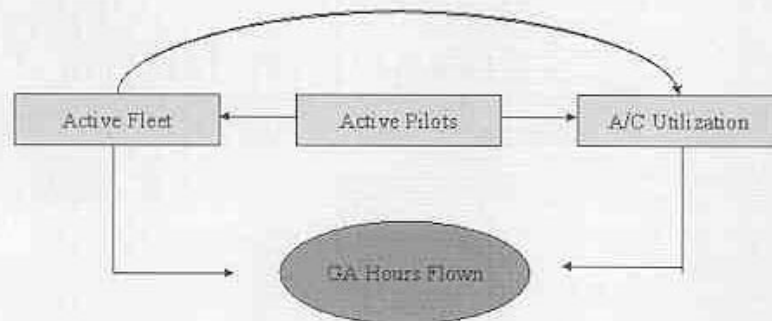
- *GA active fleet and hours flown were down in CY 2000 after five consecutive years of increase*
- *GA activity at FAA facilities down*
- *F/W piston shipments were down*
- *Student certificates were down in 2001 for third consecutive year*

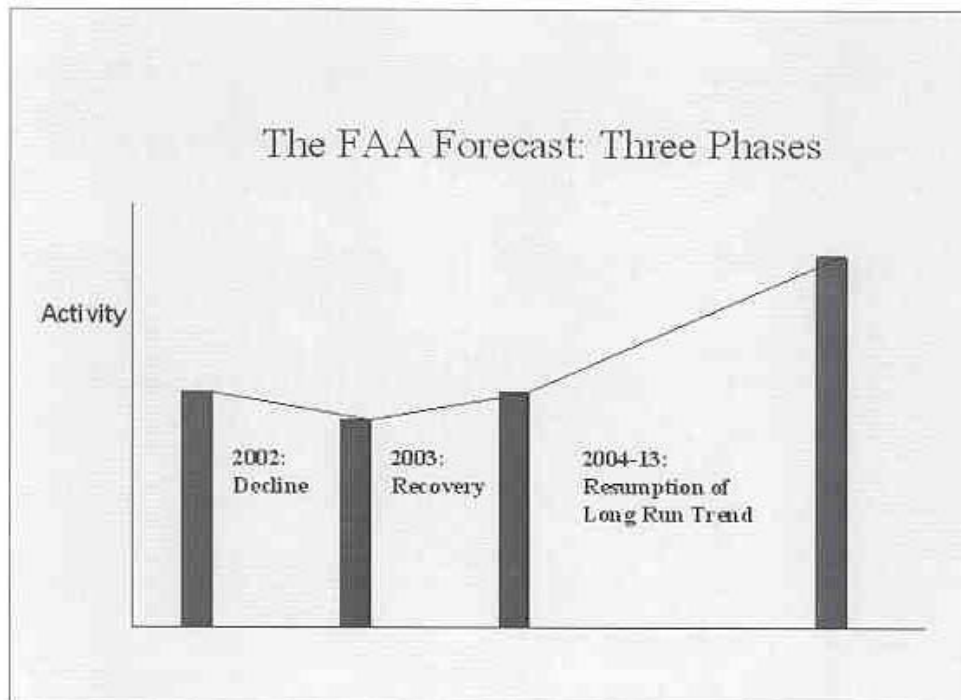
Uncertain Future Environment

- ***Recession in general economy in 2001/2002***
- ***Lasting effects of September 11th***
 - ***Restrictions on GA ?***
 - ***Restrictions on pilot training?***
- ***How fast does GA recover from recession?***
- ***Can fractional ownership maintain pace?***
- ***Will "sport pilot/light sport aircraft" provide a measurable boost to GA?***

General Forecasting Relationships:

GA Forecasting Relationships





GA Active Fleet: Assumptions and Forecasts

→ ***F/W piston***

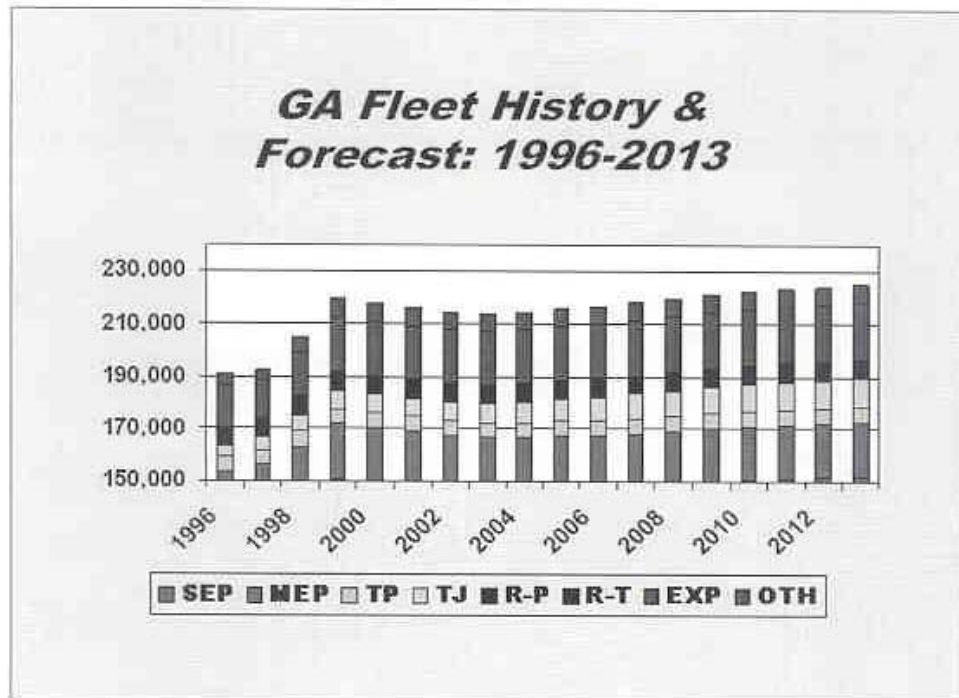
- *Single-engine: contraction in fleet through 2003; no change in 2004; and resumption of growth in 2005*

→ ***F/W Turbine***

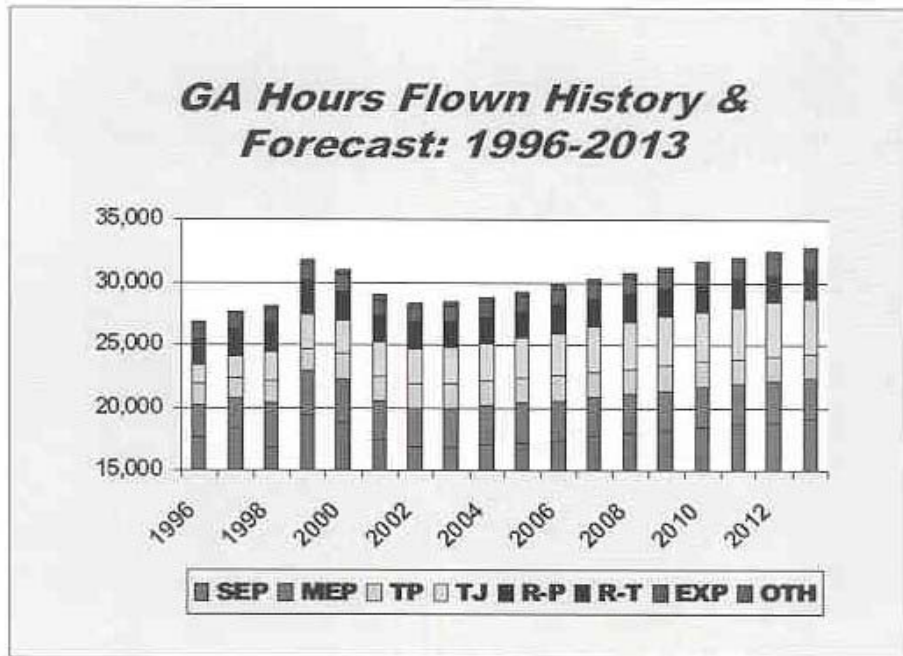
- *Turboprop: slight decline through 2003; modest growth through 2013*
- *Turbofan/jet: modest to strong growth throughout the entire forecast period*

→ ***Rotorcraft***

- *Decline through 2003; modest growth, led by piston through 2013*



- ### Aircraft Utilization: Assumptions and Forecasts
- **Piston**
 - "Aging" of piston fleet and decline in number of student pilots leads to lower piston utilization at end of forecast period
 - **Turbine**
 - Increase in turbine utilization is largely due to increase in number of these aircraft in fractional ownership programs
 - **Rotorcraft**
 - Utilization decreases slightly due to change in fleet mix and changing use patterns
 - **Net Effect**
 - Overall 2.6% increase in utilization over forecast period





Forecast Concerns/Risks

- ***Long term effects of security measures on GA***
- ***Economic cycle – strength of recovery and its effect on GA***
- ***“Aging” GA fleet -- aircraft production and affordability***
- ***Ability of airport and ATC system infrastructure to support growth***

Early Results: Economy and Security

- ***Recession shallower than expected***
 - ***Recovery sooner, but weaker than predicted***
- ***Fuel prices likely to increase***
- ***Most security (e.g., “no fly zone”) restrictions eliminated or relaxed***
- ***Early reports from FAA towers/ centers showing resiliency of GA***



Summary

- ***This year's forecast posed an unusually difficult challenge***
 - *Downturn in GA began in 2000*
 - *U.S. economy in recession for much of 2001*
 - *September 11th and its aftermath*
 - *Cancellation of FAA/TRB Forecast workshop*
- ***Some reasons for optimism for next year***
 - *U.S. economy recovering more quickly than expected*
 - *Turbofan/jet shipments holding up*
 - *Increase in commercial/business use because of the inconvenience imposed by security procedures for scheduled airlines*
- ***Forecast workshop rescheduled for September***



