

# LOUISIANA

## AVIATION SYSTEM PLAN



June 2015  
*Technical Report*

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# Executive Summary

## Introduction

Louisiana is blessed with a robust transportation system, of which the state's airport system is a critical component. Through the power of aviation, people and goods move rapidly in, around, and out of Louisiana. The state's system of 69 landing facilities, consisting of seven commercial service airports, 61 general aviation airports, and one heliport<sup>1</sup>, provides reliable access to 93 percent of Louisiana residents when considering what portion of the population is within a 30-minute drive of a system airport. In 2012, this system of airports accommodated 1.8 million general aviation operations and more than 200,000 commercial airline operations, which enplaned more than 5 million passengers.

The Louisiana Department of Transportation and Development (DOTD) has developed this Louisiana Aviation System Plan (LASP) for the purpose of guiding the state's airport planning activities. The Aviation Section of the Louisiana DOTD supports the airport system with annual grants and wanted to establish a long-term needs assessment of the airport system. The Louisiana Statewide Transportation Plan (LSTP) addresses this question by evaluating the Louisiana airport system, and identifying areas of improvement that can permit the system to operate more effectively. Additionally, the study quantified the economic benefits each system airport provides the state of Louisiana.



## Overview of Louisiana Aviation System Planning

The Aviation Section is responsible for management, development, and guidance for Louisiana's Airport System of over 780 public and private airports and heliports. The program's clients are the Federal Aviation Administration (FAA) for whom it monitors all publicly owned airports within the state to determine compliance with federal guidance, oversight, and capital improvement grants, aviators and the general public for whom it regulates airports and provides airways lighting and electronic navigation aids to enhance both flight and ground safety.

The mission of the DOTD-Aviation Section is to ensure a safe, modern system of airports which provides convenient and efficient access to the state for tourism, commerce, industrial interests, recreation and economic development.

This is accomplished through management oversight and funding for capital improvements at Louisiana airports, technical assistance and inspections for safety and operational enhancements at Louisiana airports.

The Aviation Section is funded through the Aviation Trust Fund which derives its funds from an aviation fuel tax. Under the governing authority of Louisiana Revised Statutes Title 2 and Title 70, the

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<sup>1</sup> This system plan does not include in its analysis the New Orleans Downtown Heliport since it is not an airport.

primary functions are overseeing and providing State funds for the required match to federal aviation projects averaging a total cost of over \$50 million annually. Additionally, a number of state only projects are accomplished each year as well. The Section certifies all public and privately owned airports and heliports within the State and inspects the general aviation airports annually.

The Aviation Section accomplishes the following project related tasks:

- Determine current and future needs for 69 publicly owned airports and heliport.
- Reviews, approves, and prioritizes approximately 150 new projects annually for seven public use Commercial Service and 62 general aviation airports.
- Negotiates and acquires Federal Aviation Administration (FAA) Airport Improvement Program (AIP) grants and state matching funds annually.
- Prepare the Airport Construction and Development Priority Program for Public Hearings and Legislative approval.
- Prepare and issue Sponsor State Agreements (Grants) for airport projects.
- Reviews legal documents, engineering service agreements, plans and specifications, and bid tabs each year.
- Attends pre-design conferences, preconstruction conferences, and other technical meetings each year.
- Inspects construction sites for quality of work and safety, and review all change orders and conduct final inspections

In addition to the larger projects accomplished primarily with a match to FAA AIP funds, the State provides funding to projects not eligible for FAA funds or to expedite FAA lower priority smaller projects:

- Navigational Aids and Lighting Systems Program
- Obstruction Removal Safety Program.
- Statewide Sealcoat Program
- Discretionary Program
- Advanced Planning Program
- Aviation Safety and Airport Compliance Program
- General Aviation Airport Maintenance Reimbursement Program
- General Aviation Enhancement Program
- Air Carrier Airport Maintenance Reimbursement Program
- FAA Future Obligations Funds

The purposes of the Louisiana Aviation System Plan (LASP) are to assess the facility needs of the state's airports; identify airports that support both the state's system of airports as well as the federal National Plan of Integrated Airport System (NPIAS); estimate costs for needed airport improvements within the system; and provide information for governmental and aviation stakeholders concerning the economic impact of the state's system of public use airports. The Economic Impact of Louisiana Airports was also conducted as part of this study but is presented in a separate document.

This plan provides the Louisiana Department of Transportation and Development's (DOTD) Aviation Section with an important planning tool that enables them to remain current with industry trends. This plan also helps the Aviation Section determine how the Louisiana airport system should be developed to respond to future challenges and to meet changes in demand. Further, the LASP works in concert with the Louisiana Statewide Transportation Plan that is being finalized in 2015. The LSTP

examines all of the state’s transportation needs and sets the direction for making improvements and investments in all modes of transportation. The LASP will follow a similar approach while being performance based. By being performance based, the LASP establishes goals for improvements to the state’s airports, and employs a systematic approach to enhancement of the airport system through an ongoing process. The purpose of the LASP is to provide the Aviation Section with guidelines to continue the successful development of its aviation system, with an emphasis on planning for airport facilities and improved services. Within this process, individual airport facility needs are considered within the broader framework of the entire Louisiana airport system and its categories of airports.

## Goals, Objectives, and Performance Measures

This study takes a structured approach to system planning. At the highest level, Goals, Objectives and Performance Measures provide a policy framework which assists in the development of key elements of this LASP. Goals are overarching broad descriptions of the general aims of the system while the Objectives identify the more specific aims of the aviation system intended to address the Goals.

