



**CONNECTING GLOBALLY**

North Central Texas General Aviation and Heliport System Plan

# Aviation and Heliport Use Survey

December 2009



## **AVIATION AND HELIPORT USE SURVEY**

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## AVIATION AND HELIPORT USE SURVEY

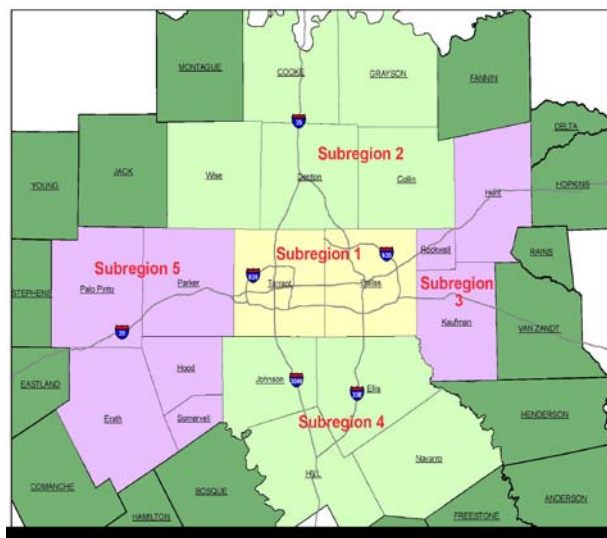
As a part of the research that is conducted for the North Central Texas General Aviation and Heliport System Plan (System Plan), a survey was conducted of aircraft and helicopter owners as well as pilots utilizing area Fixed Base Operators (FBO). A copy of the survey is included as Appendix A. The survey provided insight into the relative importance of various characteristics and amenities of General Aviation (GA) airports and heliports in the region. The information gathered through the survey is being considered as the System Plan’s forecast model is developed.

### A. METHODOLOGY

The mail survey focused on three groups: aircraft owners, helicopter owners and itinerant pilots. The registered, based-aircraft owner database, obtained from the Federal Aviation Administration (FAA), was sorted to eliminate duplication and to provide for sending one questionnaire to a person or company who owns more than one aircraft. The survey was mailed to 5,936 aircraft owners and 244 helicopter owners. In addition, 36 FBOs in the study area participated by distributing surveys to itinerant pilots.

As part of the System Plan, the region has been divided into five subregions as displayed in Exhibit 1. Questionnaires were printed on five different colors so that responses from each subregion were coded for further analysis. Likewise, FBO surveys were printed on another color of paper for easy analysis.

**Exhibit 1: Subregions**



Source: NCTCOG Research and Information Services Data

Based-aircraft owners in the database are separated by counties. Exhibit 2 shows that more than half of both aircraft and helicopter owners are in Subregion 1 which is comprised of Dallas and Tarrant counties.

**Exhibit 2: Region Counties Sorted by Subregion**

Registered Based Aircraft		
Subregion	County	Owners
1	Dallas	1,627
1	Tarrant	1,541
<b>Subregion 1 Total</b>		<b>3,168</b>
2	Collin	648
2	Cooke	42
2	Denton	693
2	Grayson	95
2	Wise	136
<b>Subregion 2 Total</b>		<b>1,614</b>
3	Hunt	77
3	Kaufman	84
3	Rockwall	97
<b>Subregion 3 Total</b>		<b>258</b>
4	Ellis	179
4	Johnson	155
4	Navarro	54
4	Hill	8
<b>Subregion 4 Total</b>		<b>396</b>
5	Erath	47
5	Hood	187
5	Palo Pinto	42
5	Parker	214
5	Somervell	10
<b>Subregion 5 Total</b>		<b>500</b>
<b>Region Total</b>		<b>5,936</b>

Helicopters		
Subregion	County	Owners
1	Dallas	67
1	Tarrant	65
<b>Subregion 1 Total</b>		<b>132</b>
2	Collin	9
2	Cooke	1
2	Denton	26
2	Grayson	8
2	Wise	10
<b>Subregion 2 Total</b>		<b>54</b>
3	Hunt	3
3	Kaufman	1
3	Rockwall	5
<b>Subregion 3 Total</b>		<b>9</b>
4	Ellis	10
4	Hill	0
4	Johnson	10
4	Navarro	2
<b>Subregion 4 Total</b>		<b>22</b>
5	Erath	0
5	Hood	3
5	Palo Pinto	19
5	Parker	5
5	Somervell	0
<b>Subregion 5 Total</b>		<b>27</b>
<b>Region Total</b>		<b>244</b>

Source: CHA Aviation Development Team

The survey packet was designed to encourage participation. Included are a cover letter from the North Central Texas Council of Governments (NCTCOG); a one-page survey, and a postage-paid reply envelope, all of which were inserted in a colorful carrier envelope.

Survey packets were mailed to aircraft and helicopter owners on January 2, 2009, and ten packets were mailed to each FBO, the list of which is shown in Exhibit 3. For airports with Air Transportation Technical Advisory Committee (ATTAC) representation, NCTCOG requested ATTAC members to communicate the survey's importance to FBO managers to encourage participation. FBO survey packets were distributed via U.S. mail with a cover letter of

explanation. For Mesquite Metro, Collin County Regional, Arlington Municipal, and Lancaster, NCTCOG staff hand-delivered FBO survey packets to ATTAC members to personally distribute.

### Exhibit 3: Regional Fixed Base Operators

<b>FBO Name</b>	<b>Airport</b>
Encore	Addison
Million Air Dallas	Addison
Harrison Aviation	Arlington Municipal
Bourland Field	Bourland Field
Bridgeport Municipal	Bridgeport Municipal
Corsicana Aviation Services	C. David Campbell Field-Corsicana Municipal
Cleburne Aviation Services	Cleburne Municipal
Cutter Aviation	Collin County Regional
Ambassador Aviation	Dallas Executive
Cutter Aviation	Dallas Executive
Jet Center of Dallas	Dallas Executive
Decatur Jet Center	Decatur Municipal
Business Air	Denton Municipal
Hammock Aviation Services	Ennis Municipal
Alliance Aviation Services	Fort Worth Alliance
Phazar Flight Support	Fort Worth Meacham International
Sandpiper Aviation	Fort Worth Meacham International
Texas Jet	Fort Worth Meacham International
Harrison Aviation	Fort Worth Spinks
City of Gainesville	Gainesville Municipal
Aviator Air Center	Grand Prairie Municipal
City of Grand Prairie	Grand Prairie Municipal
City of Granbury	Granbury Municipal
City of Hillsboro	Hillsboro Municipal
City of Lancaster	Lancaster
Greenville Aviation	Majors
City of Mesquite	Mesquite Metro
Southern Star Aviation	Mid-Way Regional
Air-1 Flight Support	North Texas Regional (Grayson County)
Lake Texoma Jet Center	North Texas Regional (Grayson County)
Marcair	Northwest Regional
Northwest Regional	Northwest Regional
Parker County	Parker County
Possum Kingdom	Possum Kingdom
Rockwall Aviation	Rockwall Municipal
Terrell Aviation	Terrell Municipal