Appendix 5-C – System Plan Aviation Forecasts Background Data



Based Aircraft Forecasts





FAA BASED AIRCRAFT FORECAST									
Base line scenario	Year								
	2000	% of region	2005	% of region	Growth Rate	2010	% of region	Growth R	Source of Base Year 2000 Data
Region/Airport									
Central									
Concord	81	100%	85	100%	4.9%	88	100%	4.0%	5010/ FAA Growth rate
Region Total	81	100%	85	100%		88	100%		
Lakes Region									
Bristol	3	2%	3	2%	4.9%	3	2%	4.0%	5010/ FAA Growth rate
Laconia	97	73%	109	75%	4.9%	113	75%	4.0%	5010/ FAA Growth rate
Wolfeboro	15	11%	16	11%	4.9%	16	11%	4.0%	5010/ FAA Growth rate
Moultonboro	17	13%	18	12%	4.9%	19	12%	4.0%	5010/ FAA Growth rate
Region Total	132	100%	145	100%		151	100%		
Nashua									
Nashua - Boire Field	403	100%	423	100%	4.9%	440	100%	4.0%	5010/ FAA Growth rate
Region Total	403	100%	423	100%		440	100%		
North Country									
Berlin	26	21%	30	23%	4.9%	32	23%	4.0%	5010/ FAA Growth rate
Colebrook	6	5%	6	5%	4.9%	7	5%	4.0%	5010/ FAA Growth rate
Errol	6	5%	6	5%	4.9%	7	5%	4.0%	5010/ FAA Growth rate
Franconia	12	10%	13	10%	4.9%	13	10%	4.0%	5010/ FAA Growth rate
Gorham	4	3%	4	3%	4.9%	4	3%	4.0%	5010/ FAA Growth rate
Haverhill	13	11%	14	10%	4.9%	14	10%	4.0%	5010/ FAA Growth rate
Mount Washington	36	30%	38	29%	4.9%	39	29%	4.0%	5010/AMP Growth rate
Plymouth	16	13%	17	13%	4.9%	17	13%	4.0%	5010/ FAA Growth rate
Twin Mountain	3	2%	3	2%	4.9%	3	2%	4.0%	5010/ FAA Growth rate
Region Total	122	100%	131	100%		136	100%		
Rockingham									
Hampton	70	43%	73	43%	4.9%	76	43%	4.0%	5010/ FAA Growth rate
Pease	91	57%	95	57%	4.9%	99	57%	4.0%	5010/ FAA Growth rate
Region Total	161	100%	169	100%		176	100%		
South									
Manchester	85	100%	89	100%	4.9%	93	100%	4.0%	5010/ FAA Growth rate
Region Total	85	100%	89	100%		93	100%		
Southwest									
Hawthorne	13	12%	14	12%	4.9%	14	12%	4.0%	5010/ FAA Growth rate
Jaffrey	41	38%	43	38%	4.9%	45	38%	4.0%	5010/ FAA Growth rate
Keene	54	50%	57	50%	4.9%	59	50%	4.0%	5010/ FAA Growth rate
Region Total	108	100%	113	100%		118	100%		
Strafford									
Rochester	68	100%	71	100%	4.9%	74	100%	4.0%	5010/ FAA Growth rate
Region Total	68	100%	71	100%		74	100%		
Upper Valley									
Claremont	22	20%	23	20%	4.9%	24	20%	4.0%	5010/ FAA Growth rate
Lebanon	76	70%	80	70%	4.9%	83	70%	4.0%	5010/ FAA Growth rate
Parlin Field	11	10%	12	10%	4.9%	12	10%	4.0%	5010/ FAA Growth rate
Region Total	109	100%	114	100%		119	100%		
State Total	1,269		1,341			1,395			
Forecast Source: FAA Aerospace Forecasts - FY 2001-2012									

Trend Line Analysis - Based Aircraft		Airport Share Of Region 2000																
Region	Airport	OPS 90	OPS 92	Ops 2000	% Change 90-00	Annual Change	Concord	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Central	Concord	81	81	81	-12.0%	-1.3%	81	80	79	78	77	76	75	74	73	72	71	71
Lakes	Region Total	3	3	3	0.0%	-1.3%	3	3	3	3	3	3	2	2	2	2	2	2
	Bristol	132	97	97	-26.5%	-3.0%	97	94	88	86	83	81	78	76	73	71	71	71
	Laconia	24	15	15	-37.5%	-4.6%	15	15	14	14	13	12	12	12	11	11	11	11
	Wolfboro	24	17	17	-29.2%	-3.4%	17	16	16	15	15	14	14	14	13	13	13	12
	Moltonboro	180	132	132	-26.7%	-3.1%	132	128	124	120	117	113	110	106	103	100	97	97
Nashua	Nashua	303	403	403	33.0%	2.9%	403	415	427	439	452	465	478	492	506	521	536	536
North	Region Total	22	26	26	18.2%	1.7%	26	27	27	28	29	30	31	31	32	33	34	34
	Berlin	6	6	6	0.0%	0.0%	6	6	6	6	6	6	6	6	6	6	6	6
	Colebrook	4	6	6	50.0%	4.1%	6	6	6	6	7	7	7	7	7	7	8	8
	Errol	9	12	12	33.3%	2.9%	12	12	13	13	13	14	14	15	15	15	16	16
	Franconia	2	4	4	100.0%	7.2%	4	4	4	4	4	4	5	5	5	5	5	5
	Gorham	2	13	13	550.0%	20.6%	13	13	14	14	14	15	15	16	16	17	17	17
	Haverhill	22	38	38	63.6%	5.0%	38	37	38	39	40	41	42	44	45	46	47	47
	Mt. Washington	15	16	16	6.7%	0.6%	16	16	17	17	18	18	19	19	20	20	21	21
	Plymouth	11	3	3	-72.7%	-12.2%	3	3	3	3	3	3	4	4	4	4	4	4
	Twin Mountain	93	122	122	31.2%	2.8%	122	125	129	132	136	140	144	148	152	156	160	160
Rockingham	Hampton	76	70	70	-7.9%	-0.8%	70	72	74	76	78	81	83	85	88	91	93	93
	Pease	45	91	91	102.2%	7.3%	91	94	96	99	102	105	108	111	114	118	121	121
South	Region Total	121	161	161	33.1%	2.9%	161	166	170	175	180	186	191	197	202	208	214	214
	Manchester	228	85	85	-62.7%	-9.4%	85	77	70	63	57	52	47	43	39	35	32	32
Southwest	Region Total	3	85	85	-94.7%	-9.4%	85	77	70	63	57	52	47	43	39	35	32	32
	Hillsboro	41	13	13	33.3%	15.8%	13	13	13	13	13	13	13	13	13	13	13	13
	Jaffery	66	41	41	0.0%	0.0%	41	41	41	41	41	41	41	40	40	40	40	40
	Keene	110	54	54	-18.2%	-2.0%	54	54	54	54	54	54	54	53	53	53	53	53
Strafford	Region Total	72	108	108	-1.8%	-0.2%	108	108	108	107	107	107	107	107	106	106	106	106
	Rochester	72	68	68	-5.6%	-0.6%	68	68	67	67	66	66	66	65	65	65	65	64
Upper	Region Total	26	68	68	-5.6%	-0.6%	68	68	67	67	66	66	66	65	65	65	65	64
	Vaile	26	22	22	-15.4%	-1.7%	22	22	22	22	22	22	22	22	23	23	23	23
	Claremont	67	76	76	13.4%	1.3%	76	76	77	77	77	77	78	78	78	79	79	79
	Lebanon	12	11	11	-8.3%	-0.9%	11	11	11	11	11	11	11	11	11	11	11	11
	Newport	105	109	109	3.8%	0.4%	109	109	110	110	111	111	111	111	112	112	113	113
Total	Airport Activity	1304	1,269	1,269	-2.7%	-0.3%	1,269	1,275	1,283	1,293	1,303	1,315	1,329	1,343	1,359	1,375	1,393	1,393

* 1990 Data for Pease represents 1993 data, the year Pease started civilian operations



Projected Population Growth Forecast - Based Aircraft

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Pop. % Change	1,289	1,280	1,293	1,305	1,321	1,339	1,356	1,374	1,393	1,412	1,434
# Change	11	0.89%	24	25	16	18	17	18	19	20	21
Region											
Central	81	82	85	87	89	90	93	96	98	101	105
Concord	81	1.00	82	87	89	90	93	96	98	101	105
Lakes	132	133	142	150	152	155	157	160	163	166	170
Bristol	3	3	3	3	3	3	3	4	4	4	4
Laconia	97	86	92	97	98	100	102	103	105	107	110
Wolfboro	15	0.00	16	17	17	17	17	18	18	18	19
Moultonboro	17	0.00	31	33	33	34	35	35	36	36	37
Nashua	403	405	411	418	420	423	426	428	430	432	433
Nashua	403	1.00	411	418	420	423	426	428	430	432	433
North Country	122	122	122	122	123	124	125	125	126	127	128
Berlin	26	51	51	51	52	52	52	53	53	54	54
Colebrook	6	0.00	6	6	6	6	6	6	6	6	6
Errol	6	0.00	3	3	3	3	3	3	3	3	3
Franconia	12	0.00	17	17	17	17	17	17	17	17	17
Gorham	4	0.00	4	4	4	4	4	4	4	4	4
Haverhill	13	0.00	15	15	15	15	15	15	15	15	15
Whitefield	36	0.00	9	9	9	9	9	9	9	9	9
Plymouth	16	0.00	15	15	15	15	15	15	15	15	15
Twin Moun	3	0.00	4	4	4	4	4	4	4	4	4
Rockingham	161	164	165	166	169	171	174	176	178	180	182
Hampton	70	99	99	100	102	103	105	106	107	108	109
Pease	91	0.00	66	66	67	68	69	70	71	72	72
South	85	88	94	100	103	106	108	111	113	115	117
Manchester	85	1.00	94	100	103	106	108	111	113	115	117
Southwest	108	108	108	108	109	110	111	111	113	115	117
Hillsboro	13	0.00	3	3	3	3	3	3	3	3	3
Jaffrey	41	0.00	21	21	21	21	21	22	22	22	23
Keene	54	0.00	84	84	85	85	86	87	88	90	91
Strafford	68	69	73	77	79	80	82	84	87	90	93
Rochester	68	1.00	73	77	79	80	82	84	87	90	93
Upper Valley	109	110	113	117	118	119	120	120	122	124	126
Claremont	22	0.00	20	21	21	21	21	21	22	22	22
Lebanon	76	0.00	82	85	86	86	87	87	89	90	92
Newport	11	0.00	11	11	11	12	12	12	12	12	12
State Total	1,289	1,280	1,312	1,345	1,361	1,378	1,395	1,412	1,431	1,450	1,472
		11	43	65	16	17					



