Florida Department of Transportation
Aviation Office

Project Number: BDK84 948-2

2013 Public Use Airports' Rates and Charges Analysis

Final Report

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Metric Conversion

SYMBOL	WHEN YOU KNOW	MULTIPLY BY	TO FIND	SYMBOL
LENGTH				
in	inches	25.4	millimeters	mm
ft	feet	0.305	meters	m
yd	yards	0.914	meters	m
mi	miles	1.61	kilometers	km
VOLUME				
fl oz	fluid ounces	29.57	milliliters	mL
gal	gallons	3.785	liters	L
ft^3	cubic feet	0.028	cubic meters	m^3
yd^3	cubic yards	0.765	cubic meters	m^3
NOTE: volumes greater than 1000 L shall be shown in m^3				
MASS				
oz	ounces	28.35	grams	g
lb	pounds	0.454	kilograms	kg
T	short tons (2000 lb)	0.907	megagrams (or "metric ton")	Mg (or "t")
TEMPERATURE (exact degrees)				
^oF	Fahrenheit	5 (F-32)/9 or (F-32)/1.8	Celsius	^oC

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It is essential for airports to charge fees that are not only fair for users and tenants, but are also sufficient to cover the costs of operating the airport. Due to the unique nature of airport property, airports often have difficulty finding comparable property from which to benchmark and establish market rates. The purpose of this project is to collect and analyze data on various user fees and charges at Florida public use airports, in order to assist them in establishing competitive rates and ensuring their economic success.</td></tr>
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List of Acronyms

Avgas	Aviation Gasoline
CFASPP	Continuing Florida Aviation System Planning Process
FBO	Fixed Base Operator
GA	General Aviation
MAG	Minimum Annual Guarantee
PSFPY	Per Square Foot Per Year

Chapter 1
Introduction

Most of the funding for operations and capital improvements at U.S. airports come from user financing in the form of various fees and charges levied on the users of aviation facilities. This is typical for both airports with commercial service as well as general aviation (GA) airports. Through airport development grants, federal and state governments are capable of providing only a fraction of airport funding needs. In addition, most grants are intended only for capital improvements, and typically do not cover airport operating costs. Airport self-sustainability is an ultimate goal of any airport grant program. Thus, both federal and state granting agencies are interested in ensuring that airports maximize their revenue, and use it to fund operations and capital development needs.

It is essential for airports to charge fees that are not only fair to users and tenants, but are also sufficient to cover the costs of operating the airport. Charging market rates for the use of airport assets and property is necessary for the economic success of the airport. However, airports must balance the need to generate as much revenue as possible with the economic realities of the local market. Charging fair market value for the use of airport property is both a requirement of most airport development grants and a sound business practice. Individual airports often survey other airports in the state to estimate typical market rates and fees, but this process may have limitations associated with subjective judgment in the choice of survey area, lack of consistency, and quality of collected data. Occasionally, even well-intentioned managers and local public officials may lack the knowledge or business expertise necessary to determine appropriate market rates.

It can be difficult for airport operators to establish rates and user fees that balance the goal of airport self-sufficiency with fairness to users, as well as market competitiveness. Both airport managers and state aviation officials would benefit from a statewide airport survey and analysis of airport rates and fees. The survey will allow airport managers and local elected officials to benchmark the rates and charges at their airports against the statewide average, adjusting them to local realities. In addition, a snapshot of the prevailing rates and charges at Florida airports will provide useful information to assist state aviation decision makers in developing policies that further enhance the state's aviation system.

The Florida Department of Transportation (FDOT) Aviation Office administers a state aviation program valued at over $100 million annually, with a large portion of the funding in the form of direct grants to airports. The analysis of user rates and fees employed by Florida's airports is a valuable tool to assess the health of the state aviation system and design policies to maximize the effectiveness of the state aviation grant program.

The purpose of this project is to collect and analyze the data on various user fees and charges at Florida public use airports, including landing fees, tie-down fees, fuel flowage fees, hangar rents, ground leases, property leases, and parking and special use fees. This analysis aims to assist Florida public airports in establishing competitive rates while ensuring economic success. In addition, the analysis of current

airport rates and fees will provide a valuable resource to state aviation officials for developing policies that further enhance the efficiency and economic health of the statewide aviation system.

The FDOT Aviation Office has elected to engage the services of the Center for Urban Transportation Research (CUTR) at the University of South Florida to provide this assistance. CUTR has demonstrated the requisite experience and background to provide the required services.

Chapter 2
Research Approach

To collect the desired information on rates and charges at Florida public use airports, researchers designed an extensive online survey. The survey consists of 33 questions covering most aspects of airport operations, from airport user fees to terminal concessions, parking, special events, insurance coverage, minimum standards, and so forth. The complete questionnaire is provided in Appendix A.

During the development of the survey, the Center for Urban Transportation Research (CUTR) worked with the FDOT Aviation Office and the project manager to identify primary areas of interest for FDOT in the data collection effort. Additionally, input and comments were sought from FDOT districts, aviation advocacy groups, and industry stakeholders. Involving all major interested groups at the early stages of survey development was aimed at ensuring the airports would be comfortable with the resulting questionnaire.

CUTR researchers attended five Continuing Florida Aviation System Planning Process (CFASPP) meetings, including four regional steering committee meetings and one statewide meeting, to participate in discussions regarding the survey questionnaire and seek comments from airport representatives. Feedback and suggestions regarding all aspects of the survey were requested, including its contents, format, delivery, etc. Comments and suggestions were welcome during and after the meeting, and could be directed to either the FDOT project manager or to CUTR. To facilitate discussion and comments, business cards of the project's principal investigator were distributed at the meetings.

The survey was designed as a web-based application to facilitate data collection. Password-protected access to the survey ensured proper handling of sensitive information provided by users. The survey went live and became available to users on March 26, 2013. The link to the survey, as well as unique user names and passwords to access it, were distributed to all 129 public use airports (including privately owned airports) in Florida. The airports were also given an option to complete the survey on paper instead of submitting it electronically. By request, a paper version of the survey was sent, either mailed or e-mailed. The deadline for completing the survey, both electronic and paper submissions, was June 30, 2013, giving airport representatives more than three months to complete the survey.

During the survey period, researchers stayed in contact with the airports by sending regular reminders, answering questions about the survey, and providing technical support of the online data collection tool. During the March 26 through July 1, 2013 time period, 5 airports requested to reset their survey accounts to restart the survey, and 21 airports requested a paper version of the questionnaire.

Overall, 65 of the 129 public use airports in Florida responded to the survey. Of them, 44 airports fully completed the survey (38 electronic and 6 paper submissions), and 21 airports provided responses to some questions, but did not complete the full survey. Including partial responses, the total survey response rate is 50.4 percent.

After the main survey period ended, researchers distributed a smaller online survey soliciting data on lease rates for box hangars and corporate hangars only. This mini-survey was designed to recover hangar rate data that was misplaced due to a technical problem with the main survey. Thirty-six airports responded to the mini-survey, resulting in a 28 percent response rate.

Chapter 3
Airports' Rates and Charges Analysis

There are a total of 129 public use airports in Florida, including 19 commercial and 110 general aviation (GA) airports. Sixty-five of these airports responded to the Florida Public Use Airports Survey distributed by CUTR, providing data on the rates and user fees in place at their facilities. The results of the survey are described in more detail in the following section.

The current analysis is based on the data provided by the 65 responding airports, and all the presented comparisons and conclusions apply only to these surveyed airports. No inference is made concerning the rates at all Florida airports based on the survey sample.

Airport Ownership

The majority of the responding airports are owned by the city in which they are located (24 airports, or 36.9 percent), followed by the county (17 airports, or 26.2 percent), and finally by an airport authority (16 airports, or 24.6 percent). Airports in private ownership and joint ownership each represent 4.6 percent of the responding airports (three airports of each type), with 3.1 percent (two airports) being controlled by an airport board. The ownership type of the surveyed airports is summarized in Figure 3-1.

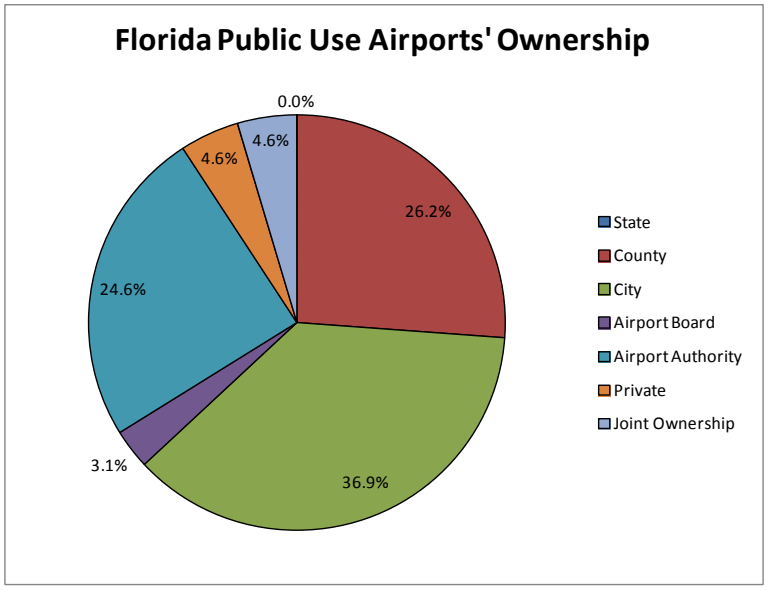


Figure 3-1. Florida airports' ownership.

Geographic Location

The geographic regions presented in the current report refer to the nine geographic regions of the state recognized by FDOT's Continuing Florida Aviation System Planning Process (CFASPP). The map of the CFASPP regions is presented in Figure 3-2.

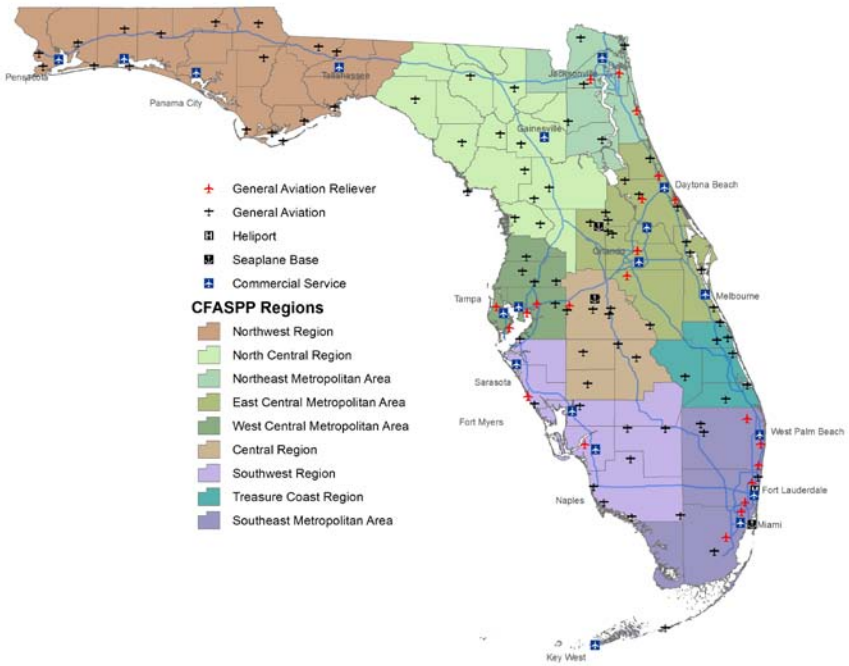


Figure 3-2. Map of Florida's geographic regions.

Source: Florida Department of Transportation

Representing all regions of the state, the airports responding to the survey are geographically diverse. With few exceptions, the airports are distributed almost evenly between Florida's nine CFASPP regions. The largest number of airports is represented by the Southeast region (14 airports, or 21.5 percent of all responding), while the Northeast and Treasure Coast are represented by the least number (3 airports in each region, or 4.6 percent of all responding in each region). A healthy geographic mix of airports is important for proper comparison of rates in a large state such as Florida. The breakdown of responding airports by geographic region is presented in more detail in Figure 3-3.

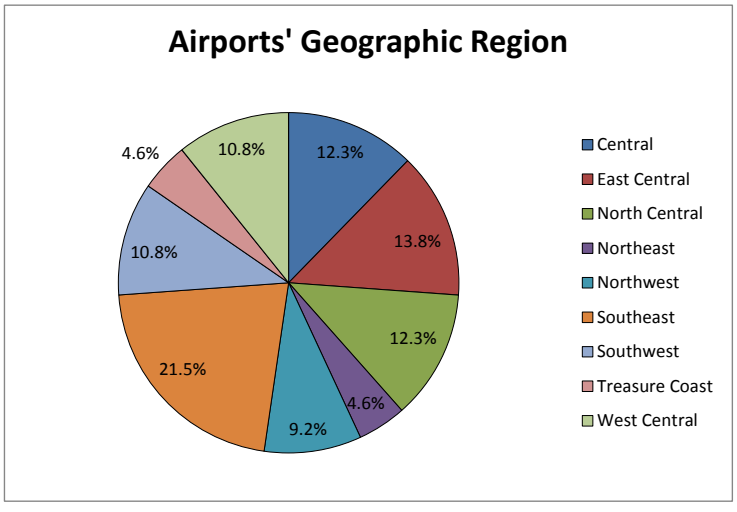


Figure 3-3. Responding airports by geographic region.

General Airport Characteristics

Of the responding airports, 16.9 percent (11 airports) are commercial, while 83.1 percent (54 airports) are general aviation (GA). The majority of all airports in Florida are publicly owned, but there are a few privately owned airports in the survey sample. More than 94.0 percent of the responding GA airports are publicly owned; about 5.6 percent are private. Unlike GA airports, all commercial airports are publicly owned. A breakdown of the responding airports by service and ownership type is presented in Figure 3-4.

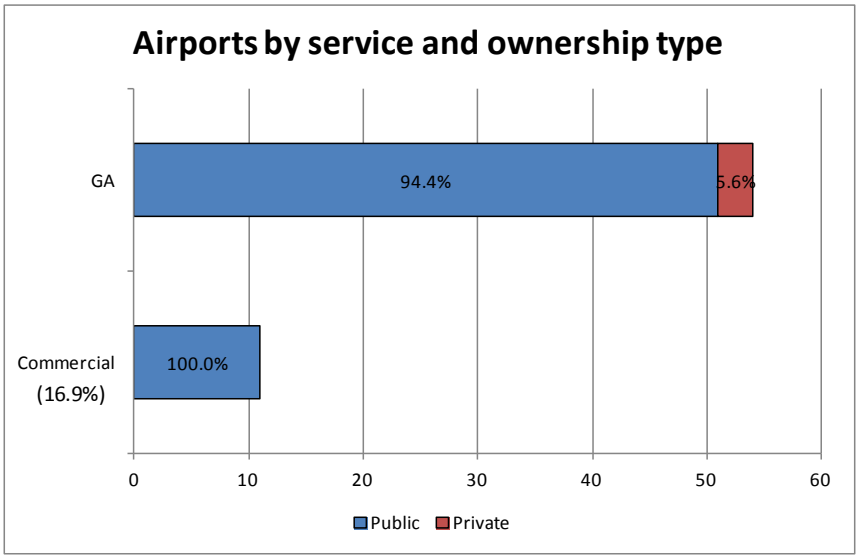


Figure 3-4. Airports' ownership, commercial vs. GA airports.

A more detailed comparison of major airport characteristics between the responding commercial and GA airports is presented in Table 3-1.

Table 3-1. Florida Airport Characteristics, Commercial vs. GA Airports

Airport Characteristics	Commercial Average	GA Average
Number of runways	2.2	2
Length of longest runway (feet)	10,003	5,153
Paved runway	100.0%	92.3%
Number of based aircraft	163	142
Number of operations per year	165,942	70,149
Enplaned passengers per year	4,497,523	0
Cargo tonnage per year (tons)	280,964	56
Provision of on-demand service (Part 139)	100.0%	52.1%
Large aircraft operations (Part 125)	100.0%	2.0%

Airport characteristics vary by location statewide, with some regional variations being significant. The comparison of number of runways, length of runways, number of based aircraft, and number of annual operations for commercial and GA airports by region is presented in Figures 3-5, 3-6, 3-7, and 3-8,

respectively. The number of commercial and GA airports that responded to each question is provided in parenthesis, the first number representing commercial airports, and the second number representing GA airports. Due to a limited number of airports representing each region in the survey data, the results of the analysis by geographic region should be interpreted with caution.

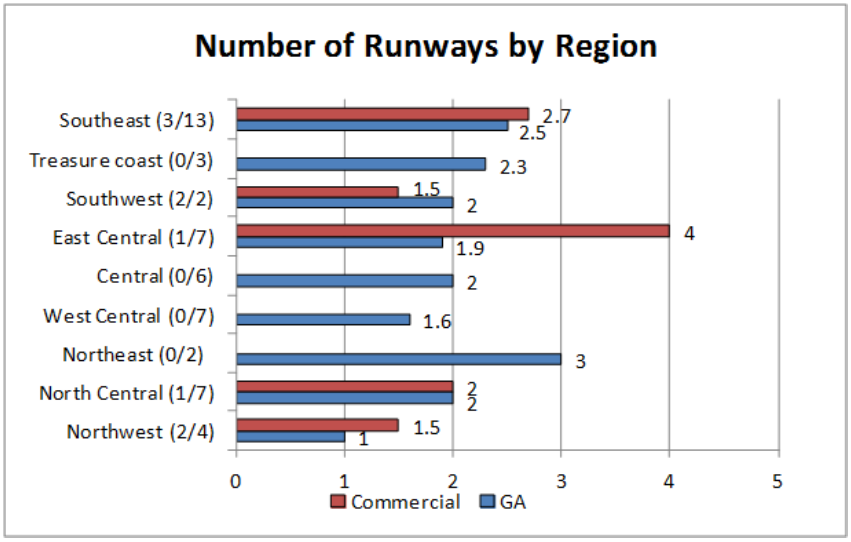


Figure 3-5. Average number of runways by region and service type.

The data show that commercial airports located in the East Central region of Florida have, on average, the largest number of runways (an average of four per airport). GA airports with the largest number of runways (an average of three per airport) are located in the Northeast region of the state.

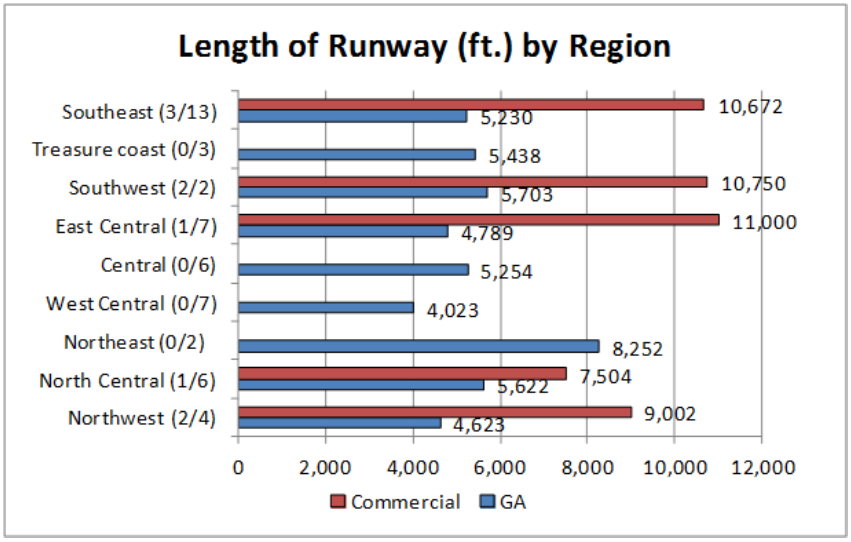


Figure 3-6. Average runway length by region and service type.

Commercial airports with the longest runways are located in the East Central region (longest runway length of 11,000 feet), while GA airports with the longest runways are located in the Northeast region of Florida (longest runway length of 8,252 feet).

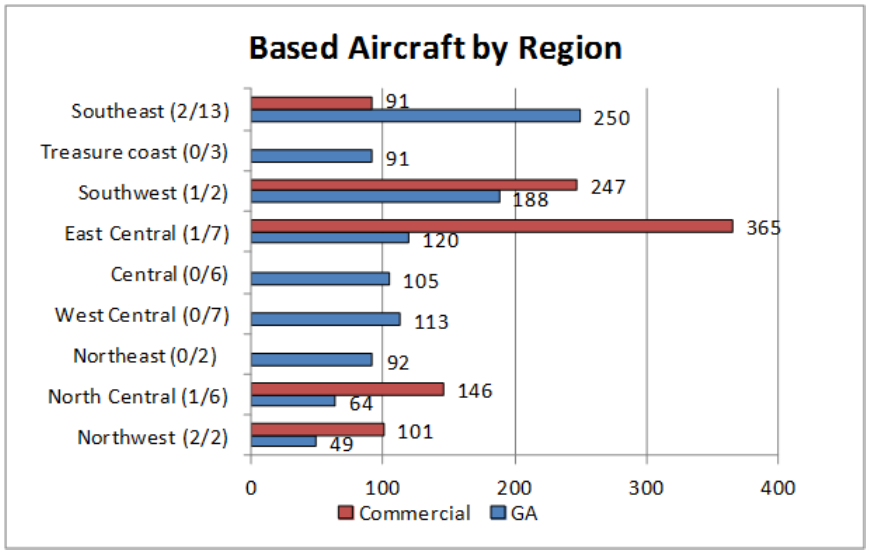


Figure 3-7. Average number of based aircraft by region and service type.

The East Central region has commercial airports with the largest number of based aircraft (an average of 365 per airport). GA airports with the largest number of based aircraft (an average of 250 per airport) are located in the Southeast region of the state.

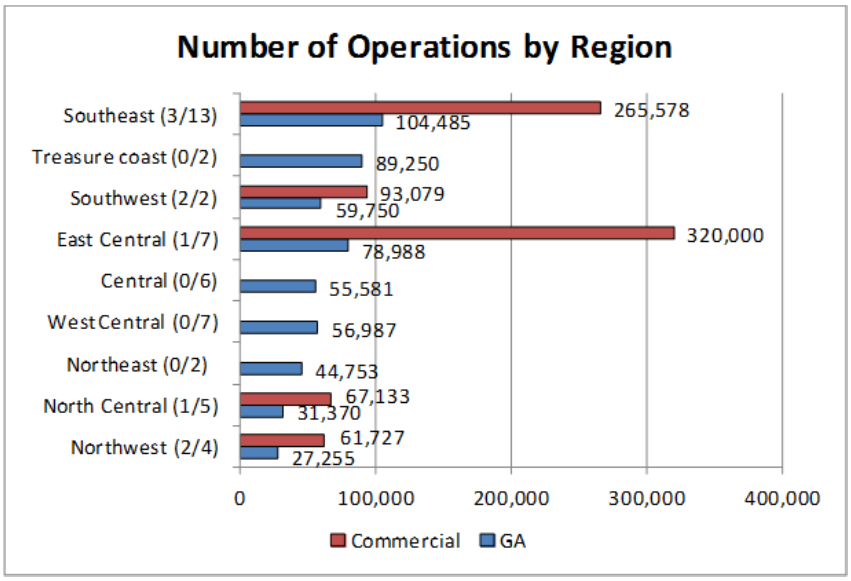


Figure 3-8. Average number of operations by region and service type.

With an average of 320,000 annual operations per airport in the East Central region and 265,578 annual operations per airport in the Southeast, commercial airports in the East Central and Southeast regions of Florida by far have the largest amount of operations per airport. GA airports with the largest average number of operations (an average of 104,485 per year per airport) are located in the Southeast region.

Air Service Providers/Carriers

Air service at an airport is typically provided by airlines with scheduled service or by charter flights. Scheduled air service could be provided by either mainline carriers or by regional or affiliate carriers. Regional carriers typically operate in regional markets that lack sufficient demand to attract mainline carriers. An *air charter service* refers to the practice of renting an aircraft for on-demand or other ad hoc air travel.

The survey data show that all surveyed commercial airports have air service provided by mainline carriers. In addition, 77.8 percent of the surveyed commercial airports have regional air carriers, and 88.9 percent have air charter service. The difference between the entities that provide air service at commercial and GA airports is presented in Figure 3-9.

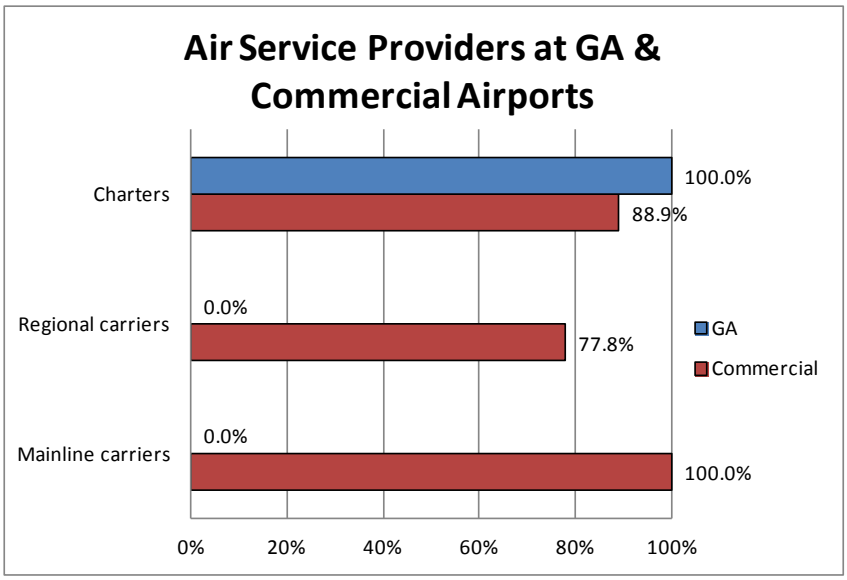


Figure 3-9. Air service providers, GA and commercial airports.

While air service at GA airports is typically provided by air charter, commercial airports can have both scheduled service and charter flights. Almost 89 percent of surveyed commercial airports have air service by both scheduled flights, either by mainline or regional carrier, and charter flights. Two thirds of surveyed commercial airports have air service provided by mainline carriers, regional carriers, and charter flights. About 11.1 percent of commercial airports provide only scheduled air service and no charter service. The shares of surveyed commercial airports with two or more types of air service providers are presented in more detail in Figure 3-10.

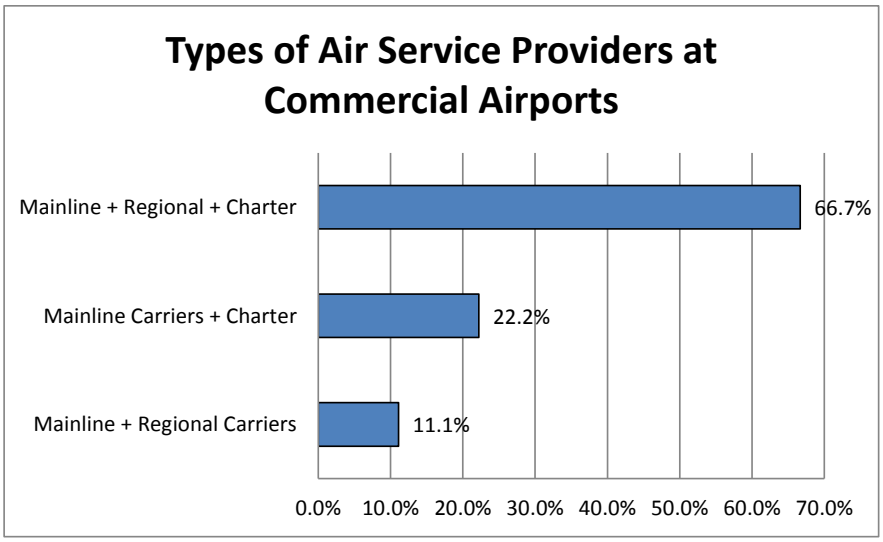


Figure 3-10. Commercial airports with two or more types of air service providers.

Of the surveyed Florida airports with scheduled air service, 91 percent have long-term agreements with airlines that allow air carriers to influence the decisions of the airport. The airlines that signed such long-term agreements are referred to as *signatory carriers*. Conversely, *nonsignatory carriers* do not enter into a signatory agreement with an airport, and typically operate limited or seasonal service. About 73 percent of the surveyed Florida airports air service is provided by nonsignatory carriers. The shares of airports with different carrier types are presented in Figure 3-11.

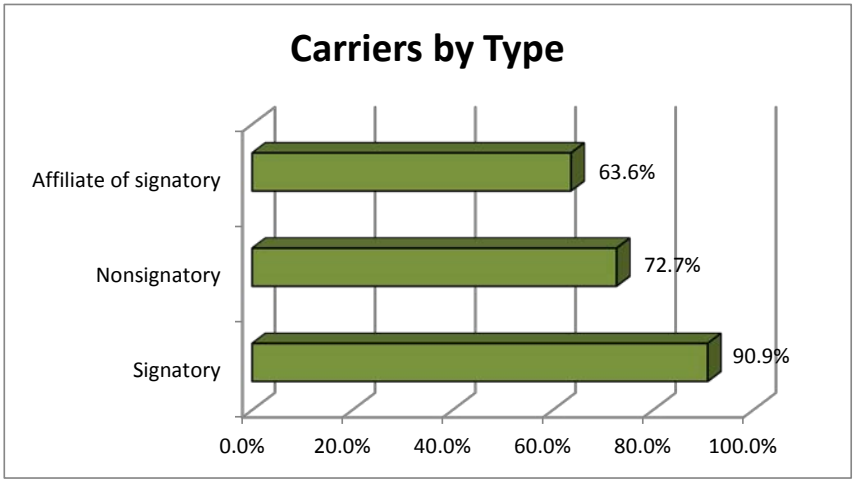


Figure 3-11. Air carrier types at Florida airports.

While air service at a majority of the airports is provided by signatory carriers, only 18 percent of airports rely exclusively on such air carriers. Most of the airports have more than one type of air carrier providing service. More than half of the surveyed airports with airline service reported having all three types of carriers at the airport, while only 27 percent rely on only one type of carrier (18 percent of

airports have only signatory carriers, 9 percent have only nonsignatory). Shares of Florida airports, both commercial and GA, with different numbers of carrier types are presented in Figure 3-12.

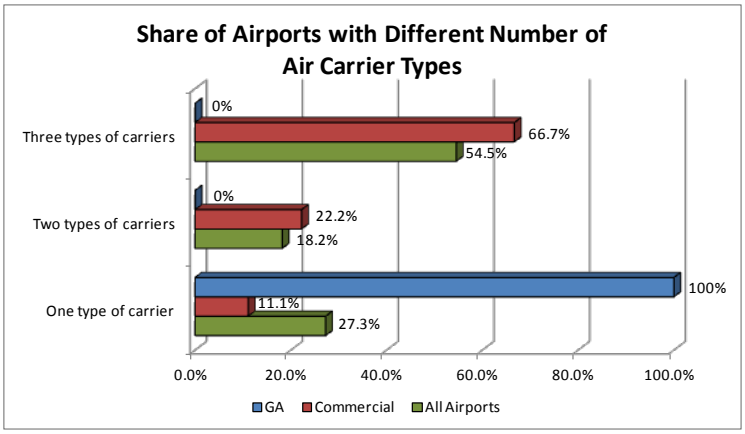


Figure 3-12. Number of air carrier types at Florida airports.

Airport/Airline Agreement Structure

There are three main types of agreements that airports can have with airlines regarding air carrier fees: *residual*, *compensatory*, or *hybrid*. In a residual agreement, the airlines accept financial risk and guarantee the airport sufficient revenue to cover operating costs and debt service requirements.

Under a residual agreement, after an airport deducts all non-airline revenue from its total expenses, the airlines are responsible for the remaining (residual) amount, ensuring that the airport will always break even. In a compensatory agreement, the airport assumes the financial risk of covering operating expenses, but also retains all excess revenues (revenues that exceed expenses). Under the compensatory method, an airport is divided into cost centers and airlines pay a share of those costs, based on the amount of space they occupy, planes landed/departed, passengers enplaned, and other measures of airline use. Compensatory agreements are more typical for mature airports with a stable revenue stream. A hybrid agreement is a combination of both agreement types.[1]

Neither the residual nor the compensatory agreement guarantees a greater revenue stream for the airport under all circumstances. Every airport should be considered individually. An optimal agreement structure will depend on the airport's function, traffic level, capital projects costs, debt structure, and other factors.

The airport-airline agreement structure for the surveyed Florida airports is summarized in Table 3-2.

Table 3-2. Airline-Airport Agreement Structure

Agreement Structure	Commercial Average	GA Average	All Airports
Residual	44%	50%	45%
Compensatory	11%	50%	18%
Hybrid	44%	0%	36%

[1] *Avjobs.com*, "History of Airports," http://www.avjobs.com/history/airports.asp#.UjoWAFO1tnw, accessed September 18, 2013.

Airline Rates and Fees

Commercial airports typically charge air carriers various fees for use of airport facilities. While there could be a wide variety of fees paid by the airlines, this report focuses on the most commonly used fees, including charges for baggage claim use, common areas, gate holding areas, loading bridges, office space, and ticket counters, as well as landing fees and passenger facility charges. Researchers make no assertion or implication that this list of fees is exhaustive.

The basis for airline charges varies depending on the type of charge, and may include aircraft turn, enplaned/deplaned passengers, square footage of space used, landing weight of an aircraft, flat fee, and others. The collected data show that most of the airline charges at Florida's commercial airports are based on square footage of space used, followed by landing weight of aircraft, and finally by number of enplaned passengers. In addition to flat fees per month or per year, charges are also typically based on aircraft turn and scheduled departure.

The airline rates that the surveyed commercial airports in Florida charge signatory carriers (those with long-term agreements with the airports) are summarized in Table 3-3. The table demonstrates the difference in rates for different airline-airport agreement structures, and also presents the average for all commercial airports/agreement structures. The numbers in parentheses listed after the rates indicate the number of surveyed airports on which a particular estimate is based.

Table 3-3. Rates for Signatory Carriers

Fee Type (for the use of)	Average for All Agreements	Compensatory Average	Residual Average	Hybrid Average
Baggage claim	$57.16/sq. ft./yr. (5) $2.14/domestic arriving seat (1)	N/A	$55.77/sq. ft./yr. (2) $2.14/domestic arriving seat (1)	$58.09/sq. ft./yr. (3)
Common areas	$47.67/sq. ft./yr. (3) $1.55/aircraft shadow (1)	N/A	$1.55/aircraft shadow (1)	$64.00/sq. ft./yr. (2)
Gate holding areas	$60.20/sq. ft./yr. (7) $185.00/aircraft turn (1) $1.55/aircraft shadow (1)	$92.32/sq. ft./yr. (1)	$48.62/sq. ft./yr. (3) $185.00/aircraft turn (1) $1.55/aircraft shadow (1)	$61.08/sq. ft./yr. (3)
Landing fee	$2.12/1,000 lbs. landed weight (8) $1.34/enplaned passenger (1) $200.00/aircraft turn (1)	$2.90/1,000 lbs. landed weight (1)	$1.48/1,000 lbs. landed weight (4)	$3.47/1,000 lbs. landed weight (2) $1.34/enplaned passenger (1)
Loading bridge	$81,946/year (2) $1,145/month (1) $70.00/aircraft turn (1) $10.00/ departure (1)	$98,858.00/year (1)	$70.00/aircraft turn (1) $10.00/departure (1)	$65,034/year (1) $1,145/month (1)
Offices	$66.49/sq. ft./yr. (8)	$92.32/sq. ft./yr. (1)	$64.10/sq. ft./yr. (4)	$61.08/sq. ft./yr. (3)
Passenger facility charge	$4.50/enplaned passenger (8)	$4.50/enplaned passenger (1)	$4.50/enplaned passenger (3)	$4.50/enplaned passenger (3)
Ticket counters	$87.99/sq. ft./yr. (9)	$92.32/sq. ft./yr. (1)	$73.95/sq. ft./yr. (4)	$67.93/sq. ft./yr. (3)

**The number of airports that responded to each question is provided in parenthesis.*

Airline rates examined in the current analysis vary depending on the type of the agreement between an airline and an airport. The data from the surveyed Florida airports show that the rates charged to the airlines for the use of airport facilities are typically higher under compensatory agreements, compared to both residual and hybrid agreements. However, no consistent difference between the rates paid by the airlines with residual and hybrid agreements was observed.

Additionally, airline rates depend on the signatory status of the airlines. Airlines that are affiliated with signatory carriers may enjoy the benefit of receiving preferential rates; however, the rates applied to airlines affiliated with signatory carriers may still be higher than the rates paid by the signatory carriers themselves. The rates for airlines affiliated with the signatory carriers operating at Florida commercial airports are summarized in Table 3-4.

Table 3-4. Rates for Affiliates of Signatory Carriers

Fee Type (for the use of)	Average for All Agreements	Compensatory Average	Residual Average	Hybrid Average
Baggage claim	$57.16/sq. ft./yr. (5) $2.14/domestic arriving seat (1) $2.20/aircraft turn/year (1)	$2.20/aircraft turn/year (1)	$55.77/sq. ft./yr. (2) $2.14/domestic arriving seat (1)	$58.09/sq. ft./yr. (3)
Common areas	$64.00/sq. ft./yr. (2) $1.55/aircraft shadow (1)	N/A	$1.55/aircraft shadow (1)	$64.00/sq. ft./yr. (2)
Gate holding areas	$58.96/sq. ft./yr. (5) $112.10/aircraft turn (2) $1.55/aircraft shadow (1)	$2.20/aircraft turn (1)	$55.77/sq. ft./yr. (2) $222.00/aircraft turn (1) $1.55/aircraft shadow (1)	$61.08/sq. ft./yr. (3)
Landing fee	$2.17/1,000 lbs. landed weight (8) $1.34/enplaned passenger (1) $200.00/aircraft turn (1)	$2.90/1,000 lbs. landed weight (1)	$1.59/1,000 lbs. landed weight (4)	$3.47/1,000 lbs. landed weight (2) $1.34/enplaned passenger (1)
Loading bridge	$77.50/aircraft turn (2) $65,034/year (1) $1,145/month (1) $10.00/departure (1)	$85.00/aircraft turn (1)	$70.00/aircraft turn (1) $10.00/departure (1)	$65,034/year (1) $1,145/month (1)
Offices	$70.46/sq. ft./yr. (8)	$92.32/sq. ft./yr. (1)	$76.52/sq. ft./yr. (4)	$55.11/sq. ft./yr. (3)
Passenger facility charge	$4.50/enplaned passenger (8)	$4.50/enplaned passenger (1)	$4.50/enplaned passenger (3)	$4.50/enplaned passenger (3)
Ticket counters	$80.67/sq. ft./yr. (8)	$92.32/sq. ft./yr. (1)	$87.31/sq. ft./yr. (4)	$67.93/sq. ft./yr. (3)

**The number of airports that responded to each question is provided in parenthesis.*

In general, airlines that sign long-term use agreements with airports and their affiliates may get better rates, compared to nonsignatory airlines. The rates that apply to nonsignatory carriers operating at the surveyed Florida commercial airports are summarized in Table 3-5.