Source: CHA Aviation Development Team



Approximately 884 survey packets were returned due to incorrect/insufficient addresses. Survey responses were received from a total of 610 aircraft owners and 16 helicopter owners. Responses varied in terms of completeness. The completion rate for the survey of aircraft and helicopter owners is approximately 12 percent. The response rate to written surveys such as this is generally low (less than 10 percent). Also, 29 itinerant pilots returned surveys that they received at area FBO's.

## **B. SURVEY INSTRUMENT**

The survey instrument focused on three general areas: airport facilities and service offerings, pricing, and airport accessibility. Respondents were asked to rank 19 characteristics of GA airports on a scale of 1 to 5 (with 5 being the most important).

- Runway length
- Fuel prices
- Jet fuel availability
- Avgas availability
- Proximity of airport to pilot's residence
- Proximity of airport to pilot's clients
- Proximity of airport to pilot's working address
- Existence of air traffic control tower
- Existence of instrument approaches
- Availability of enclosed hangar space
- Cost of hangar rental
- Itinerant hangar/aircraft parking available
- FBO/maintenance service
- Customer service/friendliness
- Airport security
- Rental/courtesy car availability
- Restaurant
- Other (option 1)
- Other (option 2)

Space below the category listing and on the back of the page allowed for additional comments. Participants were also encouraged to email responses if they preferred to do so. Respondents who were willing to provide their name, phone number and email address were entered into a drawing for a \$500 gift card.

## C. SURVEY FINDINGS AMONG ALL GROUPS

### AIRCRAFT PURPOSE RESULTS

.Among the 602 aircraft owners who responded, business was found to be the purpose of their primary aircraft for 135 respondents. Out of this number, 108 also use their business aircraft for personal reasons. Personal and recreational use is the primary purpose for 427 respondents. Other answers, of which there were 35, included such uses as flight instruction, charity, pipeline patrol, crop dusting, and law enforcement. The responses entailed a wide variety of aircraft and uses including turbine aircraft, piston aircraft, helicopters, recreational flying, professional flying, and itinerant operations. Exhibit 4 shows the total number of respondents and associated aircraft by use category.

**Exhibit 4: Total Respondents and Associated Aircraft**

Category	Respondents	Aircraft
Personal/Recreation	427	529
Business/Personal	108	133
Business/Corporate	32	53
Other	35	71
<b>Total</b>	<b>602</b>	<b>786</b>

Of all respondents, piston aircraft owners represented 588 of the survey participants while 14 respondents owned turbine aircraft. Of the 14 turbine aircraft owners, ten stated that their aircraft were used exclusively for business; three were used for both business and recreation, and one respondent reported their aircraft are used for flight training.

It is worth noting that the 588 piston aircraft respondents represented 731 aircraft, an owner to aircraft ratio of 1.2. While the 14 turbine aircraft respondents represented 48 aircraft, an owner to aircraft ratio of 3.4. These ratios correlate with the expected uses associated with piston and turbine aircraft. It is more common for corporations utilizing turbine aircraft to own more than one aircraft while piston aircraft used for personal use generally have one aircraft per owner.

## HOME BASE OF AIRCRAFT

The top aircraft facilities designated as home base for piston aircraft, ranked by number of respondents were:

- Northwest Regional (51)
- Grand Prairie Municipal (38)
- Addison (37)
- Hicks Airfield (27)
- Aero Country (25)
- Denton Municipal (24)
- Collin County Regional (23)
- Fort Worth Spinks (22)
- Pecan Plantation (21)
- Mesquite Metro (21)
- Arlington Municipal (16)
- Cleburne Municipal (13)
- Lancaster (13)
- Fort Worth Meacham Int'l (13)
- Granbury Municipal (11)
- Terrell Municipal (11)
- Rockwall (10)
- Bourland Field (10)
- Dallas Executive (10)

The top aircraft facilities designated as home base for turbine aircraft, ranked by number of respondents were:

- Dallas Love Field (4)
- Dallas Executive (2)
- Fort Worth Meacham Int'l (2)
- Six airports each provided one response (Addison, Fort Worth Alliance, Denton Municipal, Mid-Way Regional, Lancaster, and Aero Country)



The following helicopter facilities each provided one response, with the exception of Grand Prairie from which two responses were received. One response included the words “McGregor, TX” and another wrote “private strip.”

- Addison
- Aero Country
- Air Park - Dallas
- City Of Fort Worth Heliport
- Cleburne Municipal
- Corsicana
- Fort Worth Spinks
- Grand Prairie Municipal (2)
- Mid-Way Regional
- Propwash
- Tracy Municipal Airport

The following are responses from itinerant pilots. Three responses were received from pilots using Addison Airport and four responses were received from those using Mid-Way Regional Airport. Each of the remaining facilities received one response.

- Addison (3)
- Ardmore Municipal
- C. David Campbell Field-Corsicana Municipal
- Collin County Regional
- Compton/Woodley Airport (Compton, CA)
- Decatur Municipal
- Grand Prairie Municipal
- Hattiesburg-Laurel Regional Airport (Moselle, MS)
- Jasper County-Bell Field
- Kezer Air Ranch
- Lancaster
- Mid-Way Regional (4)
- Mount Pleasant Regional
- Northwest Regional
- Spicewood
- Sundance Airpark (Oklahoma City, OK)
- Waco Regional

## RATING OF AIRPORT AMENITIES

The opinions expressed by respondents are very similar when responses were grouped by turbine and piston aircraft type. This is also true for respondents across all subregions as amenity ratings are essentially the same, regardless of where the aircraft is based. Piston aircraft favored amenities that correspond to personal and recreational uses, while turbine aircraft favored amenities that correspond to business and corporate uses. This is evident by the fact that 78% of the piston aircraft in this survey use their aircraft for personal or recreational use, while 100% of turbine aircraft owners surveyed utilize their aircraft for business or corporate use. Exhibit 5 shows the key findings from the survey.