Aircraft Operations Forecasts



Region	Airport	Population Market Share Forecast		Current OPEA	Population Ratio	2001		2002		2003		2004		2005		2006		2007		2008		2009		2010		
		BA	2000			Operations	Operations	Operations	Operations	Operations	Operations	Operations	Operations	Operations	Operations	Operations	Operations	Operations	Operations	Operations	Operations	Operations	Operations	Operations	Operations	Operations
Central	Concord	80	100.0%	50,430	523	52,332	85	52,995	85	52,995	85	52,995	87	54,201	89	55,447	91	56,693	93	57,939	95	59,185	97	60,431	99	61,677
Lakes	Region Total	81	100.0%	50,430	623	52,332	85	52,995	85	52,995	85	52,995	87	54,201	89	55,447	91	56,693	93	57,939	95	59,185	97	60,431	99	61,677
	Bretel	3	2.3%	1,200	400	1,246	3	1,255	3	1,255	3	1,255	3	1,261	3	1,268	3	1,275	3	1,281	3	1,288	3	1,295	4	1,301
	Lebanon	97	73.5%	34,886	360	36,233	101	36,498	103	36,763	104	37,027	104	37,292	107	37,557	109	37,822	112	38,087	115	38,352	118	38,617	122	38,882
	Woolboro	15	11.4%	6,000	400	6,230	16	6,396	16	6,562	16	6,727	17	6,893	17	7,059	17	7,225	18	7,391	18	7,557	19	7,723	19	7,889
	Moultonborough	17	12.9%	11,870	899	12,324	18	12,414	18	12,504	18	12,594	18	12,684	19	12,774	19	12,864	20	12,954	20	13,044	21	13,134	21	13,224
	Region Total	132	53.9%	53,968	469	56,031	138	56,442	140	56,853	142	57,264	144	57,675	146	58,086	148	58,497	150	58,908	152	59,319	154	59,730	156	60,141
Nashua	Region Total	403	100.0%	100,972	251	104,918	422	105,922	427	106,926	432	107,930	437	108,934	442	109,938	447	110,942	452	111,946	457	112,950	462	113,954	467	114,958
North Country	Region Total	403	100.0%	100,972	251	104,918	422	105,922	427	106,926	432	107,930	437	108,934	442	109,938	447	110,942	452	111,946	457	112,950	462	113,954	467	114,958
	Bennington	26	21.3%	14,800	458	15,024	26	15,024	26	15,024	26	15,024	26	15,024	26	15,024	26	15,024	26	15,024	26	15,024	26	15,024	26	15,024
	Franklin	6	4.9%	1,500	280	1,500	6	1,500	6	1,500	6	1,500	6	1,500	6	1,500	6	1,500	6	1,500	6	1,500	6	1,500	6	1,500
	Errol	6	4.9%	1,500	280	1,500	6	1,500	6	1,500	6	1,500	6	1,500	6	1,500	6	1,500	6	1,500	6	1,500	6	1,500	6	1,500
	Francestown	12	9.8%	4,500	375	4,500	12	4,500	12	4,500	12	4,500	12	4,500	12	4,500	12	4,500	12	4,500	12	4,500	12	4,500	12	4,500
	Gorham	4	3.3%	1,000	250	1,000	4	1,000	4	1,000	4	1,000	4	1,000	4	1,000	4	1,000	4	1,000	4	1,000	4	1,000	4	1,000
	Hamilton	13	10.7%	4,000	308	4,007	13	4,007	13	4,007	13	4,007	13	4,007	13	4,007	13	4,007	13	4,007	13	4,007	13	4,007	13	4,007
	Hooksett	16	13.1%	4,000	250	4,007	16	4,007	16	4,007	16	4,007	16	4,007	16	4,007	16	4,007	16	4,007	16	4,007	16	4,007	16	4,007
	Keegan	3	2.5%	1,000	333	1,002	3	1,002	3	1,002	3	1,002	3	1,002	3	1,002	3	1,002	3	1,002	3	1,002	3	1,002	3	1,002
	Twin Mountain	3	2.5%	1,000	333	1,002	3	1,002	3	1,002	3	1,002	3	1,002	3	1,002	3	1,002	3	1,002	3	1,002	3	1,002	3	1,002
Region Total	Region Total	122	33.2%	33,250	273	33,306	122	33,306	122	33,306	122	33,306	122	33,379	124	33,852	126	34,325	127	34,798	128	35,271	129	35,744	131	36,217
Rochingham	Region Total	70	43.4%	17,500	556	18,073	74	18,646	77	19,219	80	19,792	83	20,365	86	20,938	89	21,511	92	22,084	95	22,657	98	23,230	101	23,803
South	Region Total	181	100.0%	45,740	347	47,344	189	49,948	197	52,552	205	55,156	213	57,760	221	60,364	229	62,968	237	65,572	245	68,176	253	70,780	261	73,384
	Manchester	105	100.0%	45,740	347	47,344	105	47,344	105	47,344	105	47,344	105	47,344	105	47,344	105	47,344	105	47,344	105	47,344	105	47,344	105	47,344
Southwest	Region Total	85	100.0%	45,740	347	47,344	85	47,344	85	47,344	85	47,344	85	47,344	85	47,344	85	47,344	85	47,344	85	47,344	85	47,344	85	47,344
	Hillsboro	13	12.0%	1,500	115	1,499	13	1,499	13	1,499	13	1,499	13	1,499	13	1,499	13	1,499	13	1,499	13	1,499	13	1,499	13	1,499
	Jaffrey	41	38.0%	10,848	250	10,841	41	10,841	41	10,841	41	10,841	41	10,841	41	10,841	41	10,841	41	10,841	41	10,841	41	10,841	41	10,841
	Kennebunk	54	50.0%	42,944	790	42,616	54	42,616	54	42,616	54	42,616	54	42,616	54	42,616	54	42,616	54	42,616	54	42,616	54	42,616	54	42,616
Stafford	Region Total	108	100.0%	10,592	273	10,592	108	10,592	108	10,592	108	10,592	108	10,592	108	10,592	108	10,592	108	10,592	108	10,592	108	10,592	108	10,592
	Rochester	68	100.0%	10,592	273	10,592	68	10,592	68	10,592	68	10,592	68	10,592	68	10,592	68	10,592	68	10,592	68	10,592	68	10,592	68	10,592
Upper Valley	Region Total	273	100.0%	10,592	273	10,592	273	10,592	273	10,592	273	10,592	273	10,592	273	10,592	273	10,592	273	10,592	273	10,592	273	10,592	273	10,592
	Champlain	75	29.2%	10,460	475	10,687	79	10,753	83	10,819	87	10,885	91	10,951	95	11,017	99	11,083	103	11,149	107	11,215	111	11,281	115	11,347
	Concord	75	69.7%	42,349	502	43,596	79	43,540	83	43,811	87	44,082	91	44,353	95	44,624	99	44,895	103	45,166	107	45,437	111	45,708	115	45,979
	Newport	11	10.1%	5,730	521	5,836	11	5,891	11	5,946	11	6,001	11	6,056	11	6,111	11	6,166	11	6,221	11	6,276	11	6,331	11	6,386
Region Total	Region Total	109	100.0%	56,938	541	60,051	112	60,382	112	60,713	114	61,044	114	61,375	116	61,706	116	62,037	117	62,368	119	62,699	121	63,030	123	63,361
State Total	State Total	1289	100.0%	479,044	377	493,980	1317	498,919	1330	503,858	1346	508,797	1362	513,736	1378	518,675	1394	523,614	1410	528,553	1426	533,492	1442	538,431	1458	543,370