The Goals of the LASP are:

- Provide an aviation system which provides adequate access to the state’s system of airports
- Provide an aviation system which supports economic growth
- Provide a safe and reliable aviation system
- Provide a framework for future aviation system planning

Each Goal is further refined with associated Objectives and Performance Measures, described in detail in Chapter 2. The Objectives and Performance Measures are used to evaluate the degree to which each Goal is being achieved. Performance Measures are defined quantities that can be analyzed objectively and are used to assess the status of the aviation system. Each Performance Measure has an associated Benchmark. A Benchmark is the threshold measurement of a Performance Measure so that an airport or aviation system can be defined in order to satisfy the future needs of the aviation system. It should be noted that Benchmarks may vary from one airport classification to another.

## Aviation System Inventory

The purpose of the inventory effort is to identify current facilities and conditions at the 68 Louisiana system airports. The inventory process and the data collected provide a solid foundation for understanding the existing system’s conditions and analyzing the performance of the airport system.

The inventory effort was accomplished through the use of a detailed survey that was developed and distributed to all airports in the state. This survey contained information related to specific activities and operational requirements at each airport. It was initially populated with data from FAA 5010 Airport Master Records, the previous airports system plan, and supplemented with data from Airport Action Plans developed by DOTD. Each airport manager or sponsor was asked to validate or correct the information contained on the survey, and to provide additional information and comments, as



necessary. Not all airport managers responded to our survey, and, of those that did, not all questions were answered completely. To the extent possible, missing data

was filled in by the study team using alternative data sources.

Inventory data is compiled in the appendix in numerous tables and Chapter 3 provides a detailed description of the information in these tables.

## System Role Analysis

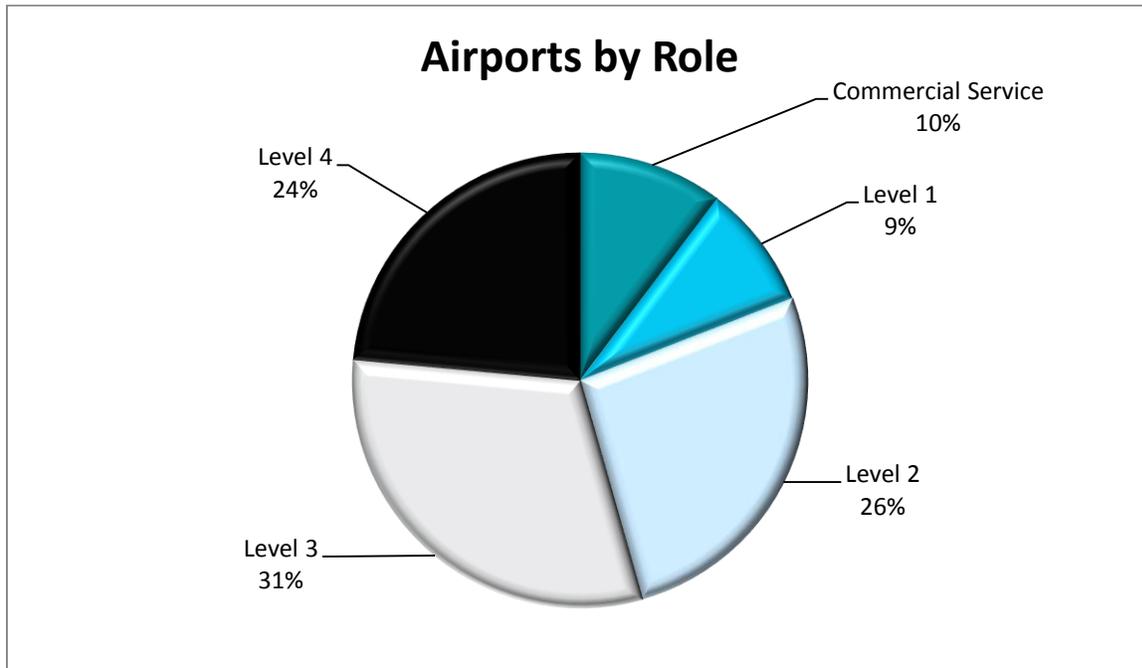
Louisiana's system of airports consists of airports that work together to meet the needs of different market segments. A key component of this system plan is identifying what role each airport plays in the system and what facilities are needed at each airport that best allows it to meet its user's needs.

Existing systems of airport classification were examined, including the previous state system plan completed in 2003. Based on current needs, it was decided to classify general aviation airports into one of four roles and classify airports with scheduled airline service into a commercial service airport role. The four general aviation airport roles are defined as:

- **Level 1 Airport** – maintains a consistent and contributing role in enabling the local, regional, and statewide economy to have access to and from the national and global economy.
- **Level 2 Airport** – maintains a contributing role in supporting the local and regional economies and connecting it to the state and national economies.
- **Level 3 Airport** – maintains a supplemental contributing role for the local economy and community access.
- **Level 4 Airport** – maintains a limited contributing role for the local economy and community access.