Table 3-5. Rates for Nonsignatory Carriers

Fee Type (for the use of)	Average for All Agreements	Compensatory Average	Residual Average	Hybrid Average
Baggage claim	$66.71/sq. ft./yr. (4) $4.40/aircraft turn (1)	$4.40/aircraft turn (1)	$73.83/sq. ft./yr. (1)	$64.34/sq. ft./yr. (3)
Common areas	$67.59/sq. ft./yr. (2) $0.50/aircraft turn/seat (1) $425/departure (1) $425/enplaned aircraft (1)	$0.50/aircraft turn/seat (1)	$425/departure (1) $425/enplaned aircraft (1)	$67.59/sq. ft./yr. (2)
Gate holding areas	$67.63/sq. ft./yr. (3) $4.40/aircraft turn/seat (1) $222/aircraft turn (1) $425/departure (1) $425/enplaned aircraft (1)	$4.40/aircraft turn/seat (1)	$222/aircraft turn (1) $425/departure (1) $425/enplaned aircraft (1)	$67.63/sq. ft./yr. (3
Landing fee	$2.32/1,000 lbs. landed weight (8) $250/aircraft turn (1)	$2.90/1,000 lbs. landed weight (1)	$1.84/1,000 lbs. landed weight (3)	$2.94/1,000 lbs. landed weight (3)
Loading bridge	$15.00/departure (2) $85.00/aircraft turn (1) $1,431/month (1) $71,537/gate/year (1)	$85.00/aircraft turn (1)	$15.00/departure (2)	$1,431/month (1) $71,537/gate/yr. (1)
Offices	$77.05/sq. ft./yr. (6)	$101.56/sq. ft./yr. (1)	$78.92/sq. ft./yr. (2)	$67.63/sq. ft./yr. (3)
Passenger facility charge	$4.50/enplaned passenger (6) 45.00/aircraft turn (1)	$4.50/enplaned passenger (1)	$4.50/enplaned passenger (2)	$4.50/enplaned passenger (3)
Ticket counters	$78.27/sq. ft./yr. (5) $115/aircraft turn (1) $425/departure (1) $425/enplaned aircraft (1)	$115/aircraft turn (1)	$82.08/sq. ft./yr. (2) $425/departure (1) $425/enplaned aircraft (1)	$75.73/sq. ft./yr. (3)

**The number of airports that responded to each question is provided in parenthesis.*

The comparison of average rates charged to signatory, affiliate, and nonsignatory airlines is presented in Figure 3-13.

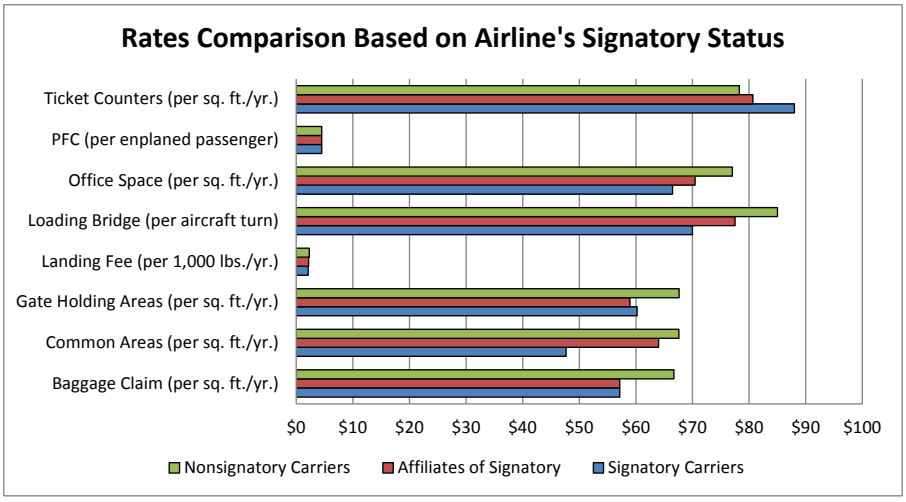


Figure 3-13. Comparison of average rates between different types of carriers.

Airport Terminal Concessions and Advertising

Terminal concession and advertising fees are charged by airports for terminal space used for the purpose of operating retail and food establishments, and for displaying in-terminal advertising. Payments for in-terminal concessions have several forms, including charges per square foot of space used by retailers/advertisers, percentage of gross revenue, or both. In addition to charging a certain percentage of gross sales/revenue, airports often require businesses operating in the terminal building to guarantee payment of a minimum amount to the airport. This amount is called *minimum annual guarantee* (MAG), and it provides the airport with a predictable revenue stream from concessions.

Airports do not always operate the concessions themselves, sometimes opting to contract out the concession service. When the concessions are managed by an outside company/contractor, the airport does not set concession rates, instead allowing the contractor to establish the rates and collect the fees. The airport typically collects a percentage of gross sales received by the contractor.

Since concession and advertising rates may vary substantially depending on the unique terms of the contract, it may be difficult to compare these rates across different airports. While some generalized rate comparison can be performed, the results should be interpreted with caution. Average terminal concession rates for the surveyed Florida commercial and GA airports are summarized in Table 3-6.

Table 3-6. Terminal Concessions and Advertising

Type of Terminal Concession	Average for Commercial Airports	Average for GA Airports
Carts and kiosks	$90.32 per sq. ft./yr. (1) 5.5% of gross revenue + MAG $33,750 (1)	
Floor displays	30% of gross revenue (1) 15% of gross sales (when contracted out) + MAG $10,000 (paid by contractor) (1)	
Wall displays	43.8% of gross revenue (2) 15% of gross sales (when contracted out) + MAG $10,000 (paid by contractor) (1)	
Other advertising	55-60% of gross revenue or MAG (2) 15% of gross sales (when contracted out) + MAG $10,000 (paid by contractor) (1)	15% of gross revenue for sales under $100,000 (1)
Restaurant	5.5% of gross revenue + MAG $33,750 (2) 12% of gross revenue (1) 6% of food sales, 10% of alcohol sales (1)	5% of gross revenue (1)
Retail	7% of gross revenue + MAG $33,750 (4)	$17.00 per sq. ft./yr. (1) $500 monthly rental rate per space (1)
Vending machine	8.7% of gross revenue + MAG $33,750 (3)	30.5% of gross revenue (1) $17.00 per sq. ft./yr. (1)

**The number of airports that responded to each question is provided in parenthesis.*

The survey data collected indicate that most of the concession fees reported by Florida public use airports, both commercial and GA, are structured as a percentage of gross revenue, plus minimum annual guarantee. Notably, the data show that the minimum annual guarantee provision is used more often in concession contracts at commercial airports than at GA airports.

Car Rental Charges

The fees charged by the surveyed Florida airports, both commercial and GA, to agencies operating in terminal car rental facilities for airport passengers are summarized in Table 3-7.

Table 3-7. Rates for In-Terminal Car Rental Operations

Fee Type	Average for Commercial Airports	Average for GA Airports
In-terminal counters/office space	$47.20 per sq. ft./yr. (5) 10% of gross revenue + MAG (4) $12 per space/month (2)	$18 per sq. ft./yr. (2) 7.83% of gross revenue (3) $500 per month (2) $15,000 for annual permit (1)
Ready/return space	$0.13 per sq. ft./yr. (2) 9.5% of gross revenue or MAG (2) $15 per space/month (1) $36 per vehicle/month (1)	$16.86 per space/month (1)
Car fuel sales	10% of gross revenue (2)	Cost + $0.25 per gallon of fuel sold (1)
Off-airport car rental	9% of gross revenue (4) $3.48 per contract (2) $1.00 per trip	10% of gross revenue (1)
Other fees		$0.75 per car wash (1)

**The number of airports that responded to each question is provided in parenthesis.*

The data show that the most widely used forms of in-terminal car rental charges include charges per square foot of occupied space and percentage of gross revenue, with or without MAG. Other types of rental car charges employed by Florida public use airports include flat fees per month, per year, per rental contract, and per trip.

Customer Facility Charges

A customer facility charge at the airport is a fee charged to specific types of improvements benefiting certain tenants. Most commonly, a customer facility charge is imposed on rental car facilities at the airport. Customer facility charges levied on the rental car facilities at the surveyed Florida commercial and GA airports are presented in Table 3-8.

Table 3-8. Rental Car Customer Facility Charges, Commercial vs. GA Airports

	Average for Commercial Airports	Average for GA Airports
Customer facility charge	$3.24 per contract per day (6)	$2.50 per contract per day (1) 12.75% per contract (4)

**The number of airports that responded to each question is provided in parenthesis.*

The data indicate that in most cases a customer facility charge has the form of a flat fee per day per rental contract. Additionally, four airports reported charging this fee as a percentage of the rental contract amount. On average, car rental customer facility charges at the surveyed commercial airports are 29.6 percent higher than similar charges at the GA airports.

Airport Parking Concessions

An airport parking concession is a fee that an airport charges a third party operator (or owner) of the parking facilities on airport property. The fee is typically related to the level of parking activity, and is often imposed as a percentage of gross revenue, but can also be a flat fee. Parking concessions for different types of parking at the surveyed commercial airports are summarized in Table 3-9.

Table 3-9. Parking Concessions at Florida's Commercial Airports

Concession Type	Average Fee/Charge
Short-term parking	10% of gross revenue (2) $14 per day (2)
Long-term parking	10% of gross revenue (2) $13 per day (2)
Off-airport parking	9% of gross revenue (2) 4% of gross revenue if <$20K, 8% if >$20K (1) $1-$3 per trip (2)

**The number of airports that responded to each question is provided in parenthesis.*

Concession is not the only form of operating airport parking facilities by third parties. Parking services may be contracted out to a management company that pays the airport a fixed amount per year. Two of the surveyed commercial airports reported their facilities as operated by a third party under a management contract, rather than concession, paying the airport a fixed fee of $57.7 thousand per year.

Ground Transportation Fees

Ground transportation fees are charges by the airport to public transportation providers for entering or picking up customers at airport facilities. The fees charged by Florida public use airports to ground public transportation providers, including taxis, courtesy cars, and buses, are summarized in Table 3-10.

Table 3-10. Ground Transportation Fees at Florida Airports, Commercial vs. GA

Type of Fee	Average for Commercial Airports	Average for GA Airports
Taxis		
Annual permit	$250/vehicle (5) $2,700 flat fee per year (1)	None
Entry fee	$10/one-time pickup (2) $2/trip (1)	None
Other fees	$2.75/trip (2) $0.074/deplaned passenger or MAG, whichever is greater (2)	$5/passenger (1) $0.06/deplaned passenger (1)
Courtesy Cars		
Annual permit	$225/vehicle (4)	None
Entry fee	$10/one-time pickup (2) $3/trip (1)	None
Other fees	$250/company (1) $0.046/deplaned passenger (1)	$250/company plus $10 (1)
Buses		
Annual permit	None	None
Entry fee	$7/trip (2)	None
Other fees	$20/departure (1)	None

**The number of airports that responded to each question is provided in parenthesis.*

Public transportation providers can be charged an annual permit fee for the right to enter and pick up passengers at the airport, a one-time pickup or entry fee, or both. Other fees may include charges per vehicle trip, per deplaned passenger, per departure, and so forth. The data from the surveyed airports indicate that ground transportation fees are more typical at commercial airports, while GA facilities rarely charge these fees.

Landing Fees

Landing fees, charges to aircraft for landing at the airport, typically apply to larger aircraft and vary based on the landing weight of an aircraft. Landing fees are more often charged by commercial airports. The use of landing fees and the average amount of the fee at the surveyed airports are summarized in Table 3-11.

Table 3-11. Landing Fees at Florida Airports, Commercial vs. GA

	Commercial Airports	GA Airports
Percent of airports that charge landing fees	44.4% (4)	5.9% (2)
Rate per 1,000 lbs. landing weight	$1.84 (4)	Not reported

**The number of airports that responded to each question is provided in parenthesis.*

The data indicate that more than 44 percent of the surveyed commercial airports charge landing fees, with an average charge of $1.84 per 1,000 pounds of landed aircraft weight. However, less than 6 percent of the surveyed GA airports charge landing fees.

Airports can collect landing fees through a variety of methods, including periodic invoicing, self-reporting, FBO staff, monthly or annual billing, and more. Airports can also employ multiple collection methods. The landing fee collection methods employed by Florida commercial and GA airports are summarized and compared in Table 3-12.

Table 3-12. Landing Fee Collection Methods, Commercial vs. GA Airports

Collection Method	Commercial Airports	GA Airports
Invoice	37.5% (3)	20.0% (1)
Self-reporting	75.0% (6)	40.0% (2)
FBO staff	37.5% (3)	40.0% (2)
Monthly billing	50.0% (4)	60.0% (3)
Annual billing	0.0%	20.0% (2)
Other	12.5% (1)	0.0%

**The number of airports that responded to each question is provided in parenthesis.*

The data show that both commercial and GA airports rely mostly on self-reporting or monthly billing for collecting landing fees. Additionally, commercial airports are more likely to use multiple collection methods than GA airports. More than 62 percent of surveyed commercial airports employ more than one method to collect landing fees, compared to 20 percent for GA airports. At the same time, 80 percent of the surveyed GA airports used only one collection method, compared to 37.5 percent of commercial airports.

Tie-Downs

Tie-downs are airport areas designated for aircraft parking that are typically equipped with anchors to secure parked aircraft. Airports may charge different fees for based aircraft and transient aircraft. Also, tie-down fees may vary for single-engine and multi-engine aircraft. Some airports may waive a daily tie-down fee with the purchase of fuel. Fees per night for the airport-owned tie-downs at the surveyed airports are summarized in Table 3-13.

Table 3-13. Average Fees for Airport-Owned Tie-Downs, Florida Public Use Airports

Type of Aircraft	Commercial Airports	GA Airports	All Airports
Single-engine	$5.50/night (2) $50.67/month (3)	$8.52/night (24)	$8.29/night (26)
Multi-engine	$6.50/night (2) $55.33/month (2)	$11.52/night (24)	$11.13/night (26)
Transient		$11.88/night* (20)	$11.88/night* (20)

**May be waived with purchase of fuel.*
***The number of airports that responded to each question is provided in parenthesis.*

The comparison of average airport-owned tie-down rates between the surveyed commercial and GA airports is also presented graphically in Figure 3-14.

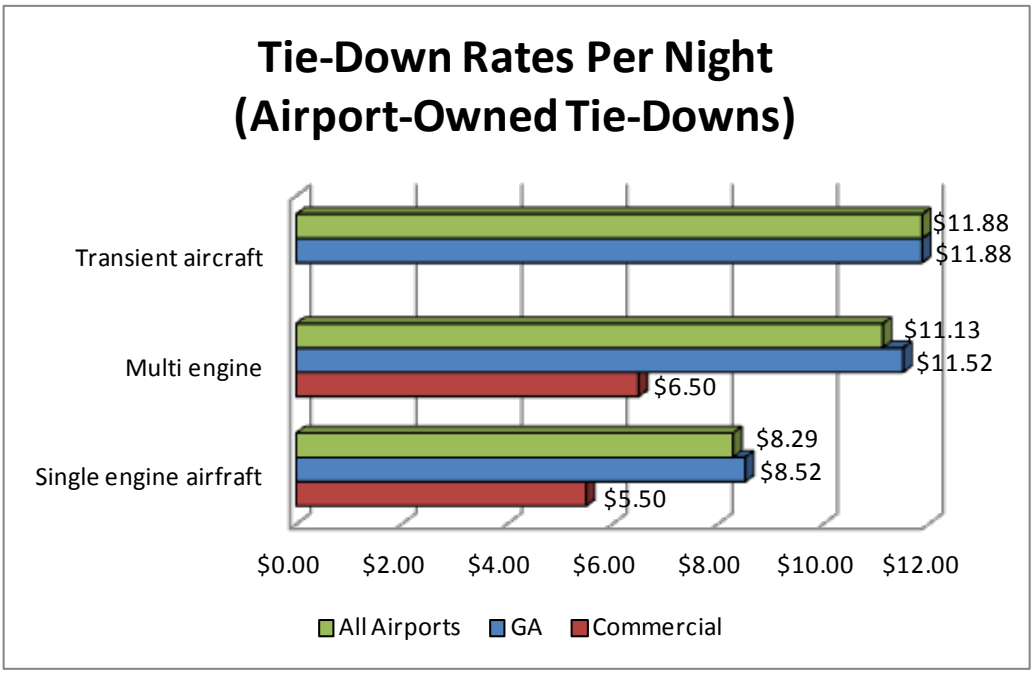


Figure 3-14. Rates per night for airport-owned tie-downs, commercial vs. GA.

Fees for tying down aircraft may vary based on geographic region of the airport. The data from the surveyed GA airports show that the lowest rates in Florida for airport-owned tie-downs are observed in the Northwest region of the state, while the highest rates are in the North Central region. A more

detailed comparison of daily rates for airport-owned tie-downs at GA airports, located in different regions of the state, is presented in Figure 3-15.

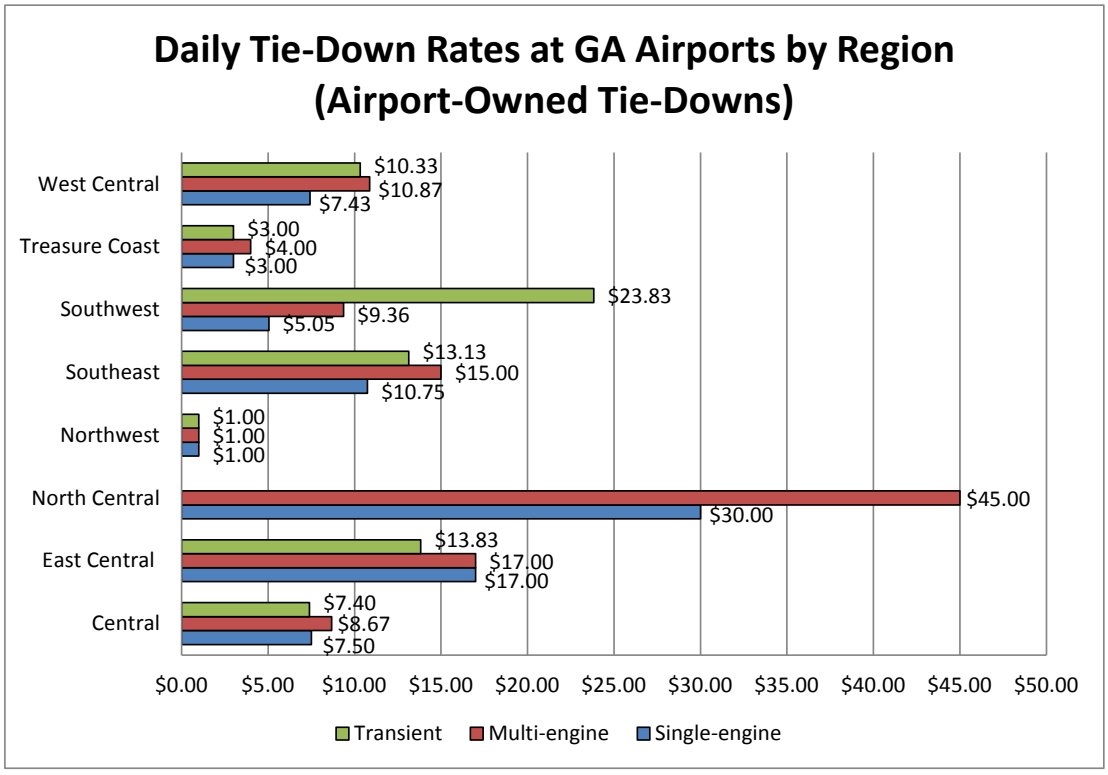


Figure 3-15. Daily rates for airport-owned tie-downs, GA airports by region.

The areas used for tie-downs can be owned and operated either by the airports themselves or by fixed base operators (FBOs), leasing the space from the airport. There is no inherent advantage or disadvantage of an FBO handling the tie-downs. In general, the tie-down rates established by the FBO may or may not be higher than similar rates for airport-owned tie-downs.

Average rates for FBO-owned tie-downs reported by the surveyed commercial and GA airports are summarized in Table 3-14.

Table 3-14. Average Rates for FBO-Owned Tie-Downs, Florida Public Use Airports

Type of Aircraft	Commercial Airports	GA Airports	All Airports
Single-engine	$5.50/night (2) $45.67/month (3)	$11.00/night (21) $100.00/month (4)	$10.52/night (23) $76.71/month (7)
Multi-engine	$6.50/night (2) $57.00/month (3)	$16.52/night (21) $125.00/month (4)	$15.65/night (23) $95.86/month (7)
Transient		$19.57/night* (15)	$19.57/night* (15)

**May be waived with purchase of fuel.*

***The number of airports that responded to each question is provided in parenthesis.*

The comparison of rates per night for the FBO-owned tie-downs at Florida commercial and GA airports is also presented graphically in Figure 3-16.

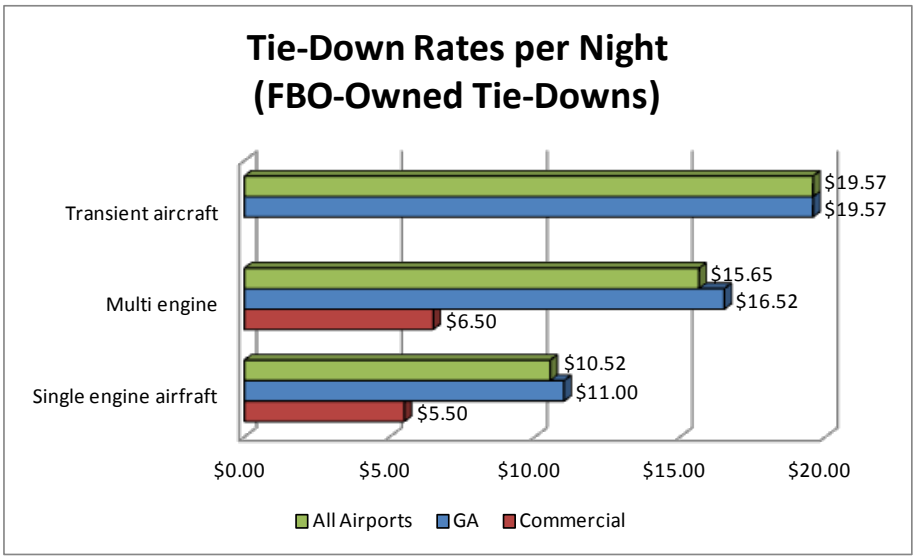


Figure 3-16. Rates per night for FBO-owned tie-downs, commercial vs. GA.

The data show that FBOs at the surveyed GA airports typically charge higher tie-down rates than FBOs at commercial airports.

Tie-down rates vary, sometimes significantly, based on geographic region. The data from the surveyed GA airports indicate that the lowest overall rates in Florida for FBO-owned tie-downs are in the Treasure Coast region, while the highest overall rates were reported in the East Central, Southeast, and Southwest regions. A more detailed comparison of daily rates for FBO-owned tie-downs at Florida GA airports, located in different regions of the state, is presented in Figure 3-17.

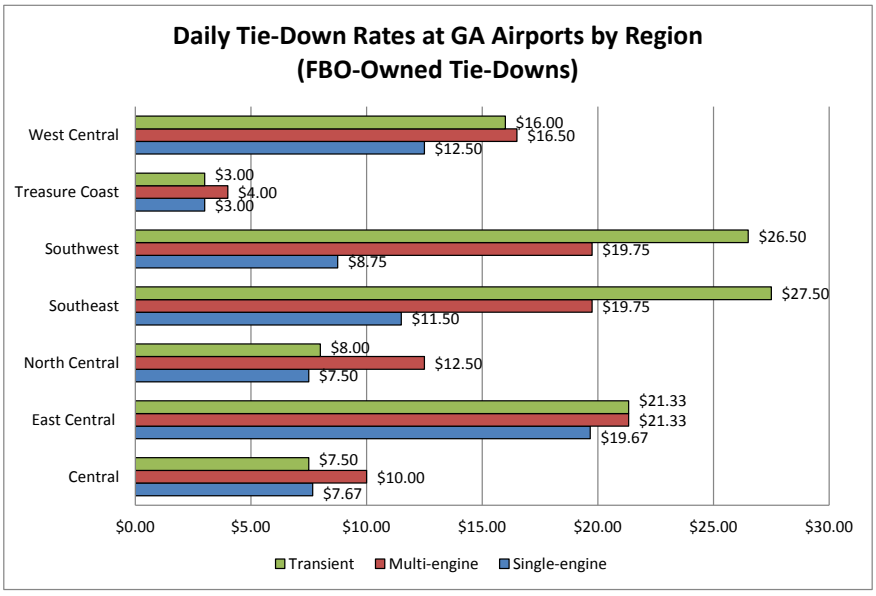


Figure 3-17. Daily rates for FBO-owned tie-downs, GA airports by region.

Fuel Providers

Fuel service can be managed either by an airport itself, by an FBO, or by both an airport and an FBO. In general, an FBO is the most common fuel provider. More than half of all surveyed public use airports in Florida have fuel service provided by an FBO; about 24.5 percent are managing fuel service themselves; and 24.5 percent have fuel service by both airport and FBO. The survey data indicate that a higher percentage of commercial airports manage fuel sales themselves, compared to GA airports (42.9 percent for commercial compared to 21.4 percent for GA). GA airports, on the other hand, are more likely to rely on an FBO to provide fuel service. Fuel sales are managed by an FBO at 54.8 percent of surveyed GA airports, compared to 28.6 percent of surveyed commercial airports. A more detailed comparison of fuel providers at commercial and GA airports is presented in Table 3-15.

Table 3-15. Fuel Providers at Florida Public Use Airports (Percent of Airports)

Fuel Provider	Commercial Airports	GA Airports	All Airports
Airport	42.9% (3)	21.4% (9)	24.5% (12)
FBO	28.6% (2)	54.8% (23)	51.0% (25)
Both airport & FBO	28.6% (2)	23.8% (10)	24.5% (12)

**The number of airports that responded to each question is provided in parenthesis.*

Types of Fuel Available

There are two major types of aviation fuel available for purchase at airports: aviation gasoline (or avgas) and jet fuel. Avgas, also referred as 100LL in this report, is a highly refined gasoline used for spark-ignited internal combustion engines in aircraft. Jet fuel, also referred as Jet A in this report, is a high-quality fuel that can be used in either compression ignition or turbine engines. Jet A is a mix of pure kerosene and anti-freeze, and it burns at temperatures at or above 120°F.[2]

The survey data show that the vast majority of the surveyed airports, both commercial and GA, offer both avgas and jet fuel. GA airports are more likely than commercial airports to offer only avgas. Almost 24.0 percent of the surveyed GA airports have only avgas available, compared to 11.1 percent of commercial airports. A more detailed comparison of the types of fuel available for purchase at commercial and GA airports is presented in Table 3-16.

Table 3-16. Types of Fuel Available, Florida Commercial and GA (Percent of Airports)

Type of Fuel	Commercial Airports	GA Airports
100LL (Avgas)	11.1% (1)	23.8% (10)
Jet A	11.1% (1)	2.4% (1)
Both 100LL and Jet A	77.8% (7)	73.8% (31)

**The number of airports that responded to each question is provided in parenthesis.*

[2] *Wikipedia*, "Aviation fuel," http://en.wikipedia.org/wiki/Aviation_fuel, last modified September 20, 2013.

The types of fuel available at airports can vary based on the type of fuel provider. The survey data indicate that when an airport manages fuel service, avgas is typically the only fuel offered by both commercial and GA airports. FBOs and other fuel providers (other than an airport) typically provide both avgas and jet fuel at both commercial and GA airports. Figures 3-18, 3-19, and 3-20 summarize the types of fuel provided by commercial and GA airports, FBOs, and other fuel providers, respectively.

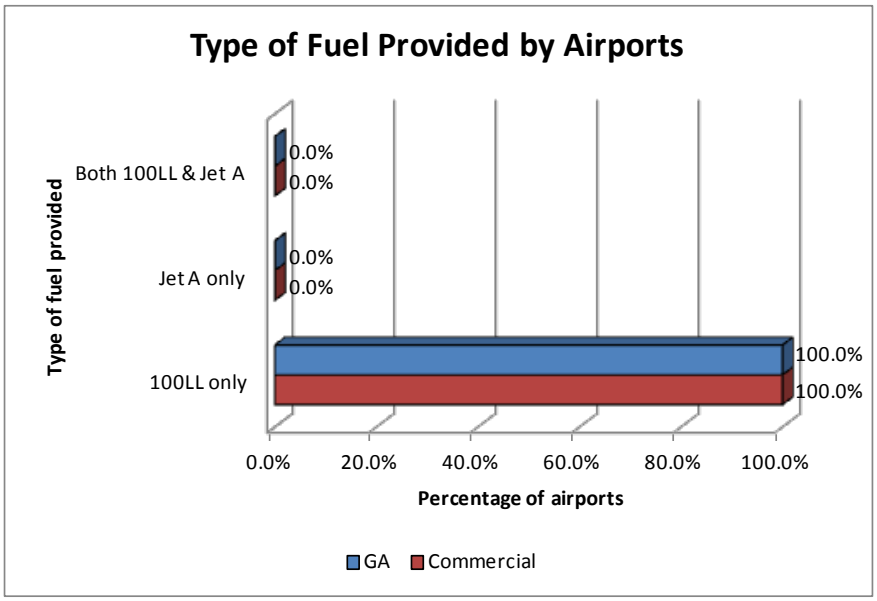


Figure 3-18. Types of fuel provided by airports, commercial vs. GA.

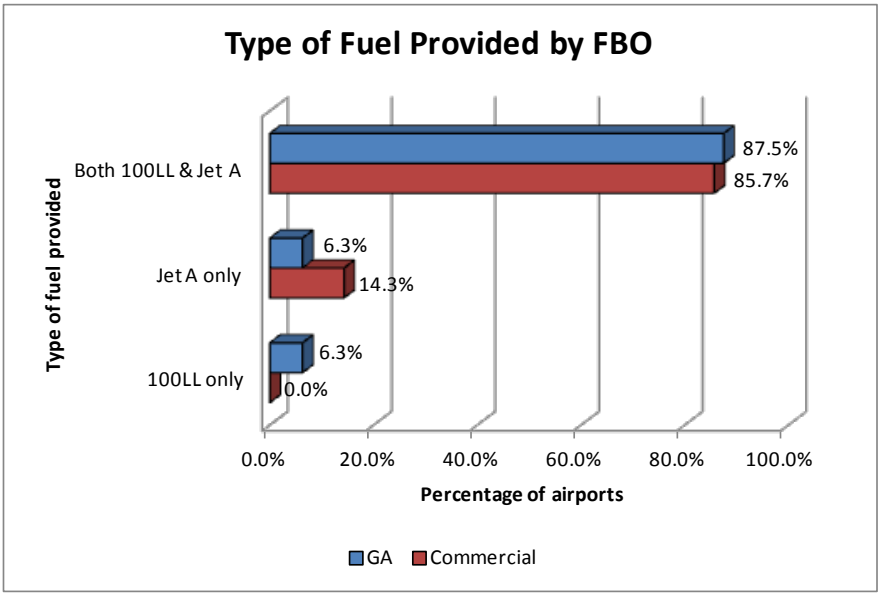


Figure 3-19. Types of fuel provided by FBO, commercial vs. GA.

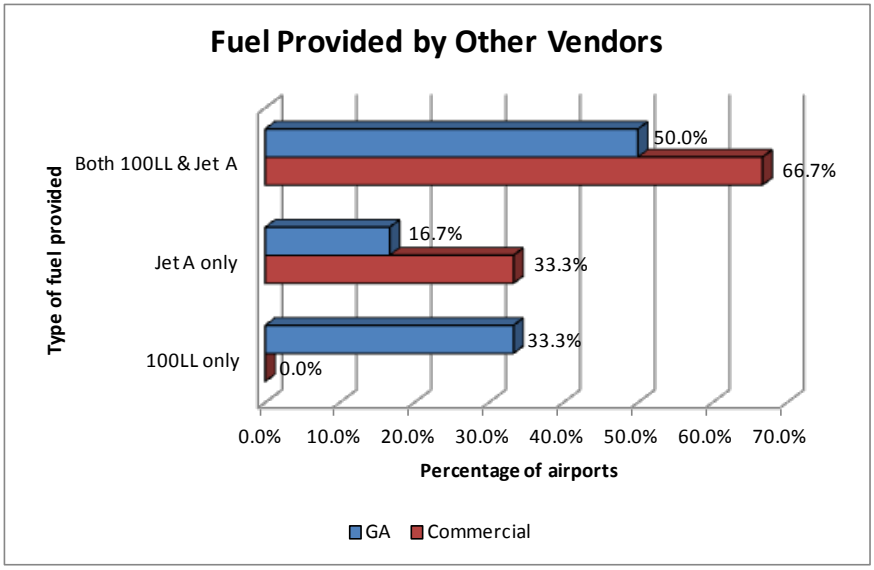


Figure 3-20. Types of fuel provided by other airport vendors, commercial vs. GA.

Fuel Flowage Fees

Fuel flowage fees are charges levied by an airport to fuel tank operators per gallon of aviation gasoline and jet fuel sold at the airport.

The average flowage fees at surveyed airports, both commercial and GA, are 8.1 cents for avgas and 10.2 cents for jet fuel. The survey data also show that GA airports, on average, charge higher flowage fees for both avgas and jet fuel, compared to commercial airports. The comparison of flowage fees at commercial and GA airports is illustrated in Figure 3-21.

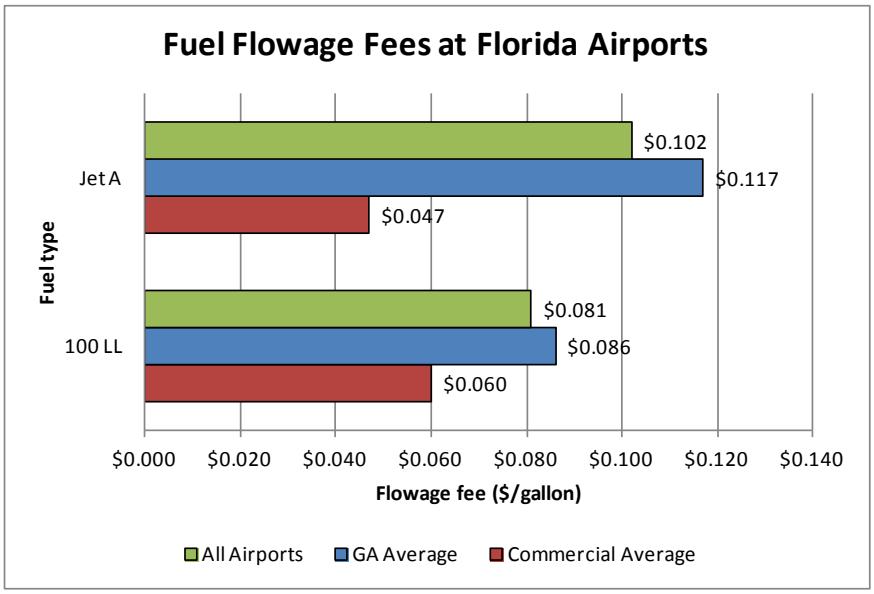


Figure 3-21. Fuel flowage fees at Florida airports, commercial and GA.

Flowage fees charged by Florida airports vary based on geographic region. Of the surveyed GA airports, the highest flowage fees, for both avgas and jet fuel, are charged by airports located in the Central region of the state, while the lowest average flowage fees are charged by airports in the North Central region. Flowage fees charged by the surveyed GA airports located in different regions are summarized in Figure 3-22.

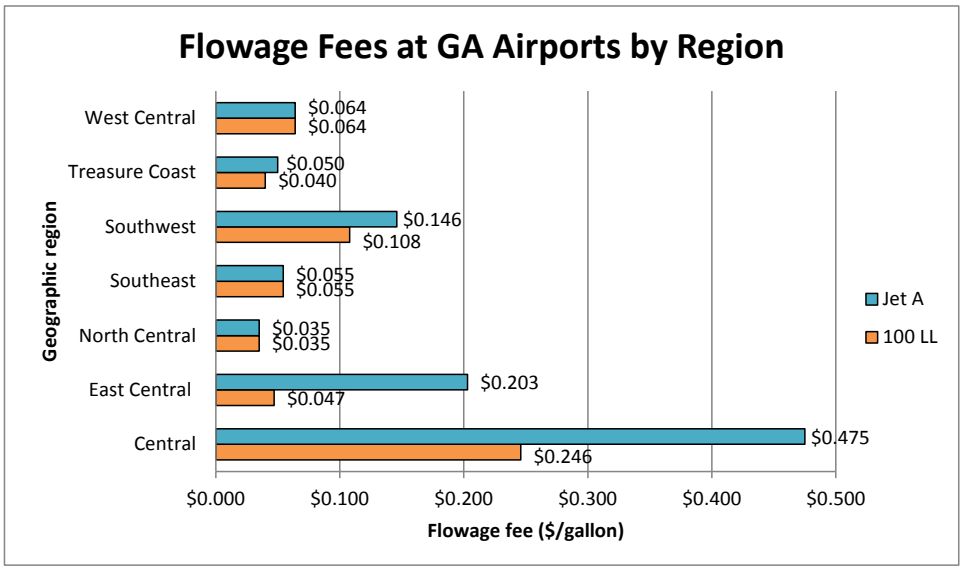


Figure 3-22. Flowage fees at Florida GA airports by geographic region.

Flowage fees charged by the surveyed commercial airports located in different regions are summarized in Figure 3-23.

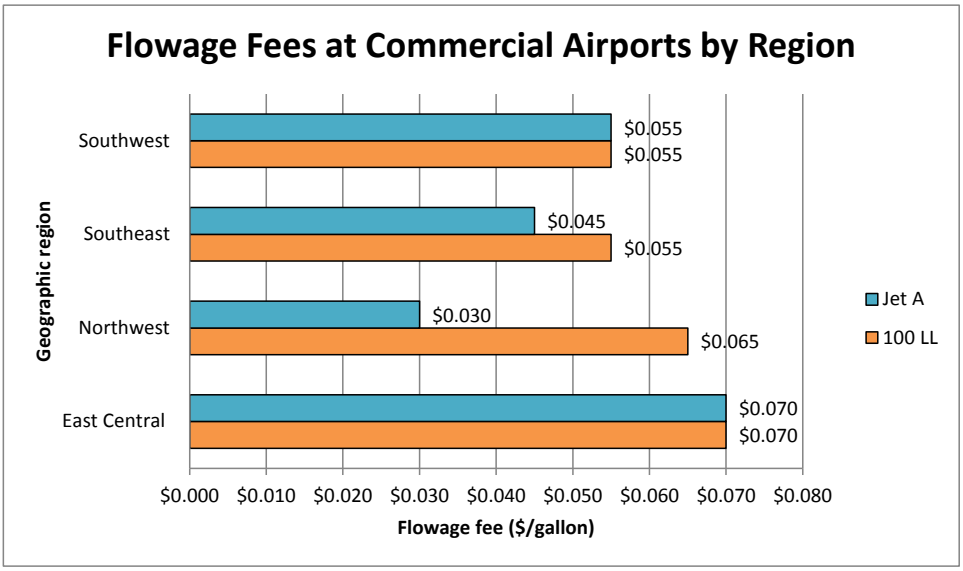


Figure 3-23. Flowage fees at Florida commercial airports by geographic region.