Projected Population Growth Forecast - Operations

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Region	50,430	50,856	51,713	52,616	53,207	53,874	54,859	55,856	56,945	58,048	59,247
Central	50,430	50,856	51,713	52,616	53,207	53,874	54,859	55,856	56,945	58,048	59,247
Lakes	53,968	54,394	59,566	64,827	65,418	66,420	67,404	68,402	69,480	70,593	72,191
Bristol	1,200	1,209	1,324	1,441	1,455	1,477	1,489	1,521	1,545	1,570	1,605
Laconia	34,898	35,174	38,518	41,920	42,302	42,950	43,586	44,231	44,935	45,648	46,382
Wellsboro	6,000	6,047	6,622	7,273	7,384	7,384	7,494	7,605	7,726	7,848	8,026
Moultonboro	11,870	11,964	13,101	14,258	14,388	14,609	14,825	15,045	15,284	15,527	15,878
Nashua	100,972	101,825	104,445	107,297	108,183	109,184	110,169	111,166	111,892	112,627	113,027
Nashua	100,972	101,825	104,445	107,297	108,183	109,184	110,169	111,166	111,892	112,627	113,027
North Country	33,250	33,250	33,250	33,250	33,545	33,879	34,207	34,540	34,903	35,270	35,670
Berlin	14,000	14,000	14,000	14,000	14,124	14,265	14,403	14,543	14,696	14,851	15,019
Colebrook	1,500	1,500	1,500	1,500	1,513	1,528	1,543	1,558	1,575	1,591	1,609
Errol	750	750	750	750	757	764	772	779	787	796	805
Franconia	4,500	4,500	4,500	4,500	4,540	4,585	4,630	4,675	4,724	4,773	4,828
Gorham	1,000	1,000	1,000	1,000	1,009	1,019	1,029	1,039	1,050	1,061	1,073
Haverhill	4,000	4,000	4,000	4,000	4,036	4,076	4,115	4,155	4,199	4,243	4,291
Whitefield	2,500	2,500	2,500	2,500	2,522	2,547	2,572	2,597	2,624	2,652	2,682
Plymouth	4,000	4,000	4,000	4,000	4,036	4,076	4,115	4,155	4,199	4,243	4,291
Twin Mtn	1,000	1,000	1,000	1,000	1,009	1,019	1,029	1,039	1,050	1,061	1,073
Rockingham	62,360	63,426	63,676	63,926	65,107	66,109	67,094	67,756	68,484	69,219	70,019
Hampton	37,500	38,141	38,291	38,442	39,152	39,754	40,347	40,746	41,183	41,625	42,105
Pease	24,860	25,285	25,385	25,484	25,955	26,355	26,747	27,012	27,301	27,595	27,913
South	45,740	46,806	48,947	51,205	52,387	53,388	54,373	55,370	56,095	56,831	57,630
Manchester	45,740	46,806	48,947	51,205	52,387	53,388	54,373	55,370	56,095	56,831	57,630
Southwest	54,784	54,784	54,784	54,784	55,089	55,423	55,751	56,084	56,809	57,545	58,344
Hillsboro	1,500	1,500	1,500	1,500	1,508	1,517	1,526	1,535	1,555	1,575	1,597
Jaffrey	10,648	10,648	10,648	10,648	10,705	10,770	10,834	10,899	11,040	11,183	11,338
Keene	42,646	42,646	42,646	42,646	42,876	43,136	43,391	43,650	44,214	44,787	45,409
Strafford	18,592	18,805	20,937	23,070	23,661	24,328	24,985	25,650	26,738	27,841	29,040
Rochester	18,592	18,805	20,937	23,070	23,661	24,328	24,985	25,650	26,738	27,841	29,040
Upper Valley	58,938	59,151	60,198	61,352	61,647	61,981	62,309	62,641	63,367	64,102	64,901
Claremont	10,459	10,497	10,683	10,887	10,940	10,999	11,057	11,116	11,245	11,375	11,517
Lebanon	42,749	42,904	43,663	44,500	44,714	44,966	45,194	45,435	45,961	46,495	47,074
Newport	5,730	5,751	5,853	5,955	5,993	6,026	6,058	6,090	6,161	6,232	6,310
State Total	479,044	483,307	497,526	512,336	518,244	524,587	531,151	537,468	544,721	552,077	560,068
	18,482	4,263	18,482	29,028	5,908	6,343	6,564	6,317	7,254	7,355	7,991

Region	Airport	Conced	Operations Per Based Aircraft Forecast		Current OPA	Population 2000	Population Ratio	2001		2002		2003		2004		2005		2006		2007		2008		2009		2010				
			BA	OP				BA	OP	BA	OP	BA	OP	BA	OP	BA	OP	BA	OP	BA	OP	BA	OP	BA	OP	BA	OP	BA	OP	BA
Central	Region Total	81	100.0%	50,430	100.0%	104,152	1,386	84	52,332	85	52,955	85	52,955	87	52,955	89	54,201	91	54,093	93	57,939	95	58,185	97	60,431	99	61,077			
Lakes	Bristol	3	2.3%	1,200	2.4%	400	3	1,248	3	1,254	3	1,254	3	1,273	3	1,291	3	1,328	3	1,381	4	1,428	4	1,455	4	1,455	4	1,510		
	Laconia	97	73.5%	34,898	64.7%	360	103	36,098	103	37,027	104	37,559	107	38,618	109	39,407	112	40,465	115	41,233	118	42,319	122	43,310	122	43,903	122	45,000		
	Woolboro	15	11.4%	6,000	11.1%	400	16	6,200	16	6,386	16	6,457	17	6,593	17	6,775	17	6,959	18	7,139	18	7,319	18	7,498	19	7,648	19	7,848		
	Molokini	17	12.9%	11,870	22.0%	688	18	12,324	18	12,394	18	12,414	19	12,504	19	12,584	20	12,674	20	12,764	20	12,854	21	12,944	21	13,034	21	13,124		
	Region Total	132		53,968		409	84,690	137	56,033	138	56,442	140	56,851	142	57,260	148	58,078	149	58,487	153	62,577	157	64,313	160	65,440	166	67,894			
Nashua	Nashua	403	100.0%	100,972	100.0%	251	418	104,918	422	105,922	427	106,926	427	107,930	432	108,934	438	109,938	443	110,942	448	111,946	452	112,950	458	113,954	465	114,958		
North Country	Region Total	403		100,972		251	418	104,918	422	105,922	427	106,926	427	107,930	432	108,934	438	109,938	443	110,942	448	111,946	452	112,950	458	113,954	465	114,958		
	Berlin	20	21.3%	14,000	42.1%	538	26	14,074	26	14,024	26	14,139	26	14,253	27	14,367	28	14,481	28	14,595	29	14,709	29	14,823	30	14,937	31	15,051		
	Colebrook	6	4.9%	1,500	4.5%	250	6	1,503	6	1,503	6	1,515	6	1,527	6	1,539	6	1,551	6	1,563	6	1,575	6	1,587	6	1,600	6	1,613		
	Encl	6	4.9%	750	2.3%	125	6	751	6	751	6	757	6	763	6	769	6	775	6	781	6	787	6	793	6	799	6	805		
	France	12	9.8%	4,500	13.3%	375	12	4,508	12	4,508	12	4,516	12	4,524	12	4,532	12	4,540	12	4,548	12	4,556	12	4,564	12	4,572	12	4,580		
	Gorham	4	3.3%	1,000	1.0%	300	4	1,000	4	1,000	4	1,000	4	1,000	4	1,000	4	1,000	4	1,000	4	1,000	4	1,000	4	1,000	4	1,000		
	Hamilton	15	11.4%	5,000	12.0%	300	15	5,000	15	5,000	15	5,000	15	5,000	15	5,000	15	5,000	15	5,000	15	5,000	15	5,000	15	5,000	15	5,000		
	Whitfield	30	29.5%	2,500	7.5%	69	30	2,500	30	2,500	30	2,500	30	2,500	30	2,500	30	2,500	30	2,500	30	2,500	30	2,500	30	2,500	30	2,500		
	Plymouth	16	13.1%	4,000	12.0%	250	16	4,007	16	4,007	16	4,007	16	4,007	16	4,007	16	4,007	16	4,007	16	4,007	16	4,007	16	4,007	16	4,007		
	Twin Mountain	3	2.9%	1,000	3.0%	333	3	1,002	3	1,002	3	1,002	3	1,002	3	1,002	3	1,002	3	1,002	3	1,002	3	1,002	3	1,002	3	1,002		
	Region Total	122		33,350		273	61,327	122	33,306	122	33,306	122	33,306	123	33,306	124	33,306	124	33,306	126	33,306	127	33,306	128	33,306	130	33,306	131	35,763	
Rockingham	Region Total	70	43.5%	37,500	60.1%	536	73	39,330	74	39,795	76	40,684	77	40,684	77	40,684	78	41,657	79	42,123	79	42,355	80	42,821	81	43,286	82	43,752	82	45,252
	Pease	91	55.5%	24,800	39.9%	273	96	26,073	97	26,382	98	26,644	99	27,153	101	27,616	102	27,916	102	27,916	102	27,916	103	28,079	104	28,387	105	28,695	106	29,004
South	Region Total	161	100.0%	45,740	100.0%	387	180,866	169	85,403	171	86,177	174	87,338	176	88,112	179	89,273	181	90,434	181	90,434	182	90,434	184	91,308	186	92,182	188	93,056	
	Manchester	85		45,740		538	88	47,344	89	47,882	90	48,420	91	48,958	92	49,496	93	50,034	94	50,572	94	50,572	94	50,572	95	51,110	96	51,648		
Southwest	Region Total	85		45,740		538	88	47,344	89	47,882	90	48,420	91	48,958	92	49,496	93	50,034	94	50,572	94	50,572	94	50,572	95	51,110	96	51,648		
	Hillsboro	13	12.0%	1,500	9.7%	115	13	1,469	13	1,469	13	1,469	13	1,469	13	1,469	13	1,469	13	1,469	13	1,469	14	1,469	14	1,469	14	1,469		
	Alley	11	10.4%	1,000	11.1%	200	11	1,041	11	1,041	11	1,041	11	1,041	11	1,041	11	1,041	11	1,041	11	1,041	11	1,041	11	1,041	11	1,041		
	Keene	54	50.0%	42,840	77.8%	789	54	42,816	54	42,816	54	42,816	55	43,011	55	43,406	56	43,801	56	44,196	57	44,591	57	44,986	58	45,381	59	45,776		
Stafford	Region Total	168		54,794		607	92,852	168	54,794	168	54,794	168	54,794	169	55,283	170	55,772	171	56,261	171	56,261	172	56,750	173	57,239	174	57,728	175	58,217	
	Rochester	68	100.0%	18,352	100.0%	273	418	104,918	422	105,922	427	106,926	427	107,930	432	108,934	438	109,938	443	110,942	448	111,946	452	112,950	458	113,954	465	114,958		
Upper Valley	Region Total	68		18,352		273	418	104,918	422	105,922	427	106,926	427	107,930	432	108,934	438	109,938	443	110,942	448	111,946	452	112,950	458	113,954	465	114,958		
	Claremont	22	20.2%	10,459	17.7%	475	22	10,459	23	10,449	23	10,449	23	10,449	23	10,449	23	10,449	23	10,449	23	10,449	24	10,449	24	10,449	24	10,449		
	Lebanon	76	69.7%	42,749	72.3%	562	77	43,358	78	43,848	79	44,338	80	44,828	81	45,318	82	45,808	83	46,298	84	46,788	85	47,278	86	47,768	87	48,258		
	Newport	11	10.1%	5,700	9.7%	321	11	5,859	11	5,859	11	5,859	11	5,859	11	5,859	11	5,859	11	5,859	11	5,859	11	5,859	11	5,859	11	5,859		
	Region Total	109		58,938		541	81,320	111	60,051	112	60,932	113	61,813	114	62,694	115	63,575	116	64,456	117	65,337	118	66,218	120	67,100	122	67,982			
State Total	Region Total	1269		479,044		377	1,195,279	1269	492,880	1317	496,868	1330	501,455	1346	507,407	1354	510,088	1332	521,995	1400	528,051	1419	535,767	1439	544,471	1461	553,948			