**Exhibit 5: Aircraft Survey Results**

Turbine Aircraft Survey Results		Piston Aircraft Survey Results	
Category	Respondent Ranking	Category	Respondent Ranking
Availability of Enclosed Hangar Space	4.6	Avgas Availability	4.5
Jet Fuel Availability	4.5	Availability of Enclosed Hangar Space	4.4
Existence of Instrument Approaches	4.3	Cost of Hangar Rental	4.3
Fuel Prices	4.3	Fuel Prices	4.2
Cost of Hangar Rental	4	Proximity to Residence	4.1
Runway Length	3.9	Customer Service	3.8
Proximity to Address	3.8	Airport Security	3.6
Airport Security	3.7	Existence of Instrument Approaches	3.5
Proximity to Clients	3.6	FBO Maintenance	3.3
Customer Service	3.6	Runway Length	3.1
Existence of Control Tower	3.5	Itinerant Hangar Rental	2.8
Rental Car Available	3.5	Rental Car Available	2.6
FBO Maintenance	3.4	Existence of Control Tower	2.5
Itinerant Hangar Available	3.2	Restaurant	2.4
Proximity to Residence	2.9	Proximity of Clients	2.3
Avgas Availability	2.9	Proximity to Address	2.3
Restaurant	2.6	Jet Fuel Availability	1.4

More detailed information recorded in the surveys is presented in Appendix B, Survey Results.

Similar surveys rating airport amenity preferences of general aviation business users have been completed on a national scale by a number of aviation organizations (NBAA, Professional Pilot Magazine, Commercial and Business Aviation, etc). While these surveys strictly reflect the national preferences of business aviation users, NCTCOG's survey aimed at capturing the preferences of a variety of general aviation users who utilize the region's airports.

The results of the FAA's General Aviation and Part 135 Activity Survey are better aligned with the results of NCTCOG's survey in that both indicate that the majority of general aviation use is

personal in nature. Despite having a smaller number of business use respondents, the importance of business aviation for the airports serving those aircraft cannot be understated. The results of the General Aviation and Part 135 Activity Survey are available in Appendix C.

#### **D. CONCLUSION**

The responses to this survey clearly indicate most users of GA airports in North Central Texas consider the availability of fuel, the availability of enclosed hangar space, the cost of hangar rentals, and fuel prices among the most important amenities of these airports, regardless of size and geographic location. The results also illustrate the different preferences of airport amenities between turbine and piston aircraft owners. Corporate aircraft owners rated amenities higher that correspond more directly to business and turbine aircraft uses, while personal aircraft owners rated amenities higher that correspond more to recreational and piston aircraft uses. The results indicate that the majority of respondents appear to have been single engine aircraft owners who utilize their aircraft for some light business use which are mainly recreational. This is evident by the number of survey findings of piston aircraft being more numerous than turbine aircraft.

The findings of the survey are being evaluated and documented as a snapshot of regional users, however will not be directly responsible for recommendations or forecasting efforts for the System Plan. Originally this report was intended for use in the Airport Community Value Metric and subsequent input into the Forecasting Model. However, upon completion of this report staff concluded that the data will not be used in the development of these products. Nonetheless, it is an important data collection step in the system planning process to provide hard evidence of study assumptions. While generalities can be made about why certain aircraft may choose to base at regional airports, it is imperative to have an accurate sampling of aircraft owners to support any such assumptions.



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North Central Texas General Aviation and Heliport System Plan

### **APPENDIX A**

#### **Survey Instrument**

Source: CHA Aviation Development Team



**Appendix A: Survey Instrument**

**CONNECTING GLOBALLY**

North Central Texas General Aviation and Heliport System Plan

PLEASE RETURN BEFORE FEBRUARY 6, 2009  
IN THE ENCLOSED POSTAGE-PAID ENVELOPE.  
Or, email responses to [mmallonee@nctcog.org](mailto:mmallonee@nctcog.org).  
Questions? Call Michael Mallonee at (817) 704-2513.

Please participate in the drawing for a **\$500 VISA gift card** by giving us your name and contact information!

Name \_\_\_\_\_

Email \_\_\_\_\_

Phone \_\_\_\_\_

# North Central Texas Airport Use Preference Survey

This survey is being conducted by the North Central Texas Council of Governments in order to collect data that will have a positive impact on airport development projects in the region. Thank you for participating.

### Inventory of Aircraft That You Own

<b>TYPE OF AIRCRAFT</b>	<b>NUMBER OF AIRCRAFT</b>	<b>HOME BASE OF AIRCRAFT (AIRPORT NAME)</b>	<b>AIRCRAFT PURPOSE (RECREATIONAL, CORPORATE CLIENTS, OTHER)</b>

*(Please identify additional aircraft and number on the back of the page.)*

### Rating of Airport Amenities

On a scale of 1 to 5 (with 5 being the most important), please rate the importance of each category below that applies to your **decisions** concerning which airport you use in North Central Texas.

Please circle one number that best applies to each category:

<b>CATEGORY</b>	<b>Least Important</b>			<b>Most Important</b>	
Runway Length	1	2	3	4	5
Fuel Prices	1	2	3	4	5
Jet Fuel Availability	1	2	3	4	5
Avgas Availability	1	2	3	4	5
Proximity of Airport to Pilot's Residence	1	2	3	4	5
Proximity of Airport to Pilot's Clients	1	2	3	4	5
Proximity of Airport to Pilot's Working Address	1	2	3	4	5
Existence of Air Traffic Control Tower	1	2	3	4	5
Existence of Instrument Approaches	1	2	3	4	5
Availability of Enclosed Hangar Space	1	2	3	4	5
Cost of Hangar Rental	1	2	3	4	5
Itinerant Hangar/Aircraft Parking Available	1	2	3	4	5
FBO/Maintenance Service	1	2	3	4	5
Customer Service/Friendliness	1	2	3	4	5
Airport Security	1	2	3	4	5
Rental/Courtesy Car Availability	1	2	3	4	5
Restaurant	1	2	3	4	5
Other:	1	2	3	4	5
Other:	1	2	3	4	5

Other comments concerning your airport usage preferences may be entered on the back of this form.  
Thank you for your assistance.