Hangar Rentals

A hangar is a closed structure designed to accommodate an aircraft for the purpose of protecting it from weather or direct sunlight, as well as for maintenance, repair, manufacture, assembly, and storage of the aircraft.[3] Hangars vary in size, shape, aircraft capacity, and materials used for construction. Airports that own hangars on their property rent them to airport tenants. Alternatively, hangars may be owned by an FBO or another permanent airport tenant.

The survey of Florida public use airports shows that more than 70 percent of all surveyed airports own and lease hangars. This percentage is higher for GA airports than for commercial airports, as is shown in Figure 3-24.

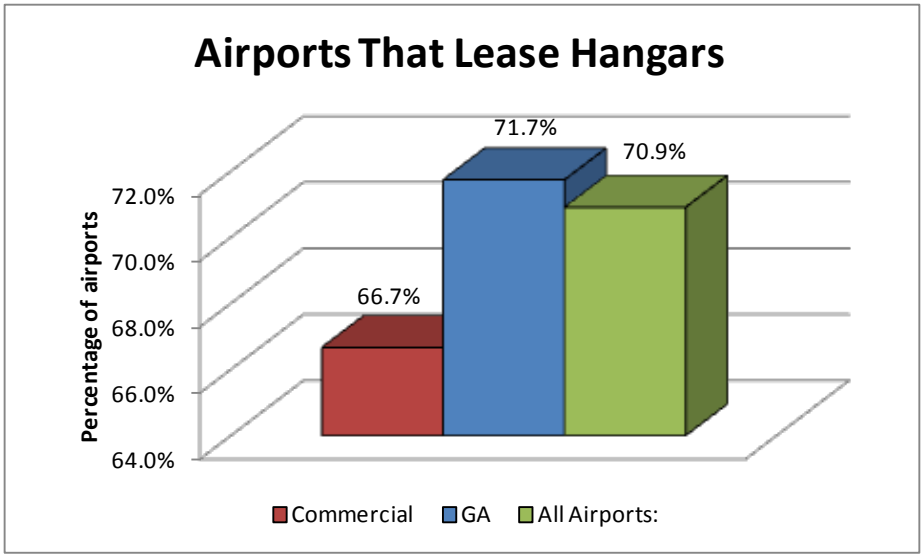


Figure 3-24. Percentage of airports that lease hangars, commercial vs. GA.

The rental rates for the three main types of hangars, including box hangars, corporate hangars, and T-hangars, is discussed in detail in the following sections.

Box Hangars

A box hangar is a basic rectangular-shaped hangar used for aircraft storage. Based on the hangar dimension, it can be subdivided into several compartments to accommodate several aircraft. The rental rate can depend on a number of factors, including the size and age of the hangar, its condition, amenities available, etc.

The data from the surveyed airports indicate that box hangars located at over half of all surveyed airports have the age of 10 years or younger. Hangars aged over 30 years were reported at 8 percent of

[3] *Wikipedia*, "Hangar," http://en.wikipedia.org/wiki/Hangar, last modified October 10, 2013.

the airports. The age of box hangars at the surveyed Florida airports is presented graphically in Figure 3-25.

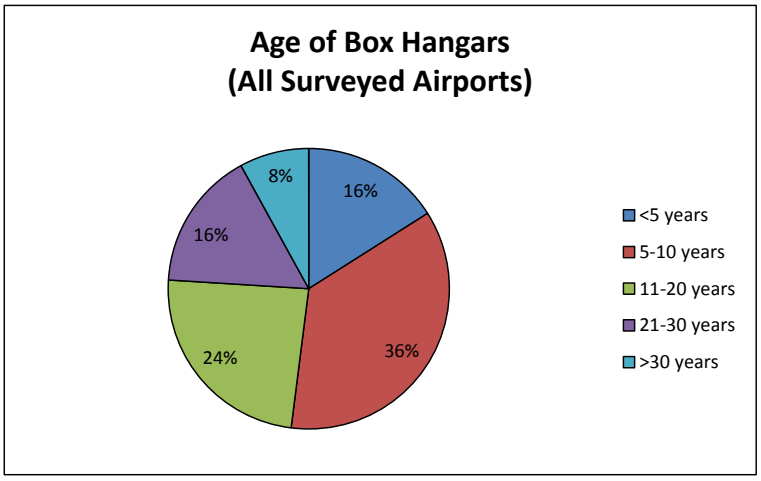


Figure 3-25. Age of box hangars, all airports.

The comparison of box hangars' age at commercial and GA airports is presented in Figure 3-26. The most common age for box hangars, both at commercial and GA airports, is 5-10 years.

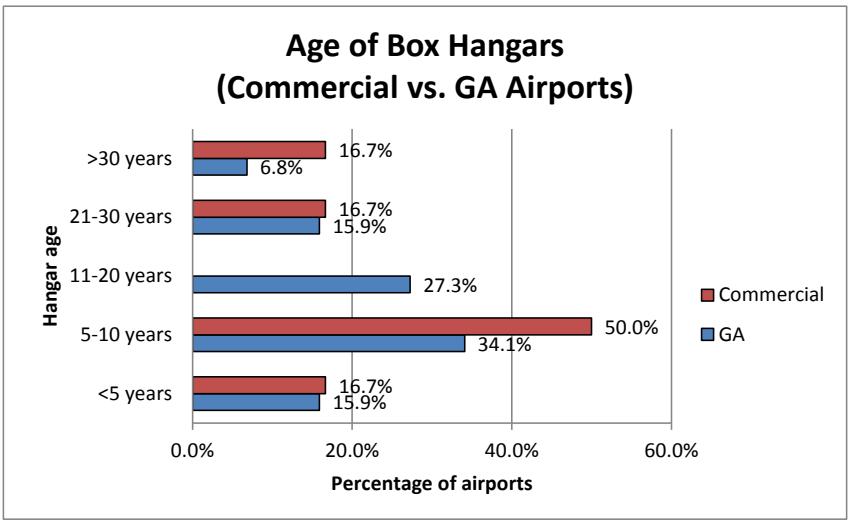


Figure 3-26. Age of box hangars, commercial vs. GA airports.

The data show that box hangars at the majority of the surveyed airports (80.0 percent) are in good condition. Poor condition of box hangars was reported by only 4 percent of airports. The condition of box hangars at all surveyed airports, and a comparison between commercial and GA airports, is presented in Figures 3-27 and 3-28, respectively.

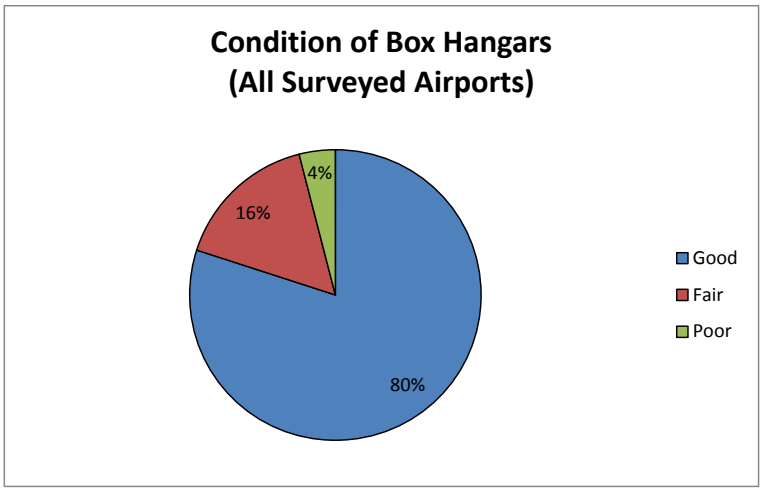


Figure 3-27. Condition of box hangars, all airports.

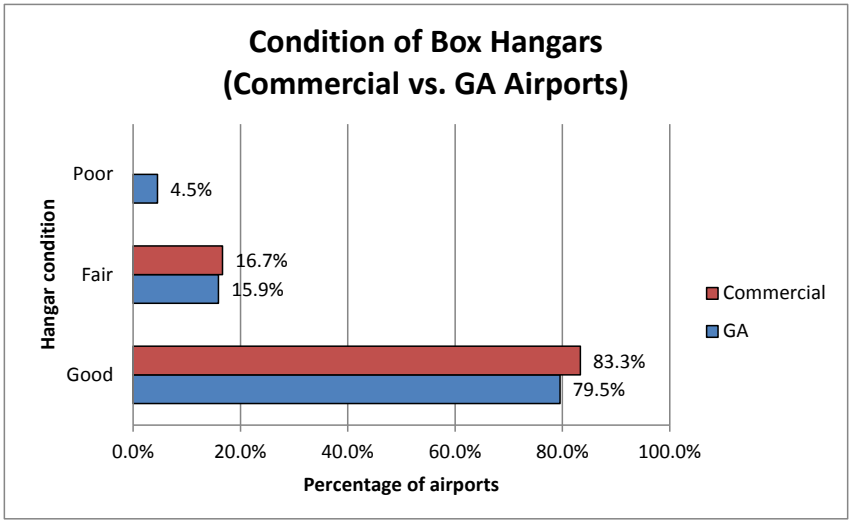


Figure 3-28. Condition of box hangars, commercial vs. GA airports.

The rent for box hangars is typically charged as a flat fee or per square foot. At some airports, it may vary based on circumstances and terms of the contract. Overall, the data from the surveyed Florida airports indicate that a flat fee is the most common form of rental charge for box hangars. More than 53.0 percent of surveyed airports use a flat fee for box hangar rental, with almost 43.0 percent using the charge per square foot.

The data from the surveyed airports show that a flat fee for box hangar rental is more widely used by GA airports, while per square foot charges are more common for commercial airports. The basis for box hangar rentals at all surveyed airports is presented in Figure 3-29, and the comparison between commercial and GA airports is displayed in Figure 3-30.

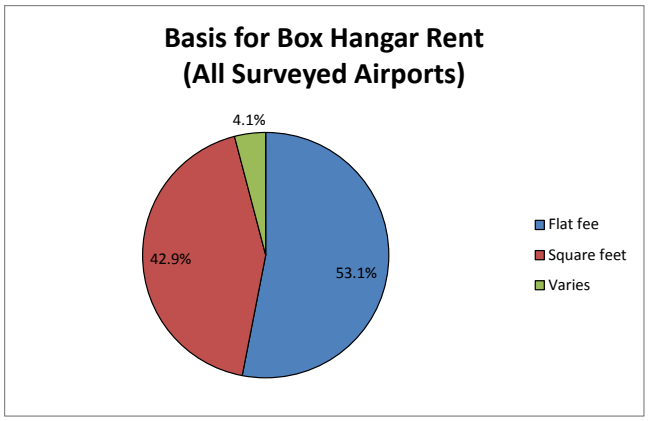


Figure 3-29. Basis for box hangar rental, all airports.

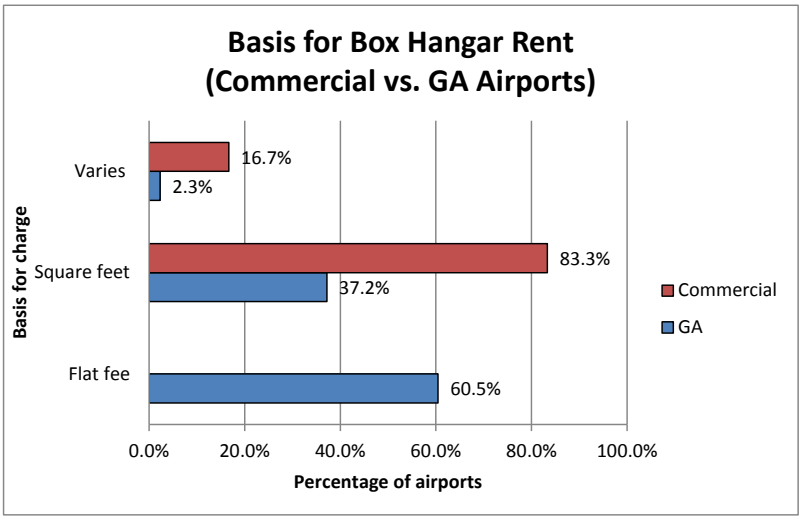


Figure 3-30. Basis for box hangar rental, commercial vs. GA airports.

Based on the survey data, the most common box hangar size is less than 2,500 square feet. More than 42.0 percent of surveyed airports reported having box hangars with square footage lees than 2,500. Slightly more than 16.0 percent have box hangars that are larger than 10,000 square feet. The size of box hangars at the surveyed Florida airports is presented in Figure 3-31.

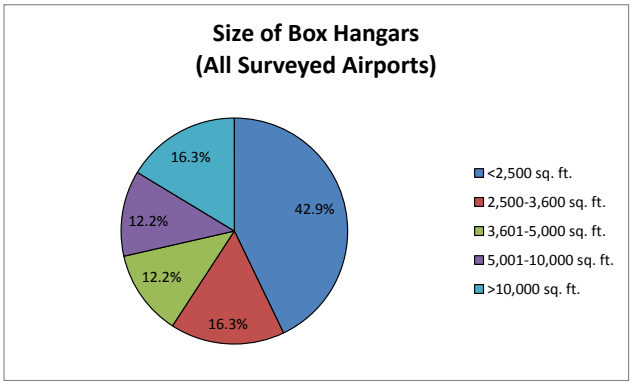


Figure 3-31. Size of box hangars, all surveyed airports.

The analysis of data shows that higher percentage of smaller-size box hangars is located at GA airports, while commercial airports typically have larger-size hangars. About 46.0 percent of GA airports have box hangars that are less than 2,500 square feet in size, compared to 16.7 percent of commercial airports. On the other hand, 50.0 percent of commercial airports have box hangars that have the size of 5,001 to 10,000 square feet, compared to 7.0 percent of GA airports. The comparison of a typical size of box hangars at commercial and GA airports is presented in Figure 3-32.

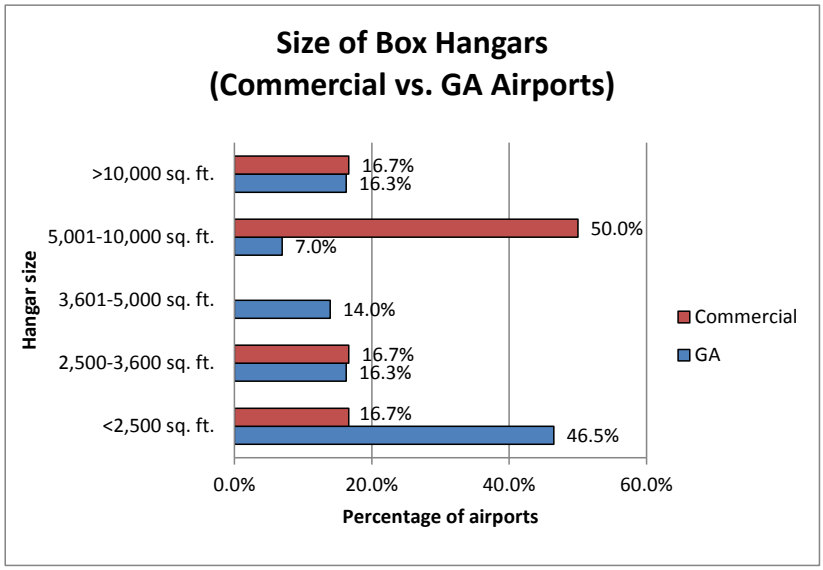


Figure 3-32. Size of box hangars, commercial vs. GA airports.

Monthly rent for box hangars by hangar size is presented in Figure 3-33.

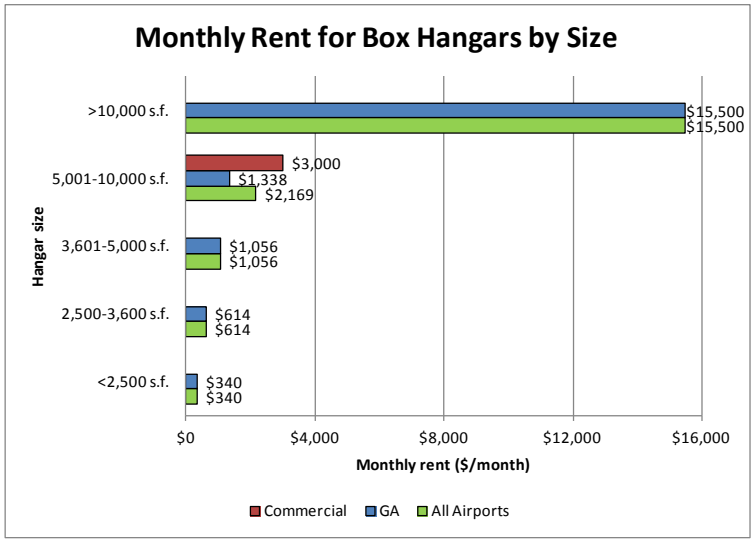


Figure 3-33. Monthly rent for box hangars by size.

The rental rates for box hangars may vary not only by size, but also by geographic region of the airport. Due to a small number of responding commercial airports, it was not possible to provide a comparison

of hangar rates at commercial airports by geographic region; only the rates at GA airports could be presented. The comparison of box hangar rates by geographic region at the surveyed GA airports is shown in Table 3-17.

Table 3-17. Box Hangar Rates at Florida GA Airports by Region

CFASPP Region	Average Monthly Rent per Hangar Size					
	<2,500 sq. ft.	2,500-3,600 sq. ft.	3,601-5,000 sq. ft.	5,001-10,000 sq. ft.	>10,000 sq. ft.	All Sizes
Central		$192 (1)				$192 (1)
East Central	$282 (2)					$282 (2)
North Central		$550 (1)				$550 (1)
Northeast	$343 (1)		$1,500 (1)		$27,000 (2)	$9,614 (3)
Northwest	$170 (2)		$1,000 (1)			$447 (3)
Southeast	$600 (1)					$600 (1)
Southwest			$667 (1)			$667 (2)
Treasure Coast	$550 (2)				$4,000 (1)	$1,700 (3)
West Central	$228 (2)	$1,100 (1)		$1,338 (2)		$846 (5)

**The number of airports that responded to each question is provided in parenthesis.*

Due to a limited number of airports representing each region in the survey data, the results of the analysis by geographic region should be interpreted with caution. The data presented describes the rates for the GA airports that responded to the survey. No assumptions are made or implied regarding average hangar rates at all GA airports in each geographic region.

The data on the age, condition, size, aircraft capacity, and rental rates of box hangars, as well as various amenities available, are summarized in Table 3-18. The data for age, condition, rental basis, and hangar size represent response categories with the largest number of responses, rather than average values. Aircraft capacity and rent amount are reported as averages.

Table 3-18. Details about Box Hangars at Florida Public Use Airports

		Commercial Average	GA Average	All Airports
Age		5-10 years	5-10 years	5-10 years
Condition		Good	Good	Good
Aircraft capacity		20	8	9
Rental basis		Square footage	Flat fee	Flat fee
Hangar size		5,001-10,000 sq. ft.	<2,500 sq. ft.	<2,500 sq. ft.
Rent	<2,500 sq. ft.		$340/month (10)	$340/month (10)
	2,500-3,600 sq. ft.		$614/month (3)	$614/month (3)
	3,601-5,000 sq. ft.		$1,056/month (3)	$1,056/month (3)
	5,001-10,000 sq. ft.	$3,000/month (2) $6.25 PSFPY (1)	$1,338/month (2)	$2,169/month (4) $6.25 PSFPY (1)
	>10,000 sq. ft.		$15,500/month (2)	$15,500/month (2)
	All sizes	$3,000/month (2) $6.25 PSFPY (1)	$2,104/month (20)	$2,186/month (22) $6.25 PSFPY (1)
Amenities available (% of airports)	Gas Electricity Water Sewage	20.0% (1) 100.0% (6) 100.0% (6) 100.0% (6)	12.2% (5) 95.5% (42) 73.3% (30) 56.4% (22)	13.0% (6) 96.0% (48) 76.6% (36) 62.2% (28)

**The number of airports that responded to each question is provided in parenthesis.*

Corporate Hangars

A corporate hangar is typically larger than a regular box hangar, and is designed for corporate aircraft use. The rental rate can depend on a number of factors, including the size of the hangar, age of the building and its condition, amenities available, and so forth.

The data from the surveyed airports indicate that more than 46.0 percent of corporate hangars have the age of 10 years or younger; about 9.4 percent reported having corporate hangars with an average age exceeding 30 years. The age of corporate hangars at the surveyed Florida airports is presented graphically in Figure 3-34.

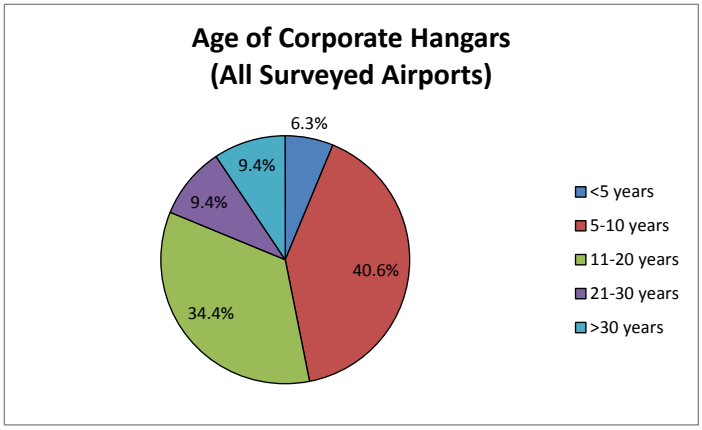


Figure 3-34. Age of corporate hangars, all airports.

The comparison of corporate hangars' age at commercial and GA airports is presented in Figure 3-35.

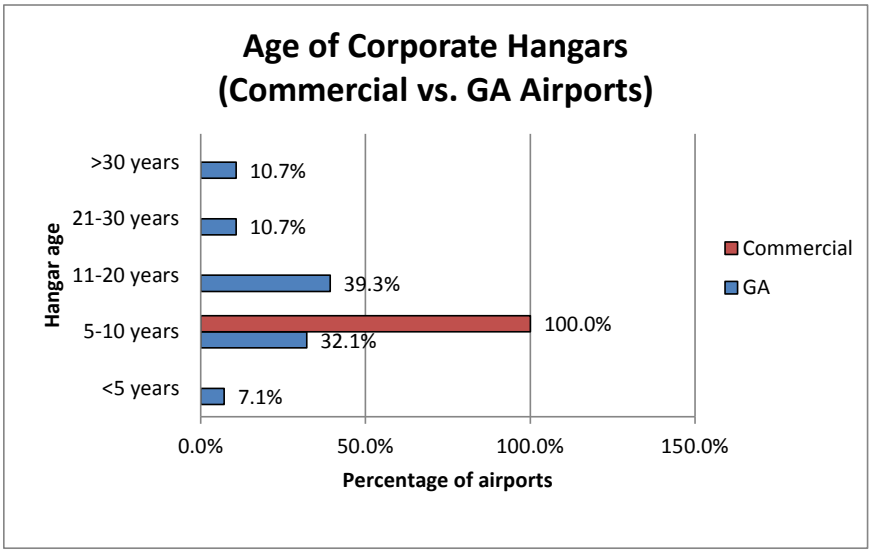


Figure 3-35. Age of corporate hangars, commercial vs. GA airports.

The most common age for corporate hangars at GA airports is 11-20 years, while the most common age at commercial airports is 5-10 years.

The data show that corporate hangars at the majority of the surveyed airports (83.9 percent) are in good condition; poor condition was reported by only 6.5 percent of airports. The condition of corporate hangars at all surveyed airports, and a comparison between commercial and GA airports, is presented in Figures 3-36 and 3-37, respectively.

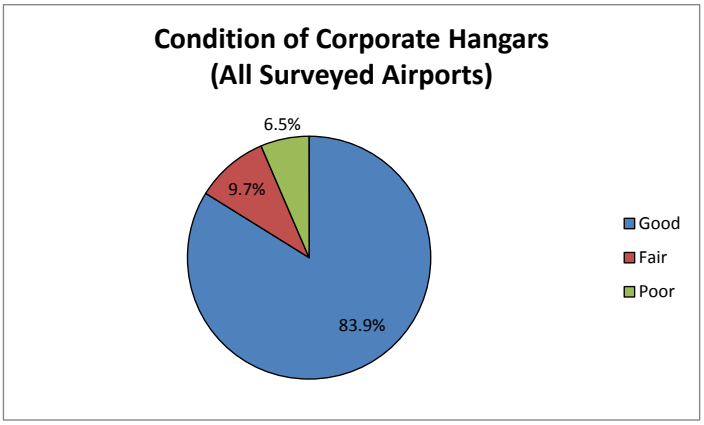


Figure 3-36. Condition of corporate hangars, all airports.

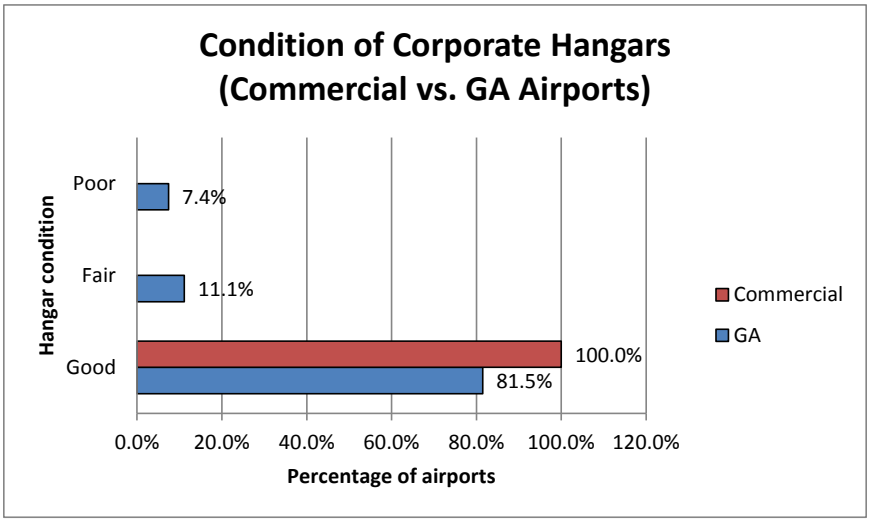


Figure 3-37. Condition of corporate hangars, commercial vs. GA airports.

The rent for corporate hangars is typically charged as a flat fee or per square foot. A few airports also reported aircraft weight and total footprint of land rented (where the hangar is constructed) as alternative bases for the rental charge of corporate hangars. The data from the surveyed Florida airports indicate that, overall, charge per square foot is the most common form of rental charge for corporate hangars. Half of all surveyed airports use square footage of the rented space as a basis for the corporate hangar rental, while almost 41.0 percent reported using a flat fee.

The data show that a flat fee charge for corporate hangar rentals is more widely used by GA airports, while square footage charges are more common for commercial airports. The basis for corporate hangar rentals at all surveyed airports is presented in Figure 3-38, and the comparison between commercial and GA airports is displayed in Figure 3-39.

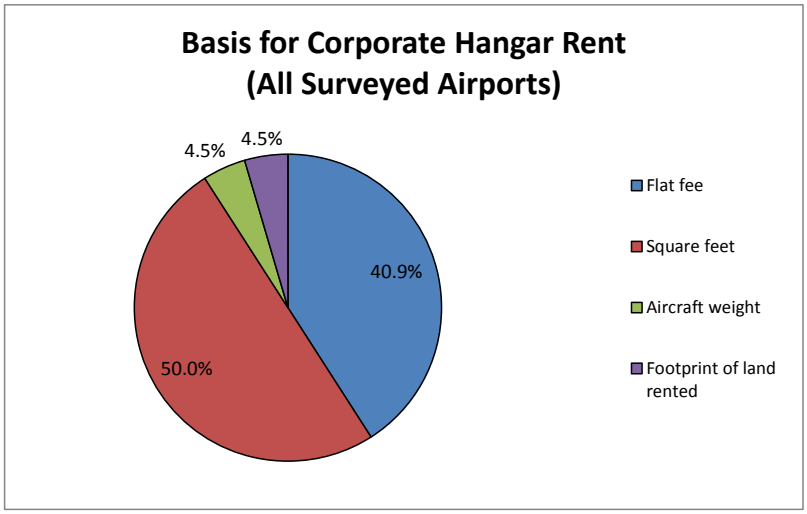


Figure 3-38. Basis for corporate hangar rental, all airports.

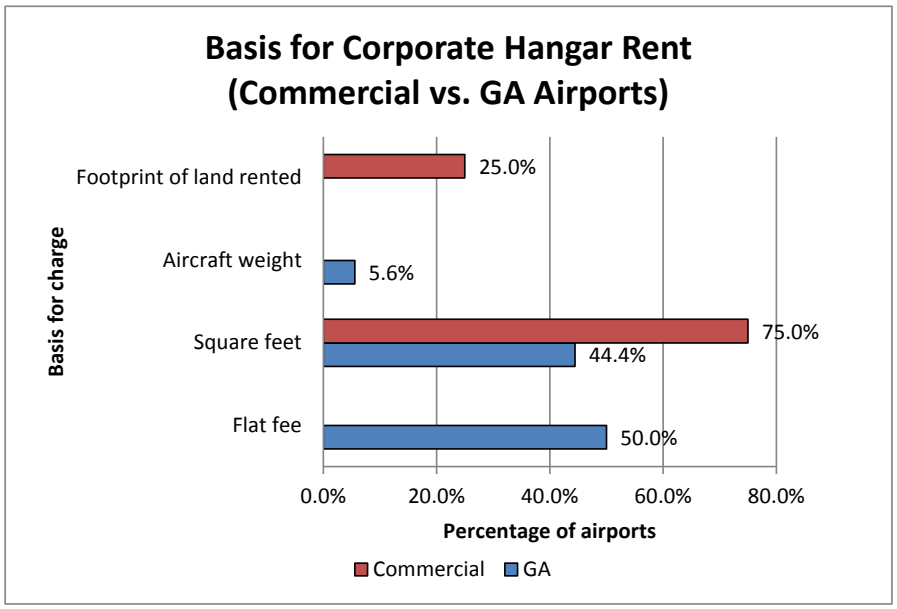


Figure 3-39. Basis for corporate hangar rental, commercial vs. GA airports.

Based on the survey data, the most common corporate hangar size is 5,001-10,000 square feet (about 36.7 percent). Another 20.0 percent of the surveyed airports have corporate hangars that are larger

than 10,000 square feet. The size of corporate hangars at the surveyed Florida airports is presented in Figure 3-40.

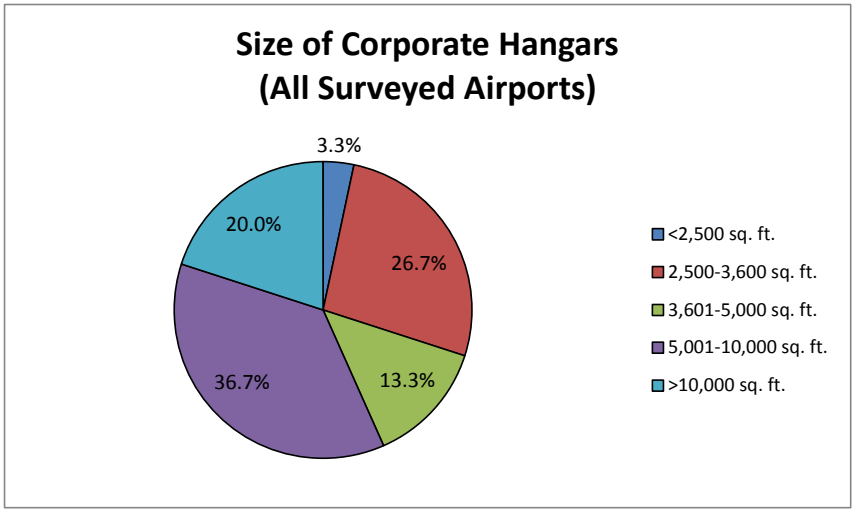


Figure 3-40. Size of corporate hangars, all surveyed airports.

The analysis of data shows that a higher percentage of larger-size corporate hangars are located at commercial airports, while GA airports typically have smaller-size hangars. Half of commercial airports have corporate hangars larger than 10,000 square feet, compared to 15.4 percent of GA airports. On the other hand, 38.5 percent of GA airports have corporate hangars that are 5,001 to 10,000 square feet, compared to 25.0 percent of commercial airports. The comparison of typical size corporate hangars at commercial and GA airports is presented in Figure 3-41.

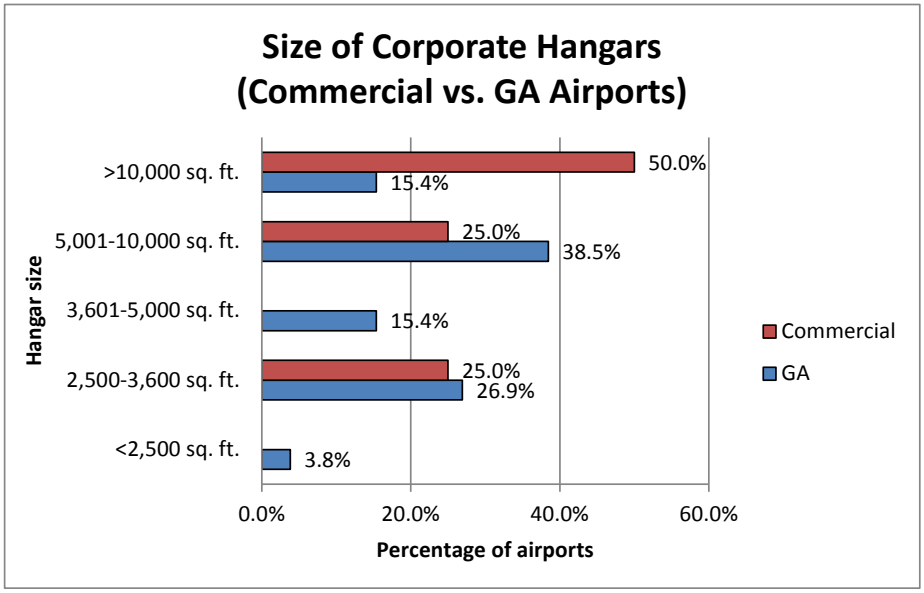


Figure 3-41. Size of corporate hangars, commercial vs. GA airports.

Monthly rent for corporate hangars by hangar size is presented in Figure 3-42.

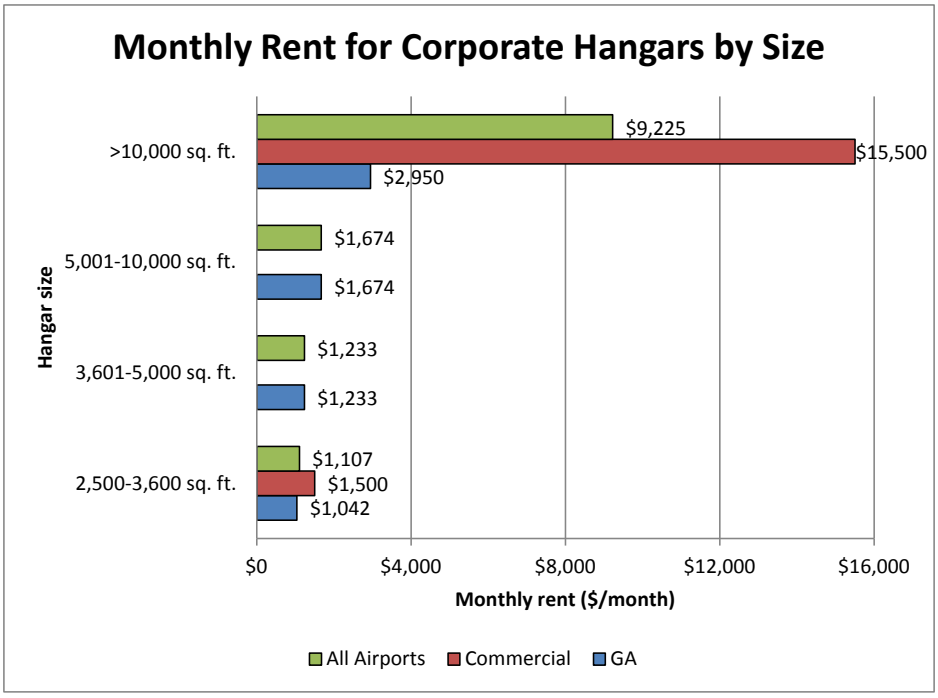


Figure 3-42. Monthly rent for corporate hangars by size.

The rental rates for corporate hangars may vary not only by size, but also by geographic region of the airport. Due to a small number of responding commercial airports, it was not possible to provide a comparison of hangar rates at commercial airports by geographic region; only the rates at GA airports could be presented. The comparison of corporate hangar rates at the surveyed GA airports by geographic region is shown in Table 3-19.

Table 3-19. Corporate Hangar Rates at Florida GA Airports by Region

CFASPP Region	Average Monthly Rent per Hangar Size					
	<2,500 sq. ft.	2,500-3,600 sq. ft.	3,601-5,000 sq. ft.	5,001-10,000 sq. ft.	>10,000 sq. ft.	All Sizes
Central	N/A		$1,700 (1)			$1,513 (2)
East Central	N/A	$783 (3)				$783 (3)
North Central	N/A			$1,800 (1)		$1,800 (1)
Northeast	N/A	$900 (1)		$313 (1)		$607 (2)
Northwest	N/A		$1,000 (2)			$1,000 (2)
Southeast	N/A	$1,800 (1)				$1,800 (1)
Southwest	N/A			$2,658 (1)		$2,658 (1)
Treasure Coast	N/A	$1,200 (1)			$4,000 (1)	$2,600 (2)
West Central	N/A			$1,925 (1)	$1,900 (1)	$1,913 (2)

**The number of airports that responded to each question is provided in parenthesis.*

Due to a limited number of airports representing each region in the survey data, the results of the analysis by geographic region should be interpreted with caution. The data presented describes the

rates for the GA airports that responded to the survey. No assumptions are made or implied regarding average hangar rates at all GA airports in each geographic region.