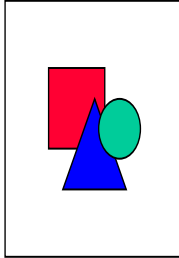


Trend Line Analysis - Operations				Airport Share Of Region																	
Region	Airport	Operations 1990	Operations 2000	% Change 1990-2000	Annual Change	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010					
Central	Concord	70,570	50,430	-28.5%	-3.3%	100.0%	50,430	48,764	47,152	45,594	44,088	42,631	39,860	38,543	37,269	36,038					
	Region Total	70,570	50,430	-28.5%	-3.3%	Concord	50,430	48,764	47,152	45,594	44,088	42,631	39,860	38,543	37,269	36,038					
Lakes	Bristol	1,200	1,200	0.0%	0	2.2%	1,200	1,151	1,104	1,059	1,015	974	896	859	824	790					
	Laconia	62,309	34,898	-44.0%	-5.6%	64.7%	34,898	33,470	32,100	30,786	29,526	28,317	26,046	24,980	23,958	22,977					
	Wolfboro	11,204	6,000	-46.4%	-6.1%	11.1%	6,000	5,754	5,519	5,293	5,076	4,869	4,478	4,295	4,119	3,950					
	Moltenboro	8,435	11,870	40.4%	3.5%	22.0%	11,870	11,384	10,918	10,471	10,043	9,632	8,859	8,497	8,149	7,815					
	Region Total	81,968	53,968	-34.2%	-4.1%	Nashua	53,968	51,759	49,640	47,608	45,660	43,791	41,998	40,279	38,630	37,049	35,533				
Nashua	Nashua	243,340	100,972	-58.5%	-8.4%	100.972	100,972	92,470	84,683	77,553	71,022	65,042	59,565	54,550	49,956	45,750	41,898				
	Region Total	243,340	100,972	-58.5%	-8.4%	North Cour	14,000	13,452	12,925	12,419	11,932	11,465	11,016	10,585	10,170	9,772	9,389				
	Colebrook	1,500	1,500	0.0%	0	4.5%	1,500	1,441	1,385	1,331	1,278	1,228	1,180	1,134	1,090	1,047	1,006				
	Errol	1,761	750	-57.4%	-8.2%	2.3%	750	721	692	665	639	614	590	567	545	523	503				
	Franconia	6,264	4,500	-28.2%	-3.3%	13.5%	4,500	4,324	4,154	3,992	3,835	3,685	3,541	3,402	3,269	3,141	3,018				
	Gorham	4,000	1,000	-75.0%	-12.9%	3.0%	1,000	961	923	887	852	819	787	756	726	698	671				
	Haverhill	2,736	4,000	46.2%	3.9%	12.0%	4,000	3,843	3,693	3,548	3,409	3,276	3,147	3,024	2,906	2,792	2,683				
	Mt. Washington	7,363	2,500	-66.0%	-10.2%	7.5%	2,500	2,402	2,308	2,218	2,131	2,047	1,967	1,890	1,816	1,745	1,677				
	Plymouth	11,512	4,000	-65.3%	-10.0%	12.0%	4,000	3,843	3,693	3,548	3,409	3,276	3,147	3,024	2,906	2,792	2,683				
	Twin Mountain	5,405	1,000	-81.5%	-15.5%	3.0%	1,000	961	923	887	852	819	787	756	726	698	671				
	Region Total	49,579	33,250	-32.9%	-3.9%	Rockingha	34,491	38,700	39,939	41,217	42,536	43,898	45,303	46,752	48,249	49,793	51,387				
	Hampton	11,017	24,860	125.7%	8.5%	39.9%	24,860	25,656	26,477	27,324	28,199	29,101	30,033	30,994	31,986	33,009	34,066				
	Pease *	45,508	62,360	37.0%	3.2%	South	62,360	64,356	66,416	68,541	70,735	72,999	75,335	77,746	80,234	82,802	85,452				
	Manchester	165,822	45,740	-72.4%	-12.1%	100.0%	45,740	40,213	35,353	31,081	27,325	24,023	21,120	18,568	16,324	14,351	12,617				
	Region Total	165,822	45,740	-72.4%	-12.1%	Southwest	10,000	1,461	1,423	1,385	1,349	1,314	1,279	1,246	1,213	1,182	1,151				
	Hillsboro	17,374	10,648	-38.7%	-4.8%	19.4%	10,648	10,370	10,098	9,834	9,577	9,327	9,083	8,845	8,614	8,389	8,169				
	Jaffery	44,046	42,646	-3.2%	-0.3%	77.8%	42,646	41,531	40,445	39,387	38,357	37,354	36,377	35,426	34,499	33,597	32,716				
	Keene	71,420	54,794	-23.3%	-2.6%	Stratford	23,736	18,592	17,706	17,278	16,861	16,455	16,057	15,670	15,292	14,923	14,563				
	Region Total	23,736	18,592	-21.7%	-2.4%	Upper Valle	9,825	10,459	9,451	8,985	8,541	8,119	7,718	7,337	6,975	6,630	6,303				
	Claremont	76,335	42,749	-44.0%	-5.6%	72.5%	42,749	40,638	38,631	36,723	34,909	33,185	31,546	29,988	28,507	27,099	25,761				
	Lebanon	11,545	5,730	-50.4%	-6.8%	9.7%	5,730	5,447	5,178	4,922	4,679	4,448	4,228	4,020	3,821	3,632	3,453				
	Newport	97,805	58,938	-39.7%	-4.9%	Total Airport	849,748	479,044	436,873	418,386	401,443	385,916	371,693	358,672	346,763	335,882	325,954				
	Region Total	97,805	58,938	-39.7%	-4.9%		479,044	457,040	436,873	418,386	401,443	385,916	371,693	358,672	346,763	335,882	325,954				

* 1990 Data for Pease represents 1993 data, the year Pease started civilian operations



Appendix 7-A – New Hampshire Statute Title XXXIX, Airports, Chapter 424 Airport Zoning



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Chapter 424: Airport Zoning

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[Section 424:10 Acquisition of Air Rights](#)



**TITLE XXXIX
AERONAUTICS**

**CHAPTER 424
AIRPORT ZONING**

Section 424:1

424:1 Definitions. – As used in this chapter unless the context otherwise requires:

I. "Airport" means any area of land or water, whether constructed or not, which has been approved by the commissioner as a site for the landing and taking-off of aircraft or utilized or to be utilized by the public as a point of arrival or departure by air.

II. "Airport hazard" means any structure, tree, smoke, steam, dust or other substance which obstructs the aerial approaches of a publicly owned airport or impairs the reasonable visibility in the vicinity thereof, electrical impulses and disturbances which interfere with radio aids or communications and lights which might result in glare in the vision of pilots of aircraft or be confused with airport lights.

III. An airport is "publicly-owned" if the portion thereof used for the landing and taking-off of aircraft is owned by a governmental body, political subdivision, public agency, or other public corporation.

IV. "Department" means the department of transportation.

V. "Person" means any individual, firm, co-partnership, corporation, company, association, joint stock association or body politic, and includes any trustee, receiver, assignee, or other similar representative thereof.

VI. "Structure" means any object constructed or installed by man, including such objects although regulated or licensed by other provisions of law.

VII. "Tree" means any object of natural growth.

Source. 1941, 145:1; 199:40. RL 51:78. RSA 424:1. 1955, 58:1. 1985, 402:6, I(c)(3), 32.



**TITLE XXXIX
AERONAUTICS**

**CHAPTER 424
AIRPORT ZONING**

Section 424:2

424:2 Airport Hazards Not in Public Interest. – It is hereby found and declared that an airport hazard endangers the lives and property of users of the airport and of occupants of land in its vicinity, and also, if of the obstruction type, in effect reduces the size of the area available for the landing, taking-off and maneuvering of aircraft, thus tending to destroy or impair the utility of the airport and the public investment therein, and is therefore not in the interest of the public health, public safety, or general welfare.

Source. 1941, 145:2. RL 51:79.

**TITLE XXXIX
AERONAUTICS**

**CHAPTER 424
AIRPORT ZONING**

Section 424:3

424:3 Preparation of Airport-Approach Plans. – The department of transportation is hereby empowered and directed to formulate and adopt, and from time to time as may be necessary revise, an airport-approach plan for each publicly-owned airport in the state. Each such plan shall indicate the circumstances in which structures and trees are or would be airport hazards, the area within which measures for the protection of the airport's aerial approaches should be taken, and what the height limits and other objectives of such measures should be. In adopting or revising any such plan, the department shall consider, among other things, the character of the flying operations expected to be conducted at the airport, the nature of the terrain, the height of existing structures and trees above the level of the airport, and the practicability of lowering or removing existing obstructions, and all other material matters, and the department may obtain and consider the views of the agency of the federal government charged with the fostering of civil aeronautics as to the aerial approaches necessary to safe flying operations at the airport.

Source. 1941, 145:3. RL 51:80. RSA 424:3. 1985, 402:6, I(c)(3).



**TITLE XXXIX
AERONAUTICS**

**CHAPTER 424
AIRPORT ZONING**

Section 424:4

424:4 Privately-owned Airports. – The department of transportation is hereby empowered and directed to formulate and adopt, and from time to time as may be necessary revise, an airport-approach plan for such airports as are privately owned but which have been licensed for commercial operation, have facilities available for public use and are necessary in the opinion of the department for the maintenance of an effective airway system in the state. Every privately-owned airport so designated by the department is hereby declared to be eligible for zoning protection and for the purposes hereof shall be deemed to be a publicly-owned airport for the purposes of airport zoning as provided in this chapter.