North Central Texas  
Council of Governments

Please return the completed survey in the postage-paid envelope to:  
NCTCOG, 616 Six Flags Drive, P.O. Box 5888, Arlington, TX 76005  
Or you may submit responses via email to: [mmallonee@nctcog.org](mailto:mmallonee@nctcog.org)



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### **APPENDIX B**

#### **Survey Results**

Average Survey Results by Aircraft Use  
Survey Results by Question

Source: CHA Aviation Development Team  
NCTCOG Staff

Appendix B: Average Survey Results by Aircraft Use

Survey Results																																				
Aircraft Use	Respondents		Runway Length		Fuel Prices		Jet Fuel Availability		Avgas Availability		Proximity to Residence		Proximity to Clients		Proximity to Address		Existence of Control Tower		Existence of Instrument Approaches		Availability of Hangar Space		Cost of Hangar Rental		Itinerant Hangar Available		FBO Maintenance		Customer Service		Airport Security		Rental Car Available		Restaurant	
	P	T	P	T	P	T	P	T	P	T	P	T	P	T	P	T	P	T	P	T	P	T	P	T	P	T	P	T	P	T	P	T	P	T	P	T
Personal	427	0	2.9	N/A	4.2	N/A	1.2	N/A	4.3	N/A	4.2	N/A	1.5	N/A	2.2	N/A	2.0	N/A	2.8	N/A	4.3	N/A	4.2	N/A	2.9	N/A	3.2	N/A	3.8	N/A	3.6	N/A	2.6	N/A	2.7	N/A
Business and Personal	105	3	3.1	3.5	4.1	4	1.5	4.5	4.4	2.5	4.2	4	2.7	1.5	3.4	4.5	2.5	2.5	3.9	3	4.3	5	4.1	4	2.9	2.5	3.3	2.5	3.7	4	3.6	3	2.8	4.5	2.5	2.5
Business	22	10	3.3	4.1	4.0	4.2	1.9	4.4	4.6	2.5	3.8	2.6	2.8	4.1	3.7	2.9	3	3.7	4.1	4.6	4.7	4.5	4.3	3.8	2.6	3.1	3.1	3.6	3.7	3.4	3.5	3.7	2.5	3.4	1.9	2.6
Other	34	1	3.1	4	4.5	5	1.1	5	4.5	5	4.0	3	2.2	5	2.9	4	2.4	5	3.4	5	4.3	5	4.4	5	2.6	5	3.6	5	3.9	5	3.6	5	2.7	5	2.5	3
<b>Total</b>	<b>588</b>	<b>14</b>	<b>3.1</b>	<b>3.9</b>	<b>4.2</b>	<b>4.3</b>	<b>1.4</b>	<b>4.5</b>	<b>4.5</b>	<b>2.9</b>	<b>4.1</b>	<b>2.9</b>	<b>2.3</b>	<b>3.6</b>	<b>3.1</b>	<b>3.8</b>	<b>2.5</b>	<b>3.5</b>	<b>3.5</b>	<b>4.3</b>	<b>4.4</b>	<b>4.6</b>	<b>4.3</b>	<b>4.0</b>	<b>2.8</b>	<b>3.2</b>	<b>3.3</b>	<b>3.4</b>	<b>3.8</b>	<b>3.6</b>	<b>3.6</b>	<b>3.7</b>	<b>2.6</b>	<b>3.5</b>	<b>2.4</b>	<b>2.6</b>

Response Key: 1 = Least Important  
 5 = Most Important  
 P = Piston  
 T = Turbine

**Appendix B: Survey Results by Question (Aircraft Respondents, Ratings of Airport Amenities)**

	Total	Least Important					Most Important
		1	2	3	4	5	No Answer
<b>Runway Length</b>							
Region Total	610	66	106	256	124	50	8
Sub-region 1	268	30	38	114	64	21	1
Sub-region 2	191	19	38	83	33	14	4
Sub-region 3	37	4	9	14	5	5	0
Sub-region 4	43	6	7	16	8	4	2
Sub-region 5	71	7	14	29	14	6	1
<b>Fuel Prices</b>							
Region Total	610	38	1	86	178	302	5
Sub-region 1	268	8	10	38	81	130	1
Sub-region 2	191	9	0	25	59	95	3
Sub-region 3	37	3	0	8	7	19	0
Sub-region 4	43	6	0	7	11	19	0
Sub-region 5	71	2	1	8	20	39	1
<b>Jet Fuel Availability</b>							
Region Total	610	472	22	17	9	26	64
Sub-region 1	268	209	9	4	5	13	28
Sub-region 2	191	150	10	6	2	6	17
Sub-region 3	37	24	2	5	0	3	3
Sub-region 4	43	35	0	0	1	2	5
Sub-region 5	71	54	1	2	1	2	11
<b>Avgas Availability</b>							
Region Total	610	26	11	56	145	359	13
Sub-region 1	268	13	6	22	52	170	5
Sub-region 2	191	6	3	18	55	105	4
Sub-region 3	37	2	0	6	8	21	0
Sub-region 4	43	4	0	2	9	27	1
Sub-region 5	71	1	2	8	21	36	3
<b>Proximity of Airport to Pilot's Residence</b>							
Region Total	610	21	17	93	191	279	9
Sub-region 1	268	10	7	44	87	118	2
Sub-region 2	191	2	5	25	65	90	4
Sub-region 3	37	1	2	6	9	19	0
Sub-region 4	43	4	0	8	14	16	1
Sub-region 5	71	4	3	10	16	36	2
<b>Proximity of Airport to Pilot's Clients</b>							
Region Total	610	342	62	65	43	41	57
Sub-region 1	268	154	27	27	23	13	24
Sub-region 2	191	105	18	22	15	17	14
Sub-region 3	37	19	4	4	2	5	3
Sub-region 4	43	27	2	8	0	1	5
Sub-region 5	71	37	11	4	3	5	11
<b>Proximity of Airport to Pilot's Working Address</b>							
Region Total	610	236	46	112	96	84	36
Sub-region 1	268	94	19	59	42	37	17
Sub-region 2	191	82	15	27	34	26	7
Sub-region 3	37	13	4	5	6	6	3
Sub-region 4	43	19	2	12	4	4	2
Sub-region 5	71	28	6	9	10	11	7