The data on the age, condition, size, aircraft capacity, and rental rates of corporate hangars, as well as various amenities available, are summarized in Table 3-20. The data for age, condition, rental basis, and hangar size presented in the table below represent categories with the largest number of responses, rather than average values. Aircraft capacity and rent amount are reported as averages.

Table 3-20. Details about Corporate Hangars at Florida Public Use Airports

		Commercial Average	GA Average	All Airports
Age		5-10 years	11-20 years	5-10 years
Condition		Good	Good	Good
Aircraft capacity		4	6	5
Rental basis		Square footage	Flat fee	Square footage
Hangar size		>10,000 sq. ft.	5,001-10,000 sq. ft.	5,001-10,000 sq. ft.
Rent	2,500-3,600 sq. ft.	$1,500/month (1)	$1,042/month (6)	$1,107/month (7)
	3,601-5,000 sq. ft.		$1,233/month (3)	$1,233/month (3)
	5,001-10,000 sq. ft.	$0.26 PSFPY (1)	$1,674/month (4)	$1,674/month (4) $0.26 PSFPY (1)
	>10,000 sq. ft.	$15,500/month (2)	$2,950/month (2)	$9,225/month (4)
	All sizes	$10,833/month (3) $0.26 PSFPY (1)	$1,492/month (16)	$2,967/month (19) $0.26 PSFPY (1)
Amenities available (% of airports)	Gas	0.0%	4.2% (1)	3.6% (1)
	Electricity	100.0% (4)	100.0% (28)	100.0% (32)
	Water	100.0% (4)	96.3% (26)	96.8% (30)
	Sewage	100.0% (4)	77.8% (21)	80.6% (25)

**The number of airports that responded to each question is provided in parenthesis.*

T–hangars

T-hangars are constructed in a "T" shape, allowing aircraft parking from both sides of the hangar, thus saving space and offering more aircraft slots. T-hangars are typically constructed of metal, and are primarily used for storing private aircraft because they are more economical than box hangars.[4]

The survey data indicate that the most common age of T-hangars is 11-20 years (almost 46.0 percent); about 5.4 percent of the airports reported T-hangars with an average age exceeding 30 years. The age of T-hangars at the surveyed Florida airports is presented graphically in Figure 3-43.

[4] *Wikipedia*, "Tee hangar," http://en.wikipedia.org/wiki/Tee_Hangar, last modified September 18, 2013.

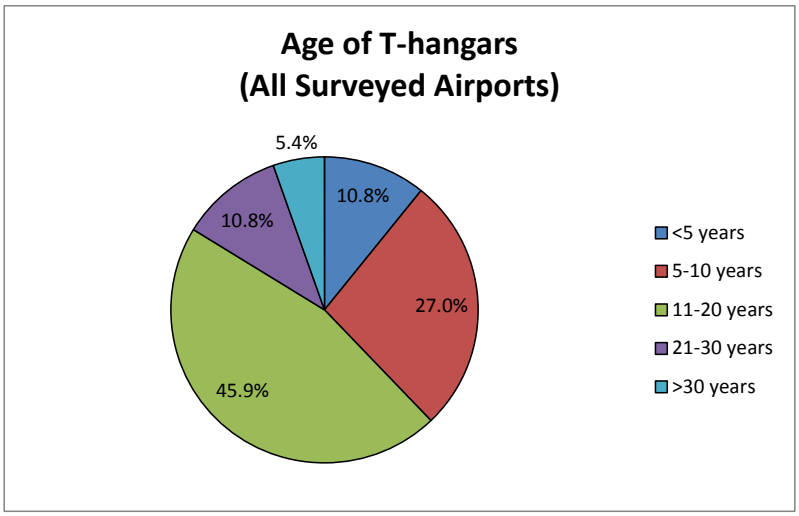


Figure 3-43. Age of T-hangars, all airports.

The comparison of T-hangars' age at commercial and GA airports is presented in Figure 3-44.

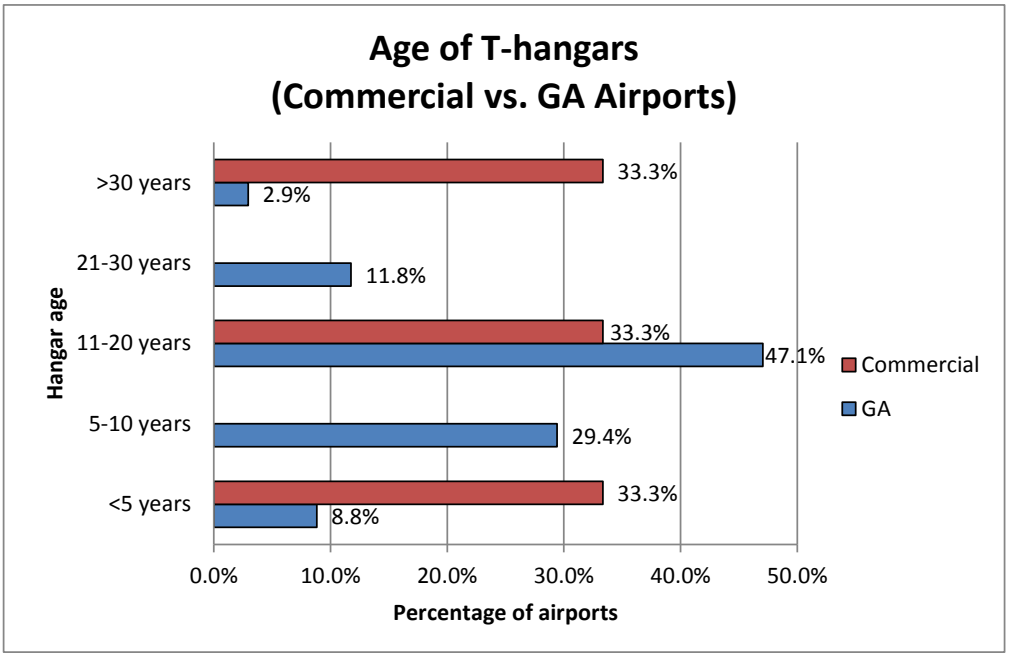


Figure 3-44. Age of T-hangars, commercial vs. GA airports.

The most common age for T-hangars at GA airports is 11-20 years, while no distinct common age is evident at commercial airports.

The data show that T-hangars at the majority of the surveyed airports (70.6 percent) are in good condition; the remaining 29.4 percent are in fair condition, with none in poor condition. T-hangars at all commercial airports were reported to be in good condition, compared to 69.7 percent at GA airports.

The condition of T-hangars at all surveyed airports, and a comparison between commercial and GA airports, is presented in Figures 3-45 and 3-46, respectively.

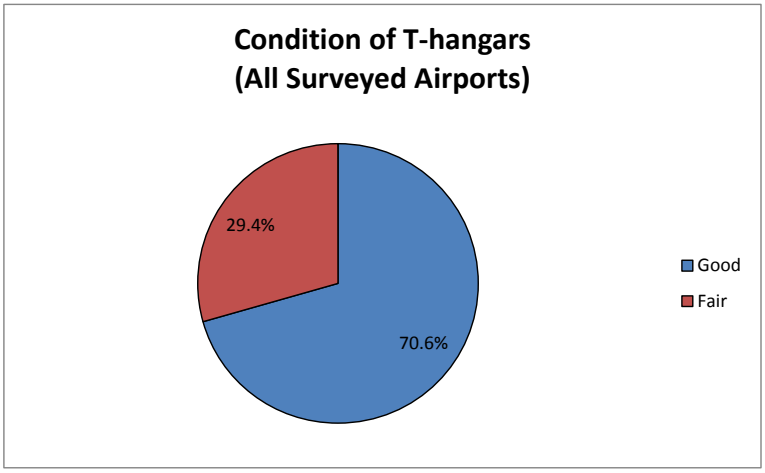


Figure 3-45. Condition of T-hangars, all airports.

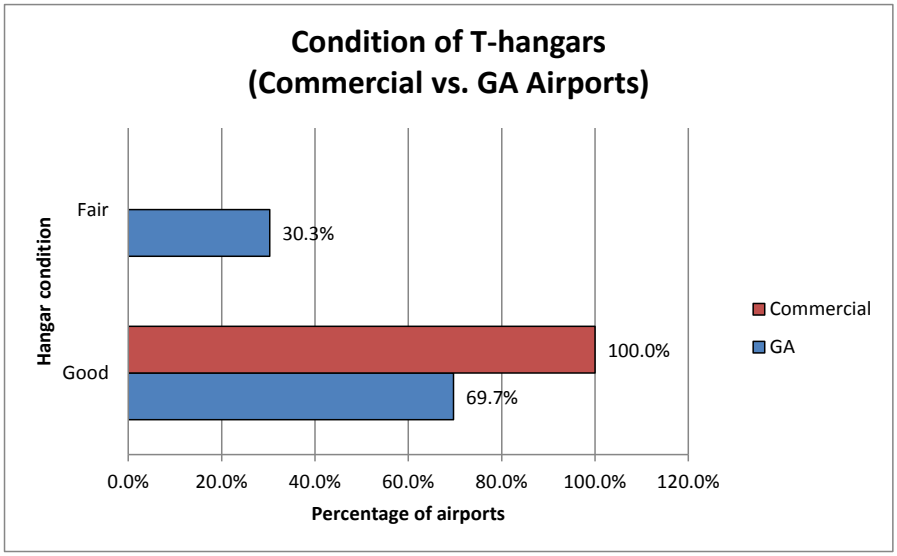


Figure 3-46. Condition of T-hangars, commercial vs. GA airports.

The rent for T-hangars is typically charged as a flat fee or per square foot. The data from the surveyed Florida airports indicate that, overall, a flat fee is the most common form of rental charge for T-hangars (approximately 97.0 percent).

The basis for the charge varies dramatically between commercial and GA airports. While 97.7 percent of surveyed GA airports use a flat fee as the most common charge, all surveyed commercial airports use square footage as the basis for T-hangar rental. The basis for T-hangar rental at all surveyed airports is

presented in Figure 3-47, and the comparison between commercial and GA airports is shown in Figure 3-48.

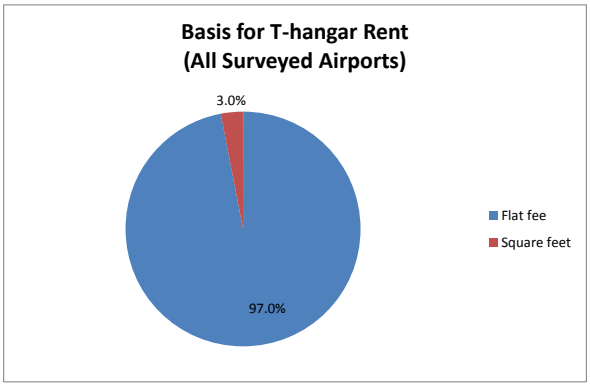


Figure 3-47. Basis for T-hangar rental, all airports.

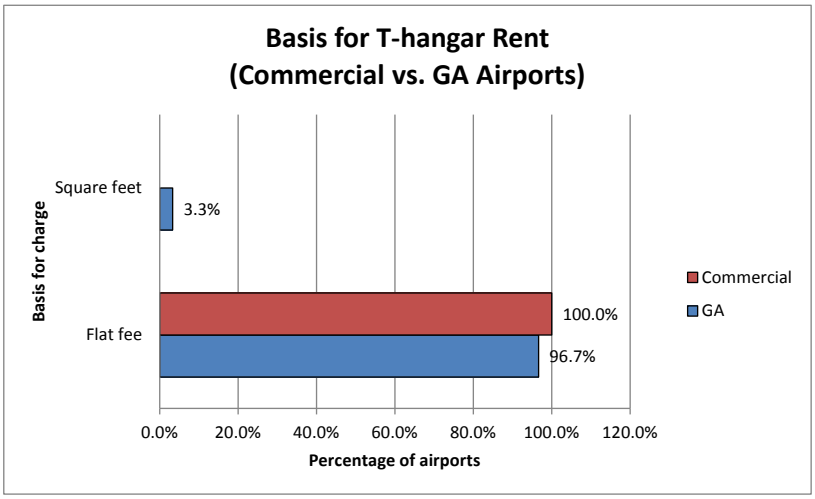


Figure 3-48. Basis for T-hangar rental, commercial vs. GA airports.

Based on the survey data, the most common size of T-hangar is less than 2,500 square feet (more than 83.0 percent); only 8.3 percent have T-hangars larger than 10,000 square feet. The size of T-hangars at the surveyed Florida airports is presented in Figure 3-49.

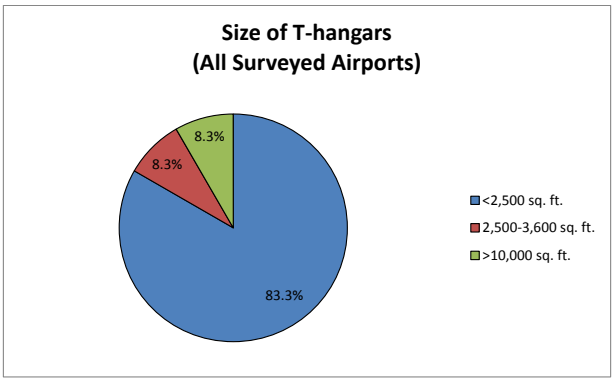


Figure 3-49. Size of T-hangars, all surveyed airports.

The analysis shows that all surveyed commercial airports have T-hangars that are less than 2,500 square feet in size, compared to 81.8 percent of GA airports that have the smallest size T-hangars. The comparison of typical size T-hangars at commercial and GA airports is presented in Figure 3-50.

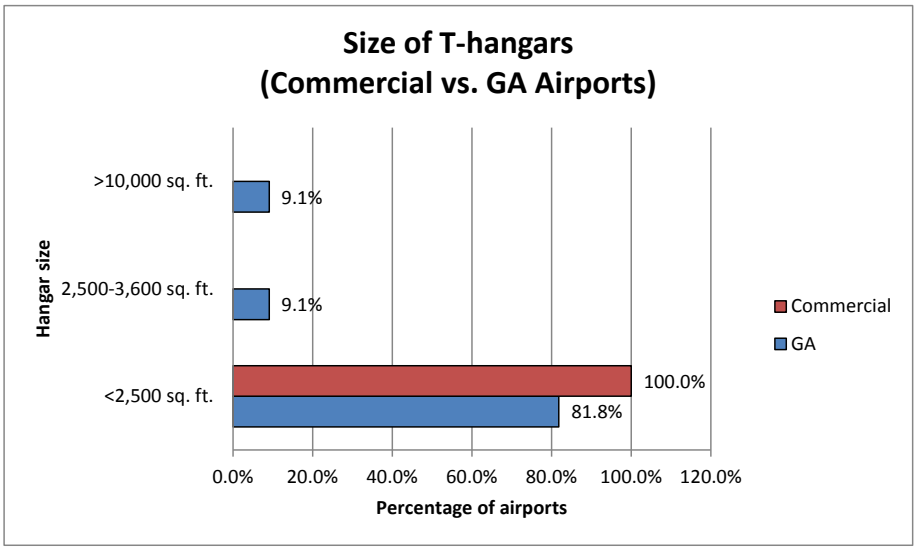


Figure 3-50. Size of T-hangars, commercial vs. GA airports.

Monthly rent for T-hangars by hangar size is presented in Figure 3-51.

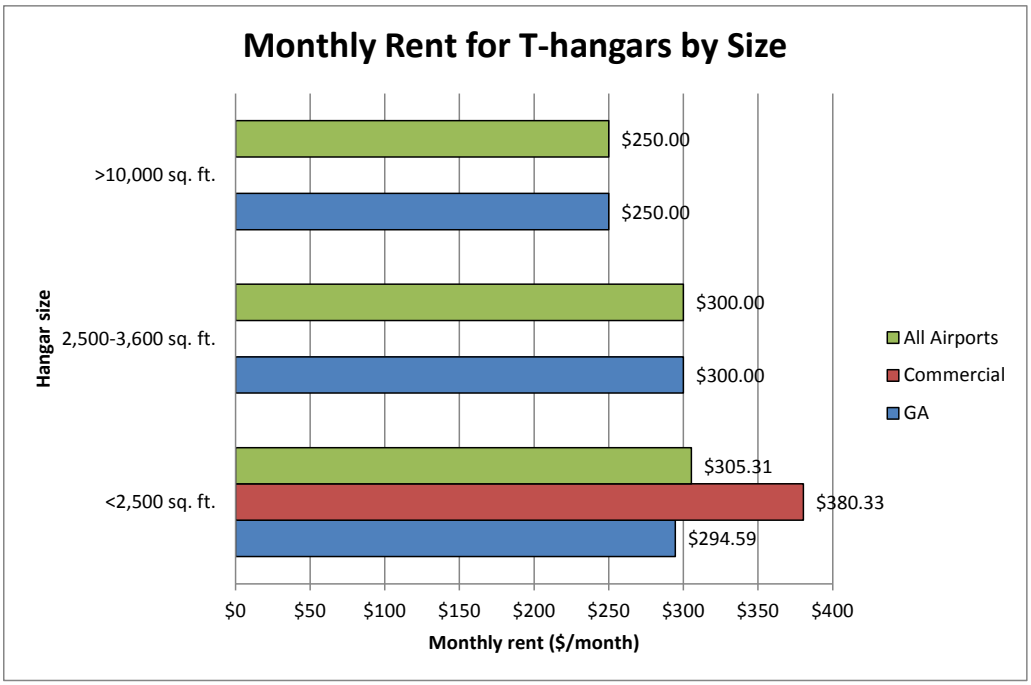


Figure 3-51. Monthly rent for T-hangars by size.

The rental rates for T-hangars may vary not only by size, but also by geographic region of the airport. However, due to a small number of responding commercial airports, it was not possible to provide a

comparison of hangar rates at commercial airports by geographic region; only the rates at GA airports could be presented. The comparison of T-hangar rates at the surveyed GA airports by geographic region is shown in Table 3-21.

Table 3-21. T-hangar Rates at Florida GA Airports by Region

CFASPP Region	Average Monthly Rent per Hangar Size			
	<2,500 sq. ft.	2,500-3,600 sq. ft.	>10,000 sq. ft.	All Sizes
Central	$272.75 (4)			$272.75 (4)
East Central	$281.63 (4)			$281.63 (4)
North Central	$247.00 (2)	$300.00 (1)		$241.30 (4)
Northwest	$175.00 (1)			$175.00 (1)
Southeast		$16.60 PSFPY (1)		$419.00 (1) $16.60 PSFPY (1)
Southwest	$303.31 (4)			$303.31 (4)
Treasure Coast	$333.33 (3)			$333.33 (3)
West Central	$362.25 (3)		$250.00 (3)	$306.12 (6)

**The number of airports that responded to each question is provided in parenthesis.*

Due to a limited number of airports representing each region in the survey data, the results of the analysis by geographic region should be interpreted with caution. The data presented describes the rates for the GA airports that responded to the survey. No assumptions are made or implied regarding average hangar rates at all GA airports in each geographic region.

The data on the age, condition, size, aircraft capacity, and rental rates of T-hangars, as well as various amenities available, are summarized in Table 3-22. The data for age, condition, rental basis, and hangar size presented below represent response categories with the largest number of responses, rather than average values. Aircraft capacity and rent amount are reported as averages.

Table 3-22. Details about T-hangars at Florida Public Use Airports

		Commercial Average	GA Average	All Airports
Age		N/A	11-20 years	11-20 years
Condition		Good	Good	Good
Aircraft capacity		50	74	73
Rental basis		Flat fee	Flat fee	Flat fee
Hangar size		<2,500 sq. ft.	<2,500 sq. ft.	<2,500 sq. ft.
Rent	<2,500 sq. ft.	$380.33/month (3)	$294.59/month (21)	$305.31/month (24)
	2,500-3,600 sq. ft.		$300.00/month (1) $16.60 PSFPY (1)	$300.00/month (1) $16.60 PSFPY (1)
	>10,000 sq. ft.		$250.00/month (3)	$250.00/month (3)
	All sizes	$380.33/month(3)	$290.00/month (25) $16.60 PSFPY (1)	$299.20/month (28) $16.60 PSFPY (1)
Amenities available (% of airports)	Gas Electricity Water Sewage	0.0% 100.0% (3) 100.0% (3) 66.7% (2)	12.5% (4) 94.1% (32) 61.8% (21) 35.5% (11)	11.4% (4) 94.6% (35) 64.9% (24) 38.2% (13)

**The number of airports that responded to each question is provided in parenthesis.*

Waiting List

When the demand for certain types or rental facilities at the airport exceeds available supply, airports often maintain a waiting list of customers interested in renting a particular type of facility. Waiting lists are typical for hangars or other types of airport facilities that are in high demand but are undersupplied.

Half of the surveyed Florida commercial airports and more than 67.0 percent of GA airports reported having a waiting list for hangars. Few GA airports reported having a waiting list for shade hangars and large buildings, and no airport (either GA or commercial) reported having a waiting list for tie-downs. The percentage of airports with waiting lists for different types of rentals is summarized in Table 3-23.

Table 3-23. Percentage of Airports with a Waiting List for Rentals

Type of Rentals	Commercial Average	GA Average	All Airports
Hangars	50.0% (2)	67.6% (25)	65.9% (27)
Tie-downs	0.0%	0.0%	0.0%
Shade hangars		5.4% (2)	4.9% (2)
Large buildings		2.7% (1)	2.4% (1)

**The number of airports that responded to each question is provided in parenthesis.*

Ground Leases

A ground lease is a long-term lease of airport land in which a tenant is allowed to occupy and develop the land during the lease period. After the lease expires, the land with all improvements, buildings, and other structures typically reverts back to the owner (airport).[5]

Both aeronautical and non-aeronautical activities at the airport can involve ground leases. The most common types of ground leases include those for the purpose of constructing private hangars, performing industrial or commercial activities, constructing warehouses, using land for open storage or agricultural purposes, and performing additional aeronautical activities.

Since ground leases typically involve long-term contracts, it is wise to include a provision about a periodic adjustment of rates. The basis for adjustment may include an appraisal of the property value, changes in consumer price index (CPI) reported by the U.S. Bureau of Labor Statistics, or other methods. The rates for the common types of ground leases are summarized in the following section.

Private Hangar Ground Lease

Average ground lease rates for constructing private hangars at the surveyed commercial and GA airports in Florida are presented in Table 3-24.

[5] *Loan.com*, "What is a Ground Lease?" http://www.loan.com/business-loans/what-is-a-ground-lease.html, accessed September 27, 2013.

Table 3-24. Private Hangar Ground Lease Rates, All Airports

	Measure	Commercial Average	GA Average	All Airports
Lease amount	Per sq. ft./year	$0.435 (4)	$0.273 (27)	$0.294 (31)
	Flat fee/year		$600-$2400/year (1)	$600-$2400/year (1)
	% of FMV	12% (1)		12% (1)
Percent of gross revenue	%		19.9% (8)	19.9% (8)
Periodic adjustment		80.0% (4)	88.9% (24)	87.5% (28)
How often adjusted	Annual	33.3% (2)	62.1% (18)	57.1% (20)
	Every 5 years	16.7% (1)	6.9% (2)	8.6% (3)
	Other	50.0% (3)	31.0% (9)	34.3% (12)
Basis for adjustment	CPI	50.0% (3)	51.7% (15)	51.4% (18)
	Appraisal	33.3% (2)	20.7% (6)	22.9% (8)
	Other	16.7% (1)	27.6% (8)	25.7% (9)

**The number of airports that responded to each question is provided in parenthesis.*

The survey data show that hangar ground lease rates on average are 60 percent higher (per square foot) at the commercial airports than at GA airports. The comparison of hangar ground lease rates per square foot at the surveyed Florida commercial and GA airports is presented in Figure 3-52.

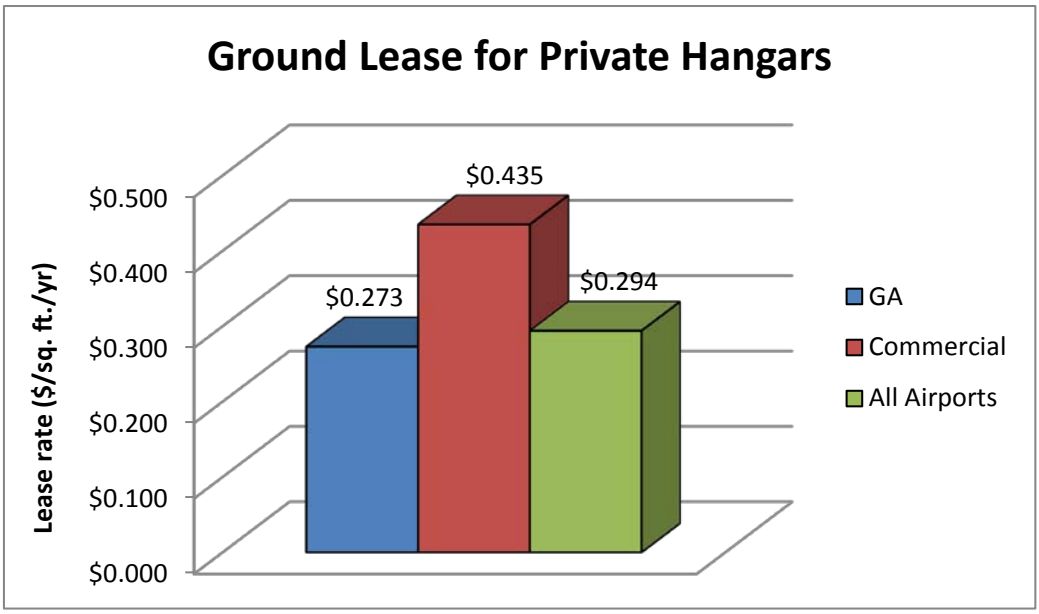


Figure 3-52. Average ground lease rates for private hangars, commercial vs. GA.

The rates vary based on the geographic region of the airport. Due to a small number of responding commercial airports, it is not possible to provide a comparison of ground lease rates at commercial airports by geographic region; only the rates at GA airports could be presented. Ground lease rates for private hangars at the surveyed GA airports by geographic region of the state are shown in Figure 3-53.

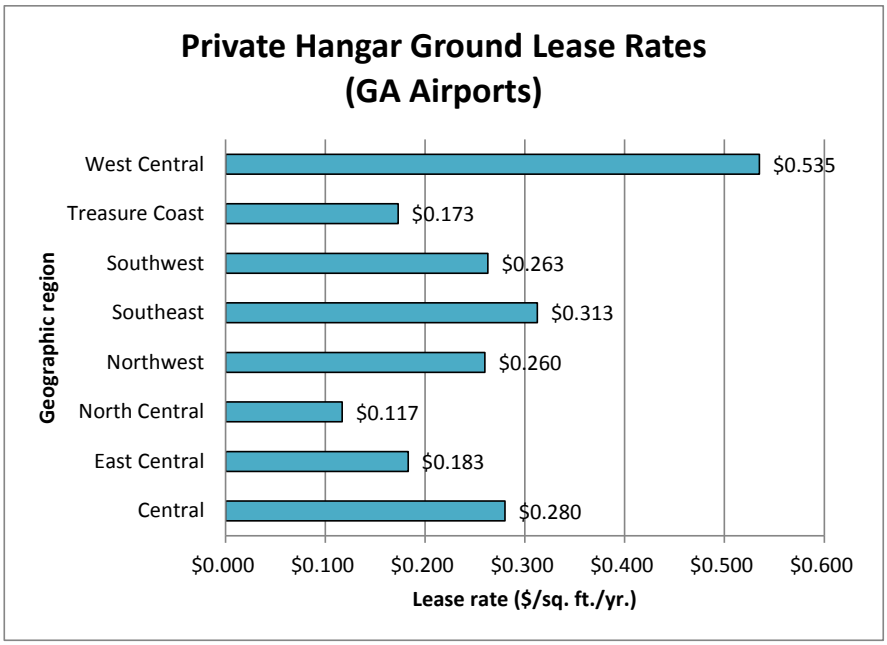


Figure 3-53. Ground lease rates for hangars at GA airports by region.

The data show that the highest average ground lease rates for private hangars ($0.535/sq. ft./yr.) are charged by GA airports located in the West Central region of the state. On the other hand, GA airports in the North Central region have the lowest average ground lease rates for hangars ($0.117/sq. ft./yr.). Due to a limited number of airports representing each region in the survey data, the results of the geographic comparison should be interpreted with caution.

Other Aeronautical Ground Leases

Average ground lease rates for other aeronautical activities (other than hangar construction) at the surveyed commercial and GA airports in Florida are presented in Table 3-25.

Table 3-25. Aeronautical Ground Lease Rates, All Airports

	Measure	Commercial Average	GA Average	All Airports
Lease amount	Per sq. ft./year	$0.490 (2)	$0.232(20)	$0.255 (22)
	% of FMV	12% (1)		12% (1)
Percent of gross revenue	%		8.7% (7)	8.7% (7)
Periodic adjustment		83.3% (5)	95.5% (21)	92.9% (26)
How often adjusted	Annual	60.0% (3)	76.2% (16)	73.1% (19)
	Every 5 years	20.0% (1)	9.5% (2)	11.5% (3)
	Other	20.0% (1)	14.3% (3)	15.4% (4)
Basis for adjustment	CPI	16.7% (1)	52.6% (10)	44.0% (11)
	Appraisal	33.3% (2)	21.1% (4)	24.0% (6)
	Other	50.0% (3)	26.3% (5)	32.0% (8)

**The number of airports that responded to each question is provided in parenthesis.*

The survey data show that other aeronautical ground lease rates on average are more than two times higher (per square foot) at the commercial airports than at GA airports. The comparison of other aeronautical ground lease rates, other than private hangar rates (per square foot), at the surveyed Florida commercial and GA airports is presented in Figure 3-54.

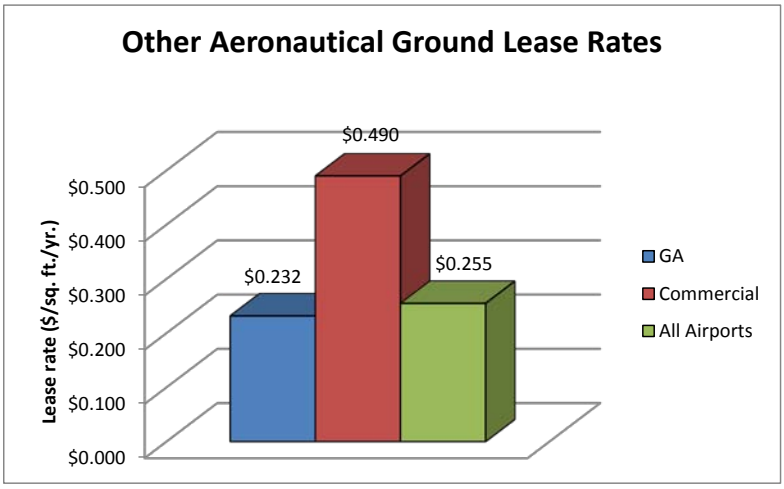


Figure 3-54. Average aeronautical ground lease rates, commercial vs. GA.

The rates vary based on the geographic region of the airport. Due to a small number of responding commercial airports, it is not possible to provide a comparison of ground lease rates at commercial airports by geographic region; only the rates at GA airports could be presented. Ground lease rates for other aeronautical purposes (other than private hangars) at the surveyed GA airports by geographic region of the state are shown in Figure 3-55.

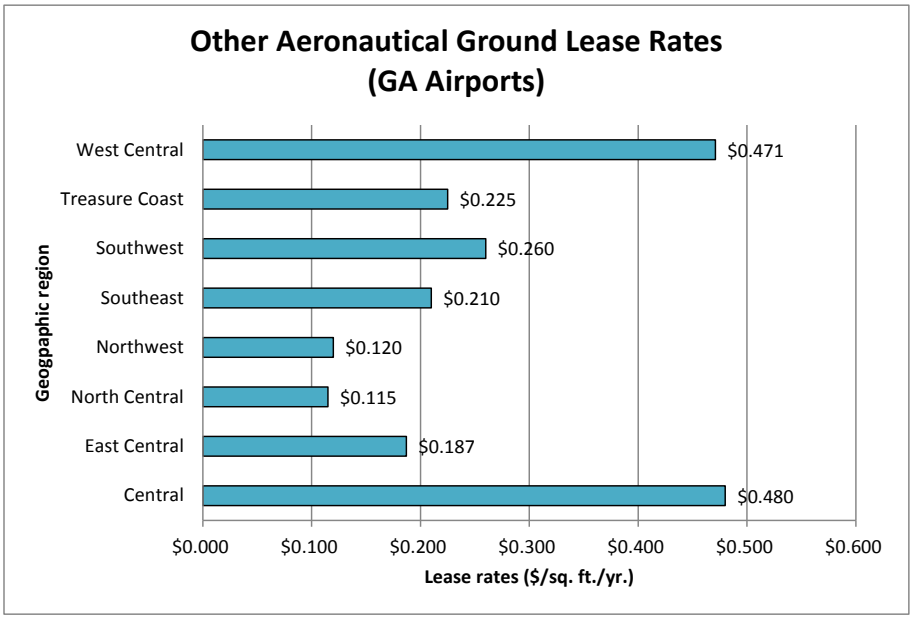


Figure 3-55. Aeronautical ground lease rates at GA airports by region.

The data show that the highest average ground lease rates for other aeronautical activities ($0.480/sq. ft./yr.) are charged by GA airports located in the Central region of the state. On the other hand, GA airports in the North Central region have the lowest average aeronautical lease rates ($0.115/sq. ft./yr.). Due to a limited number of airports representing each region in the survey data, the results of the geographic comparison should be interpreted with caution.

Commercial – Non-aeronautical Use

Average ground lease rates for commercial non-aeronautical use at the surveyed commercial and GA airports in Florida are presented in Table 3-26.

Table 3-26. Ground Lease Rates for Commercial Non-aeronautical Use, All Airports

	Measure	Commercial Average	GA Average	All Airports
Lease amount	Per sq. ft./year	$1.759 (4)	$1.774 (18)	$1.771 (22)
	% of FMV	12% (1)	5% (1)	8.5% (2)
Percent of gross revenue	%		14.4% (8)	14.4% (8)
Periodic adjustment		80.0% (4)	95.2% (20)	92.3% (24)
How often adjusted	Annual	28.6% (2)	57.1% (12)	50.0% (14)
	Every 5 years	14.3% (1)	14.3% (3)	14.3% (4)
	Other	57.1% (4)	28.6% (6)	35.7% (10)
Basis for adjustment	CPI	42.9% (3)	52.2% (12)	50.0% (15)
	Appraisal	14.3% (1)	26.1% (6)	23.3% (7)
	Other	42.9% (3)	21.7% (5)	26.7% (8)

**The number of airports that responded to each question is provided in parenthesis.*

The survey data show that ground lease rates for commercial non-aeronautical use at commercial at GA airports are practically identical. The difference in rates per square foot between commercial and GA airports is less than 1 percent. The comparison of commercial non-aeronautical ground lease rates (per square foot) at the surveyed Florida commercial and GA airports is presented in Figure 3-56.

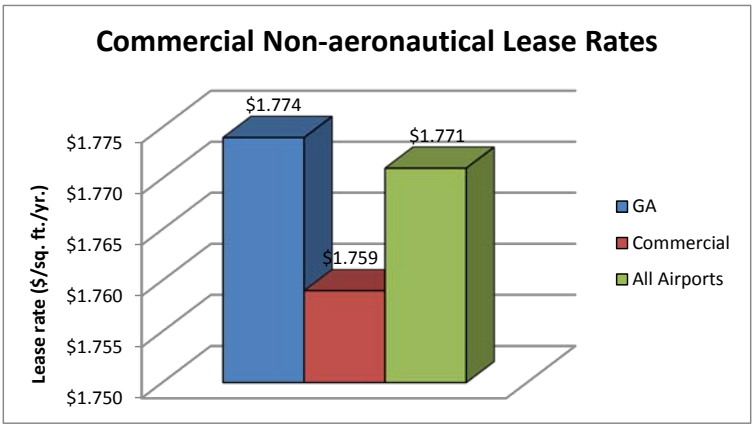


Figure 3-56. Ground lease rates for commercial non-aeronautical use, commercial vs. GA.

The rates vary, sometimes substantially, based on the geographic region of the airport. Due to a small number of responding commercial airports, it is not possible to provide a comparison of ground lease

rates at commercial airports by geographic region; only the rates at GA airports could be presented. Ground lease rates for commercial non-aeronautical use at the surveyed GA airports by geographic region of the state are shown in Figure 3-57.

Figure 3-57. Ground lease rates for commercial non-aeronautical use at GA airports by region.

The highest average ground lease rates for commercial non-aeronautical use ($10.00/sq. ft./yr.) were observed at GA airports located in the West Central region of the state. GA airports in the North Central region reported the lowest average ground lease rates for commercial non-aeronautical use ($0.040/sq. ft./yr.). Due to a limited number of airports representing each region in the survey data, the results of the geographic comparison should be interpreted with caution.

Industrial – Non-aeronautical Use

Average ground lease rates for industrial non-aeronautical use at the surveyed commercial and GA airports in Florida are presented in Table 3-27.

Table 3-27. Ground Lease Rates for Industrial Non-aeronautical Use, All Airports

	Measure	Commercial Average	GA Average	All Airports
Lease amount	Per sq. ft./year	$1.025 (1)	$1.136 (8)	$1.124 (9)
	% of FMV	12% (1)		12% (1)
Percent of gross revenue	%		20.0% (4)	20.0% (4)
Periodic adjustment		75.0% (3)	100.0% (12)	93.8% (15)
How often adjusted	Annual	40.0% (2)	66.7% (8)	58.8% (10)
	Every 5 years	20.0% (1)	8.3% (1)	11.8% (2)
	Other	40.0% (2)	25.0% (3)	29.4% (5)
Basis for adjustment	CPI	50.0% (2)	80.0% (8)	71.4% (10)
	Other	50.0% (2)	20.0% (2)	28.6% (4)

**The number of airports that responded to each question is provided in parenthesis.*

The survey data show that ground lease rates for industrial non-aeronautical use at GA airports on average are 10.0 percent higher than at commercial airports. The comparison of industrial non-aeronautical ground lease rates (per square foot) at the surveyed Florida commercial and GA airports is presented in Figure 3-58.