To determine which airports are in each role, each airport was evaluated using 17 factors. These 17 factors were selected in an effort to measure potential need for aviation services, as well as the current level of aviation services offered. Demand for aviation services is influenced by factors that are related to aviation, as well as factors that are unrelated. It was determined that both aviation and non-aviation factors should be considered to achieve a balance in evaluating airport needs throughout the state. Points were assigned to each airport based upon their evaluation in each of the 17 factors. The scores for all 17 factors were added together to arrive at a total role analysis score for each airport. Airports were then listed in descending order of total role analysis score and, through discussions with staff members of Louisiana DOTD, appropriate score break points between airport roles were determined. **Figure 1** shows the percentage of each airport role in the Louisiana airport system.

**Figure 1: Breakdown of Louisiana System Airports by Role**

The next step involved determining what facility and service needs are recommended for each airport role. These facility and service standards, shown in **Table 1**, serve as benchmarks for evaluating the overall system performance as well as recommended airport improvements for those airports that do not meet the recommended benchmark.

**Table 1: Facility and Service Performance Measures and Respective Benchmarks**

Performance Measure	Commercial Service (7 Airports)	Level 1 Airports (6 Airports)	Level 2 Airports (18 Airports)	Level 3 Airports (21 Airports)	Level 4 Airports (16 Airports)
Airport Reference Code	C-II or Design Aircraft	B-II or greater	B-II or greater	B-I or greater	A-I or turf
Runway Length	75% Large Aircraft at 60% useful load	6,500'	5,000'	4,000'	Maintain existing RW length
Runway Width	To meet ARC	To meet ARC	To meet ARC	75'	60'
Taxiway	Full parallel	Full parallel	Partial parallel	Turnarounds and connectors	Turnarounds or connectors
Instrument Approach Procedure	ILS or LPV	LPV	VNAV	LNAV or non-precision	Not applicable
Visual Aids	MALS, PAPI	MALS/SALS PAPI/REILS	PAPI/REILS	PAPI/REILS	Not applicable
Lighting	HIRL, Beacon	MIRL, Beacon	MIRL, Beacon	MIRL, Beacon	Reflectors or LIRL, Beacon
Weather Reporting	Automated weather reporting	Automated weather reporting	Automated weather reporting	Local aviation weather	Not applicable
Services	Restroom, FBO, maintenance, ground transportation	Restroom, FBO, maintenance, ground transportation	Restroom, FBO, maintenance, ground transportation	Restroom	Restroom
Fuel	Jet-A, 100LL	Jet-A, 100LL	Jet-A, 100LL	100LL	Not applicable
Facilities	Terminal, aircraft apron, hangars, auto parking	Terminal, aircraft apron, hangars, auto parking	Terminal, aircraft apron, hangars, auto parking	Pilot lounge, aircraft apron, hangars, auto parking	Aircraft apron, hangars, auto parking
Backup Generators	Yes	Yes	Yes	Yes	Not applicable
Intermodal Connections	Yes	Not applicable	Not applicable	Not applicable	Not applicable

Source: CDM Smith

In order for the aviation system to function as intended, the individual airports need certain physical facilities in sufficient quantities to be able to provide services that meet the role the airport is intended to fulfill in the system. Each Performance Measure will be compared to a specific Benchmark, which may vary by airport category, and which individual airports are recommended to meet in order to fulfill their role physical infrastructure attributes. Definitions of each Performance Measure can be found in Section 4.

## Forecast of Aviation Demand

A key part of system planning is evaluating the capacity of the aviation system to handle current and future demand for aviation services. To that end, a forecast of aviation demand was developed out to 2043. This forecast included commercial service and general aviation activity.

The general approach used to develop aviation forecasts for the State of Louisiana's airport system was to identify historical relationships between Louisiana aviation factors and total U.S. aviation activity. Actual trends in demand, experienced on a statewide basis and at individual system airports, were also considered. These relationships were then used to estimate future growth rates, which were

applied to baselines of various aviation activities. In some cases, existing forecasts of aviation demand were used when assessed as providing sufficient detail.

Forecasts of commercial service activity consisted of enplanements and airline operations at the following seven Louisiana airports:

- Alexandria                      Alexandria International (AEX)
- Baton Rouge                    Baton Rouge Metropolitan (BTR)
- Lafayette                        Lafayette Regional (LFT)
- Lake Charles                  Lake Charles Regional (LCH)
- Monroe                          Monroe Regional (MLU)
- New Orleans                    Louis Armstrong New Orleans International (MSY)
- Shreveport                      Shreveport Regional (SHV)

In addition, forecasts of passenger leakage and out-of-state passenger catchment were made to help DOTD officials understand how airports in neighboring states impacted commercial service activity within Louisiana.

General aviation activity forecasts included projections of based aircraft and operations at each of the 68 airports in the Louisiana system. Several forecasts of based aircraft were developed, providing a range of projected outcomes. The preferred based aircraft forecast was selected and used as a basis for estimating future general aviation operations. **Table 2** shows a summary of the aviation activity forecasts for the LASP.

**Table 2: Forecast Summary**

Projection Type	2011	2018	2023	2033	2043
Commercial Service Enplanements	5,416,154	5,807,159	6,247,170	7,256,622	8,435,779
Commercial Airline Operations	211,122	226,874	239,121	266,270	290,782
Based Aircraft	2,676	2,811	2,921	3,154	3,413
General Aviation Operations	1,794,158	2,018,865	2,196,407	2,599,692	3,077,023

Source: CDM Smith

It is important to note that this forecast does not take into consideration any proposed new airport in the system. Potential impacts to nearby existing airports, such as decreased operations and based aircraft, would be likely if the proposed airport were to be built, as a new airport would draw some users from nearby surrounding airports. Currently, there are no airports in Livingston Parish and aircraft owners must travel to Baton Rouge, Gonzales, or Hammond to their based aircraft.