Source. 1949, 53:2. RSA 424:4. 1985, 402:6, I(c)(3).

**TITLE XXXIX
AERONAUTICS
CHAPTER 424
AIRPORT ZONING**

Section 424:5

424:5 Adoption of Airport Zoning Regulations. –

I. Every town having within its territorial limits an airport, or an area approved as an airport site by the commissioner, shall adopt, administer and enforce, under the police power and in the manner and upon the conditions hereinafter prescribed, airport zoning regulations applicable to such area, which regulations shall divide the area into zones, and, within such zones, specify the land uses permitted, regulate and restrict the height to which structures or trees may be erected or allowed to grow, and regulate and restrict the creation and discharge of smoke, steam, dust or other obstructions to visibility, electrical impulses and disturbances which interfere with radio aids or communication and regulate and restrict lighting as may be necessary to effectuate the safe approach to the airport.

II. In the event that a town has adopted, or hereafter adopts, a general zoning ordinance regulating, among other things, the height of buildings, any airport zoning regulations adopted for the same area or portion thereof under this chapter, may be incorporated in and made a part of such general zoning regulations, and be administered and enforced in connection therewith, but such general zoning regulations shall not limit the effectiveness or scope of the regulations adopted hereunder.

III. Any zoning or other regulations applicable to any area within which, according to an airport-approach plan adopted by the department, measures should be taken for the protection of airport approaches, including not only any airport zoning regulations adopted under this chapter but any zoning or other regulations dealing with the same or similar matters that have been or may be adopted under authority other than that conferred by this chapter, shall be consistent with, and conform to, the department's approach plan for such area, and shall be amended from time to time as may be necessary to conform to any revision of the plan that may be made by the department.

IV. All airport zoning regulations adopted hereunder shall be reasonable, and none shall require the removal, lowering, or other change or alteration of any structure or tree not conforming to the regulations when adopted or amended, or otherwise interfere with the continuance of any nonconforming use, except as provided in RSA 424:6, I.

V. If any city or town fails to adopt within a reasonable time airport zoning regulations, the department may, for the protection of the public safety, adopt and from time to time as may be necessary amend or repeal such regulations for such city or town until airport zoning regulations herein provided for are adopted by such city or town.

Source. 1941, 145:4. RL 51:81. RSA 424:5. 1955, 58:2. 1985, 402:6, I(c)(3).

**TITLE XXXIX
AERONAUTICS
CHAPTER 424
AIRPORT ZONING
Section 424:6**

424:6 Permits and Variances. –

I. PERMITS. Where advisable to facilitate the enforcement of zoning regulations adopted pursuant to this chapter, a system may be established for granting permits to establish or construct new structures and other uses and to replace existing structures and other uses or make substantial changes therein or substantial repairs thereof. In any event, before any nonconforming structure or tree may be replaced, substantially altered or repaired, rebuilt, allowed to grow higher, or replanted, a permit must be secured from the administrative agency authorized to administer and enforce the regulations, authorizing such replacement, change or repair. No such permit shall be granted that would allow the structure or tree in question to be made higher or become a greater hazard to air navigation than it was when the applicable regulation was adopted; and whenever the administrative agency determines that a nonconforming structure or tree has been abandoned or more than 80 percent torn down, destroyed, deteriorated, or decayed: (a) no permit shall be granted that would allow said structure or tree to exceed the applicable height limit or otherwise deviate from the zoning regulations, but a permit shall be issued as of right if the structure as erected or altered is in conformance with the regulations or will not constitute a greater hazard than the structure that is replaced or altered; and (b) whether application is made for a permit under this paragraph or not, the said agency may by appropriate action compel the owner of the nonconforming structure or tree to lower, remove, reconstruct, or equip such object as may be necessary to conform to the regulations. Except as indicated, all applications for permits for replacement, change or repair of nonconforming uses shall be granted.

II. VARIANCES. Any person desiring to erect any structure, or increase the height of any structure, or permit the growth of any tree, or otherwise use his property in violation of airport zoning regulations adopted hereunder may apply to the zoning board of adjustment for a variance from the zoning regulations in question. Such variances shall be allowed where a literal application or enforcement of the regulations would result in practical difficulty or unnecessary hardship and the relief granted would not be contrary to the public interest but do substantial justice and be in accordance with the spirit of the regulations.

III. OBSTRUCTION MARKING AND LIGHTING. In granting any permit or variance under this section, the administrative agency or zoning board of adjustment may, if it deems such action advisable to effectuate the purposes hereof and reasonable in the circumstances, so condition such permit or variance as to require the owner of the structure or tree in question to permit the political subdivision, at its own expense, to install, operate, and maintain suitable obstruction markers and obstruction lights thereon.



Source. 1941, 145:5. RL 51:82. 2001, 40:1, eff. Aug. 7, 2001.

**TITLE XXXIX
AERONAUTICS**

**CHAPTER 424
AIRPORT ZONING**

Section 424:6-a

424:6-a Application of Zoning and Planning Laws. – The provisions of title LXIV shall apply to procedures for adoption of local airport zoning regulations, the administration and enforcement of the requirements of local airport zoning regulations, and procedures for rehearing and appeal from any action taken by a local land use board, building inspector, or the local legislative body with respect to airport zoning regulations.

Source. 2001, 40:2, eff. Aug. 7, 2001.

**TITLE XXXIX
AERONAUTICS**

**CHAPTER 424
AIRPORT ZONING**

Section 424:10

424:10 Acquisition of Air Rights. – In any case in which: (1) it is desired to remove, lower, or otherwise terminate a nonconforming use; or (2) the approach protection necessary according to the department's airport-approach plan cannot, because of constitutional limitations, be provided by airport zoning regulations hereunder; or (3) it appears advisable that the necessary approach protection be provided by acquisition of property rights rather than by airport zoning regulations, the town within which the property or nonconforming use is located, the town owning the airport or served by it, or the governor and council, upon recommendation of the department, may acquire, by purchase, grant, or condemnation in the manner provided by law by which towns or the governor and council are authorized to acquire real property for public purposes, such an air right, easement, or other estate or interest in the property or nonconforming use in question, and so may acquire a substitute property, structure and easement and convey the same to anyone whose structures, easements and property are or may be a nonconforming use, as may be necessary to effectuate the purposes hereof.

Source. 1941, 145:9. RL 51:86. RSA 424:10. 1985, 402:6, I(c)(3).



Appendix 7-B – NHDES Worksheets



State of New Hampshire – Department of Transportation

**CATEGORICAL EXCLUSION
NON-PROGRAMMATIC ENVIRONMENTAL IMPACT SUMMARY**

Action/Project Name: _____ State Project Number: _____
Federal Project Number: _____

Description of Project (Attach Location Map, As Appropriate):

Project Purpose and Need:

Alternatives Considered:

Alt. No. 1 _____

Alt. No. 2 _____

Alt. No. 3 _____

Project Setting:

Urban Village Rural
Scenic Byway/NH Scenic Road? Yes No
National/State Forest Highway? Yes No

Unique Features: _____

State of New Hampshire – Department of Transportation

IMPACT ASSESSMENT SUMMARY

1. Air Quality NOT APPLICABLE

- Is project located in ozone nonattainment area? Yes No
- Is project located in carbon monoxide nonattainment area? Yes No
- Is project included in conformity determinations? Yes No Year ____
- Is project exempt from conformity determination? Yes No
- Is project exempt from CO analysis? Yes No
- Exemption Code (from most recent conformity document): ____
- Has project changed since the conformity analysis? Yes No
- Is project exempt from NEPA requirement to consider air quality? Yes No

For Projects Requiring a Carbon Monoxide Microscale Analysis:

Maximum Predicted 1-Hour Concentrations (ppm):

YEAR	CONCENTRATIONS			
Current Year ()	___ to ___	NAAQS Violations?	Yes <input type="checkbox"/>	No <input type="checkbox"/>
Opening Year ()build	___ to ___	NAAQS Violations?	Yes <input type="checkbox"/>	No <input type="checkbox"/>
Opening Year ()no-build	___ to ___	NAAQS Violations?	Yes <input type="checkbox"/>	No <input type="checkbox"/>
Design Year ()build	___ to ___	NAAQS Violations?	Yes <input type="checkbox"/>	No <input type="checkbox"/>
Design Year ()no-build	___ to ___	NAAQS Violations?	Yes <input type="checkbox"/>	No <input type="checkbox"/>

Comments: _____

2. Historic/Archaeological Resources (Section 106 or RSA 227-C:9) NOT APPLICABLE

Historic Resources Investigated? Yes No National Register Eligible? Yes No

Comments: _____

Archaeological Resources Investigated? Yes No National Register Eligible? Yes No

Comments: _____

Findings: No Historic Properties Affected No Adverse Effect Adverse Effect

Agency Comments: _____

Review Completed: _____

Advisory Council Consultation Comments (when Adverse Effects are found): _____

Review Completed: _____

Mitigation (Describe): _____



State of New Hampshire – Department of Transportation

3. Threatened or Endangered Species/Natural Communities NOT APPLICABLE

Endangered species in project area? Yes No In vicinity? Yes No
 Section 7 consultation necessary? Yes No

Comments from NH Natural Heritage Inventory:
A program of the NH Department of Resources and Economic Development

Comments from State, Federal, or private agency:

Mitigation (Describe):

4. Floodplains or Floodways NOT APPLICABLE

Does the proposed project encroach in the floodplain? Yes No Acreage _____
 Volume _____

Significance (Describe):

Does the proposed project encroach in the floodway? Yes No Acreage _____
 Volume _____

Significance (Describe):

Coordination With FEMA Required? Yes No

Comments from NH Office of Emergency Management:

Comments from NH Office of State Planning:

Comments from Federal Highway Administration:

Comments from US Army Corps of Engineers:

Mitigation (Describe):

State of New Hampshire – Department of Transportation

5. Noise NOT APPLICABLE

Is project a Type I Highway Project? Yes No
 Are There Receptors Present? Yes No : # of Residential ___ # Of Commercial ___

Year		Range of Noise Levels (dBA Leq)		Noise Abatement Criterion Impacts	
		Residential (R)	Commercial (C)	# Approaching	# At or Exceeding
_____	No-Build	_____ to _____	_____ to _____	Res, Comm	Res, Comm
_____	Build	_____ to _____	_____ to _____	Res, Comm	Res, Comm
_____	No-Build	_____ to _____	_____ to _____	Res, Comm	Res, Comm
_____	Build	_____ to _____	_____ to _____	Res, Comm	Res, Comm

Will completed project increase noise levels
 3 dBA or more? Yes No
 15 dBA or More? Yes No

Are mitigation measures included in project? Yes No
 Explain: _____

Has the municipality received a copy of the traffic noise assessment? Yes No

6. Right-of-Way NOT APPLICABLE

Is additional ROW required? Yes No Acreage ___
 Are improved properties acquired? Yes No Acreage ___
 Displacement: Rental Units __, Private Homes __, Businesses __
 Relocation Report received from the Bureau of Right-of-Way? Yes No

Relocation services to be provided? _____

Properties available for relocation? _____

Public Land (Federal State, or Municipal) Involvement? Yes No (See Section 7 below.)