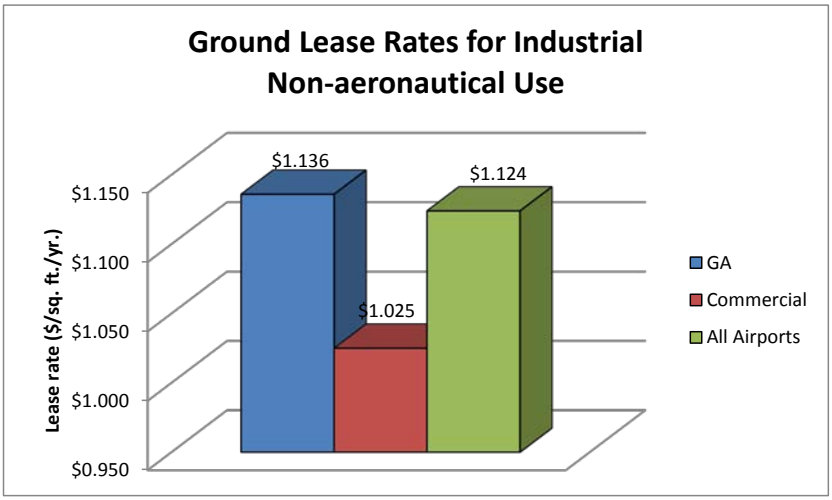


Figure 3-58. Ground lease rates for industrial non-aeronautical use, commercial vs. GA.

The rates vary, sometimes substantially, based on the geographic region of the airport. Due to a small number of responding commercial airports, it is not possible to provide a comparison of ground lease rates at commercial airports by geographic region; only the rates at GA airports could be presented. Ground lease rates for industrial non-aeronautical use at the surveyed GA airports by geographic region of the state are shown in Figure 3-59.

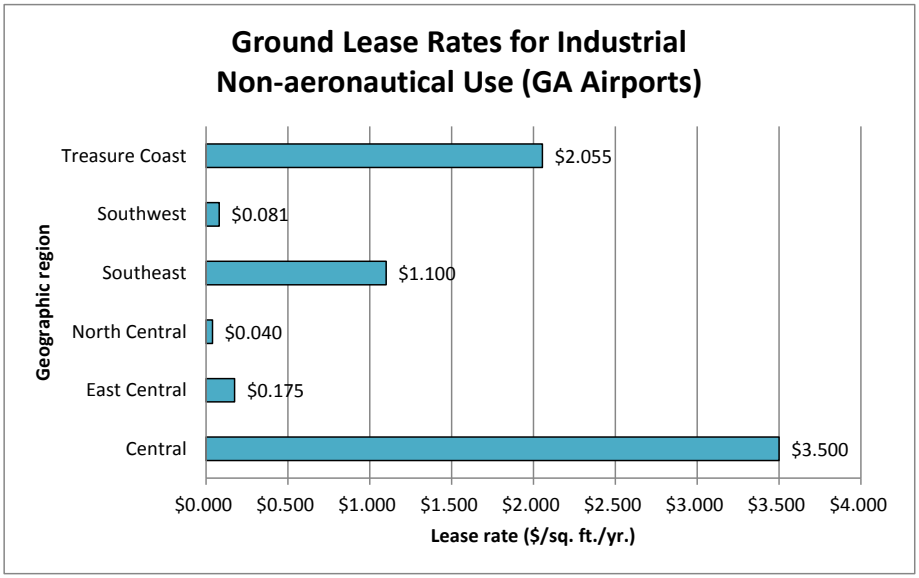


Figure 3-59. Ground lease rates for industrial non-aeronautical use at GA airports by region.

The highest average ground lease rates for industrial non-aeronautical use ($3.50/sq. ft./yr.) were observed at GA airports located in the Central region of the state. GA airports in the North Central region reported the lowest average ground lease rates for industrial non-aeronautical use ($0.040/sq. ft./yr.). Due to a limited number of airports representing each region in the survey data, the results of the geographic comparison should be interpreted with caution.

Agricultural Land

Average rates for leasing airport land for agricultural purposes at the surveyed commercial and GA airports in Florida are presented in Table 3-28.

Table 3-28. Ground Lease Rates for Agricultural Land at the Airport, All Airports

	Measure	Commercial Average	GA Average	All Airports
Lease amount	Per sq. ft./year	By appraisal	$0.043 (2)	$0.043 (2) or by appraisal
Percent of gross revenue	%		<6% (2)	<6% (2)
Periodic adjustment		100.0% (1)	40.0% (2)	50.0% (3)
How often adjusted	Annual	100.0% (1)	60.0% (3)	66.7% (4)
	Every 5 years		20.0% (1)	16.7% (1)
	Other		20.0% (1)	16.7% (1)
Basis for adjustment	CPI		20.0% (1)	16.7% (1)
	Appraisal	100.0% (1)	40.0% (2)	50.0% (3)
	Other		40.0% (2)	33.3% (2)

**The number of airports that responded to each question is provided in parenthesis.*

Due to a limited number of airports reporting established lease rates for agricultural land at the airport, no comparison of rates could be performed between commercial and GA airports, or between the airports in different geographic regions of the state.

Open Storage

Average rates for leasing airport land for open storage purposes at the surveyed commercial and GA airports in Florida are presented in Table 3-29.

Table 3-29. Ground Lease Rates for Open Storage at the Airport, All Airports

	Measure	Commercial Average	GA Average	All Airports
Lease amount	Per sq. ft./year	$0.390 (1)	$3.500 (1)	$1.945 (2)
Percent of gross revenue	%		>1% (1)	>1% (1)
Periodic adjustment		100.0% (3)	66.7% (2)	83.3% (5)
How often adjusted	Annual	66.7% (2)	100.0% (3)	83.3% (5)
	Other	33.3% (1)		16.7% (1)
Basis for adjustment	CPI	33.3% (1)	66.7% (2)	50.0% (3)
	Appraisal	33.3% (1)	33.3% (1)	33.3% (2)
	Other	33.3% (1)		16.7% (1)

**The number of airports that responded to each question is provided in parenthesis.*

Due to a limited number of airports reporting established ground lease rates for open storage at the airport, no comparison of rates could be performed between commercial and GA airports, or between the airports in different geographic regions of the state.

Warehouses

Average ground lease rates for warehouses located at the surveyed commercial and GA airports in Florida are presented in Table 3-30.

Table 3-30. Ground Lease Rates for Warehouses at the Airport, All Airports

	Measure	Commercial Average	GA Average	All Airports
Lease amount	Per sq. ft./year	$9.000 (2)	$4.095 (6)	$5.321 (8)
Percent of gross revenue	%		26.0% (1)	26.0% (1)
Periodic adjustment		100.0% (4)	85.7% (6)	90.9% (10)
How often adjusted	Annual			
	Every 5 years			
	Other	100.0% (3)	100.0% (6)	100.0% (9)
Basis for adjustment	CPI	66.7% (2)	33.3% (2)	44.4% (4)
	Appraisal	33.3% (1)	16.7% (1)	22.2% (2)
	Other		50.0% (3)	33.3% (3)

**The number of airports that responded to each question is provided in parenthesis.*

The survey data show that ground lease rates for warehouses located at commercial airports are more than double the similar rates at GA airports. The comparison of ground lease rates for warehouses at the surveyed Florida commercial and GA airports is presented in Figure 3-60.

Figure 3-60. Ground lease rates for warehouses at the airport, commercial vs. GA.

Due to a limited number of airports reporting established ground lease rates for warehouses at the airport, no comparison of rates could be performed between the airports in different geographic regions of the state.

Summary of Rates for All Types of Ground Leases

The lease rates for different types of ground leases reported by the surveyed Florida airports are summarized in Table 3-31.

Table 3-31. Summary of Rates for Different Types of Ground Leases, All Surveyed Airports

Type of Ground Lease	Basis for Charge	Average Lease Rate		
		Commercial Average	GA Average	All Airports
Private hangar	Per sq. ft./year	$0.435 (4)	$0.273 (27)	$0.294 (31)
	Flat fee/year		$600-$2400 (1)	$600-$2400 (1)
	% of FMV	12% (1)		12% (1)
Other aeronautical use	Per sq. ft./year	$0.490 (2)	$0.232(20)	$0.255 (22)
	% of FMV	12% (1)		12% (1)
Commercial non-aeronautical use	Per sq. ft./year	$1.759 (4)	$1.774 (18)	$1.771 (22)
	% of FMV	12% (1)	5% (1)	8.5% (2)
Industrial non-aeronautical use	Per sq. ft./year	$1.025 (1)	$1.136 (8)	$1.124 (9)
		12% (1)		12% (1)
Agricultural land	Per sq. ft./year	by appraisal	$0.043 (2)	$0.043 (2) or by appraisal
Open storage	Per sq. ft./year	$0.390 (1)	$3.500 (1)	$1.945 (2)
Warehouses	Per sq. ft./year	$9.000 (2)	$4.095 (6)	$5.321 (8)

**The number of airports that responded to each question is provided in parenthesis.*

The rates per square foot for the main types of ground leases at the surveyed Florida airports are compared graphically in Figures 3-61 and 3-62.

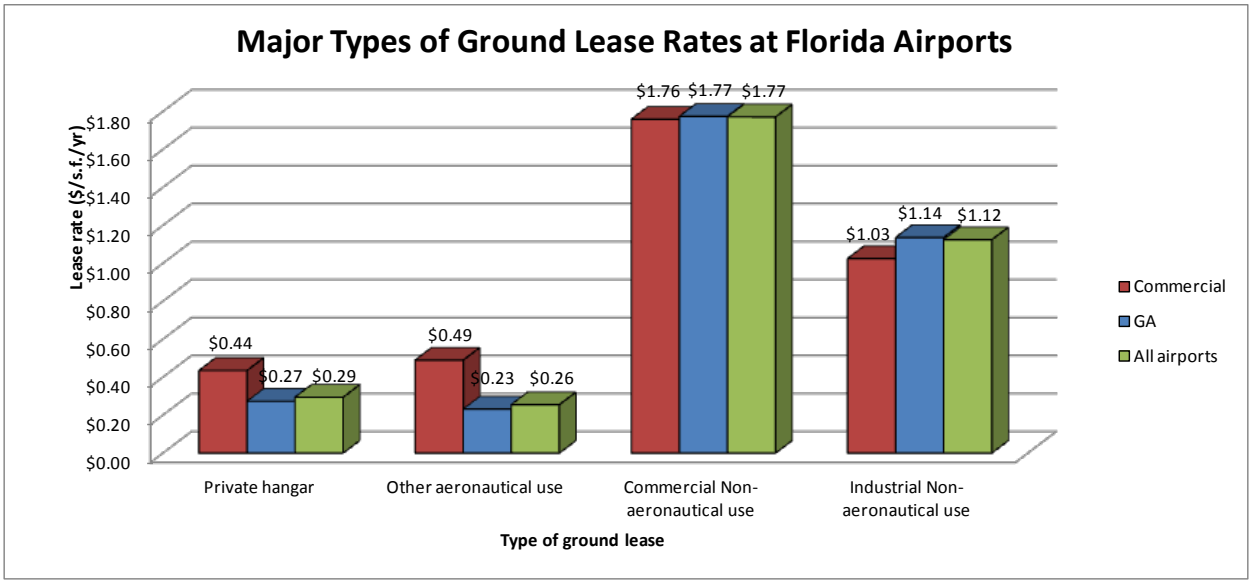


Figure 3-61. Comparison of major types of ground leases at Florida airports.

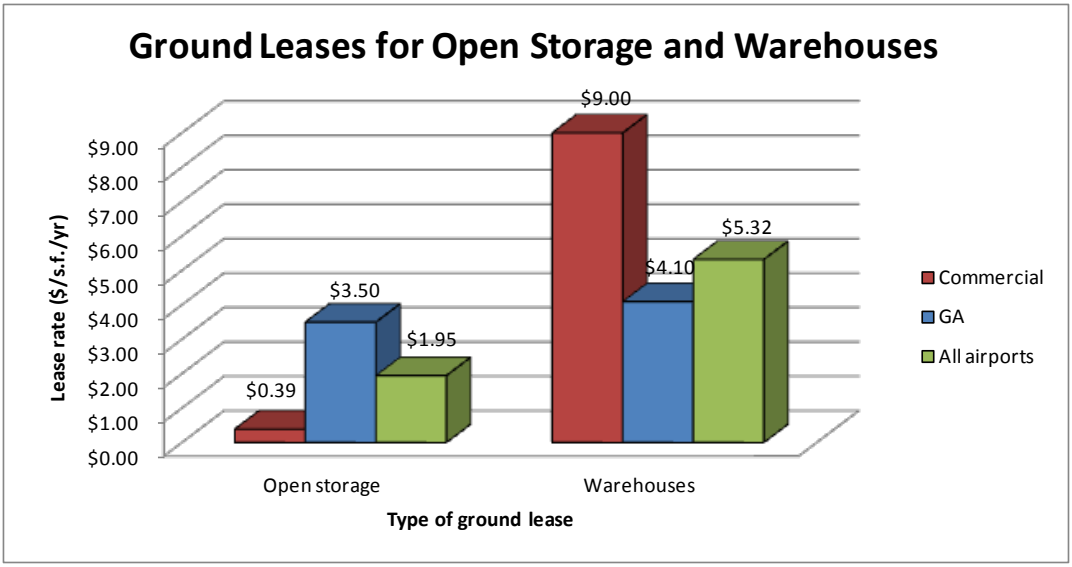


Figure 3-62. Ground lease rates for open storage and warehouses at Florida airports.

Airport-Owned Buildings

Airports often charge different lease rates depending on the tenant's type of business and further the type of product the tenant offers to the public. Fixed base operators (FBOs) have a special function at the airport, and their relationship to airport business is somewhat unique. Since FBOs are subject to minimum standards, which require a variety of services to be provided to the public, it is not uncommon for them to receive preferential lease rates. The rates charged to different types of tenants for leasing airport-owned buildings at the surveyed Florida public use airports are discussed in more detail in the following section.

Tenant Type: Fixed Base Operator (FBO)

Average rates charged by the surveyed Florida airports to FBOs for renting an airport-owned building are summarized in Table 3-32.

Table 3-32. Lease Rates Charged to FBOs for Airport-Owned Buildings, All Airports

	Measure	Commercial Average	GA Average	All Airports
Lease amount	Per sq. ft./year	$0.490 (2)	$1.352 (10)	$1.208 (12)
Percent of gross revenue	%		44.0% (6)	44.0% (6)
Periodic adjustment		100.0% (5)	64.7% (11)	72.7% (16)
How often adjusted	Annual	40.0% (2)	33.3% (5)	35.0% (7)
	Every 2 years		6.7% (1)	5.0% (1)
	Every 5 years		33.3% (5)	25.0% (5)
	Other	60.0% (3)	26.7% (4)	35.0% (7)
Basis for adjustment	CPI	20.0% (1)	43.8% (7)	38.1% (8)
	Appraisal	20.0% (1)	37.5% (6)	33.3% (7)
	Other	60.0% (3)	18.8% (3)	28.6% (6)

**The number of airports that responded to each question is provided in parenthesis.*

The survey data show that lease rates charged to FBOs for renting airport-owned buildings at commercial airports on average are significantly lower than at GA airports. However, a higher percentage of commercial airports periodically adjust their lease rates. The comparison of lease rates charged to FBOs for renting airport-owned buildings at the surveyed Florida commercial and GA airports is presented in Figure 3-63.

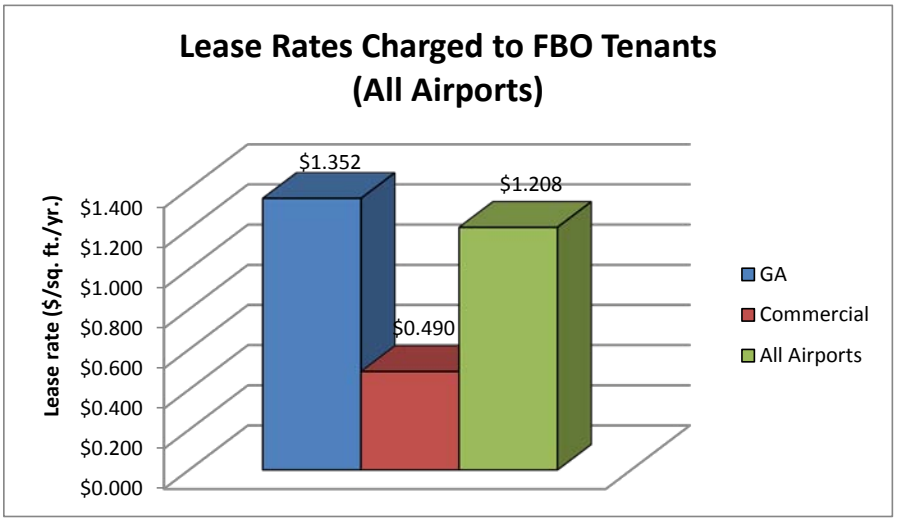


Figure 3-63. Rates charged to FBOs for leasing airport-owned buildings, commercial vs. GA.

The rates vary, sometimes substantially, based on the geographic region of the airport. Due to a small number of responding commercial airports, it is not possible to provide a comparison of lease rates at commercial airports by geographic region; only the rates at GA airports could be presented. Lease rates charged to FBOs at the surveyed GA airports by geographic region of the state are shown in Figure 3-64.

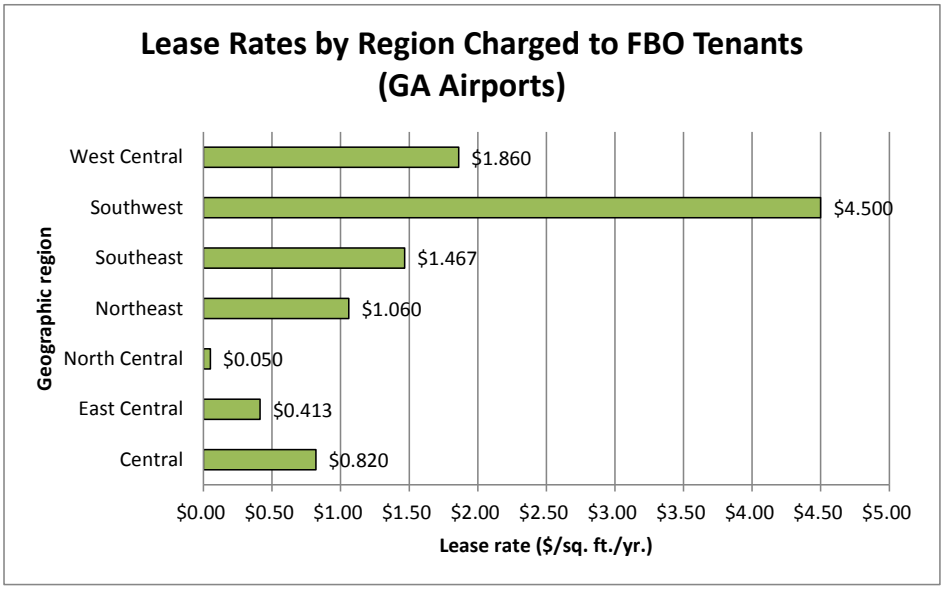


Figure 3-64. Building lease rates by region charged to FBOs by GA airports.

The highest average building lease rates charged to FBO tenants ($4.50/sq. ft./yr.) were observed at GA airports located in the Southwest region of the state. On the other hand, FBOs leasing buildings from GA airports in the North Central region enjoyed the lowest lease rates ($0.050/sq. ft./yr.). Due to a limited number of airports representing each region in the survey data, the results of the geographic comparison should be interpreted with caution.

Tenant Type: Aircraft Maintenance

Average rates charged by the surveyed Florida airports to aircraft maintenance tenants for renting airport-owned buildings are summarized in Table 3-33.

Table 3-33. Lease Rates Charged to Aircraft Maintenance Tenants, All Airports

	Measure	Commercial Average	GA Average	All Airports
Lease amount	Per sq. ft./year	$8.700 (1)	$2.861 (8)	$3.510 (9)
Percent of gross revenue	%		<2.4% (5)	<2.4% (5)
Periodic adjustment		100.0% (5)	75.0% (9)	82.4% (14)
How often adjusted	Annual	80.0% (4)	41.7% (5)	52.9% (9)
	Every 2 years		8.3% (1)	5.9% (1)
	Every 5 years	20.0% (1)	8.3% (1)	11.8% (2)
	Other		41.7% (5)	29.4% (5)
Basis for adjustment	CPI	20.0% (1)	41.7% (5)	35.3% (6)
	Appraisal	40.0% (2)	8.3% (1)	17.6% (3)
	Other	40.0% (2)	50.0% (6)	47.1% (8)

**The number of airports that responded to each question is provided in parenthesis.*

The survey data show that average building lease rates charged to aircraft maintenance tenants at GA airports are significantly lower than similar rates at commercial airports. Additionally, a higher percentage of commercial airports periodically adjust their lease rates. The comparison of rates charged to aircraft maintenance tenants for renting airport-owned buildings at the surveyed Florida commercial and GA airports is presented in Figure 3-65.

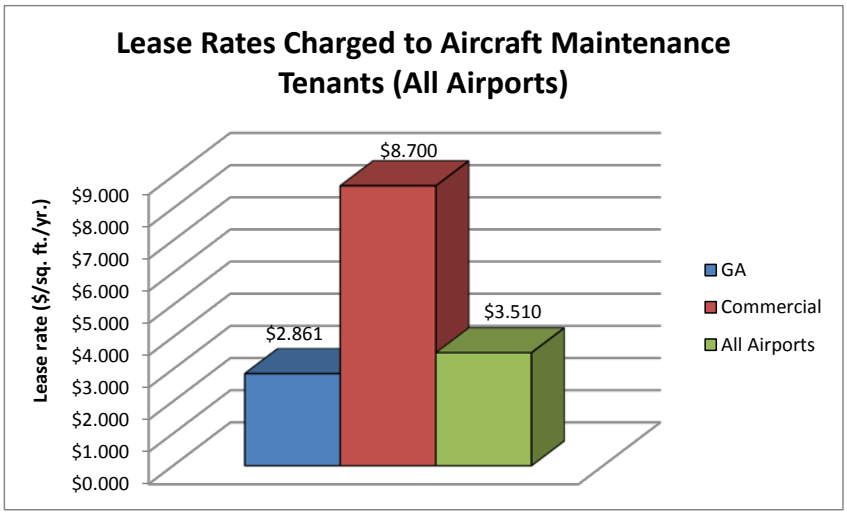


Figure 3-65. Building lease rates charged to aircraft maintenance tenants, commercial vs. GA.

The rates vary, sometimes substantially, based on the geographic region of the airport. Due to a small number of responding commercial airports, it is not possible to provide a comparison of lease rates at commercial airports by geographic region; only the rates at GA airports could be presented. Lease rates charged to aircraft maintenance tenants at the surveyed GA airports by geographic region of the state are shown in Figure 3-66.

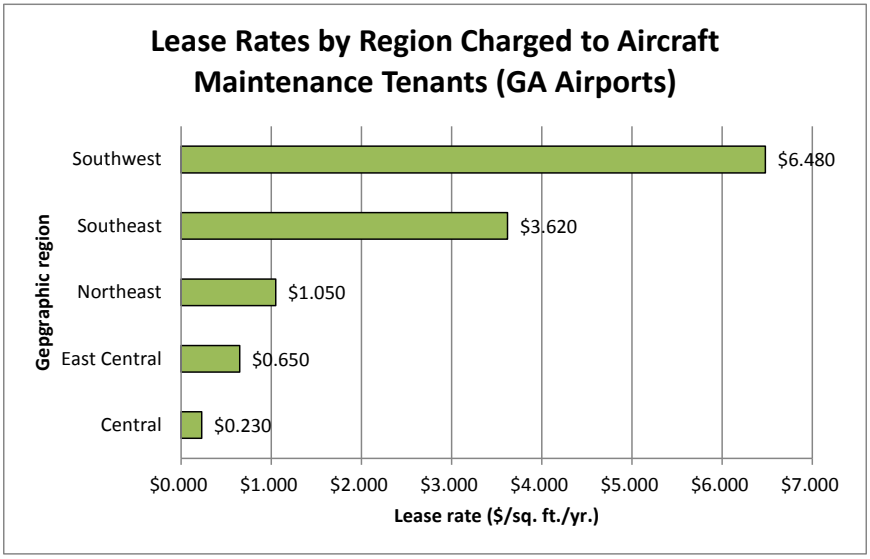


Figure 3-66. Building lease rates by region charged to aircraft maintenance tenants by GA airports.

The highest average building lease rates charged to aircraft maintenance tenants ($6.48/sq. ft./yr.) were observed at GA airports located in the Southwest region. On the other hand, aircraft maintenance tenants leasing buildings from GA airports in the Central region of the state enjoyed the lowest average rates ($0.230/sq. ft./yr.). Due to a limited number of airports representing each region in the survey data, the results of the geographic comparison should be interpreted with caution.

Tenant Type: Cargo

Average rates charged by the surveyed Florida airports to air cargo tenants for renting airport-owned buildings are summarized in Table 3-34.

Table 3-34. Lease Rates Charged to Air Cargo Tenants, All Airports

	Measure	Commercial Average	GA Average	All Airports
Lease amount	Per sq. ft./year	$11.188 (4)	$0.422 (2)	$7.598 (6)
Percent of gross revenue	%			
Periodic adjustment		100.0% (6)	100.0% (3)	100.0% (9)
How often adjusted	Annual	60.0% (3)	100.0% (3)	75.0% (6)
	Other	40.0% (2)		25.0% (2)
Basis for adjustment	CPI	20.0% (1)	66.7% (2)	37.5% (3)
	Appraisal	40.0% (2)	33.3% (1)	37.5% (3)
	Other	40.0% (2)		25.0% (2)

**The number of airports that responded to each question is provided in parenthesis.*

The survey data show that average building lease rates charged to air cargo tenants at GA airports are significantly lower than similar rates at commercial airports. Also, a higher percentage of GA airports adjust their rates annually. They are more likely than commercial airports to rely on CPI instead of an appraisal as a basis for adjustment. The comparison of rates charged to air cargo tenants for renting airport-owned buildings at the surveyed Florida commercial and GA airports is presented in Figure 3-67.

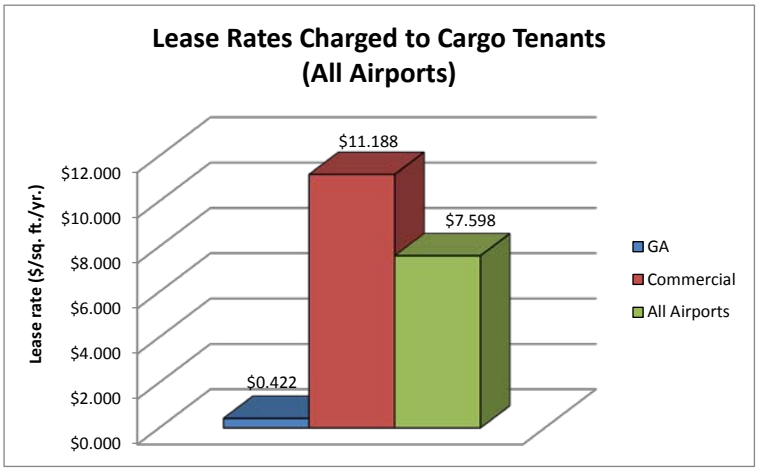


Figure 3-67. Building lease rates charged to air cargo tenants commercial vs. GA.

Due to a limited number of airports reporting established building lease rates applicable to air cargo tenants, no comparison of rates could be performed between the airports in different geographic regions of the state.

Tenant Type: Government/Military

Average rates charged by the surveyed Florida airports to government or military tenants for renting airport-owned buildings are summarized in Table 3-35.

Table 3-35. Lease Rates Charged to Government/Military Tenants, All Airports

	Measure	Commercial Average	GA Average	All Airports
Lease amount	Per sq. ft./year	$1.060 (1)	$4.050 (2) No cost (3)	$3.053 (3)
Percent of gross revenue	%	8.0% (1)	2.0% (1)	5.0% (2)
Periodic adjustment		100.0% (2)	60.0% (3)	71.4% (5)
How often adjusted	Annual	50.0% (1)	50.0% (2)	50.0% (3)
	Other	50.0% (1)	50.0% (2)	50.0% (3)
Basis for adjustment	CPI	50.0% (1)	33.3% (1)	40.0% (2)
	Appraisal	50.0% (1)	33.3% (1)	40.0% (2)
	Other		33.3% (1)	20.0% (1)

**The number of airports that responded to each question is provided in parenthesis.*

The survey data show that average building lease rates charged to government/military tenants at GA airports are significantly higher than similar rates at commercial airports. However, several GA airports reported providing their buildings to government tenants at no cost. The comparison of rates charged to

government/military tenants for renting airport-owned buildings at the surveyed Florida commercial and GA airports is presented in Figure 3-68.

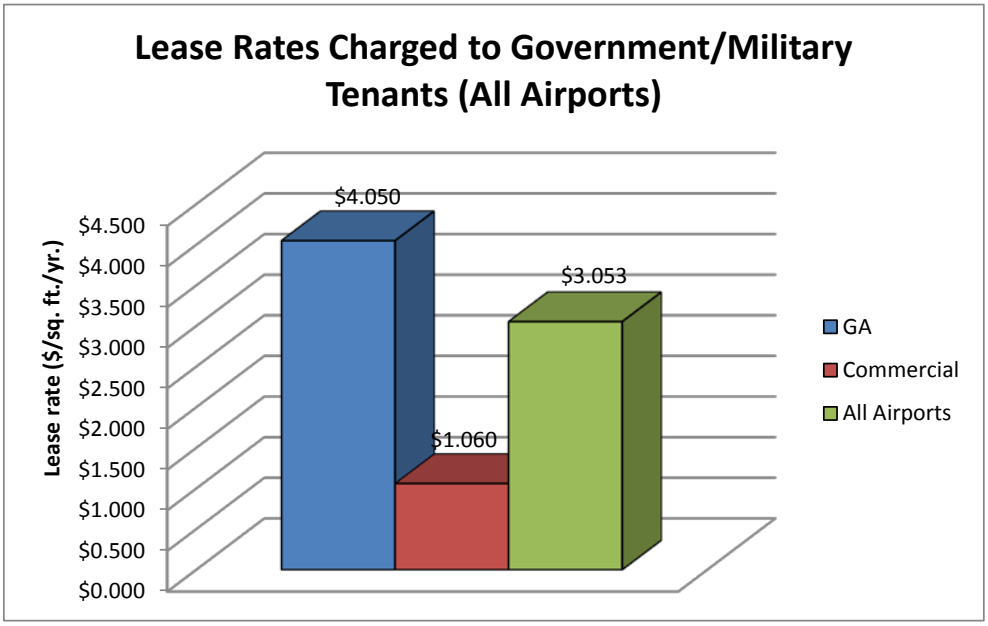


Figure 3-68. Building lease rates charged to government/military tenants, commercial vs. GA.

Due to a limited number of airports charging government and military tenants for leasing airport-owned buildings, no comparison of rates could be performed between the airports in different geographic regions of the state.

Summary of Rates for All Types of Tenants

Building lease rates that apply to different types of airport tenants, as reported by the surveyed Florida airports, are summarized in Table 3-36.

Table 3-36. Summary of Lease Rates for Different Types of Tenants, All Surveyed Airports

Type of Airport Tenant	Basis for Charge	Average Lease Rate		
		Commercial Average	GA Average	All Airports
FBO	Per sq. ft./year	$0.490 (2)	$1.352 (10)	$1.208 (12)
Aircraft maintenance	Per sq. ft./year	$8.700 (1)	$2.861 (8)	$3.510 (9)
Cargo	Per sq. ft./year	$11.188 (4)	$0.422 (2)	$7.598 (6)
Government/military	Per sq. ft./year	$1.060 (1)	$4.050 (2) No cost (3)	$3.053 (3)

**The number of airports that responded to each question is provided in parenthesis.*

The rates per square foot for the main types of airport tenants using airport-owned buildings at the surveyed Florida airports are compared graphically in Figure 3-69.

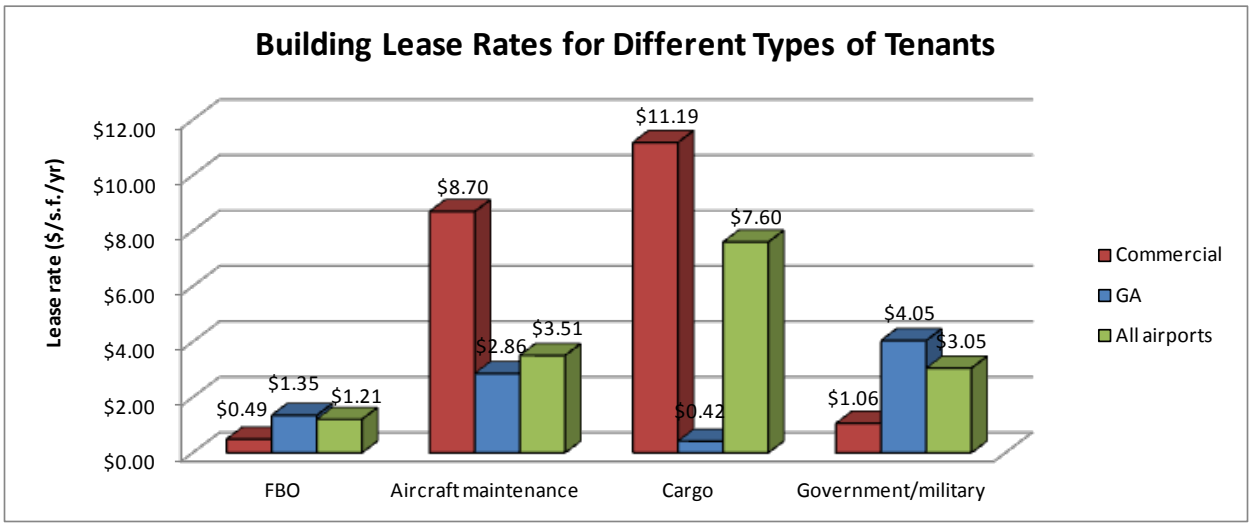


Figure 3-69. Comparison of building lease rates between the main types of airport tenants.

Rates Charged by FBO

Fixed base operators at an airport may perform various types of aeronautical activities, including land leases and hangar rentals. Some airports do not lease hangars to the end customers, but rather lease airport land to an FBO for the purpose of hangar construction. In such cases, an FBO establishes hangar rates and leases hangars to the end users.

The lease rates for enclosed hangars and T-hangars charged by FBOs that were reported by the surveyed Florida airports are summarized in Table 3-37.

Table 3-37. Monthly Hangar Lease Rates Charged by FBO

Basis for Charge	Commercial Average	GA Average	All Airports
Per sq. ft. per month	$10.00 (1)	$3.45 (3)	$5.09 (4)
Flat fee per month	$314.50 (2)	$470.50 (8)	$439.30 (10)

**The number of airports that responded to each question is provided in parenthesis.*

The comparison of hangar rates charged by FBO per square foot and as a flat fee per month between the surveyed commercial and GA airports is presented graphically in Figures 3-70 and 3-71.

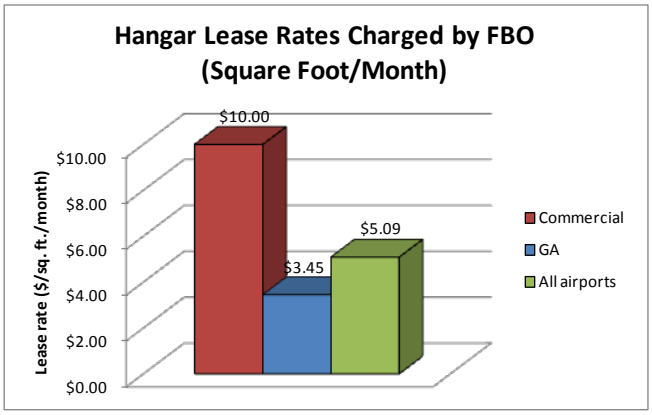


Figure 3-70. Hangar rates charged by FBO, per square foot per month, commercial vs. GA.

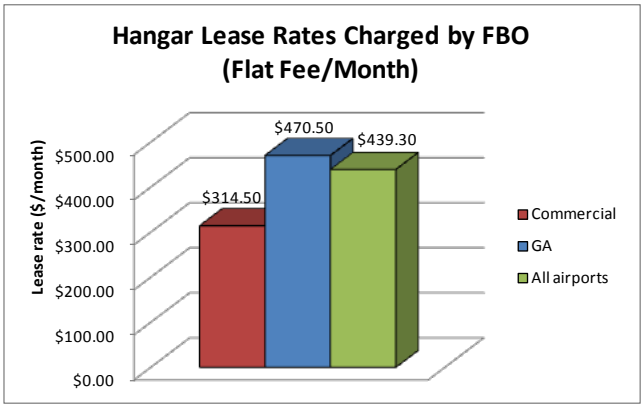


Figure 3-71. Hangar rates charged by FBO, flat fee per month, commercial vs. GA.

The hangar rates charged by FBOs located at GA airports in different geographic regions of the state are compared in Figure 3-72. Due to a small number of responding commercial airports, no comparison of rates by geographic region could be performed for commercial airports.

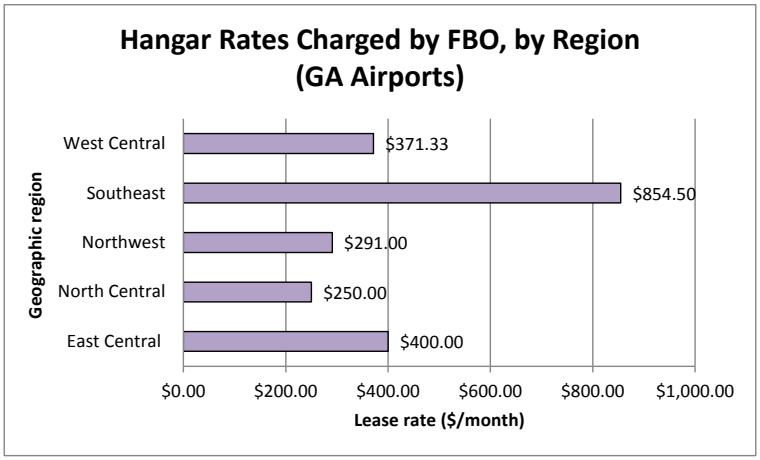


Figure 3-72. Hangar rates charged by FBO by region, GA airports.

The survey data show that FBOs at GA airports in the Southeast region charge the highest lease rate for hangars ($854.50/month), while GA airports in the North Central region have the lowest hangar rates charged by FBOs ($250/month). Due to a small number of airports representing each region in the survey data, the results of the geographic comparison should be interpreted with caution.

Airport Parking Charges

Parking charges are assessed by airports for using airport-owned or -operated parking facilities. In many airports, parking rates vary for short-term and long-term parking, and depend on facility usage. Average fees for different types of parking facilities reported by the surveyed Florida airports are summarized in Table 3-38.

Table 3-38. Average Airport Parking Charges, Commercial vs. GA Airports

Type of Charge	Commercial Average		GA Average	
	Short-term	Long-term	Short-term	Long-term
Hourly ($/hour)	$2.00 (4)	$2.00 (3)	$3.00 (1)	$3.00 (1)
Daily ($/day)	$13.44 (9)	$11.25 (8)	$15.50 (4)	$11.25 (4)
Monthly ($/month)			$46.67 (3)	$47.50 (4)

**The number of airports that responded to each question is provided in parenthesis.*

The data show that GA airports typically have higher parking rates for short-term parking, both on an hourly and daily basis, and equal or higher parking rates for long-term parking (hourly and daily), compared to commercial airports. However, unlike commercial airports, the majority of GA airports do not charge passengers for airport parking. More than 85.0 percent of the surveyed GA airports reported charging no fee for parking at the airport.