Based general aviation aircraft for all system airports are projected to grow from a 2011 level of 2,676 to 3,413 in 2043, an average annual growth rate of 0.76 percent. Total annual general aviation operations for all system airports are projected to grow from their 2011 level of 1,794,158 to 3,077,023 in 2043, an average annual growth rate of 1.7 percent.

## System Adequacy and Options

The identification of each airport's role in the aviation system made it possible to evaluate the performance of the aviation system as a whole as well as assess how well the individual airports fulfilled their role in the system.

The performance of the overall system was examined in terms of access and economic coverage. This was accomplished through the use of market areas for each airport, typically defined as the area encompassed within a 30-minute drive time of the airport. By measuring the population or other parameters within a given set of drive times, the performance of the system could be evaluated. This method was used to evaluate the degree of access the aviation system provided, and the degree of economic coverage afforded by the system.



In terms of access, the system was evaluated by airport role, starting with commercial service airports and expanding coverage by adding additional airport role levels. With all airport roles, the Louisiana airport system provides coverage for 93 percent of the state's population, as shown in **Figure 2**.

Other access coverage provided by Louisiana airports was evaluated. These additional evaluations included coverage provided by airports with weather reporting equipment, various types of instrument approaches, and air ambulance service.

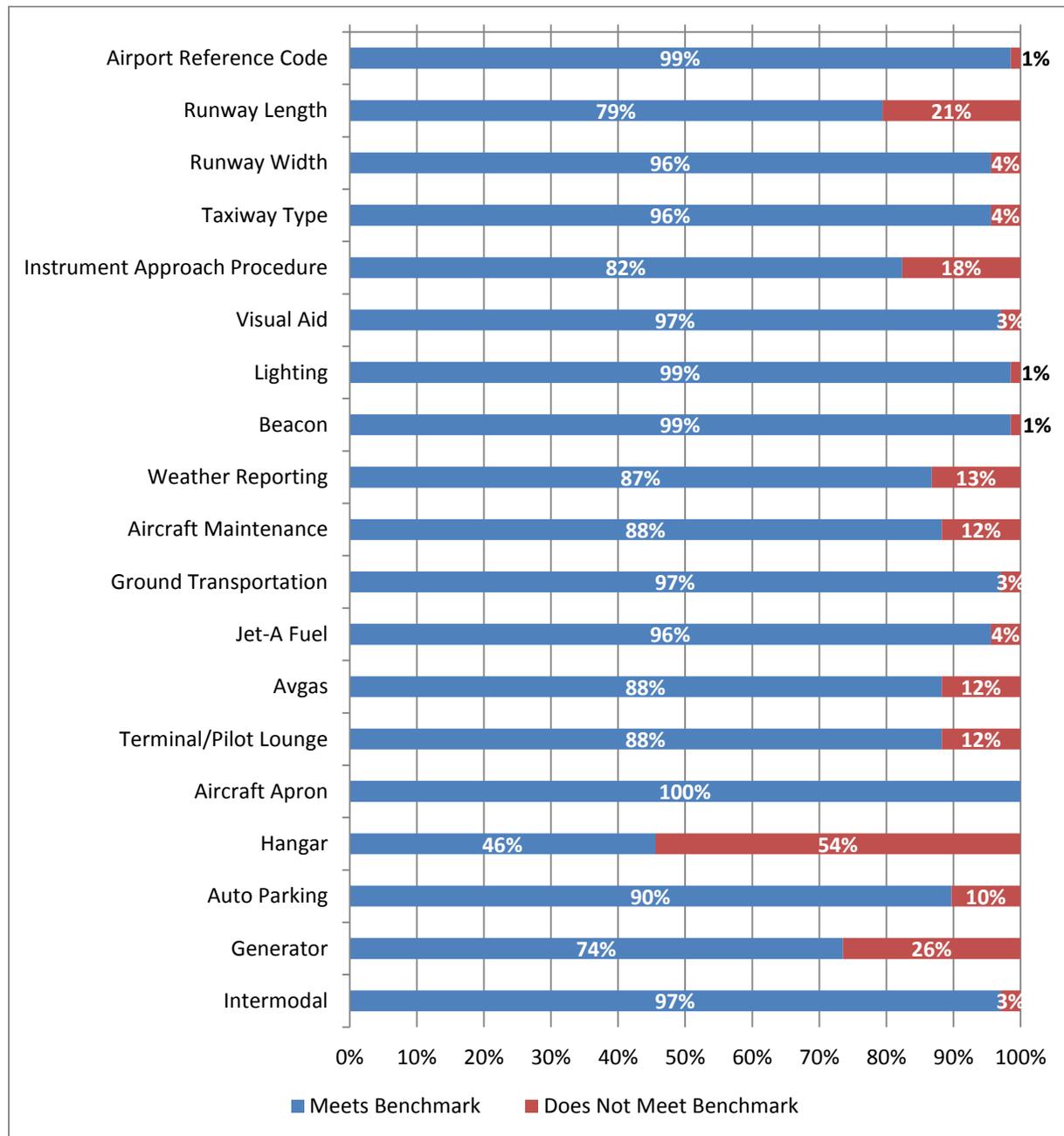
Economic coverage was evaluated through an analysis of airports with aerial application activity, airports that support the oil and gas industry, and the coverage system airports provide of Louisiana's metropolitan statistical areas.