7. Section 4(f) Resources NOT APPLICABLE

Public Parkland Impacts? Yes No Temporary Permanent
 Public Recreational Area Impacts? Yes No Temporary Permanent
 Public Wildlife/Waterfowl Refuge Impacts? Yes No Temporary Permanent
 Historic Properties Impacted? Yes No Temporary Permanent
 LCIP Recreational Land? Yes No Temporary Permanent

Acquisition required? Yes No Area ___

Comments: _____

Non-acquisition use of 4(f) property (23 CFR 771.135(p)):

Noise Level Increase Yes No Visual Intrusion Yes No
 Access Restriction Yes No Vibration Impacts Yes No
 Ecological Intrusion Yes No

Programmatic 4(f) Evaluation 4(f) Evaluation



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For impacts to recreational 4(f) resources, obtain a statement of significance from official with jurisdiction:
Date Requested: ___ Date Received: ___

8. Section 6(f) Resources NOT APPLICABLE

Are there impacts to any properties acquired or improved with funds made available through Section 6(f) of the Federal Land and Water Conservation Fund Act? Yes No Temporary Permanent

Recommendation received from State Liaison Officer? Yes No
Coordination with the US Department of the Interior necessary? Yes No

Comments: _____

9. Water Quality/Streams, Rivers, and Lakes NOT APPLICABLE

Erosion Control Plan Required? Yes No
Groundwater Impacts? Yes No
Surface Water Impacts? Yes No
Wells Impacted? Yes No Private Community Municipal
Stream Alteration Required? Yes No

Coordination Required on:
Public Waters Access? Yes No
Shoreland Protection? Yes No
Lakes Management? Yes No
Wild and Scenic River? Yes No
NH Designated River? Yes No

Comments: _____

10. Wetlands NOT APPLICABLE

Will this project impact lands under the jurisdiction of the NH Wetlands Bureau? Yes No

Type of permit required: expedited minimum minor major

Does this project qualify under the ACOE NHSPGP? Yes No

ACOE Individual Permit required? Yes No

Landform Type	USF&W Classification	Permanent Impacts	Temporary Impacts
	Total		
Non-Wetland Bank <small>(Jurisdictional land adjacent to lakes, ponds, streams and rivers)</small>	N/A		
Upland Portion of the Tidal Buffer Zone <small>(Land within 100' of the highest observable tide line)</small>	N/A		
	Total		



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Estimated length of permanent impacts to banks _____ ft.
 Estimated length of permanent impacts to channel _____ ft.
 Estimated volume of impacts in Public Waters _____ cu. yd.
 If a channel is to be constructed, or a culvert or a bridge is to be installed, give the distance the flow of water is to be rerouted _____ ft.
 If waterfront project, indicate total length of shoreline frontage _____ ft.
 If wall, riprap, beach, or similar project, indicate length of proposed shoreline impact _____ ft.

Describe Mitigation: _____

Comments: _____

11. Land Conservation Investment Program (LCIP) NOT APPLICABLE

Will land or easements obtained through the LCIP be impacted? Yes No
(Contact the LCIP Coordinator at the RH Office of State Planning)
 Have the impacts been reviewed at a monthly Natural Resource Agency Meeting? Yes No
 Has an application been made to CORD demonstrating compliance with RSA 162-C:6? Yes No

Comments: _____

12. Wildlife and Fisheries NOT APPLICABLE

Does the project impact important habitat? Yes No
 Does the project have the potential to impact Essential Fish Habitat? Yes No

Comments from State, Federal, or private agency: _____

Mitigation (Describe): _____

13. Agricultural Land NOT APPLICABLE

Does the project impact agricultural land? Yes No Active farmland? Yes No
 Does project area contain prime, unique, statewide or local important farmland? Yes No
 Completion of Form AD-1006 Required? Yes No

Comments: _____

14. Coast Guard NOT APPLICABLE

Does the project involve work in navigable waters? Yes No
 Does the project impact a historic bridge? Yes No
 Does the project require a Coast Guard Permit? Yes No



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Determination of FHWA and/or Coast Guard: _____

Comments: _____

15. Hazardous/Contaminated Materials Liabilities NOT APPLICABLE

Does the project area includes sites from NHDES Groundwater Protection Bureau list? Yes No
 ISA completed and attached? Yes No Additional investigation required? Yes No
 CERCLA involvement? Yes No
 Remediation required? Yes No

Comments: _____

16. Public Participation Opportunity NOT APPLICABLE

Public Informational Meeting? Yes No Date ____
 Public Hearing Required? Yes No Date ____
 On site meeting? Yes No Date ____

Comments: _____

17. Social and Economic Impacts NOT APPLICABLE

Is the project consistent with local and regional land use plans? Yes No

Describe: _____

Neighborhood and community impacts? Yes No
 Churches Handicapped
 Schools Low Income Housing
 Elderly Emergency Service Facilities/Vehicles
 Minorities Environmental Justice (Executive Order 12898)

Describe _____



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Impacts to local businesses? Yes No Temporary Permanent

Describe: _____

18. Environmental Justice NOT APPLICABLE

Does the area affected by the proposed action contain minority or low-income populations? Yes No

Are the anticipated environmental impacts resulting from the proposed action likely to fall disproportionately on the minority and/or low income populations? Yes No

Comments: _____

19. Traffic Patterns NOT APPLICABLE

Temporary detour required? Yes No Length _____
 Temporary bridge required? Yes No Impacts? Yes No

Describe: _____

Permanent changes to traffic patterns? Yes No

Describe: _____

20 Construction Impacts: NOT APPLICABLE

Describe: _____



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21. Field Inspection Comments:

22. Coordination

Meeting	Date	Comments

23. Environmental Mitigation and/or Commitments:

Note: When appropriate, more detailed descriptions of resources and an explanation of the impact analysis should be attached to this form.



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Evaluated by: _____ Date: _____
(Bureau of Environment Representative)
(Title)

or

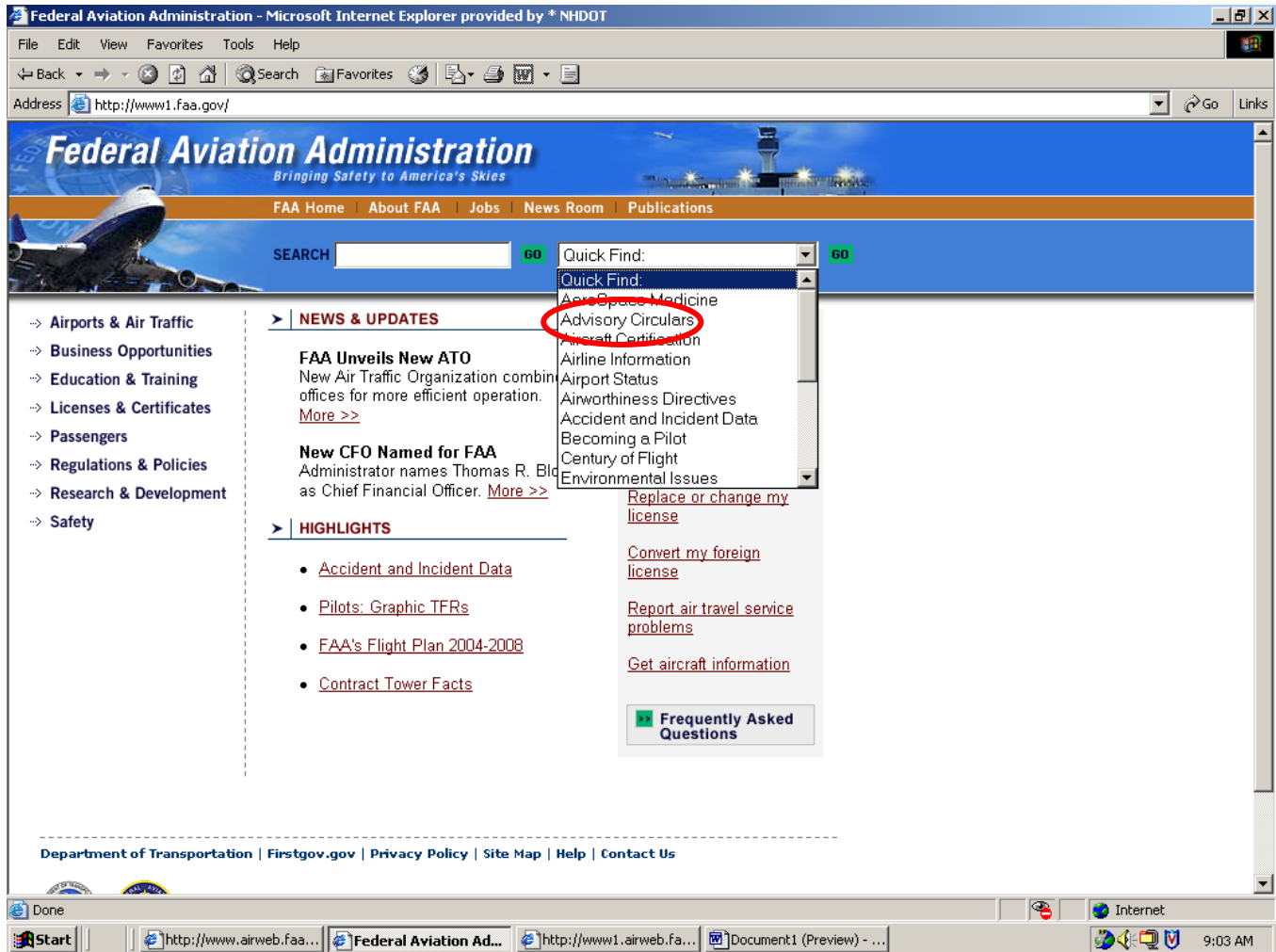
Evaluated by: _____ Date: _____
(Consulting Firm Representative)
(Consulting Firm Name)

Accepted by: _____ Date: _____
(Bureau of Environment Representative)
(Title)



Appendix 7-C – Sample Airport Zoning Ordinance

The most current version of AC-150/5190-4A is available on the FAA websites at www.faa.gov by searching the FAA Advisory Circular Download list.