Fees for "Through-the-Fence" Operations

"Through-the-fence" operations describe the practice of a public airport owner permitting access to the public landing area by independent operators offering an aeronautical activity or by aircraft based on land adjacent to, but not a part of, the airport property. Through-the-fence operations include businesses or individuals that have access to the airport infrastructure from outside airport property, or that utilize airport property to conduct a business, but do not rent business space at the airport. The most common types of through-the-fence agreements are for freelance flight instruction, aircraft maintenance, and aircraft hangars.[6]

Through-the-fence operations can be conducted with or without a formal agreement. Most airports do not have through-the-fence operations at their facilities, or even know of them. Ninety percent of the surveyed GA airports, and more than 71.0 percent of the surveyed commercial airports, reported not having through-the-fence agreements.

[6] Aircraft Owners and Pilots Association, "Airport Frequently Asked Questions – Through-the-Fence Operations," http://www.aopa.org/Advocacy/Get-Involved/Airport-Support-Network/Guide-to-Obtaining-Community-Support-for-Your-Local-Airport/AOPA-Airport-Protection-Publications/Airport-Frequently-Asked-Questions-Through-the-Fence-Operations, accessed September 30, 2013.

The details about different types of through-the-fence agreements at the surveyed Florida public use airports are summarized in Table 3-39.

Table 3-39. Airport Fees for "Through-the-Fence" Operations at Florida Airports

Type of "Through-the-Fence" Agreement	Annual Fee					
	Commercial Airports		GA Airports		All Airports	
	Deeded Access	Access Agreement	Deeded Access	Access Agreement	Deeded Access	Access Agreement
Residential			$120 (1)		$120 (1)	
Commercial for private use		$100 (1)		$5,120 (2)		$3,447 (3)
Commercial for public use		$650 (2)	$4,100 (1)	$240 (1)	$4,100 (1)	$513 (3)

**The number of airports that responded to each question is provided in parenthesis.*

The limited amount of data on through-the-fence agreements reported by the surveyed airports does not allow for any further analysis or meaningful comparison between airports.

Special Use and Events

Occasionally, public use airports may host special events or rent their property or facilities for other special use. Depending on the circumstances, the airport property may be provided to event organizers with or without compensation to the airport.

The fees for special events charged by the surveyed Florida airports are summarized in Table 3-40.

Table 3-40. Fees for Special Events or Special Use of Airport Property

Charge for	Commercial Average		GA Average		All Airports	
	Application Fee	Use Fee	Application Fee	Use Fee	Application Fee	Use Fee
Special event		2,728.50/day (2)	$200 (2)	$412.50/day (6)	$200 (2)	$991.50/day (8)
				$250/event (2)		$250/event (2)
				$161.25/hour (4)		$161.25/hour (4)
Conference room rental				$25/hour (1)		$25/hour (1)

**The number of airports that responded to each question is provided in parenthesis.*

The limited amount of data on special event fees reported by the surveyed airports does not allow for in-depth analysis or meaningful comparison of these rates between commercial and GA airports.

The data from the surveyed airports indicate that the majority of Florida's airports charge a fee for special events at the airport, or for special use of airport property. GA airports are more likely to provide their property for a special event without charge. Only 20.0 percent of the surveyed commercial airports reported not charging a fee for special events at the airport, compared to 45.2 percent of GA airports.

Airport Insurance

Public use airports are required to have business insurance covering typical risks related to various aspects of airport operations, including general airport liability, bodily injury, property damage, pollution

liability, and independent contractor coverage. Insurance rates can be paid either separately by the airport or grouped with government entities owning the airport.

Typical types of insurance at all the surveyed airports, including the coverage type, insurance limit, deductible amount, and annual premium, are summarized in Tables 3-41, 3-42, and 3-43, respectively.

Table 3-41. Airport Insurance – Commercial Airports' Average

Coverage Type	Limit	Deductible	Annual Premium	Grouped with Government
General Airport Liability	$190,015,000 (5)	$8,333 (3)	$56,916 (4)	0.0%
Products/Completed Operations	$70,000,000 (3)	$0 (2)	$25,283 (3)	0.0%
Hangar-Keepers Liability	$70,000,000 (3)	$0 (2)	$25,283 (3)	
Bodily Injury	$36,666,667 (3)	$0 (2)	$25,283 (3)	0.0%
Property Damage	$194,800,000 (5)	$1,013,500 (5)	$280,982 (4)	20.0% (1)
Pollution Liability	$5,000,000 (2)	$30,000 (2)	$24,803 (2)	0.0%
Independent Contractor Coverage				0.0%
Other – EPLI	$5,000,000 (1)	$5,000 (1)	$18,211 (1)	0.0%
Other – Cyber	$1,000,000 (1)	$25,000 (1)	$14,000 (1)	0.0%
Other – Workers' Compensation				100.0% (1)

**The number of airports that responded to each question is provided in parenthesis.*

Table 3-42. Airport Insurance – GA Airports' Average

Coverage Type	Limit	Deductible	Annual Premium	Grouped with Government
General Airport Liability	$37,655,000 (20)	$2,300 (10)	$41,529 (15)	0.0%
Products/Completed Operations	$64,325,000 (10)	$1,833 (6)	$58,998 (9)	30.0% (3)
Hangar-Keepers Liability	$38,211,538 (13)	$2,500 (7)	$66,760 (8)	
Bodily Injury	$29,509,545 (11)	$1,571 (7)	$57,819 (8)	41.7% (5)
Property Damage	$54,555,827 (13)	$7,813 (8)	$102,285 (9)	46.2% (6)
Pollution Liability	$27,800,000 (10)	$6,714 (7)	$42,668 (8)	41.7% (5)
Independent Contractor Coverage	$5,000,000 (1)	$0 (1)	$8,160 (2)	42.9% (3)
Other – Fuel Storage Tank	$1,000,000 (1)	$10,000 (1)	$4,004 (1)	
Other – Tower Liability	$1,000,000 (1)		$22,815 (1)	
Other – Secretarial Bond	$500,000 (1)	$1,000 (1)	$1,596 (1)	

**The number of airports that responded to each question is provided in parenthesis.*

Table 3-43. Airport Insurance – All Airports

Coverage Type	Limit	Deductible	Annual Premium	Grouped with Government
General Airport Liability	$68,127,000 (25)	$3,692 (13)	$44,768 (19)	0.0%
Products/Completed Operations	$65,634,615 (13)	$1,375 (8)	$50,569 (12)	21.4% (3)
Hangar-keepers Liability	$44,171,875 (16)	$1,944 (9)	$55,448 (11)	
Bodily Injury	$31,043,214 (14)	$1,222 (9)	$48,946 (11)	31.3% (5)
Property Damage	$93,512,541 (18)	$394,615 (13)	$157,269 (13)	38.9% (7)
Pollution Liability	$24,000,000 (12)	$11,889 (9)	$39,095 (10)	31.3% (5)
Independent Contractor Coverage	$5,000,000 (1)	$0 (1)	$8,160 (2)	30.0% (3)
Other*	$2,642,857 (7)	$8,200 (5)	$43,164 (8)	41.7% (5)

**Other types of coverage include: EPLI, fuel storage tank, tower liability, cyber, secretarial bond, and Workers' Compensation.*

***The number of airports that responded to each question is provided in parenthesis.*

Minimum Standards

Airport minimum standards are requirements set forth by the airport that an individual or entity wishing to provide aeronautical services to the public, on a public-use airport, must meet in order to provide those services, such as minimum leasehold size, required equipment, hours of operation, and fees. Minimum standards are imposed to ensure that safe and efficient service is available to the public.[7]

Minimum standards may vary for different types of tenants. FBOs are typically subject to more stringent standards than non-FBO tenants.

FBO

Average minimum standards that apply to FBOs at the surveyed commercial and GA airports are summarized in Tables 3-44 and 3-45, respectively.

Table 3-44. Average Minimum Standards for FBOs at Commercial Airports

Activity	Leasehold Size	Building/Hangar Size	Personnel Requirement	Hours of Operation	Equipment Requirement	Insurance Requirement	Services Provided
Flight school	37,967 sq. ft. or 0.9 acre	2,800 sq. ft.	1+, certified by FAA	8 hrs./day, 5 days/week	2 aircraft, at least 1 aircraft capable of IFR flight	$1M general liability	Flight training
Aircraft maintenance/repair	39,143 sq. ft. or 0.9 acres	9,160 sq. ft.	2 mechanics, certified by FAA	8 hrs./day, 5 days/week	Tools & parts required for the task, tires, batteries, etc.	$1.7M general liability	Maintenance and repair, removal of disabled aircraft
Aircraft rental	37,967 sq. ft. or 0.9 acres	2,733 sq. ft.	1+, FAA certified	8 hrs./day, 5 days/week	2 certified and airworthy aircraft	$1M general liability	Rental of aircraft
Specialty services	21,780 sq. ft. or 0.5 acres	5,000 sq. ft.	1+	8 hrs./day, 5 days/week, sufficient to meet demand	At least 1 aircraft, sufficient equipment & parts, phone to FAA FSS, charts	$1.3M general liability	N/A
Aircraft sales	37,967 sq. ft. or 0.9 acres	3,300 sq. ft.	1+, FAA certified	8 hrs./day, 5 days/week, sufficient to meet demand	At least 1 current model demonstrator aircraft	$1.3M general liability	Aircraft sales
Air taxi/charter	30,975 sq. ft. or 0.7 acres	4,700 sq. ft.	1-2 persons	8 hrs./day, 5 days/week, + available 24/7 on call	1-2 certified, airworthy, all-weather aircraft, luggage/freight handling	$1M general liability	Air transportation for hire
Fuel sales	90,340 sq. ft. or 2.1 acres	15,000 sq. ft.	At least 2 properly trained & uniformed personnel	Should be available 7 days/week, at least 12 hrs./day	2-3 fueling trucks, 750-1,600 gallons each, minimum fuel storage of 40,000 gallons	$8.6M general liability	Retail fuel sale of 100LL & Jet A
Other GA operations	7 acres	12,000 sq. ft. total, + 5,000 sq. ft. dedicated for storage of tenants' aircraft	At least 2 properly trained & uniformed personnel	10-12 hrs./day, 7 days/week	Adequate equipment for tie-downs, cleaning aircraft windows; recharging aircraft batteries	$10M general liability	At a minimum, FBO should provide (1) sale of aviation fuel; (2) ancillary ground services & support; (3) tie-down, hangar, and parking; (4) aircraft maintenance; and (5) at least one specialized aviation service

[7] National Air Transportation Association, "Airport Sponsors Guide to Minimum Standards & Airport Rules and Regulations 2009," http://www.nata.aero/data/files/GIA/airport_misc/minstdsguidefinal.pdf, accessed October 1, 2013.

Table 3-45. Average Minimum Standards for FBOs at GA Airports

Activity	Leasehold Size	Building/Hangar Size	Personnel Requirement	Hours of Operation	Equipment Requirement	Insurance Requirement	Services Provided
Flight school	81,109 sq. ft. or 1.9 acres	3,311 sq. ft.	1+, certified by FAA	8 hrs./day, 7 days/week	1-2 aircraft	$1.3M general liability	Flight instruction
Aircraft maintenance/repair	40,771 sq. ft. or 0.9 acres	5,811 sq. ft.	1+ mechanic, certified by FAA	8 hrs./day, 5 days/week	Parts and equipment for type of work, as required by FAA	$1.2M general liability	Aircraft maintenance and repair
Aircraft rental	46,184 sq. ft. or 1.1 acres	2,614 sq. ft.	1+ pilot, properly trained & certified by FAA	8 hrs./day, 5 days/week	2 properly certified aircraft	$1.2M general liability	Rental of aircraft
Specialty services	62,726 sq. ft. or 1.4 acres	3,338 sq. ft.	1+, properly trained and certified	8 hrs./day, 5 days/week	At least 1 certified aircraft, phone to FAA FSS, charts	$1.25M general liability	N/A
Aircraft sales	46,149 sq. ft. or 1.1 acres	2,900 sq. ft.	At least 1 demo pilot, properly certified	8-10 hrs./day, 5-6 days/week	At least 1 aircraft, current model demonstrators (available or on call)	$1.25M general liability	Aircraft sales, repair & servicing (time of sale guarantee)
Air taxi/charter	42,169 sq. ft. or 0.9 acres	3,788 sq. ft.	At least 1 pilot with valid FAA commercial pilot certification	8-10 hrs./day, 5 days/week, on call after hours	At least 1 certified aircraft, luggage handling area, shelter, restroom	$1.25M general liability	Air taxi
Fuel sales	170,610 sq. ft. or 3.9 acres	9,833 sq. ft.	1-2 properly trained personnel	8-12 hrs./day, 7 days/week, and available after hours on call	Fuel storage of 24,000 gallons, mobile and fixed dispensing, metering equipment	$1.5M general liability	Fuel sale, minor repairs, towing, recharging aircraft batteries
Other GA operations	127,862 sq. ft. or 2.9 acres	6,500 sq. ft.	1-2 properly trained & uniformed personnel	8-12 hrs./day, 7 days/week	Subject to approval by city/county/ authority	Subject to approval by city/county/ authority	Subject to approval by city/county/ authority

Non-FBO Tenants

Average minimum standards that apply to non-FBO tenants at the surveyed commercial and GA airports are summarized in Tables 3-46 and 3-47, respectively.

Table 3-46. Average Minimum Standards for Non-FBO Tenants at Commercial Airports

Activity	Leasehold Size	Building/Hangar Size	Personnel Requirement	Hours of Operation	Equipment Requirement	Insurance Requirement	Services Provided
Flight school	16,187 sq. ft. or 0.4 acres	1,875 sq. ft.	1+ FAA certified pilot	8 hrs./day, 5-7 days/week	At least 2 aircraft, 1 - IFR, 1 - classified as complex aircraft	$1M general liability	Flight training
Aircraft maintenance/repair	28,743 sq. ft. or 0.7 acres	7,280 sq. ft.	2 FAA certified mechanic	8 hrs./day, 5 days/week	Sufficient inventory of parts & equipment to provide services	$1.3M general liability	Specialized repair
Aircraft rental	16,187 sq. ft. or 0.4 acres	1,933 sq. ft.	1+ FAA certified flight instructor	8 hrs./day, 5-7 days/week	2-3 certified and airworthy aircraft	$1M general liability	Rental of aircraft
Specialty services	21,780 sq. ft. or 0.5 acres	4,300 sq. ft.	N/A	8 hrs./day, 5 days/week, to meet demand	At least 1 aircraft, sufficient equipment & parts to perform services	$1.5M general liability	N/A
Aircraft sales	16,187 sq. ft. or 0.4 acres	3,533 sq. ft.	1+, FAA certified	8 hrs./day, 5 days/week	At least 1 current model demonstrator	$1.5M general liability	N/A
Air taxi/charter	16,187 sq. ft. or 0.4 acres	2,963 sq. ft.	2 pilots	8 hrs./day, 5 days/week, + on-call response	At least 1 certified and airworthy all-weather aircraft	$1M general liability	N/A
Fuel sales	70,340 sq. ft. or 1.6 acres	10,000 sq. ft., finished space to accommodate administration, operations,etc.	Properly trained, properly uniformed personnel	12 hrs./day, 7 days/week, self-service should be available 24/7	Delivery source with 2,500-4,000 gallons capacity, fixed and mobile dispensing	$3.8M general liability	Sale of aviation fuel through self-service 24/7, and at least 2 specialized aviation services
Other GA operations	21,780 sq. ft. or 0.5 acres	3,600 sq. ft.	N/A	8 hrs./day, 5 days/week	N/A	Adequate to city/county/ authority standards	N/A

Table 3-47. Average Minimum Standards for Non-FBO Tenants at GA Airports

Activity	Leasehold Size	Building/Hangar Size	Personnel Requirement	Hours of Operation	Equipment Requirement	Insurance Requirement	Services Provided
Flight school	63,006 sq. ft. or 1.4 acres	4,083 sq. ft.	2 persons, properly trained and certified by FAA	8-12 hrs./day, 5-7 days/week	At least 2 properly certified aircraft	$1.5M general liability	Flight instruction
Aircraft maintenance/repair	31,581 sq. ft. or 0.7 acres	5,600 sq. ft.	1+, FAA certified	8 hrs./day, 5 days/week	Inventory of parts to perform aircraft maintenance, as required by FAA	$1.3M general liability	Aircraft repairs
Aircraft rental	27,225 sq. ft. or 0.6 acres	3,020 sq. ft.	At least 1 person, properly trained & certified by FAA	8 hrs./day, 5 days/week, should have means of contact after hours	1-2 aircraft, at least 1 aircraft capable of instrument flight	$1.3M general liability	Aircraft rental
Specialty services	54,450 sq. ft. or 1.3 acres	>3,471 sq. ft.	1+, properly trained, certified by FAA	8 hrs./day, 5 days/week, should have means of contact after hours	At least 1 aircraft, airworthy to perform required operations	$1.3M general liability	Avionics, banner towing, etc.
Aircraft sales	27,159 sq. ft. or 0.6 acres	3,420 sq. ft.	At least 1 properly certified and equipped pilot	8 hrs./day, 5 days/week, should have means of contact after hours	1 demo aircraft of each model sold (available or on call)	$1.3M general liability	Aircraft sales, repair and servicing during time of sales guarantee
Air taxi/charter	27,225 sq. ft. or 0.6 acres	3,420 sq. ft.	1+, valid FAA commercial pilot certification	8 hrs./day, 5 days/week, should have means of contact after hours	At least 1 certified aircraft, equipped to support classification of the service	$1.3M general liability	Air transportation for hire
Fuel sales	38,115 sq. ft. or 0.9 acres	1,000 sq. ft.	Proper training required	8 hrs./day, 7 days/week, + available after hours on call	At least 8,000-gallon fuel tank for each grade of fuel, fixed and mobile dispensing	$1M general liability	Fuel sales, minor repair services, aircraft towing, recharging batteries, etc.
Other GA operations	65,340 sq. ft. or 1.5 acres	3,600 sq. ft.	N/A	Tower hours	Subject to approval by city/county/authority	$1.3M general liability	Subject to approval by city/county/authority

Chapter 4
Conclusions and Suggestions

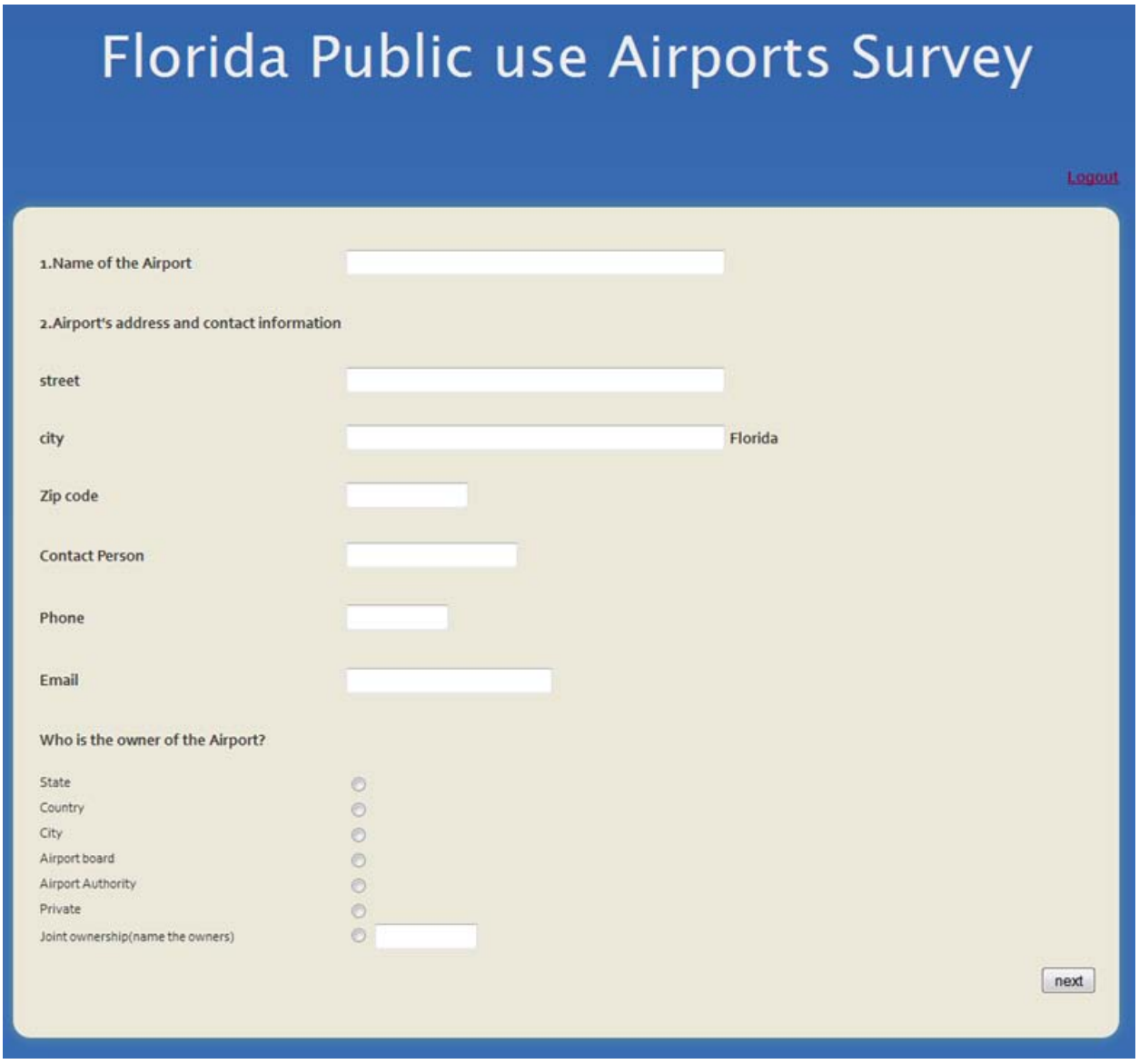
The analysis presented in this report is based on data provided by the 65 airports responding to the survey. The responding airports vary, sometimes significantly, in terms of location, size, service type, function, market served, and business model. These differences complicate proper comparison of rates and user fees charged by different airports. As a result, all the comparisons of rates presented in the current analysis apply only to the surveyed airports. No inference is made about the rates at all Florida airports based on the survey sample.

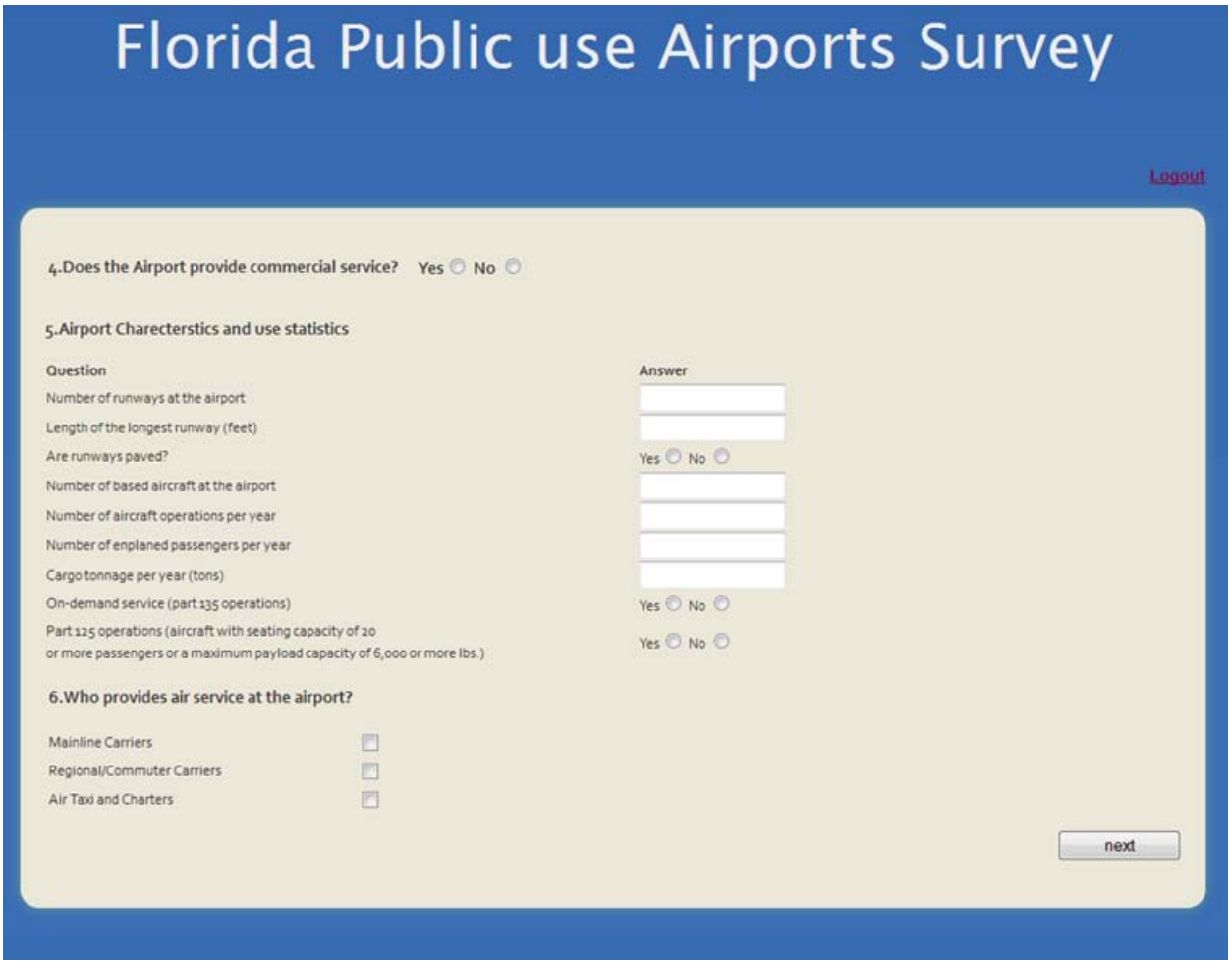
Since the goal of the analysis was not to compare individual airports to each other, all the results in the current report are presented in aggregate terms, using average and median values to describe specific groups of airports. Throughout the report, airports are most often grouped based on the service type (e.g., commercial vs. general aviation) and geographic region (using CFASPP region division). Reasonable attempts were made to provide a meaningful comparison of rates between these groups. However, when the number of responding airports was not sufficient to justify proper comparison between common groups, grouping was not used. For example, due to a low number of responding commercial airports, it was not possible to perform a comparison of rates at these airports by geographic region.

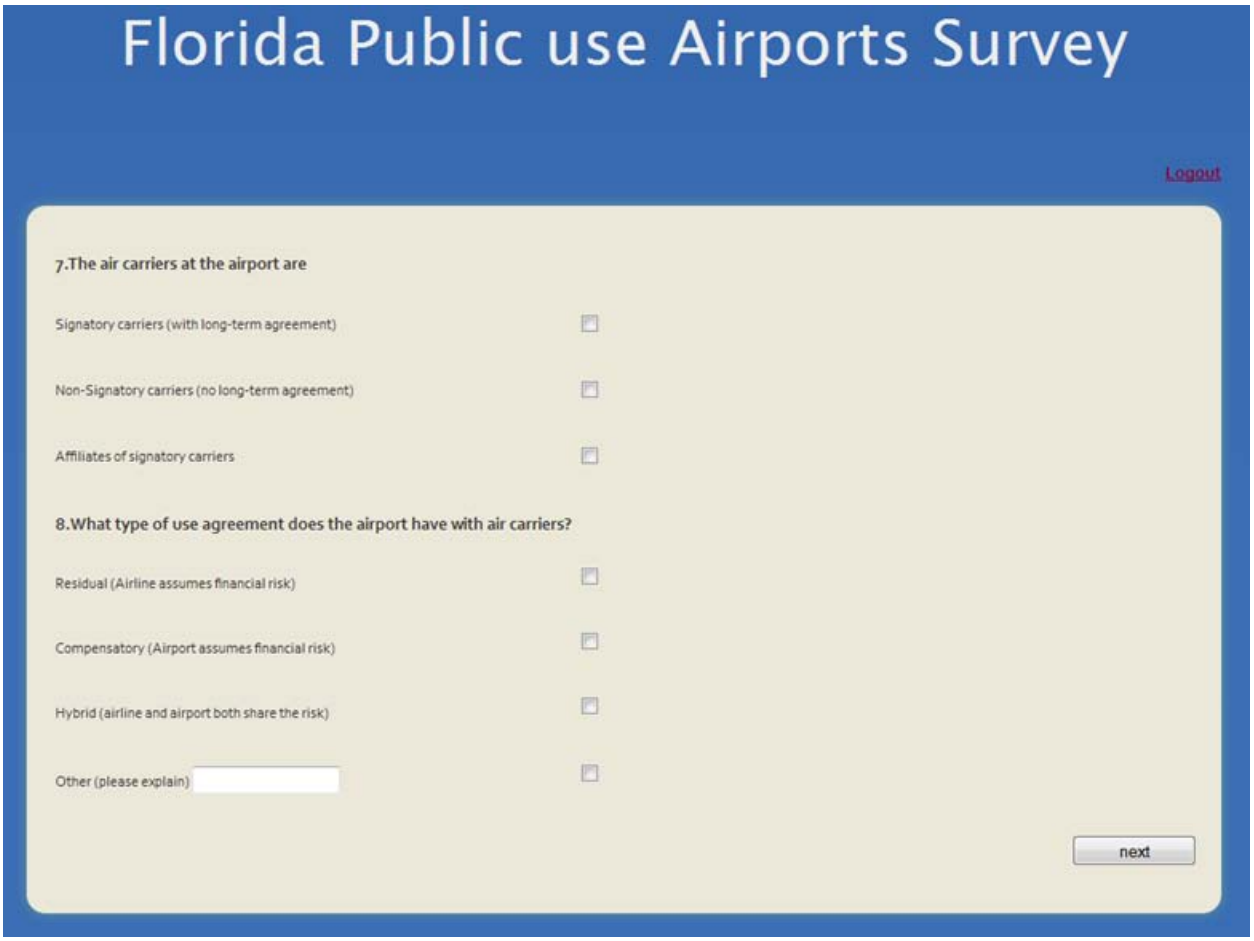
While there were 65 airports that provided overall responses to the survey, some questions in the survey received more responses than others. As a result, both the depth and reliability of the analysis is different for different types of airport rates, depending on the quantity and quality of data available. Caution should be used when interpreting the results of certain groups' comparisons, as well as the analysis of all airport rates as a whole.

It is recommended that FDOT consider implementing periodic collection of the data on various fees and charges at Florida airports. The online survey instrument used for collecting the current data can be used for future data collection, with minimal modifications. Collecting and analyzing such data periodically can provide a useful comparison of rates not only across geographic regions, but also over time. Having the dynamic picture of airport rates can prove valuable to FDOT policy makers, airport owners, and the statewide aviation community.

Appendix A
Airport Survey Questionnaire




Florida Public use Airports Survey
Logout
4.Does the Airport provide commercial service? Yes No
5.Airport Charecterstics and use statistics
Question
Answer
Number of runways at the airport
Length of the longest runway (feet)
Are runways paved?
Yes No
Number of based aircraft at the airport
Number of aircraft operations per year
Number of enplaned passengers per year
Cargo tonnage per year (tons)
On-demand service (part 135 operations)
Yes No
Part 125 operations (aircraft with seating capacity of 20 or more passengers or a maximum payload capacity of 6,000 or more lbs.)
Yes No
6.Who provides air service at the airport?
Mainline Carriers
Regional/Commuter Carriers
Air Taxi and Charters
next


Florida Public use Airports Survey
Logout
7.The air carriers at the airport are
Signatory carriers (with long-term agreement)
Non-Signatory carriers (no long-term agreement)
Affiliates of signatory carriers
8.What type of use agreement does the airport have with air carriers?
Residual (Airline assumes financial risk)
Compensatory (Airport assumes financial risk)
Hybrid (airline and airport both share the risk)
Other (please explain)
next

Florida Public use Airports Survey

Logout

9.What are the rates charged to signatory or affiliates of signatory carriers and the rate structure?

The fee is charged for (the use of):	Basis for the charge	Rate for signatory carriers	Rate for affiliate of signatory carriers
Baggage claim	Per aircraft turn ☐		
	Per enplaned passenger ☐		
	Per sq. ft/year ☐		
	Per 1000 lb. landed weight ☐		
	Per day ☐		
	Other ☐		
Common areas	Per aircraft turn ☐		
	Per enplaned passenger ☐		
	Per sq. ft/year ☐		
	Per 1000 lb. landed weight ☐		
	Per day ☐		
	Other ☐		
Gate holding areas	Per aircraft turn ☐		
	Per enplaned passenger ☐		
	Per sq. ft/year ☐		
	Per 1000 lb. landed weight ☐		
	Per day ☐		
	Other ☐		
Landing fee	Per aircraft turn ☐		
	Per enplaned passenger ☐		
	Per sq. ft/year ☐		
	Per 1000 lb. landed weight ☐		
	Per day ☐		
	Other ☐		

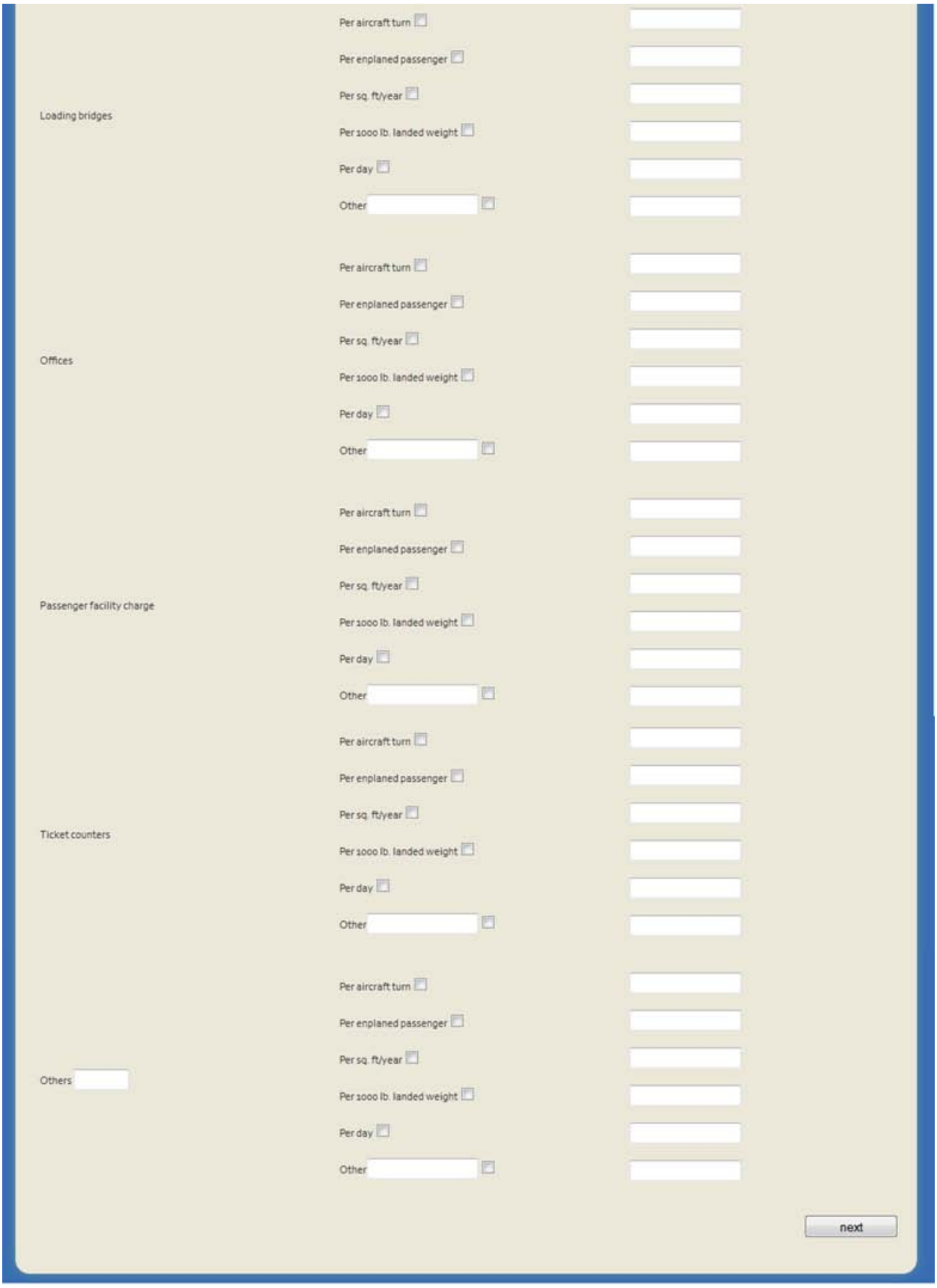

Per aircraft turn
Per enplaned passenger
Per sq. ft/year
Loading bridges
Per 1000 lb. landed weight
Per day
Other
Per aircraft turn
Per enplaned passenger
Per sq. ft/year
Offices
Per 1000 lb. landed weight
Per day
Other
Per aircraft turn
Per enplaned passenger
Per sq. ft/year
Passenger facility charge
Per 1000 lb. landed weight
Per day
Other
Per aircraft turn
Per enplaned passenger
Per sq. ft/year
Ticket counters
Per 1000 lb. landed weight
Per day
Other
Per aircraft turn
Per enplaned passenger
Per sq. ft/year
Gate holding areas
Per 1000 lb. landed weight
Per day
Other
next

Florida Public use Airports Survey

Logout

10. What are the rates charged to non-signatory carriers and what is the rate structure?

The fee is charged for (the use of):	Basis for the charge	Rate for non signatory carriers
Baggage claim	Per aircraft turn ☐	
	Per enplaned passenger ☐	
	Per sq. ft/year ☐	
	Per 1000 lb. landed weight ☐	
	Per day ☐	
	Other ☐	
Common areas	Per aircraft turn ☐	
	Per enplaned passenger ☐	
	Per sq. ft/year ☐	
	Per 1000 lb. landed weight ☐	
	Per day ☐	
	Other ☐	
Gate holding areas	Per aircraft turn ☐	
	Per enplaned passenger ☐	
	Per sq. ft/year ☐	
	Per 1000 lb. landed weight ☐	
	Per day ☐	
	Other ☐	
Landing fee	Per aircraft turn ☐	
	Per enplaned passenger ☐	
	Per sq. ft/year ☐	
	Per 1000 lb. landed weight ☐	
	Per day ☐	
	Other ☐	