**Appendix B: Survey Results by Question (Aircraft Respondents, Ratings of Airport Amenities)**

	Total	Least Important					Most Important	No Answer
		1	2	3	4	5		
<b>Existence of Air Traffic Control Tower</b>								
Region Total	610	268	91	129	81	33	8	
Sub-region 1	268	94	41	66	48	18	1	
Sub-region 2	191	85	29	35	26	12	4	
Sub-region 3	37	25	5	3	3	0	1	
Sub-region 4	43	25	5	8	1	3	1	
Sub-region 5	71	39	11	17	3	0	1	
<b>Existence of Instrument Approaches</b>								
Region Total	610	160	53	102	139	145	11	
Sub-region 1	268	64	19	47	67	69	2	
Sub-region 2	191	50	24	24	43	46	4	
Sub-region 3	37	12	4	4	6	8	3	
Sub-region 4	43	16	2	5	9	10	1	
Sub-region 5	71	18	4	22	14	12	1	
<b>Availability of Enclosed Hangar Space</b>								
Region Total	610	29	19	51	121	381	9	
Sub-region 1	268	184	61	13	3	7	0	
Sub-region 2	191	12	5	21	36	113	4	
Sub-region 3	37	1	3	3	7	22	1	
Sub-region 4	43	3	1	5	7	25	2	
Sub-region 5	71	6	7	9	10	38	1	
<b>Cost of Hangar Rental</b>								
Region Total	610	29	14	79	160	312	16	
Sub-region 1	268	10	4	26	65	159	4	
Sub-region 2	191	10	5	26	51	92	7	
Sub-region 3	37	1	0	8	11	16	1	
Sub-region 4	43	4	1	7	13	16	2	
Sub-region 5	71	4	4	12	20	29	2	
<b>Itinerant Hangar/Aircraft Parking Available</b>								
Region Total	610	111	108	181	121	73	16	
Sub-region 1	268	60	57	78	46	22	5	
Sub-region 2	191	24	36	62	37	25	7	
Sub-region 3	37	7	2	11	7	8	2	
Sub-region 4	43	7	4	12	9	10	1	
Sub-region 5	71	13	9	18	22	8	1	
<b>FBO/Maintenance Service</b>								
Region Total	610	81	71	174	172	103	9	
Sub-region 1	268	35	36	83	72	42	0	
Sub-region 2	191	23	20	57	58	28	5	
Sub-region 3	37	6	5	8	9	8	1	
Sub-region 4	43	6	3	6	15	12	1	
Sub-region 5	71	11	7	20	18	13	2	
<b>Customer Service/Friendliness</b>								
Region Total	610	40	36	137	198	189	10	
Sub-region 1	268	14	19	65	91	76	3	
Sub-region 2	191	18	9	49	61	49	5	
Sub-region 3	37	3	1	6	9	18	0	
Sub-region 4	43	2	2	3	17	19	0	
Sub-region 5	71	3	5	14	20	27	2	

**Appendix B: Survey Results by Question (Aircraft Respondents, Ratings of Airport Amenities)**

	Total	Least Important					Most Important	No Answer
		1	2	3	4	5		
<b>Airport Security</b>								
Region Total	610	39	54	159	182	161	15	
Sub-region 1	268	16	28	60	79	80	5	
Sub-region 2	191	14	13	58	63	39	4	
Sub-region 3	37	4	6	6	6	13	2	
Sub-region 4	43	4	5	12	9	12	1	
Sub-region 5	71	1	2	23	25	17	3	
<b>Rental/Courtesy Availability</b>								
Region Total	610	185	95	141	103	71	15	
Sub-region 1	268	91	41	70	39	21	6	
Sub-region 2	191	54	34	44	37	17	5	
Sub-region 3	37	10	5	7	4	10	1	
Sub-region 4	43	14	7	6	7	8	1	
Sub-region 5	71	16	8	14	16	15	2	
<b>Restaurant</b>								
Region Total	610	171	85	171	120	41	22	
Sub-region 1	268	74	39	83	49	16	7	
Sub-region 2	191	51	31	45	45	11	8	
Sub-region 3	37	12	3	11	6	2	3	
Sub-region 4	43	17	6	10	5	5	0	
Sub-region 5	71	17	6	22	15	7	4	

**Appendix B: Survey Results by Question (FBO Respondents, Ratings of Airport Amenities)**

	Total	Least Important					Most Important
		1	2	3	4	5	No Answer
Runway Length	30	2	5	8	10	4	1
Fuel Prices	30	0	0	5	5	20	0
Jet Fuel Availability	30	16	3	3	0	7	1
Avgas Availability	30	5	0	2	5	18	0
Proximity of Airport to Pilot's Residence	30	6	2	9	5	8	0
Proximity of Airport to Pilot's Clients	30	7	4	5	6	8	0
Proximity of Airport to Pilot's Working Address	30	10	1	5	5	9	0
Existence of Air Traffic Control Tower	30	9	5	9	4	1	2
Existence of Instrument Approaches	30	4	1	6	8	11	0
Availability of Enclosed Hangar Space	30	3	3	4	10	9	1
Cost of Hangar Rental	30	2	3	4	6	15	0
Itinerant Hangar/Aircraft Parking Available	30	1	0	5	14	9	1
FBO/Maintenance Service	30	1	1	4	15	9	0
Customer Service/Friendliness	30	1	0	2	11	16	0
Airport Security	30	1	0	9	10	9	1
Rental/Courtesy Availability	30	1	3	9	6	10	1
Restaurant	30	3	3	15	6	1	2