As of the printing of this document, the direct link for AC-150/5190-4A was the following:

http://www1.airweb.faa.gov/Regulatory_and_Guidance_Library/rgAdvisoryCircular.nsf/ACNumber/35E1883669B46C6A86256C690074E920?OpenDocument

However, please be aware that these links may change from time to time.



Appendix 8-A – The NASCAR Air Force



The Nascar Air Force

Racing crews take to the air to meet demanding schedules

By Alton K. Marsh (From *AOPA Pilot*, February 1999.)

Forty-three stock cars are thundering around the track in the MBNA Gold 400 faster than the average cruising speed of many general aviation airplanes. The bowl-shaped stands of the Dover Downs International Speedway in Dover, Delaware, provide a great view for spectators while amplifying the screaming clatter. On this Sunday afternoon, the few greenhorn spectators without earplugs hear only the rattling of the anvil and stirrup bones in their ears—perceived by the brain as a buzz saw attacking concrete. They won't hear well again until Monday afternoon.

It's surprising that the pistons remain in the engine blocks of these 725-horsepower Winston Cup Series engines. For those new to racing the Winston Cup Series is, to borrow a phrase, king of the hill, top of the heap. Advertising-covered race cars flash before fans who are dressed in T-shirts decorated in their favorite car's gaudy colors. The aroma of fried chicken and hamburgers from sponsors' VIP tents behind the bleachers mingles with the smell of burning rubber from new racing tires growing old fast.

Nascar Winston Cup races attract 6 million spectators and 177 million television viewers each year. Spectator interest has exploded in the last five years, making Nascar—the National Association for Stock Car Auto Racing—a marketing leviathan. There are race car Jell-O (a car sponsor) molds in your local grocery store, race car models at the nearest Texaco (also a car sponsor), and Nascar souvenir stores in towns that don't even have tracks. Fans are unusually loyal, eating Cheerios for breakfast if they like Johnny Benson's 26 car, but Kellogg's Corn Flakes if they support Terry Labonte's 5 car. (Around Nascar you never say "the number 26 car," but instead "the 26 car" or "the 5 car," unless you want people to think you are a rookie.)

With the explosion in interest has come an explosion in the schedule: There were 36 races in all corners of the country last year. More tracks are under construction and the number of races will grow. A schedule like that can only be met through use of general aviation, a fact not lost on aircraft manufacturers. VisionAire, for example, has targeted all of racing as one of the best markets for its Vantage jet now in development. Last July, the company sponsored the VisionAire 500, part of the Indy Racing League, at the Charlotte (North Carolina) Motor Speedway. In all, VisionAire has sponsored the VisionAire 500 twice, a drag race, and four cars ranging from drag racers and stock cars to Indy-style open-wheel race cars. Next year VisionAire will sponsor a car racing in the Nascar Busch Series, a younger cousin to the Winston Cup Series.

"There is no question that the racing schedules are getting bigger and more hectic each year," said Tim Beverly, a pilot and owner of Tyler Jet Motorsports. "The only way to survive and budget your time wisely is by flying yourself. Drivers can't physically handle the race schedule, sponsor demands, and personal commitments without a plane. You justify all the costs when you look back over the course of a year and realize that you have saved yourself more than two weeks' worth of hours by flying privately rather than on a commercial airline."

Included among the pilot-drivers are Mark Martin and Rusty Wallace, who claimed in a *Sports Illustrated* interview that the Learjet 31A he pilots is the fastest aircraft on the Nascar circuit. Although not pilots, three-time and current Winston Cup champion Jeff Gordon and two-time champion Terry Labonte (1984 and 1996) also ride to work in Learjets. Martin, Gordon's closest competitor for last year's Winston Cup champion title, lives in a fly-in community in Florida and commutes to races in his Cessna CitationJet.



Gordon drives for Hendrick Motorsports, which owns three Winston Cup cars and a race truck. On any weekend during the season the company must move more than 50 people, and uses five airplanes to do it. The company owns a Gulfstream II, two Beech King Air 200s, and two Beech 1900s. Chief pilot Jay Luckwaldt said he stopped operating into the airport near Talladega, Alabama, when pattern operations became "too dangerous" because of the number of aircraft. Since all the drivers and crews are on the same schedule, they generally end up flying at the same time. Rusty Wallace calls it an aerial convoy, while Doyle Rouse, a pilot for the Richard Childress team, calls it an armada.

It takes a fleet of 120 general aviation aircraft—what might be called the Nascar Air Force—to move the army of pit crews, drivers, and owners. Flight Explorer, the flight tracking software by Dimensions International (www.dimen-intl.com), captured the phenomenon last year on the Thursday (moving day for most crews) before a July Winston Cup race in *Loudon, New Hampshire*. The radar blips bubbled up from North Carolina until there was a string of more than 50 aircraft seemingly nose to tail—all headed to the same destination. Eventually they broke into two tracks when the first airways became clogged. Coming home from that race on the following Sunday, aircraft emerged from two airports near the racetrack (*Concord and Laconia Airports*). The car sponsors could be seen streaking westward to their headquarters in large northern cities while crews and owners headed back to North Carolina. Mark Martin, driver of the Valvoline 6 car, left the pack in North Carolina and flew to his home in Florida.

"So many planes go to a race that you make your own traffic problems in the system itself," said Jeff Hartmann, pilot of a Beech King Air 200—the workhorse of the Nascar fleet—for Andy Petree Racing. Hartmann supports the crew of the Skoal Bandit 33 car driven by Kenny Schrader. "In *New Hampshire* they set up a special routing for the teams. Whatever you file, they still give you the special routing."

Rouse said that the Childress team operates four airplanes—an IAI Westwind II, a Rockwell Sabreliner, a Beech 1900, and a King Air 200. The aircraft move 43 people per weekend. Advance teams go in on Thursday to help with qualifications and testing, and the over-the-wall (pit) crew moves in Sunday morning. Last year Rouse flew 189 hours.

"New controllers who have never seen the glitter of all the airplanes on their scopes all taking off at six or seven in the morning ask, 'Where is everyone going?' But their supervisors know," Rouse said. He praises Atlanta-area controllers for handling the armada best. At a few other airports, departures are delayed by the requirement for clearances, if the weather is IFR, or by the huge conga line of aircraft on the taxiway. Rouse is kept busy in the off season supporting car and racing truck testing, and with business trips for Childress. Rouse supports teams for Daytona 500 winner Dale Earnhardt and driver Mike Skinner, along with a Super Truck racing team.

Jack Roush, owner of the Valvoline, Exide, Primestar, John Deere, and Cheerios cars, said he puts some of his crews on the Race Car Express, a chartered airliner shared jointly by many of the teams, and uses eight private aircraft to transport 58 race crew members. Roush Industries, a high-performance car engineering company in Livonia, Michigan, has branched out into making airplane parts for jet aircraft. He learned to fly because of his need to visit not only the tracks, but also shops in North Carolina where his cars are built. Since earning his pilot certificate he has developed an interest in warbirds, and rebuilt a North American P-51 Mustang. He and Mark Martin, who drives for him, agreed when they both appeared on the television show Ultimate Flights that climbing into a cockpit offers a good way to "get unhooked from the day's events."

Martin added that his CitationJet is, in some ways, easier to fly than the Cessna 340 he once operated, and



is "as comfortable as an old pair of shoes." The only adjustment was getting used to seeing waypoints pass by faster, he said. Steve Hmiel, Martin's crew chief, said on the Ultimate Flights show that Nascar aircraft owners are always looking for aircraft speed mods so that they can go a little faster, just like on the track.

While the Nascar fleet has blossomed in the past five or six years with an influx of jets, aviation has always been a part of the racing scene. "Racing was always my first love, but flying has become my passion," says 1983 Winston Cup champion Bobby Allison. His career was cut short from an accident at the Pocono, Pennsylvania, raceway in 1988, but he recovered enough to regain his airman medical certificate. "I bought my first airplane in 1967 and hired an instructor to help me get my pilot's license," he said. "I would fly from one race to the next so I would have more time to race on short tracks during the week between Winston Cup events." Today's car owners share his views on the importance of aviation to Nascar.

"The airplane is as important as any milling lathe or any piece of equipment in the shop, primarily due to what has happened to our schedule," said car owner Richard Childress. "There are more races, and we are going farther to several new racetracks. Aviation is a big part of the budget, but you have to have it."

Fifty years have elapsed since Nascar evolved from cars originally built as moonshine tankers that could outfox the law along North Carolina back roads. Descendents of those tankers shine on today's racetracks at more than 200 mph, but the future of the sport that hooch built clearly depends on still faster machines in the air.