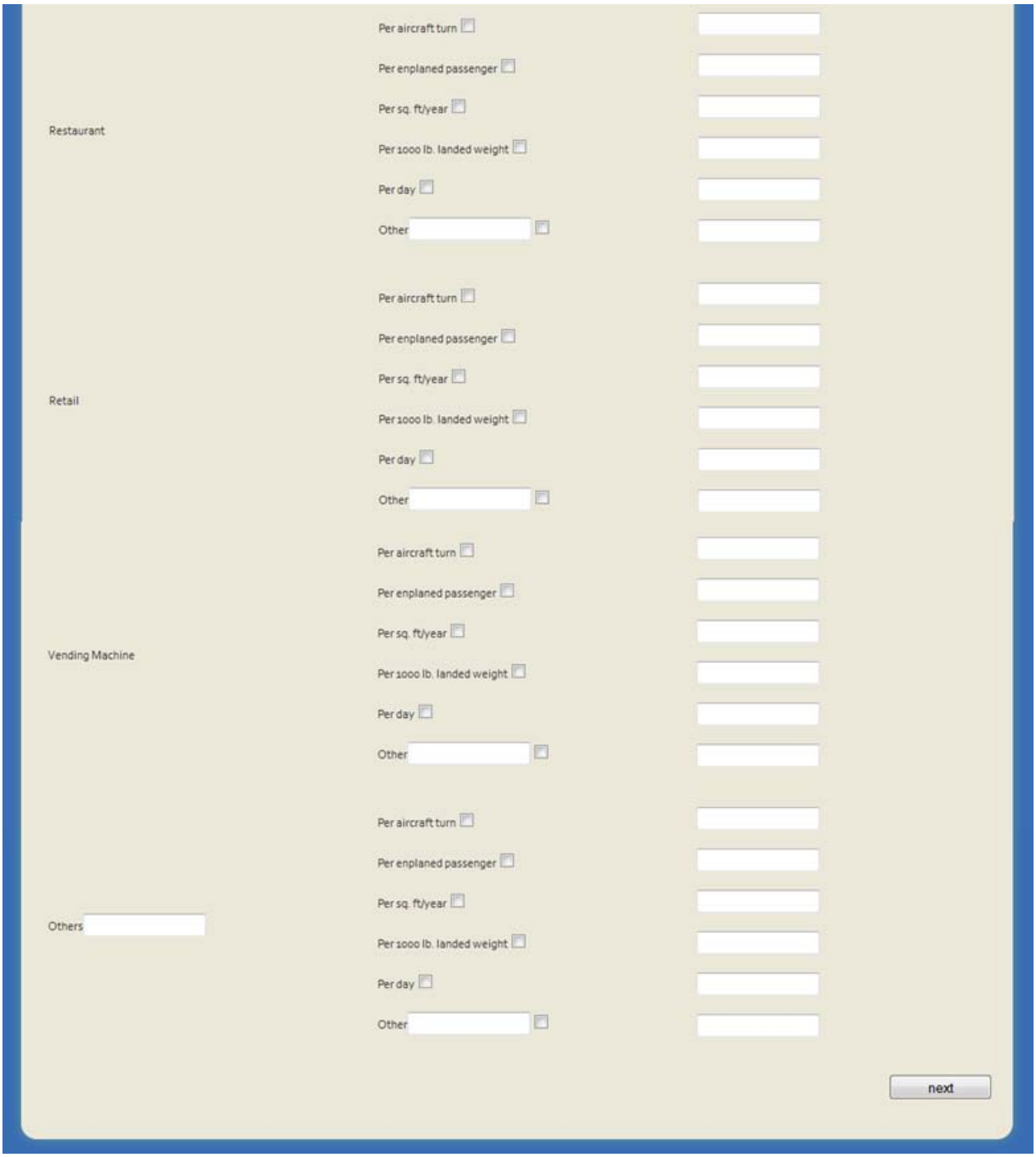

Per aircraft turn
Per enplaned passenger
Per sq. ft/year
Loading bridges
Per 1000 lb. landed weight
Per day
Other
Per aircraft turn
Per enplaned passenger
Per sq. ft/year
Offices
Per 1000 lb. landed weight
Per day
Other
Per aircraft turn
Per enplaned passenger
Per sq. ft/year
Passenger facility charge
Per 1000 lb. landed weight
Per day
Other
Per aircraft turn
Per enplaned passenger
Per sq. ft/year
Ticket counters
Per 1000 lb. landed weight
Per day
Other
Per aircraft turn
Per enplaned passenger
Per sq. ft/year
Others
Per 1000 lb. landed weight
Per day
Other
next

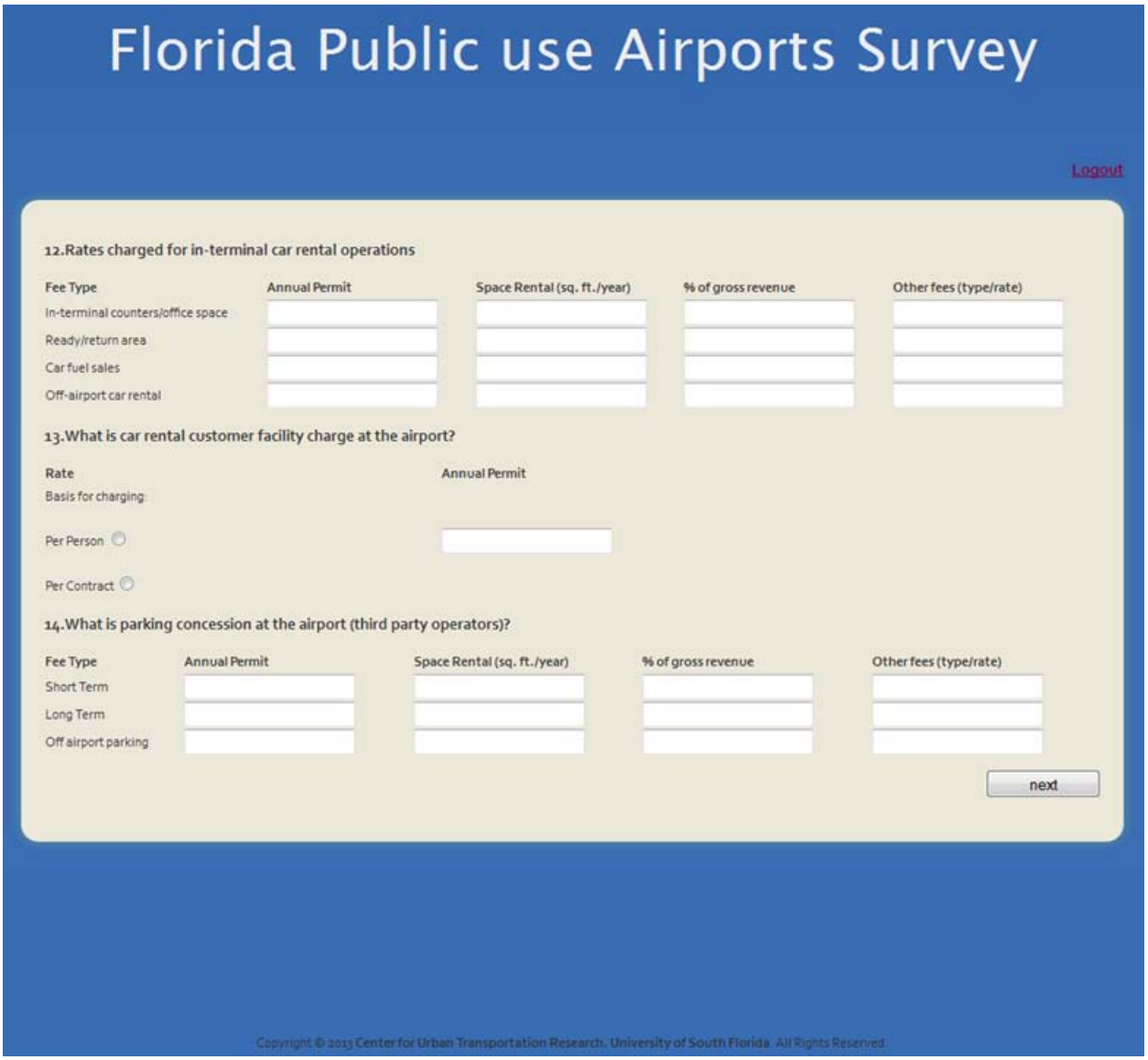
Florida Public use Airports Survey

Logout

11. What are the rates charged to airport (terminal) concessions and/or advertising?

The fee is charged for (the use of):	Basis for the charge	Rate for non signatory carriers
Carts & Kiosks	Per aircraft turn ☐	
	Per enplaned passenger ☐	
	Per sq. ft/year ☐	
	Per 1000 lb. landed weight ☐	
	Per day ☐	
	Other ☐	
Floor Displays	Per aircraft turn ☐	
	Per enplaned passenger ☐	
	Per sq. ft/year ☐	
	Per 1000 lb. landed weight ☐	
	Per day ☐	
	Other ☐	
Wall Displays	Per aircraft turn ☐	
	Per enplaned passenger ☐	
	Per sq. ft/year ☐	
	Per 1000 lb. landed weight ☐	
	Per day ☐	
	Other ☐	
Other Advertising	Per aircraft turn ☐	
	Per enplaned passenger ☐	
	Per sq. ft/year ☐	
	Per 1000 lb. landed weight ☐	
	Per day ☐	
	Other ☐	


Restaurant
Per aircraft turn
Per enplaned passenger
Per sq. ft/year
Per 1000 lb. landed weight
Per day
Other
Retail
Per aircraft turn
Per enplaned passenger
Per sq. ft/year
Per 1000 lb. landed weight
Per day
Other
Vending Machine
Per aircraft turn
Per enplaned passenger
Per sq. ft/year
Per 1000 lb. landed weight
Per day
Other
Others
Per aircraft turn
Per enplaned passenger
Per sq. ft/year
Per 1000 lb. landed weight
Per day
Other
next


Florida Public use Airports Survey
Logout
12.Rates charged for in-terminal car rental operations
Fee Type
Annual Permit
Space Rental (sq. ft./year)
% of gross revenue
Other fees (type/rate)
In-terminal counters/office space
Ready/return area
Car fuel sales
Off-airport car rental
13.What is car rental customer facility charge at the airport?
Rate
Annual Permit
Basis for charging:
Per Person
Per Contract
14.What is parking concession at the airport (third party operators)?
Fee Type
Annual Permit
Space Rental (sq. ft./year)
% of gross revenue
Other fees (type/rate)
Short Term
Long Term
Off airport parking
next
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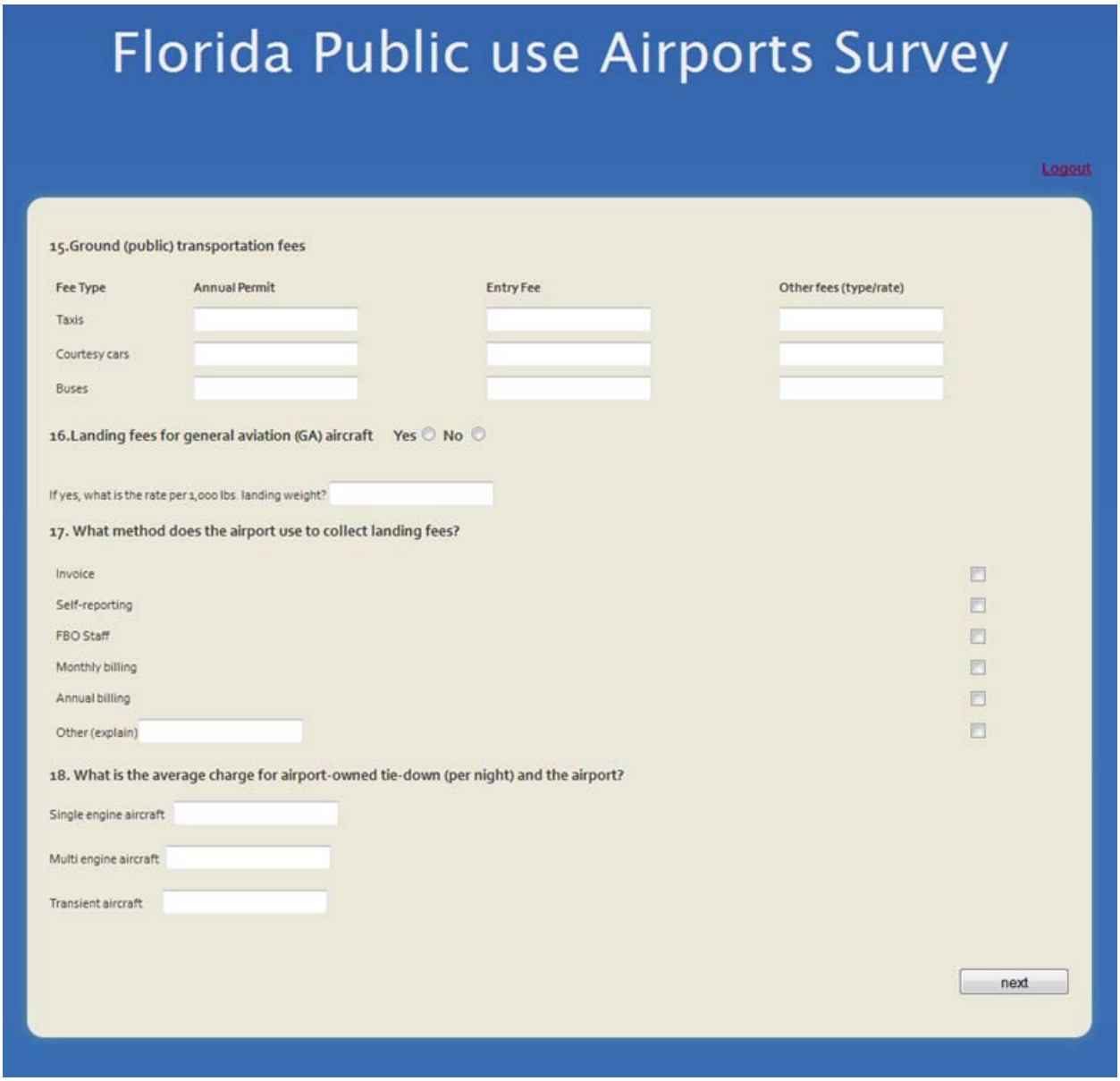
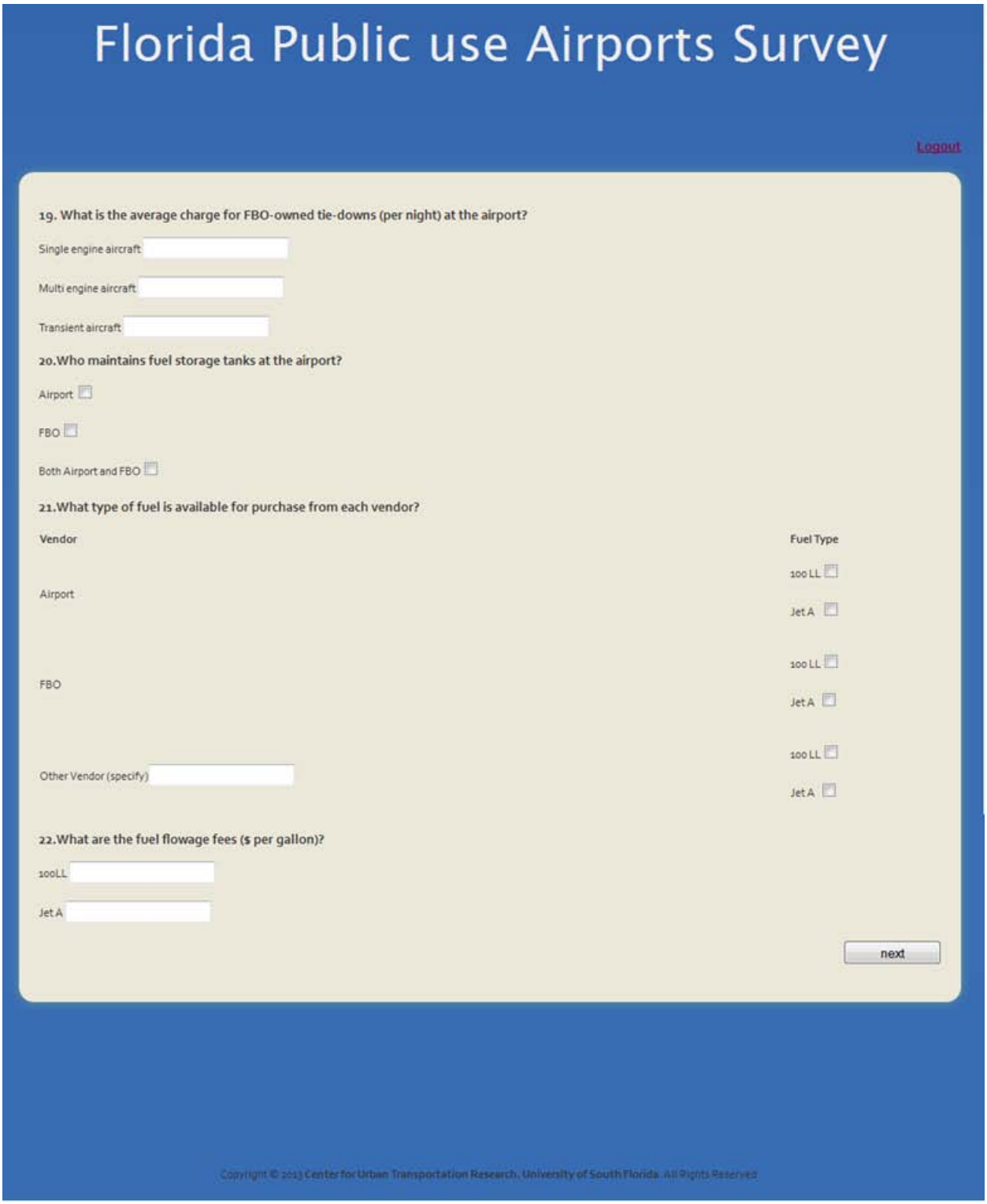

Florida Public use Airports Survey
Logout
15.Ground (public) transportation fees
Fee Type
Annual Permit
Entry Fee
Other fees (type/rate)
Taxis
Courtesy cars
Buses
16.Landing fees for general aviation (GA) aircraft
Yes
No
If yes, what is the rate per 1,000 lbs. landing weight?
17. What method does the airport use to collect landing fees?
Invoice
Self-reporting
FBO Staff
Monthly billing
Annual billing
Other (explain)
18. What is the average charge for airport-owned tie-down (per night) and the airport?
Single engine aircraft
Multi engine aircraft
Transient aircraft
next


Florida Public use Airports Survey
Logout
19. What is the average charge for FBO-owned tie-downs (per night) at the airport?
Single engine aircraft
Multi engine aircraft
Transient aircraft
20.Who maintains fuel storage tanks at the airport?
Airport
FBO
Both Airport and FBO
21.What type of fuel is available for purchase from each vendor?
Vendor
Fuel Type
Airport
100 LL
Jet A
FBO
100 LL
Jet A
Other Vendor (specify)
100 LL
Jet A
22.What are the fuel flowage fees ($ per gallon)?
100LL
Jet A
next
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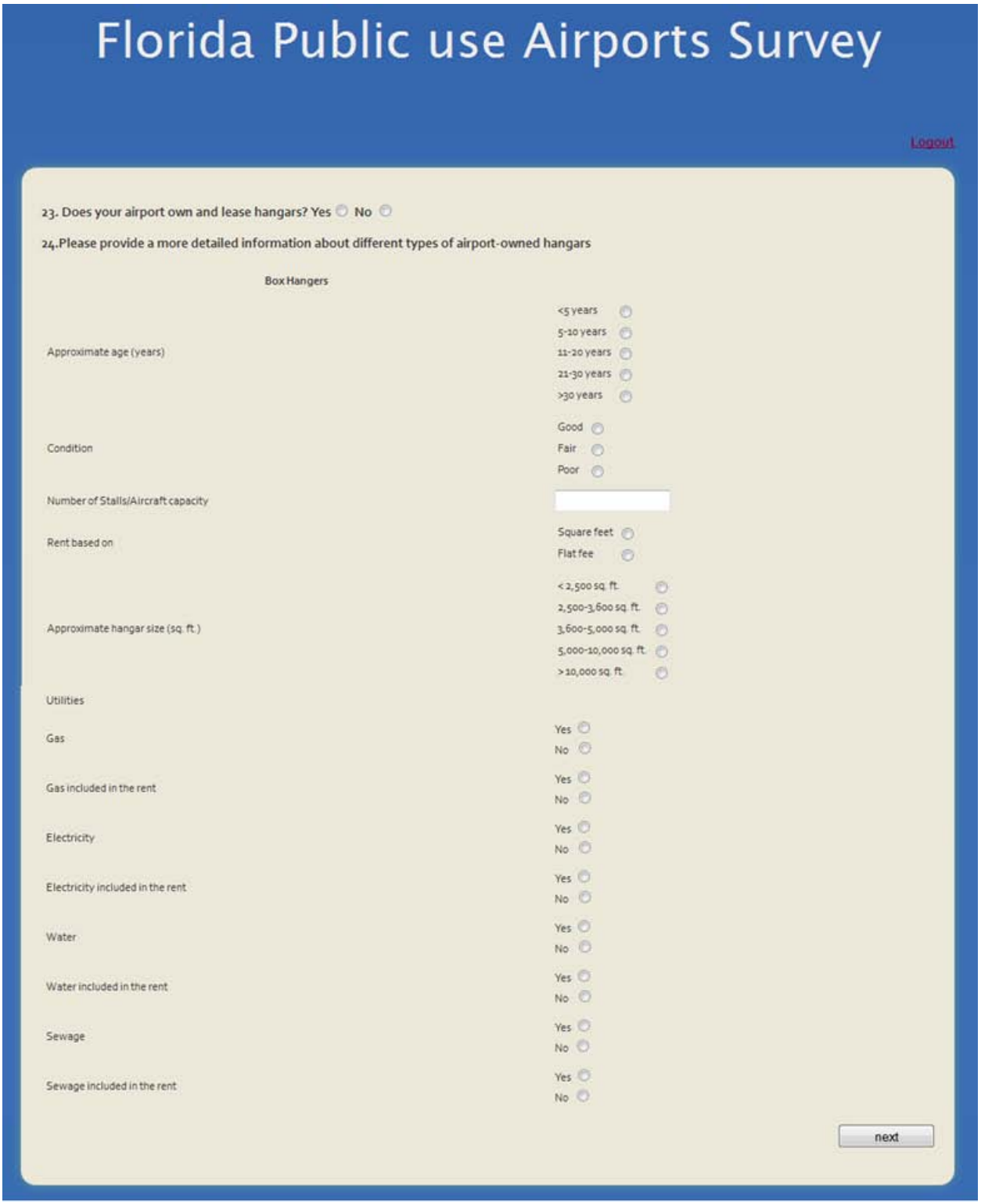
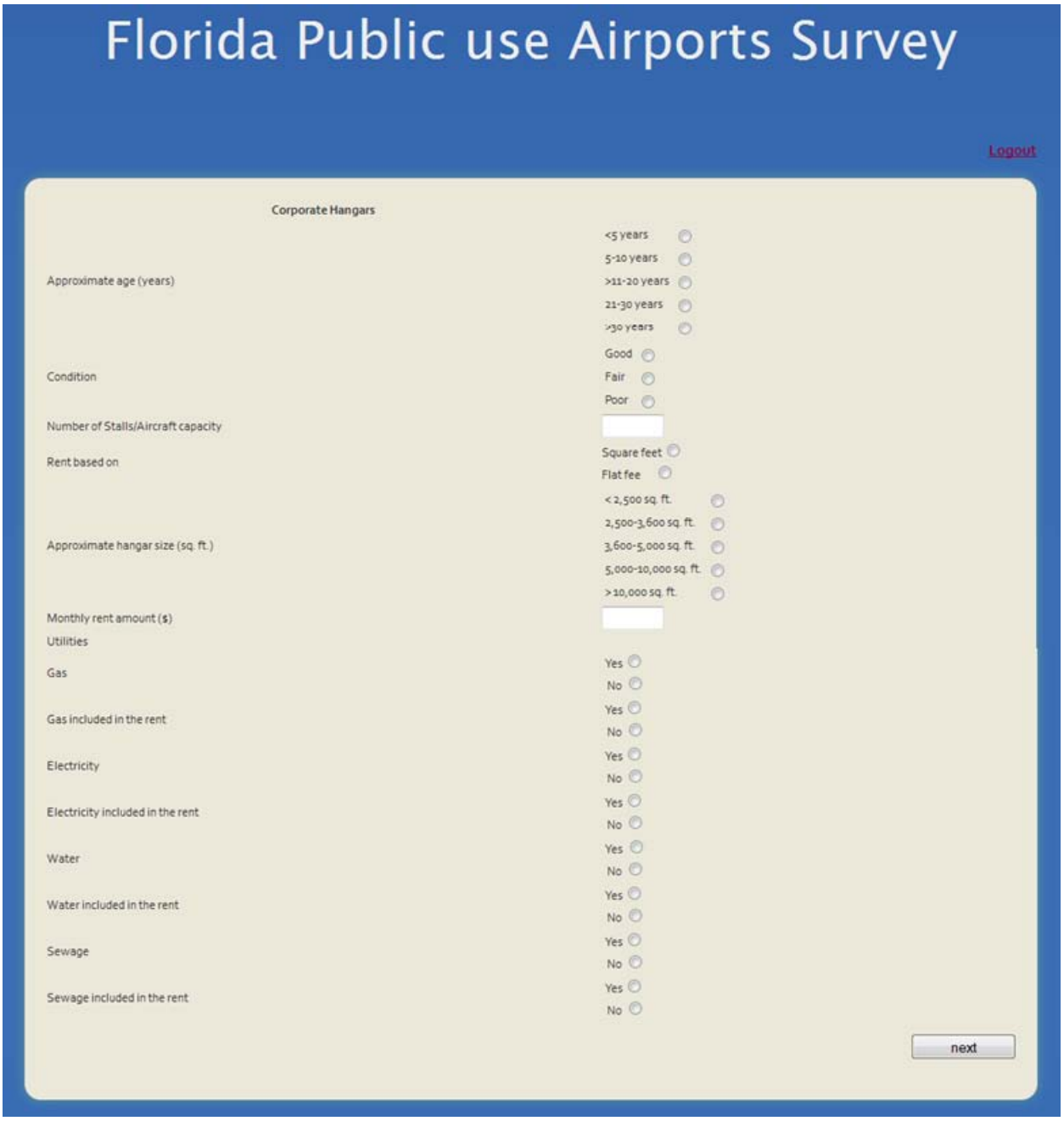
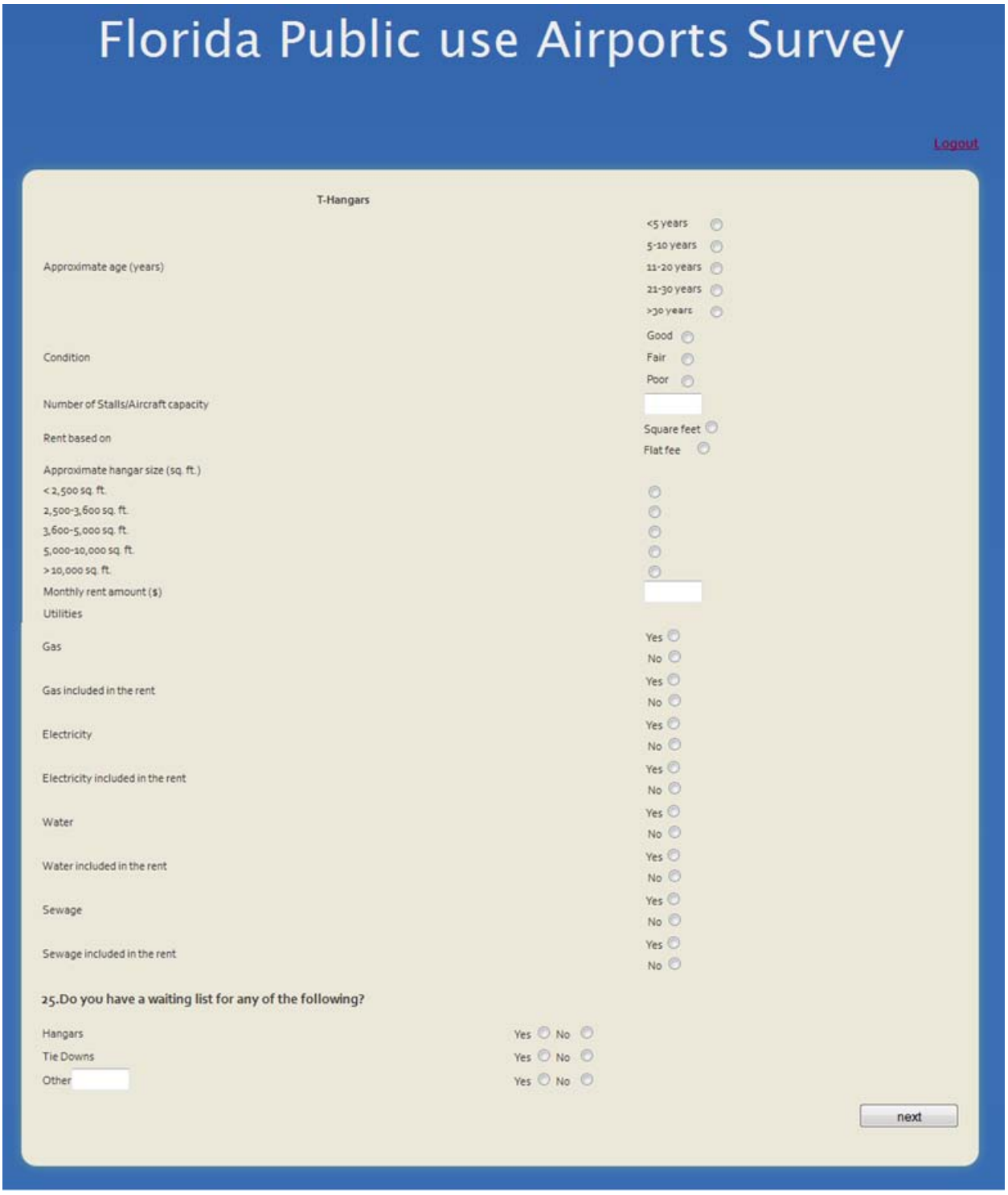
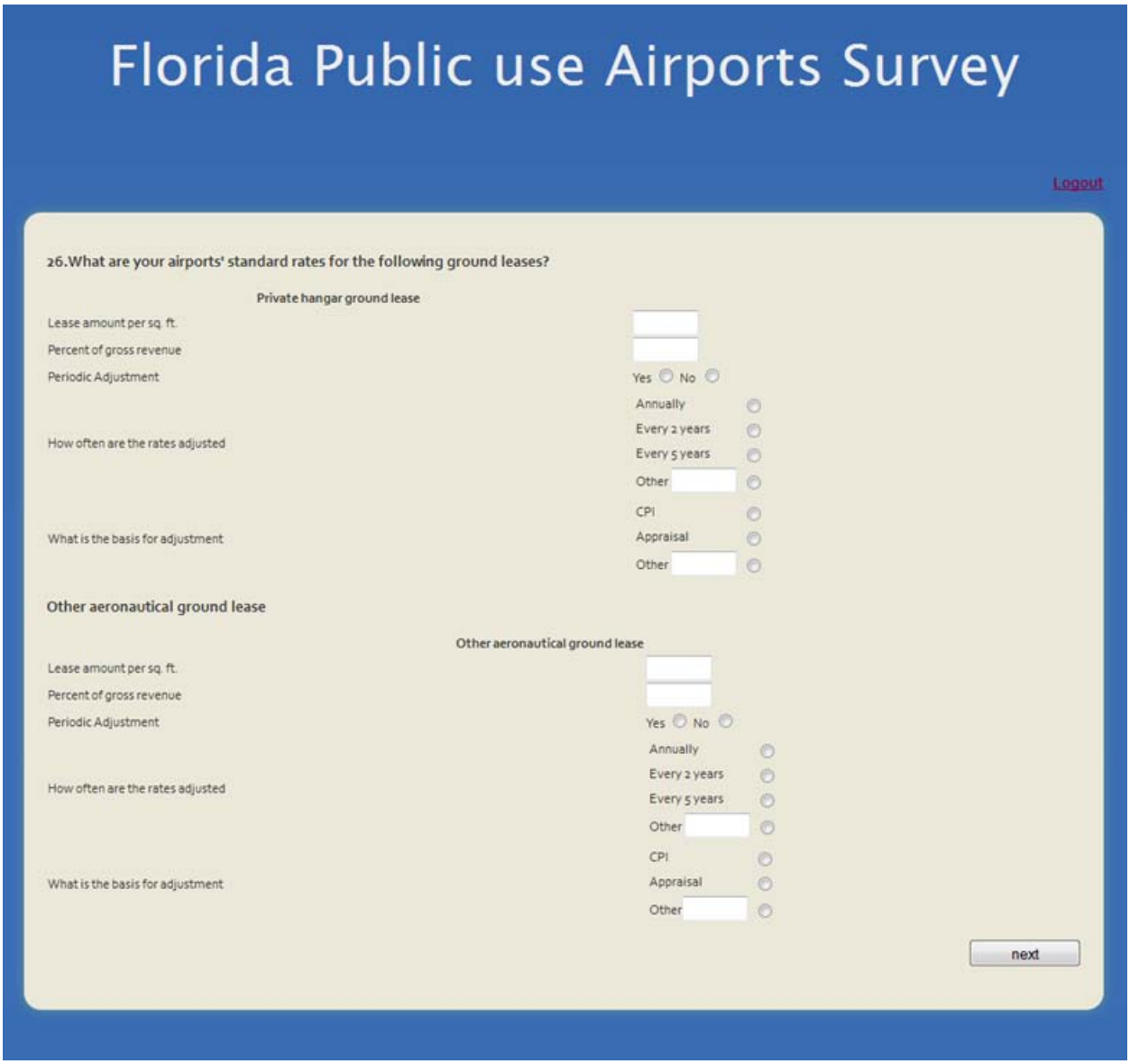
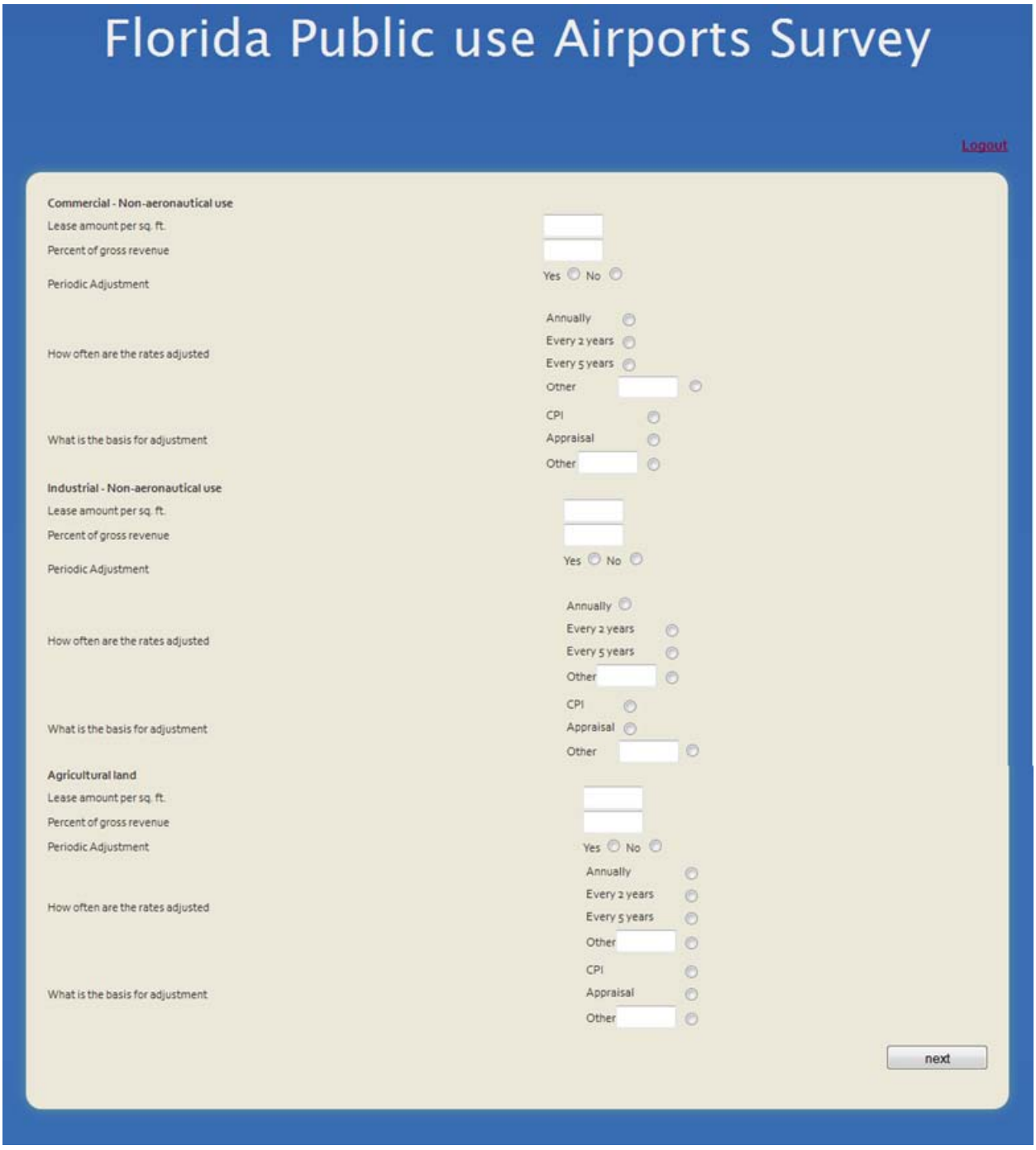
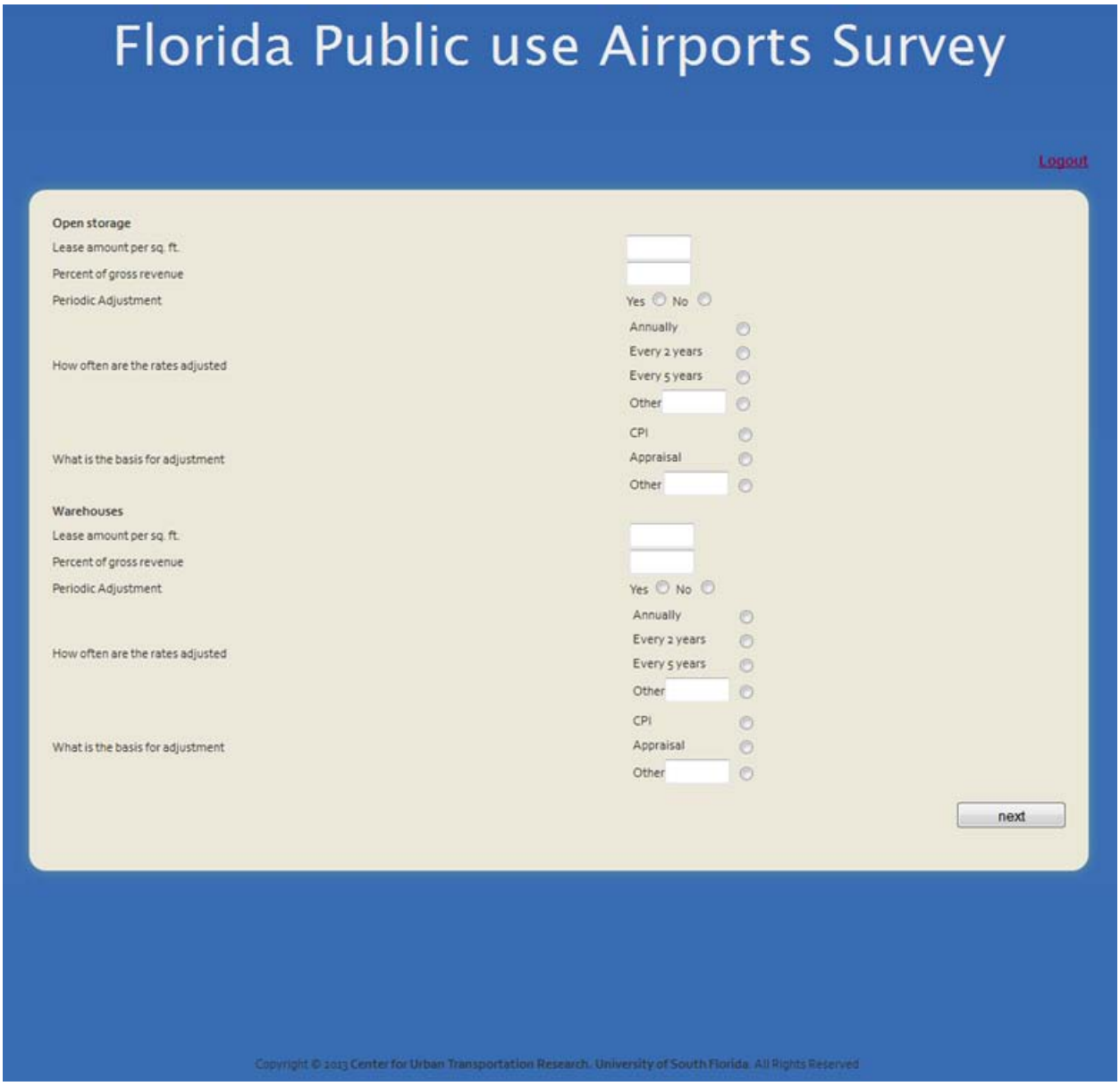