The adequacy of individual airports to fulfill the roles they've been assigned was evaluated based on a set of facility and service objectives. These facility and service objectives were developed for each airport role, as shown earlier in Table 1. By comparing each airport's current facilities and services with the recommended facilities and services for its assigned role, the adequacy of individual airports can be determined. The results of this analysis are shown in **Figure 3** for all 68 system airports.

Figure 3 clearly illustrates the demand for additional hangars in the Louisiana airport system, along with the need for longer runways, additional instrument approach procedures, and back-up generators. This system level analysis was conducted for each of the airport roles. Additionally, each facility and service objective was evaluated independently for each of the airport roles.



**Figure 3: Louisiana Airport System Performance Measures**



Source: CDM Smith

## Trends and Issues Identification

Recent trends, both national and statewide, are important considerations in the development of an aviation system plan, as these trends can influence the supply of and the demand for aviation services.

The LASP examined aviation trends both at the national and state level. National trends included an overview of U.S. commercial air carriers, their expansion during the early 2000s, and subsequent

mergers and consolidation following the Great Recession of 2008. The effects of factors such as jet fuel price fluctuations and the pressure from low cost carriers are analyzed.



National trends in air cargo were examined, with a focus on factors that have resulted in limited domestic growth. These factors include the decrease in postal service mail volume and a shift from air cargo to truck-transported cargo due to costs.

Louisiana's historic enplanement, airline operations, and cargo tonnage were evaluated in light of the national trends analyzed.

National general aviation trends that were studied covered aircraft, pilots, and how aircraft were being used. The analysis of aircraft included the annual number of general aviation aircraft shipped, the value of general aviation aircraft sold annually, and their average price.

Trends in the national pilot population were examined, with a particular emphasis on the decline in private pilots. This is the largest segment of the pilot population and is a concern to the general aviation industry. Reduced pilot numbers translate into less demand for nearly all aviation services.

The use of general aviation aircraft was analyzed by examining the hours flown in eight different categories of general aviation use. These categories consisted of numerous businesses uses of general aviation – aerial application, aerial observation, air medical, air taxi, business, and corporate (paid crew) – personal use, and flight instruction. Most business uses of general aviation aircraft showed little change from 1995 to 2010 (the year with the most recent data). In contrast, personal use of general aviation aircraft started downward in 2003 due to increasing fuel, insurance, and aircraft costs. Since personal flight hours account for the largest segment of general aviation flight time, a decline in this segment greatly impacts the general aviation industry. This is immediately seen in the number of instructional flight hours, which, unsurprisingly, has also declined.

One factor that may be influencing the decline in general aviation flight hours is the uncertain future of avgas. The fuel is one of the few remaining sources of lead and there is increasing pressure to eliminate it as a source of lead contamination. The problem is that a replacement fuel must be suitable for use in a variety of aircraft engines, pose no problems for the existing distribution system, and be economically viable. A number of companies are pursuing a replacement fuel, but given the technical challenges and the regulatory hurdles that must be overcome, it is uncertain whether a replacement fuel will be available before avgas goes extinct. This uncertainty contributes to the decline in general aviation activity, especially from a discretionary point of view.

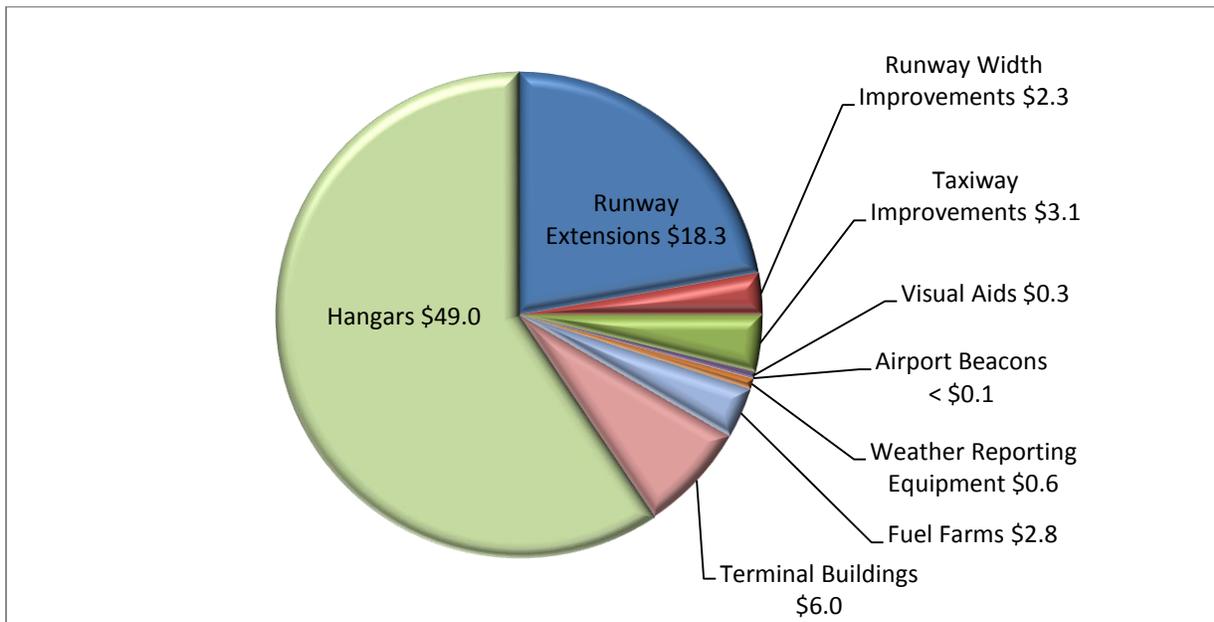
Another factor of concern to general aviation users is the development of Automatic Dependent Surveillance – Broadcast (ADS-B). This new technology uses a combination of satellites and ground-based stations to provide accurate tracking of properly equipped aircraft. The system provides air traffic controllers better situational awareness by providing more coverage than traditional radar