**Appendix B: Survey Results by Question (Helicopter Respondents, Ratings of Airport Amenities)**

	Total	Least Important					Most Important
		1	2	3	4	5	No Answer
<b>Region total</b>	16	5	2	4	4	0	1
<b>Sub-region 1</b>	7	4	0	2	1	0	0
<b>Sub-region 2</b>	4	1	1	1	1	0	0
<b>Sub-region 3</b>	1	0	0	0	0	0	1
<b>Sub-region 4</b>	4	0	1	1	2	0	0
<b>Sub-region 5</b>	0	0	0	0	0	0	0
<b>Fuel Prices</b>							
<b>Region total</b>	16	2	0	2	7	4	1
<b>Sub-region 1</b>	7	2	0	2	2	1	0
<b>Sub-region 2</b>	4	0	0	0	2	2	0
<b>Sub-region 3</b>	1	0	0	0	0	0	1
<b>Sub-region 4</b>	4	0	0	0	3	1	0
<b>Sub-region 5</b>	0	0	0	0	0	0	0
<b>Jet Fuel Availability</b>							
<b>Region total</b>	16	6	2	1	1	4	2
<b>Sub-region 1</b>	7	5	0	0	1	1	0
<b>Sub-region 2</b>	4	1	0	0	0	2	1
<b>Sub-region 3</b>	1	0	1	0	0	0	0
<b>Sub-region 4</b>	4	0	1	1	0	1	1
<b>Sub-region 5</b>	0	0	0	0	0	0	0
<b>Avgas Availability</b>							
<b>Region total</b>	16	2	0	2	3	9	0
<b>Sub-region 1</b>	7	2	0	0	1	4	0
<b>Sub-region 2</b>	4	0	0	1	1	2	0
<b>Sub-region 3</b>	1	0	0	1	0	0	0
<b>Sub-region 4</b>	4	0	0	0	1	3	0
<b>Sub-region 5</b>	0	0	0	0	0	0	0
<b>Proximity of Airport to Pilot's Residence</b>							
<b>Region total</b>	16	1	0	4	6	5	0
<b>Sub-region 1</b>	7	1	0	2	1	3	0
<b>Sub-region 2</b>	4	0	0	1	3	0	0
<b>Sub-region 3</b>	1	0	0	0	1	0	0
<b>Sub-region 4</b>	4	0	0	1	1	2	0
<b>Sub-region 5</b>	0	0	0	0	0	0	0
<b>Proximity of Airport to Pilot's Clients</b>							
<b>Region total</b>	16	6	3	3	1	1	2
<b>Sub-region 1</b>	7	3	1	2	0	1	0
<b>Sub-region 2</b>	4	1	1	0	1	0	1
<b>Sub-region 3</b>	1	0	0	0	0	0	1
<b>Sub-region 4</b>	4	2	1	1	0	0	0
<b>Sub-region 5</b>	0	0	0	0	0	0	0
<b>Proximity of Airport to Pilot's Working Address</b>							
<b>Region total</b>	16	5	1	4	2	2	2
<b>Sub-region 1</b>	7	3	1	1	0	2	0
<b>Sub-region 2</b>	4	0	0	2	1	0	1
<b>Sub-region 3</b>	1	0	0	0	0	0	1
<b>Sub-region 4</b>	4	2	0	1	1	0	0
<b>Sub-region 5</b>	0	0	0	0	0	0	0

**Appendix B: Survey Results by Question (Helicopter Respondents, Ratings of Airport Amenities)**

	Total	Least Important					Most Important
		1	2	3	4	5	No Answer
<b>Existence of Air Traffic Control Tower</b>							
Region total	16	7	1	5	1	1	1
Sub-region 1	7	3	0	3	0	1	0
Sub-region 2	4	1	0	2	1	0	0
Sub-region 3	1	0	0	0	0	0	1
Sub-region 4	4	3	1	0	0	0	0
Sub-region 5	0	0	0	0	0	0	0
<b>Existence of Instrument Approaches</b>							
Region total	16	3	1	6	4	1	1
Sub-region 1	7	3	0	3	1	0	0
Sub-region 2	4	0	1	2	1	0	0
Sub-region 3	1	0	0	0	0	0	1
Sub-region 4	4	0	0	1	2	1	0
Sub-region 5	0	0	0	0	0	0	0
<b>Availability of Enclosed Hangar Space</b>							
Region total	16	2	0	4	1	8	1
Sub-region 1	7	1	0	2	1	3	0
Sub-region 2	4	1	0	2	0	1	0
Sub-region 3	1	0	0	0	0	0	1
Sub-region 4	4	0	0	0	0	4	0
Sub-region 5	0	0	0	0	0	0	0
<b>Cost of Hangar Rental</b>							
Region total	16	2	0	3	4	6	1
Sub-region 1	7	1	0	2	3	1	0
Sub-region 2	4	1	0	1	1	1	0
Sub-region 3	1	0	0	0	0	0	1
Sub-region 4	4	0	0	0	0	4	0
Sub-region 5	0	0	0	0	0	0	0
<b>Itinerant Hangar/Aircraft Parking Available</b>							
Region total	16	3	1	5	5	1	1
Sub-region 1	7	3	0	1	3	0	0
Sub-region 2	4	0	1	2	1	0	0
Sub-region 3	1	0	0	0	0	0	1
Sub-region 4	4	0	0	2	1	1	0
Sub-region 5	0	0	0	0	0	0	0
<b>FBO/Maintenance Service</b>							
Region total	16	2	0	6	4	3	1
Sub-region 1	7	2	0	3	1	1	0
Sub-region 2	4	0	0	2	2	0	0
Sub-region 3	1	0	0	0	0	0	1
Sub-region 4	4	0	0	1	1	2	0
Sub-region 5	0	0	0	0	0	0	0
<b>Customer Service/Friendliness</b>							
Region total	16	0	0	3	4	8	1
Sub-region 1	7	0	0	1	3	3	0
Sub-region 2	4	0	0	1	1	2	0
Sub-region 3	1	0	0	0	0	0	1
Sub-region 4	4	0	0	1	0	3	0
Sub-region 5	0	0	0	0	0	0	0

**Appendix B: Survey Results by Question (Helicopter Respondents, Ratings of Airport Amenities)**

	Total	Least Important					Most Important
		1	2	3	4	5	No Answer
<b>Airport Security</b>							
Region total	16	0	1	5	7	2	1
Sub-region 1	7	0	1	1	5	0	0
Sub-region 2	4	0	0	1	1	2	0
Sub-region 3	1	0	0	0	0	0	1
Sub-region 4	4	0	0	3	1	0	0
Sub-region 5	0	0	0	0	0	0	0
<b>Rental/Courtesy Availability</b>							
Region total	16	3	2	6	4	0	1
Sub-region 1	7	2	1	4	0	0	0
Sub-region 2	4	1	0	1	2	0	0
Sub-region 3	1	0	0	0	0	0	1
Sub-region 4	4	0	1	1	2	0	0
Sub-region 5	0	0	0	0	0	0	0
<b>Restaurant</b>							
Region total	16	4	5	2	4	0	1
Sub-region 1	7	3	2	1	1	0	0
Sub-region 2	4	1	1	0	2	0	0
Sub-region 3	1	0	0	0	0	0	1
Sub-region 4	4	0	2	1	1	0	0
Sub-region 5	0	0	0	0	0	0	0