Florida Public use Airports Survey
Logout
23. Does your airport own and lease hangars? Yes No
24.Please provide a more detailed information about different types of airport-owned hangars
Box Hangers
Approximate age (years)
<5 years
5-10 years
11-20 years
21-30 years
>30 years
Condition
Good
Fair
Poor
Number of Stalls/Aircraft capacity
Rent based on
Square feet
Flat fee
Approximate hangar size (sq. ft.)
< 2,500 sq. ft.
2,500-3,600 sq. ft.
3,600-5,000 sq. ft.
5,000-10,000 sq. ft.
>10,000 sq. ft.
Utilities
Gas
Yes
No
Gas included in the rent
Yes
No
Electricity
Yes
No
Electricity included in the rent
Yes
No
Water
Yes
No
Water included in the rent
Yes
No
Sewage
Yes
No
Sewage included in the rent
Yes
No
next


Florida Public use Airports Survey
Logout
Corporate Hangars
Approximate age (years)
<5 years
5-10 years
>11-20 years
21-30 years
>30 years
Condition
Good
Fair
Poor
Number of Stalls/Aircraft capacity
Rent based on
Square feet
Flat fee
Approximate hangar size (sq. ft.)
< 2,500 sq. ft.
2,500-3,600 sq. ft.
3,600-5,000 sq. ft.
5,000-10,000 sq. ft.
>10,000 sq. ft.
Monthly rent amount ($)
Utilities
Gas
Yes
No
Gas included in the rent
Yes
No
Electricity
Yes
No
Electricity included in the rent
Yes
No
Water
Yes
No
Water included in the rent
Yes
No
Sewage
Yes
No
Sewage included in the rent
Yes
No
next


Florida Public use Airports Survey
Logout
T-Hangars
Approximate age (years)
<5 years
5-10 years
11-20 years
21-30 years
>30 years
Condition
Good
Fair
Poor
Number of Stalls/Aircraft capacity
Rent based on
Square feet
Flat fee
Approximate hangar size (sq. ft.)
< 2,500 sq. ft.
2,500-3,600 sq. ft.
3,600-5,000 sq. ft.
5,000-10,000 sq. ft.
> 10,000 sq. ft.
Monthly rent amount ($)
Utilities
Gas
Yes
No
Gas included in the rent
Yes
No
Electricity
Yes
No
Electricity included in the rent
Yes
No
Water
Yes
No
Water included in the rent
Yes
No
Sewage
Yes
No
Sewage included in the rent
Yes
No
25.Do you have a waiting list for any of the following?
Hangars
Yes No
Tie Downs
Yes No
Other
Yes No
next


Florida Public use Airports Survey
Logout
26.What are your airports' standard rates for the following ground leases?
Private hangar ground lease
Lease amount per sq. ft.
Percent of gross revenue
Periodic Adjustment
Yes
No
How often are the rates adjusted
Annually
Every 2 years
Every 5 years
Other
What is the basis for adjustment
CPI
Appraisal
Other
Other aeronautical ground lease
Other aeronautical ground lease
Lease amount per sq. ft.
Percent of gross revenue
Periodic Adjustment
Yes
No
How often are the rates adjusted
Annually
Every 2 years
Every 5 years
Other
What is the basis for adjustment
CPI
Appraisal
Other
next


Florida Public use Airports Survey
Logout
Commercial - Non-aeronautical use
Lease amount per sq. ft.
Percent of gross revenue
Periodic Adjustment
Yes
No
How often are the rates adjusted
Annually
Every 2 years
Every 5 years
Other
What is the basis for adjustment
CPI
Appraisal
Other
Industrial - Non-aeronautical use
Lease amount per sq. ft.
Percent of gross revenue
Periodic Adjustment
Yes
No
How often are the rates adjusted
Annually
Every 2 years
Every 5 years
Other
What is the basis for adjustment
CPI
Appraisal
Other
Agricultural land
Lease amount per sq. ft.
Percent of gross revenue
Periodic Adjustment
Yes
No
How often are the rates adjusted
Annually
Every 2 years
Every 5 years
Other
What is the basis for adjustment
CPI
Appraisal
Other
next


Florida Public use Airports Survey
Logout
Open storage
Lease amount per sq. ft.
Percent of gross revenue
Periodic Adjustment
Yes
No
How often are the rates adjusted
Annually
Every 2 years
Every 5 years
Other
What is the basis for adjustment
CPI
Appraisal
Other
Warehouses
Lease amount per sq. ft.
Percent of gross revenue
Periodic Adjustment
Yes
No
How often are the rates adjusted
Annually
Every 2 years
Every 5 years
Other
What is the basis for adjustment
CPI
Appraisal
Other
next
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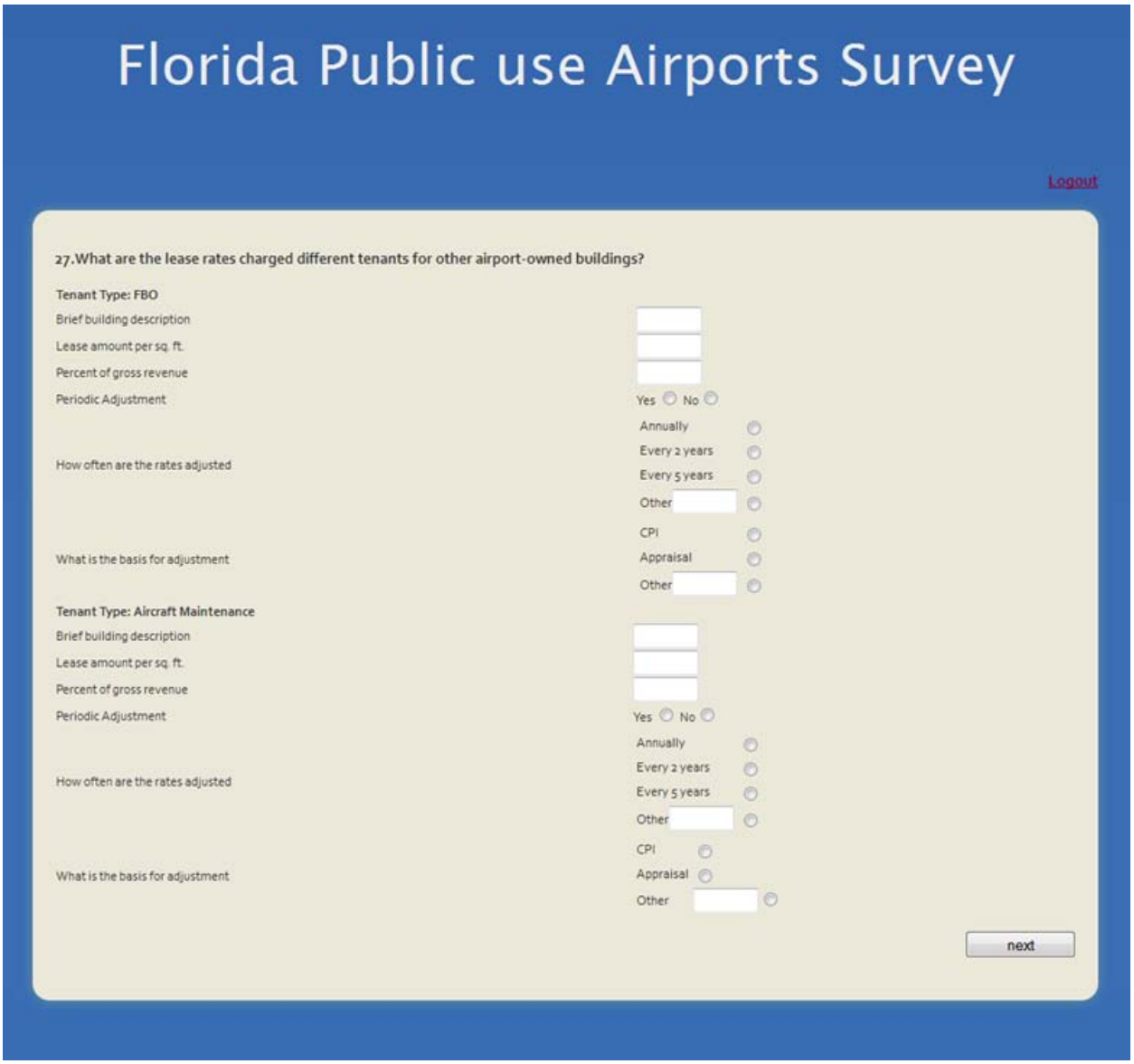
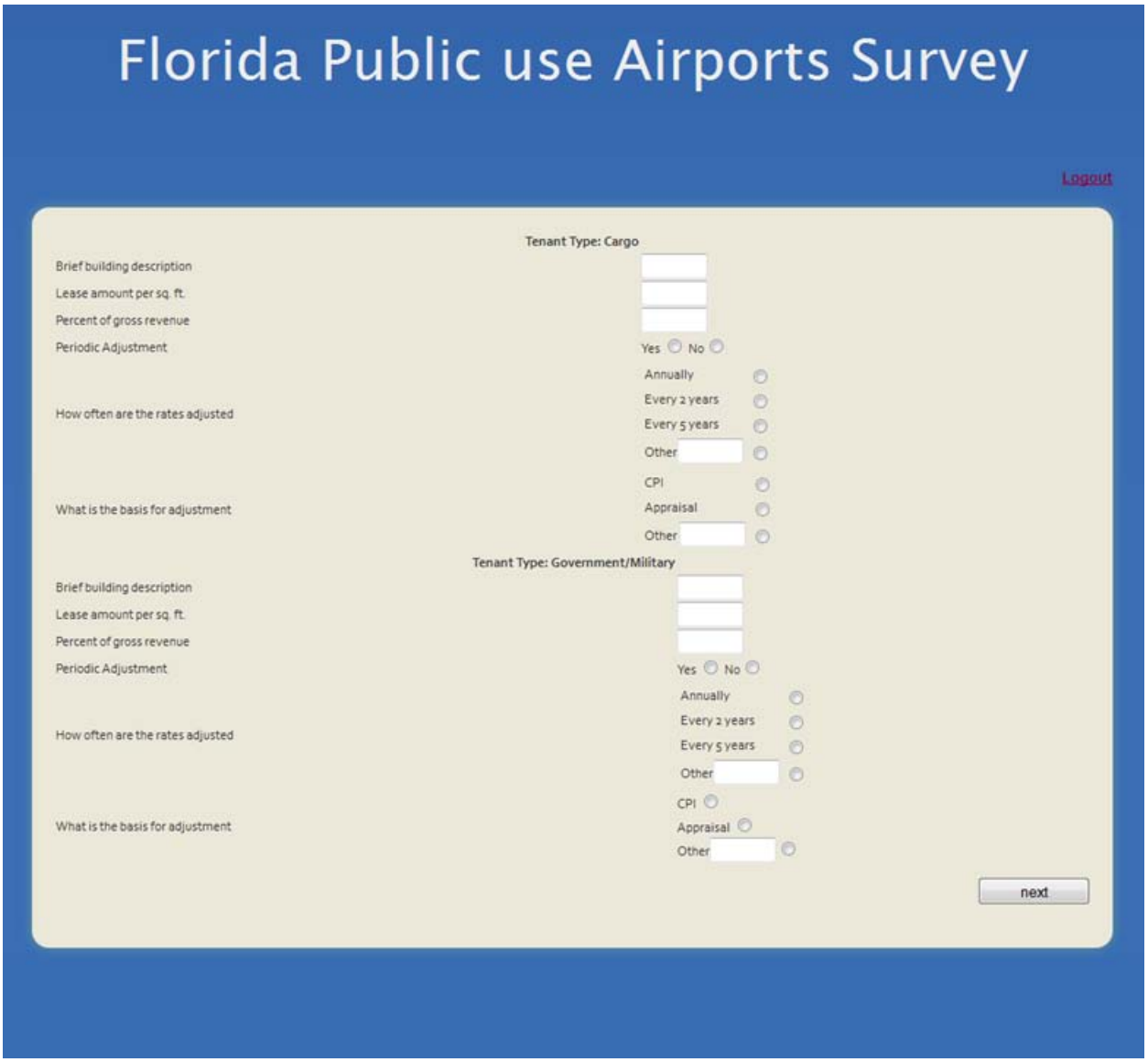
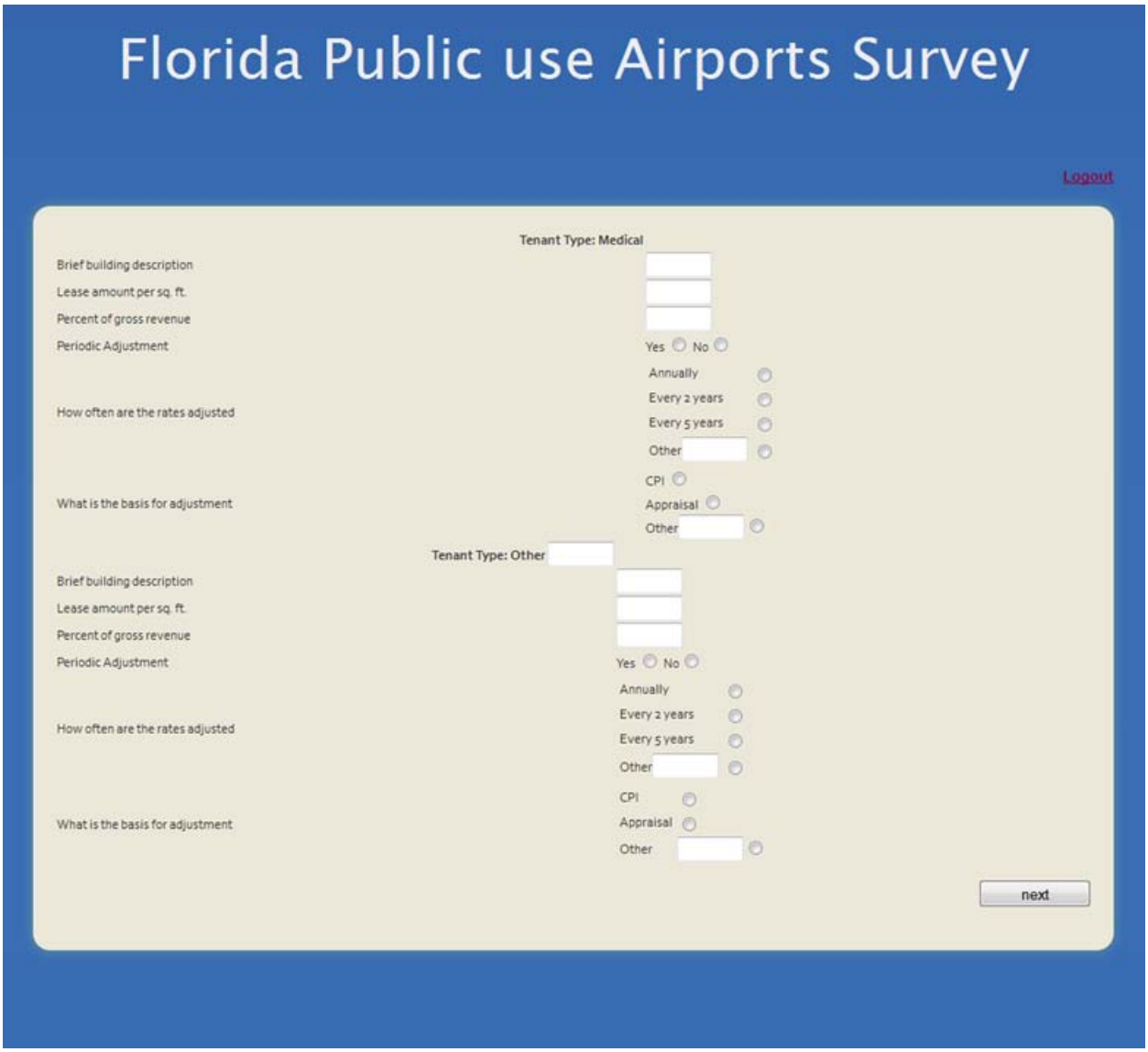
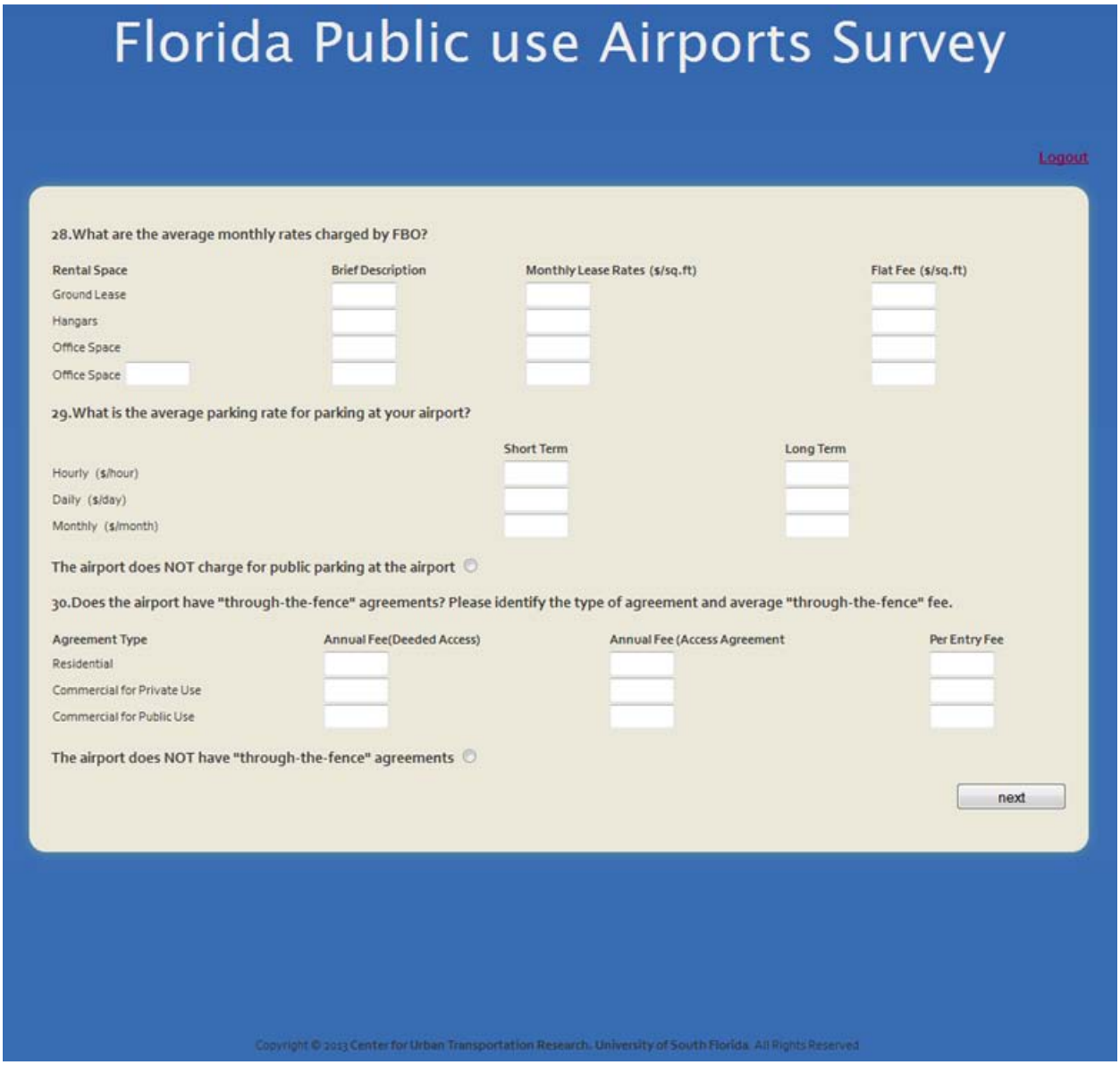

Florida Public use Airports Survey
Logout
27.What are the lease rates charged different tenants for other airport-owned buildings?
Tenant Type: FBO
Brief building description
Lease amount per sq. ft.
Percent of gross revenue
Periodic Adjustment
Yes
No
How often are the rates adjusted
Annually
Every 2 years
Every 5 years
Other
What is the basis for adjustment
CPI
Appraisal
Other
Tenant Type: Aircraft Maintenance
Brief building description
Lease amount per sq. ft.
Percent of gross revenue
Periodic Adjustment
Yes
No
How often are the rates adjusted
Annually
Every 2 years
Every 5 years
Other
What is the basis for adjustment
CPI
Appraisal
Other
next


Florida Public use Airports Survey
Logout
Tenant Type: Cargo
Brief building description
Lease amount per sq. ft.
Percent of gross revenue
Periodic Adjustment
Yes
No
How often are the rates adjusted
Annually
Every 2 years
Every 5 years
Other
What is the basis for adjustment
CPI
Appraisal
Other
Tenant Type: Government/Military
Brief building description
Lease amount per sq. ft.
Percent of gross revenue
Periodic Adjustment
Yes
No
How often are the rates adjusted
Annually
Every 2 years
Every 5 years
Other
What is the basis for adjustment
CPI
Appraisal
Other
next


Florida Public use Airports Survey
Logout
Tenant Type: Medical
Brief building description
Lease amount per sq. ft.
Percent of gross revenue
Periodic Adjustment
Yes
No
How often are the rates adjusted
Annually
Every 2 years
Every 5 years
Other
What is the basis for adjustment
CPI
Appraisal
Other
Tenant Type: Other
Brief building description
Lease amount per sq. ft.
Percent of gross revenue
Periodic Adjustment
Yes
No
How often are the rates adjusted
Annually
Every 2 years
Every 5 years
Other
What is the basis for adjustment
CPI
Appraisal
Other
next


Florida Public use Airports Survey
Logout
28.What are the average monthly rates charged by FBO?
Rental Space
Brief Description
Monthly Lease Rates ($/sq.ft)
Flat Fee ($/sq.ft)
Ground Lease
Hangars
Office Space
Office Space
29.What is the average parking rate for parking at your airport?
Short Term
Long Term
Hourly ($/hour)
Daily ($/day)
Monthly ($/month)
The airport does NOT charge for public parking at the airport
30.Does the airport have "through-the-fence" agreements? Please identify the type of agreement and average "through-the-fence" fee.
Agreement Type
Annual Fee(Deeded Access)
Annual Fee (Access Agreement
Per Entry Fee
Residential
Commercial for Private Use
Commercial for Public Use
The airport does NOT have "through-the-fence" agreements
next
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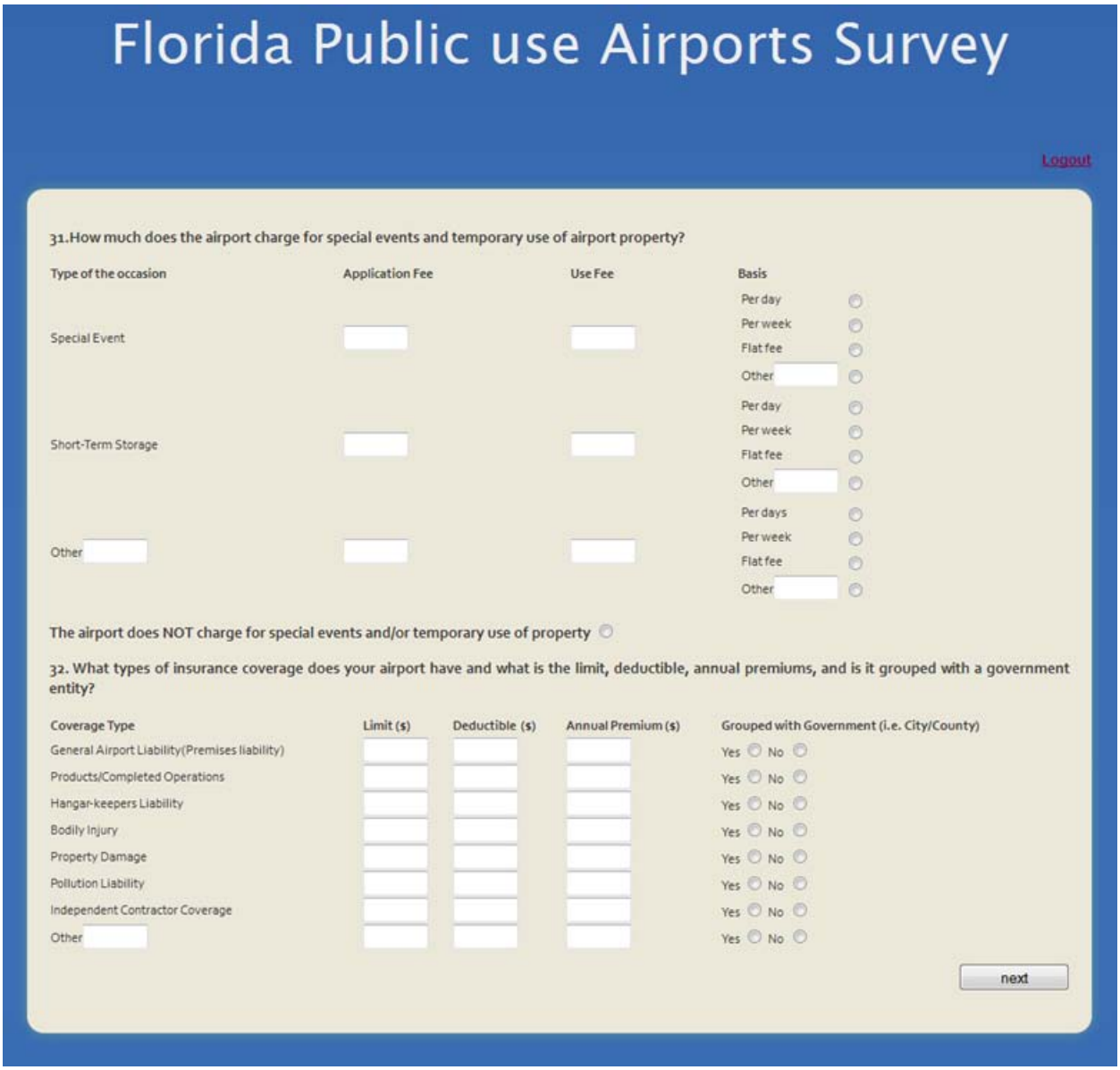
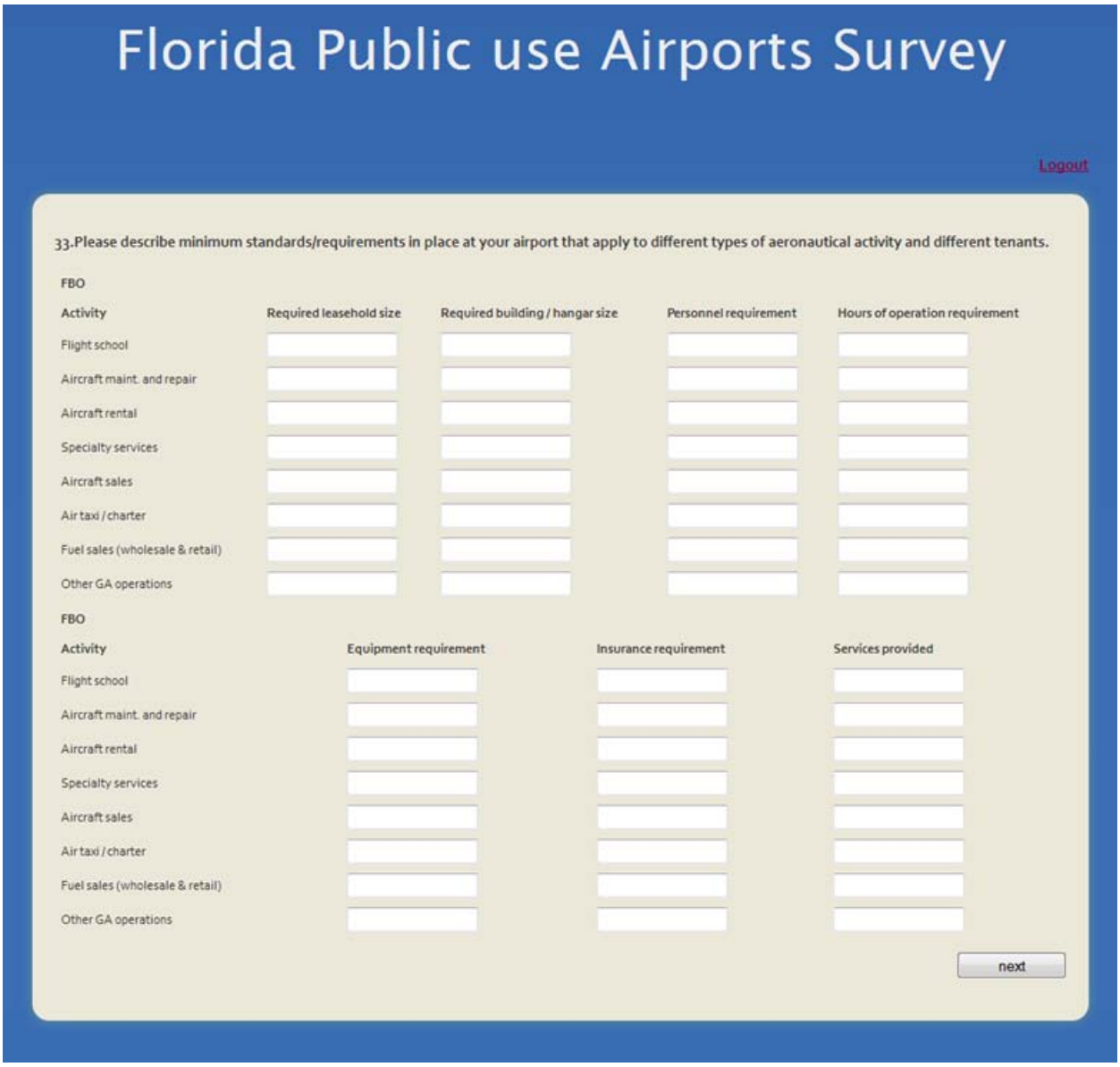
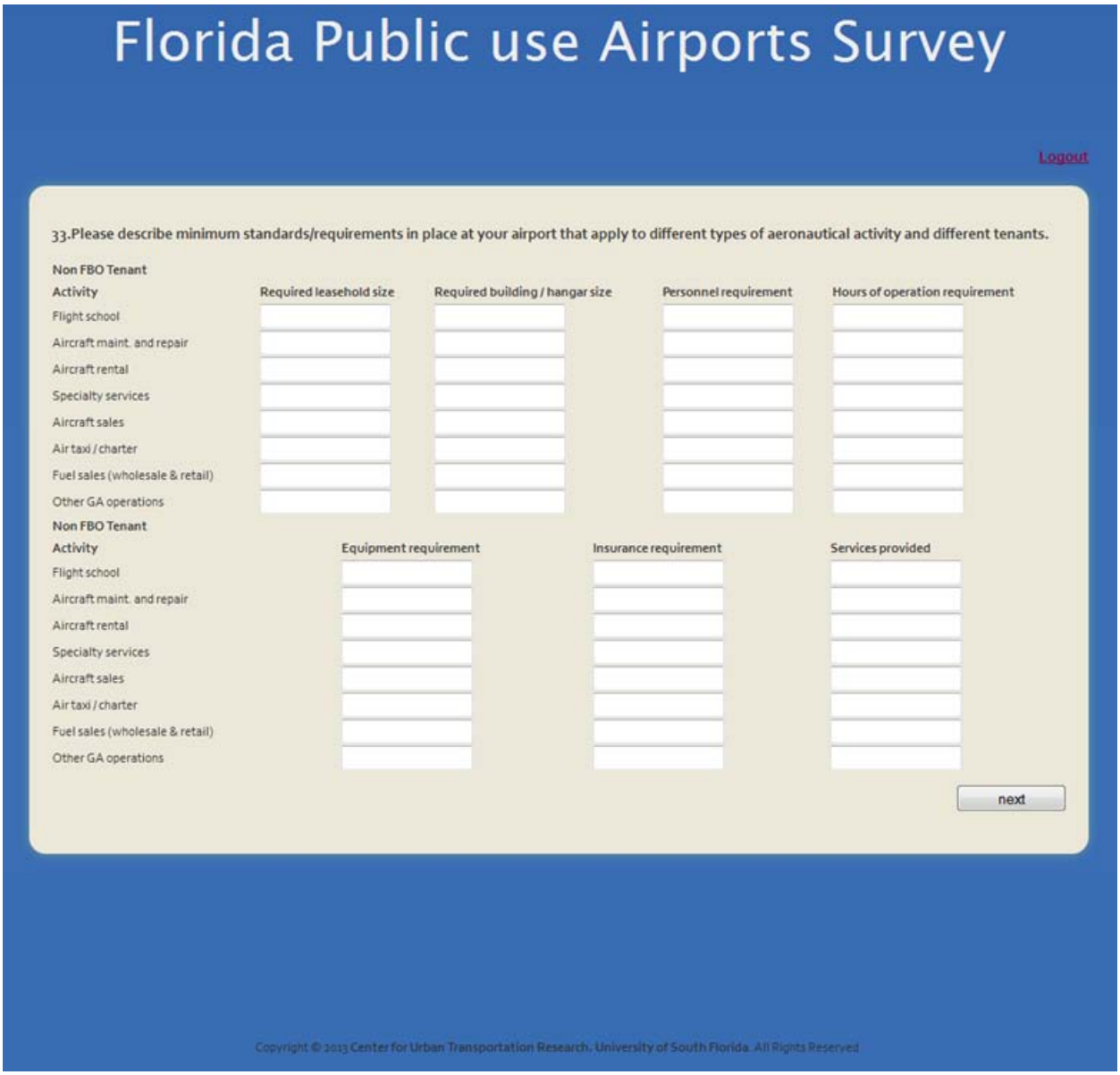

Florida Public use Airports Survey
Logout
31.How much does the airport charge for special events and temporary use of airport property?
Type of the occasion
Application Fee
Use Fee
Basis
Special Event
Per day
Per week
Flat fee
Other
Short-Term Storage
Per day
Per week
Flat fee
Other
Other
Per days
Per week
Flat fee
Other
The airport does NOT charge for special events and/or temporary use of property
32. What types of insurance coverage does your airport have and what is the limit, deductible, annual premiums, and is it grouped with a government entity?
Coverage Type
Limit ($)
Deductible ($)
Annual Premium ($)
Grouped with Government (i.e. City/County)
General Airport Liability(Premises liability)
Products/Completed Operations
Hangar-keepers Liability
Bodily Injury
Property Damage
Pollution Liability
Independent Contractor Coverage
Other
Yes No
next


Florida Public use Airports Survey
Logout
33.Please describe minimum standards/requirements in place at your airport that apply to different types of aeronautical activity and different tenants.
FBO
Activity
Required leasehold size
Required building / hangar size
Personnel requirement
Hours of operation requirement
Flight school
Aircraft maint. and repair
Aircraft rental
Specialty services
Aircraft sales
Air taxi / charter
Fuel sales (wholesale & retail)
Other GA operations
FBO
Activity
Equipment requirement
Insurance requirement
Services provided
Flight school
Aircraft maint. and repair
Aircraft rental
Specialty services
Aircraft sales
Air taxi / charter
Fuel sales (wholesale & retail)
Other GA operations
next


Florida Public use Airports Survey
Logout
33.Please describe minimum standards/requirements in place at your airport that apply to different types of aeronautical activity and different tenants.
Non FBO Tenant Activity
Required leasehold size
Required building / hangar size
Personnel requirement
Hours of operation requirement
Flight school
Aircraft maint. and repair
Aircraft rental
Specialty services
Aircraft sales
Air taxi / charter
Fuel sales (wholesale & retail)
Other GA operations
Non FBO Tenant Activity
Equipment requirement
Insurance requirement
Services provided
Flight school
Aircraft maint. and repair
Aircraft rental
Specialty services
Aircraft sales
Air taxi / charter
Fuel sales (wholesale & retail)
Other GA operations
next
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