systems that are limited by line of sight and terrestrial locations. The ADS-B system can also provide weather and traffic information to aircraft. However, all of this comes at a cost to the user who must install ADS-B equipment in their aircraft by 2020. The cost for this installation is high, especially compared to the overall cost of older general aviation aircraft.

## System Option Recommendations

The Louisiana Airport System is a robust aviation system that provides access to more than 90 percent of the population of Louisiana, as defined by a 30-minute drive time from each system airport. Maintaining such a system requires extensive resources, both in terms of capital and man hours. The system plan identified more than \$80 million in current airport improvement projects that would contribute to helping Louisiana's airports better fulfill the role they play in the Louisiana airport system. Those improvements are shown in **Figure 4**. Coupled with other capital needs of aviation in Louisiana, it is estimated that Louisiana's aviation needs over the next 33 years amount to \$3.48 billion. It will take a combination of state and federal funds and it is unlikely that these will meet all of the needs of the aviation system.

**Figure 4: Allocation of System Improvement Costs, (in millions of \$)**



Source: CDM Smith

This system plan also analyzed the Louisiana Airport System and identified areas with overlaps and gaps with an eye towards recommending which airports should be eligible for federal funding. Airports that are part of the National Plan of Integrated Airport Systems (NPIAS) are eligible for federal funding from the FAA. Louisiana currently has 55 out of its 68 system airports<sup>2</sup> in the NPIAS. From that analysis, the following changes to the NPIAS were recommended:

- Remove Byerley Airport from the NPIAS and the state system
- Add Columbia Airport to the NPIAS, or;

<sup>2</sup> Louisiana has 56 airports in the NPIAS, but New Orleans Downtown Heliport (7N0), a NPIAS facility, is not included in this analysis.

- Consider adding one of the following to the NPIAS:
  - Proposed airport in Plaquemines
  - Proposed airport in Livingston
  - Existing airport in Jackson

Under the current state regulations and policies, there is little distinction in terms of funding priority between airports that are part of the state airport system and those that are not. To better control the distribution of state airport funds and make inclusion in the state system more meaningful, it was recommended that the state adopt a funding strategy that either restricted state funding to system airports, or at least gave some degree of priority to system airports.

Following these recommendations, the following changes to the state system were recommended:

- Remove Welsh Airport from the state system
- Remove Pollock Airport from the state system
- Remove Olla Airport from the state system

In addition, numerous recommendations from the previous long range transportation plan were reviewed with the project advisory committee and aviation stakeholders and updated, as part of the system planning process.

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# Section 1. Overview of Louisiana Aviation System Planning

The purposes of the Louisiana Aviation System Plan (LASP) are to assess the facility needs of the state's airports; identify airports that support both the state's system of airports as well as the federal National Plan of Integrated Airport System (NPIAS); estimate costs for needed airport improvements within the system; and provide information for governmental and aviation stakeholders concerning the economic impact of the state's system of public use airports. The Economic Impact of Louisiana Airports was also conducted as part of this study but is presented in a separate document.

## Plan Overview

This plan provides the Louisiana Department of Transportation and Development's (DOTD) Aviation Section with an important planning tool that enables them to remain current with industry trends. This plan also helps the Aviation Section determine how the Louisiana airport system should be developed to respond to future challenges and to meet changes in demand. Further, the LASP works in concert with the Louisiana Statewide Transportation Plan (LSTP) that is being finalized in 2015. The LSTP examines all of the state's transportation needs and sets the direction for making improvements and investments in all modes of transportation. The LASP will follow a similar approach while being performance based. By being performance based, the LASP establishes goals for improvements to the state's airports, and employs a systematic approach to enhancement of the airport system through an ongoing process. The purpose of the LASP is to provide the Aviation Section with guidelines to continue the successful development of its aviation system, with an emphasis on planning for airport facilities and improved services. Within this process, individual airport facility needs are considered within the broader framework of the entire Louisiana airport system and its categories of airports.

It is important to note that the LASP is not a programming document. Inclusion of projects in this plan does not constitute a commitment of either state or federal funding. The LASP is a "top-down" planning study whose recommendations must still be implemented from the "bottom-up". Implementation of specific airport improvements identified in this study remains the responsibility of individual airport owners. Some actions identified by the LASP could require the development of an updated airport master plan and in some cases an environmental assessment prior to actual development. Information contained in this document should be used by airports in Louisiana as they evaluate and determine their individual development needs.

Through the NPIAS, the Federal Aviation Administration (FAA) monitors the development needs of the national air transportation system. State aviation system plans are one of the primary inputs for updating the NPIAS. Not all airports included in the state system are included in the NPIAS. Only those Louisiana airports included in the NPIAS are able to compete for federal funding from the FAA. All public-owned public-use airports in Louisiana can apply for grants from DOTD Aviation Section.