## **CONNECTING GLOBALLY**

North Central Texas General Aviation and Heliport System Plan

### **APPENDIX C**

#### **FAA General Aviation and Part 135 Activity Survey**

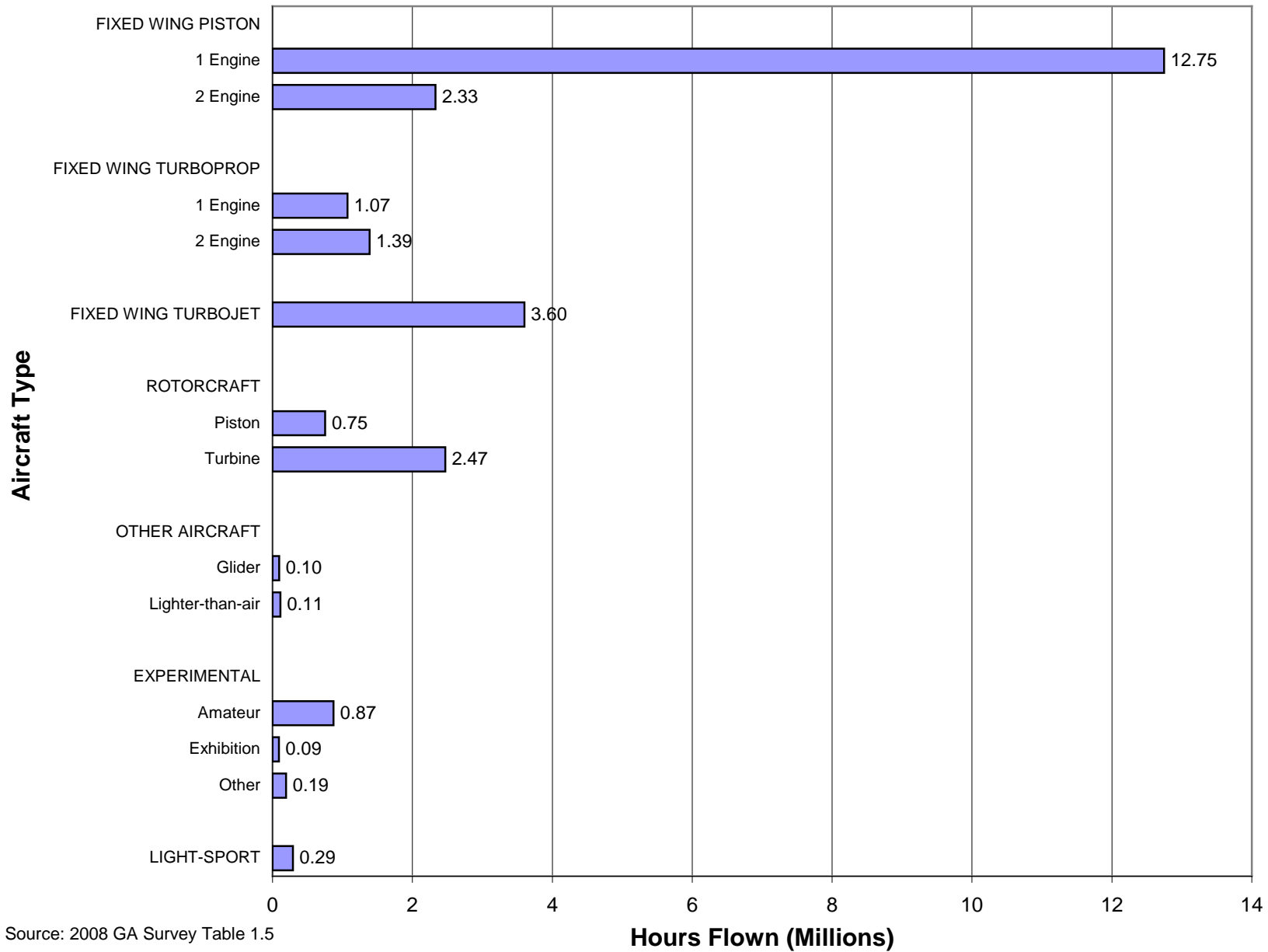
Chart 1 – 2008 Hours Flown by Type

Chart 2 – 2007 and 2008 Hours Flown by Actual Use

Chart 3 – 2008 Hours Flown by Actual Use

Source: Federal Aviation Administration (FAA)