In an aviation system plan, system performance is typically measured by evaluating whether airports are fulfilling the "roles" they have been assigned, both as individual airports and as the category of airports as a whole. There are various classification methods used to assign roles to airports, including the one used in this system plan. Two classification methods – the FAA's

classification of airports under the National Plan of Integrated Airport Systems (NPIAS) and the FAA's classification of airports in the report *General Aviation Airports: A National Asset* – are analyzed in this study, in addition to the state system classification.

The NPIAS has only three categories of airports, described as follows:

- **Commercial service airports** are defined as public airports receiving scheduled passenger service and having 2,500 or more enplaned passengers per year.
- **Reliever airports** provide pilots with attractive alternatives to using congested commercial service airports.
- **General aviation airports** do not meet the criteria of commercial service or reliever airports, but generally have at least 10 based aircraft and are at least 20 miles from the nearest NPIAS airport.

To establish continuity with future system plans, the same Performance Measures tailored for Louisiana should be used. The Performance Measures selected were arrived at after careful discussion with DOTD aviation officials. Each drive-time Performance Measure is based upon a 30-minute drive time, unless indicated otherwise.

In addition to having convenient access to an airport, it is important to have access to airports that provide aircraft with the ability to operate during periods of poor weather. Airports with various types of instrument approaches provide this capability. In the last system plan, there were two categories of approaches – precision and non-precision. Precision approaches provide greater airport access than non-precision approaches, but at a greater cost.

Since the previous system plan was completed, advances in instrument approach technology have necessitated changes in terminology and categorizations. The increased use of GPS, in particular, has blurred the distinction between precision and non-precision approaches and a third category of instrument approaches is now in use. It is called approaches with vertical guidance and includes GPS approaches that provide vertical guidance (an improvement over non-precision approaches) but do not meet the parameters of precision approaches.

## System Planning in Louisiana

In 2012, the DOTD initiated an update of the 2003 Louisiana Aviation System Plan. Since completion of the 2003 study, conditions in Louisiana and in the air transportation industry have changed; these changes warrant an update of the plan. The 2003 LASP provided a general assessment of aviation needs within the State as well as provided a blueprint for future airport-specific planning that may be undertaken for airports throughout Louisiana. Individual airport planning takes place in the form of an airport master plan or airport layout plan (ALP).

Louisiana has a long history of aviation system planning and this study is tied to previous system planning efforts. The 1992 LASP study followed FAA guidelines and the process was supplemented through the review of system plans performance measures used by other states and planning agencies. This purpose of this plan is to provide the Aviation Section of the DOTD with a planning tool that enables them to remain current with industry trends. This plan also helps the Aviation Section determine how the Louisiana airport system should be developed to respond to future challenges and changes in demand.

This study's goals, objectives and performance measures are presented in the following chapter. The performance categories and the specific measurements/objectives in this report are more specific than the three overall goals and performance measures (Access, Economic and Physical) presented in the 2003 study. The 2015 LASP then is comprised of a series of steps, the first of which is to identify a set of system measurement criteria that characterize an adequate airport system for Louisiana, and then to establish a vision for development of the system. Measurements will be identified to evaluate the adequacy of the State's airport system from a qualitative and quantitative standpoint. The measurements will be used to evaluate the system's performance and to develop specific benchmarks or targets to evaluate and guide the development of the system. Options for resolving system deficiencies will focus on meeting identified targets. Finally, a recommended plan will be developed to provide guidance on the airports and facilities that are needed to meet target benchmarks, and specific actions will be identified to direct the implementation of the recommended plan.

Subsequent chapters of the LASP include the following:

- Overview of Louisiana Aviation System Planning
- Goals, Objectives, and Performance Measures
- Aviation System Inventory
- System Role Analysis
- Forecast of Aviation Demand
- System Adequacy and Options
- Trends and Issues Identification
- System Option Recommendations

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## Section 2. Goals, Objectives, and Performance Measures

This study takes a structured approach to system planning. At the highest level, Goals, Objectives and Performance Measures identified by the DOTD Aviation Section, in concert with an aviation advisory committee,<sup>3</sup> provide a policy framework which assists in the development of key elements of this Louisiana Aviation System Plan (LASP) Update. Goals are overarching broad descriptions of the general aims of the system while the objectives identify the more specific aims of the aviation system intended to address the goal.

In order to evaluate these conditions of the aviation system, one or more Performance Measures are tied to each Objective. Performance Measures are defined quantities that can be analyzed objectively and are used to assess the status of the aviation system. Each Performance Measure has an associated Benchmark. A Benchmark is the threshold measurement of a Performance Measure so that an airport or aviation system can be defined in order to satisfy the future needs of the aviation system. It should be noted that Benchmarks may vary from one airport classification to another. The associated Benchmarks are discussed in more detail in Sections Four and Six.

Each Goal, Objective and its associated Performance Measure are described in more detail in the following sections:

### Goal 1: Provide an aviation system which allows access to the state's system of airports

#### Objectives

- Provide adequate access by air to the population of the State.
- Integrate the airport system effectively with other transportation systems, thereby providing an efficient multimodal transportation system.
- Provide adequate access by air to the State's growing petroleum, agriculture, tourism, aviation, and aeronautical industries.