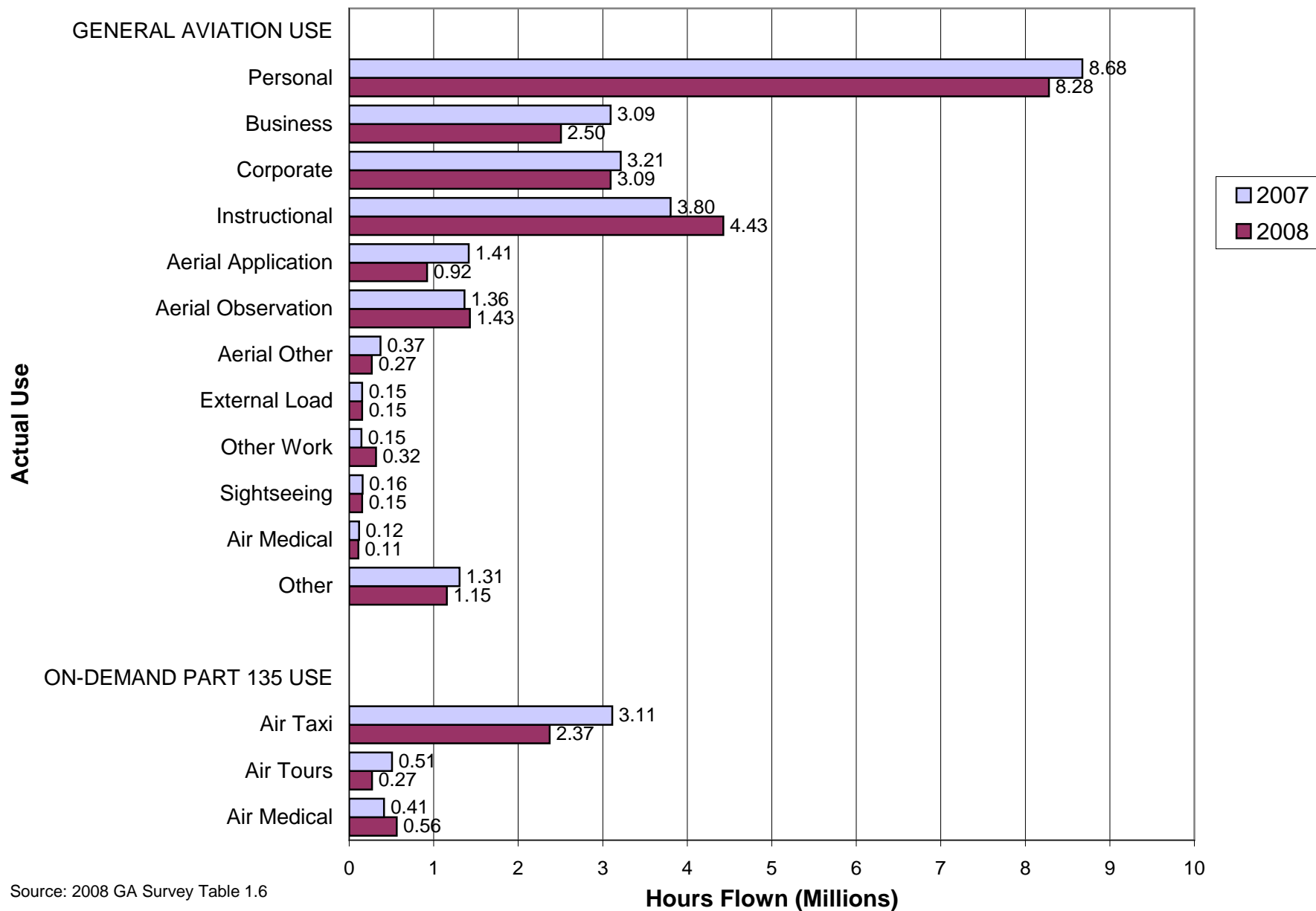
**Chart 1**  
**2008 Hours Flown by Aircraft Type**



Source: 2008 GA Survey Table 1.5

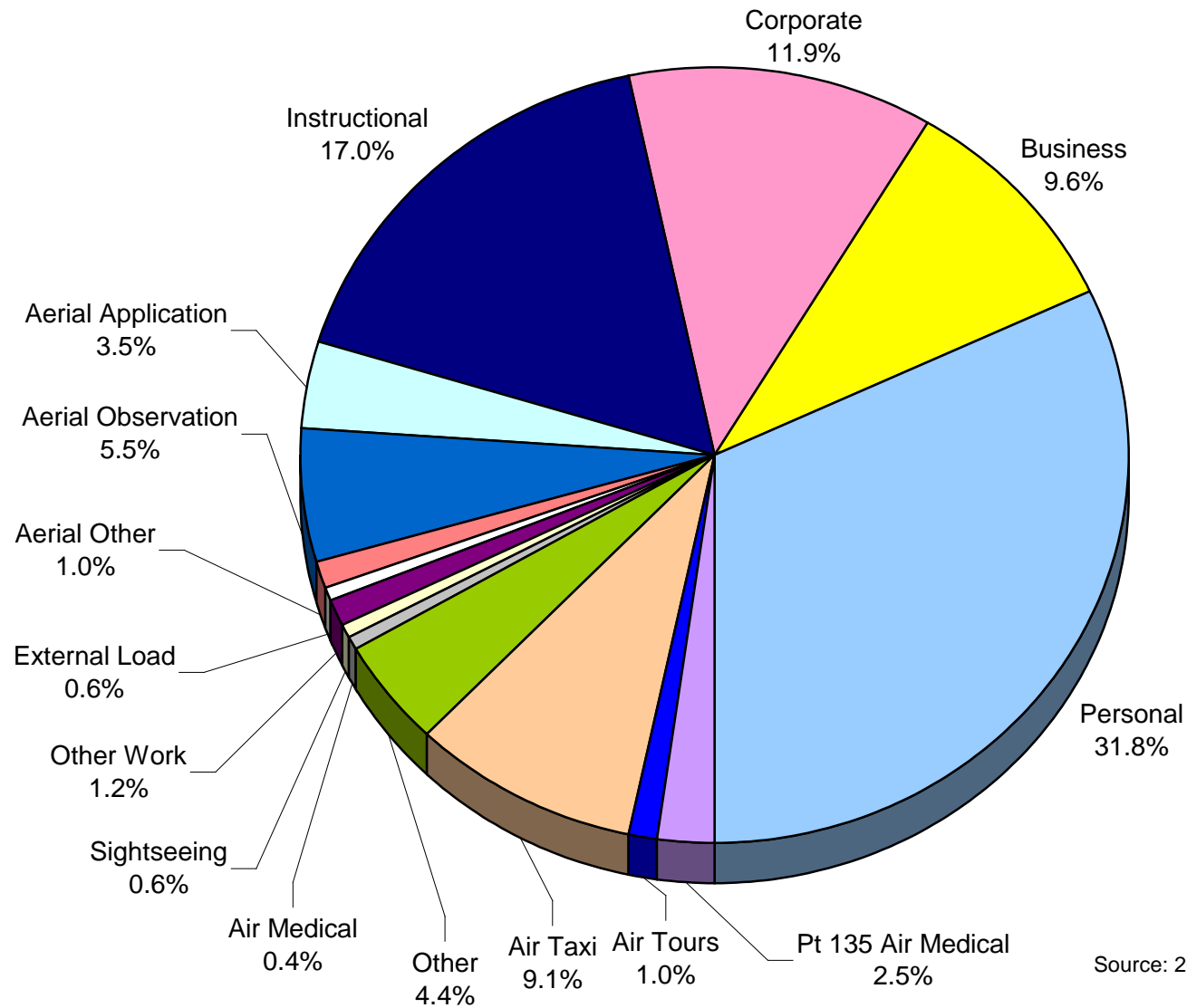


**Chart 2**  
**2007 and 2008 Hours Flown by Actual Use**



Source: 2008 GA Survey Table 1.6

**Chart 3**  
**2008 Hours Flown by Actual Use**



Source: 2008 GA Survey Table 1.6