#### Performance Measures

Evaluate whether Louisiana residents have convenient access to airports as defined by the coverage provided by drive-time analysis for various categories of airports and groupings of those airport categories. This is accomplished by measuring the percentage of Louisiana's population that fall:

- Within 60-minute drive time of Commercial Airports
- Within 30-minute drive time of all system airports
- Within 30-minute drive time of all system airports equipped with on site weather reporting
- Within 30-minute drive time of all system airports with an instrument approach procedure
- Within 30-minute drive time of all system airports with an instrument approach procedure that has  $\frac{3}{4}$  mile or less visibility minimums

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<sup>3</sup> The advisory Committee was comprised of stakeholders from government and private industry that was involved throughout this system planning process.

- Within 30-minute drive time of all system airports that support air ambulance activity

## Goal 2: Provide an aviation system which supports economic growth

### Objectives

- Provide the opportunity to maximize the growth in domestic and international commerce and travel.
- Provide the economic benefits and return on investment to the state and local communities from development of the airport system.
- Ensure that airports are capable of supporting economic activity that is generated by urban development.

### Performance Measures

Evaluate whether Louisiana industries have convenient access to airports as defined by the coverage provided by drive-time analysis for various categories of airports and groupings of those airport categories.

- Percentage of general aviation airport with adequate aircraft storage facilities as documented in airport master plans and action plans
- Percentage of oil and gas businesses within a 30-minute drive time of a public-use airport as referenced utilizing GIS technology
- Percentage of individual airport brochures updated to reflect the current airport economic impact to the state and local economy

## Goal 3: Provide a safe and reliable aviation system

### Objectives

- Ensure system airports have physical facilities to provide services that meet the role the airport is intended to fulfill.
- Assist aviation partners in achieving safe and secure performance.
- Ensure airports in the state system that are maintained and in good repair.

### Performance Measures

Evaluate the physical infrastructure for various categories of airports and groupings of those airport categories.

- Percent of airports that meet the state safety standards
- Percent of airports that meet the state lighting standards
- Percent of airports that meet the state emergency support standard
- Percent of system airports with a published approach
- Percent of system airports that have adopted Airport Minimum Standards, Airport Rules and Regulations, and Airport Operations Manuals documents for their facility
- Percent of system airports with controlling interest either through property ownership or easements over the FAA design standard for runway protection zones (RPZs) for each runway end

## Goal 4: Provide a framework for future aviation system planning

### Objectives

- Provide the framework for Louisiana Aviation System Planning throughout the state.
- Incorporate all aspects of aviation system planning into DOTD processes, policies, and procedures.
- Utilize this plan to revise and implement revisions to the Louisiana Administrative Code for program development and administration.

### Performance Measures

Performance Measures were selected to evaluate the physical infrastructure for various categories of airports and groupings of those airport categories.

- Number of airports that have an Airport Layout Plan or Master Plan which support the aviation system plan
- Percent of system airports that are acknowledged in regional transportation plans or other local transportation efforts

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## Section 3. Aviation System Inventory

The purpose of the inventory effort is to identify current facilities and conditions at the 68 Louisiana system airports. The inventory process and the data collected will provide a solid foundation for understanding the existing system's conditions. Further, much of the data collected will be used for subsequent analysis, evaluations, and recommendations throughout the study process.

### Inventory Process

In order to provide a comprehensive inventory of all airports, a standard survey was developed and distributed to all airports in the state. This survey contained information related to specific activities and operational requirements at each airport. It was initially populated with data from FAA 5010 Airport Master Records, the previous airports system plan, and supplemented with data from Airport Action Plans developed by DOTD. Each airport manager or sponsor was asked to validate or correct the information contained on the form, and provided additional information and comments, as necessary. Not all airport managers responded to our survey, and, of those that did, not all questions were answered completely. To the extent possible, missing data was filled in by the study team using alternative data sources. Detailed data tables and explanations of the inventory information gathered can be found in the appendix.

Louisiana has 56 airports in the NPIAS, including a heliport (New Orleans Downtown – 7NO) that is part of the state airport system but not included in this study since it is not an airport. Seven of the NPIAS airports are commercial service airports and three are reliever airports. There are 13 airports in the state system plan that are not part of the NPIAS.

The NPIAS method of classification does not offer a great deal of differentiation among general aviation airports, which is how the vast majority of airports in the NPIAS are classified. The FAA attempted to address this shortfall in their general aviation study entitled *General Aviation Airports: A National Asset* (the 2012 Asset study). This study defined five categories of general aviation airports – National, Regional, Local, Basic, and unclassified. However, none of Louisiana's airports met the definition of National, so there are only four categories of general aviation airport in Louisiana based upon the FAA study. Another limitation of the FAA's Asset study is that it only examined NPIAS airports, thereby excluding 13 airports recognized in Louisiana's system of airports. Furthermore, the FAA Asset study did not classify 13 NPIAS airports in Louisiana (either due to lack of data or evidence that the airport did not fit well into a single category), so more than two dozen Louisiana system airports (38.2 percent) do not have a role as defined by the FAA Asset study (see **Table A-1** in the Appendix).

**Tables A-4** through **A-7** in the appendix provide information specific to each system airport such as contact data, publication data of any Airport Layout Plans, Airport Master Plans as well as economic impact studies, cargo studies and marketing documents and activity forecasts.

### Activity Statistics

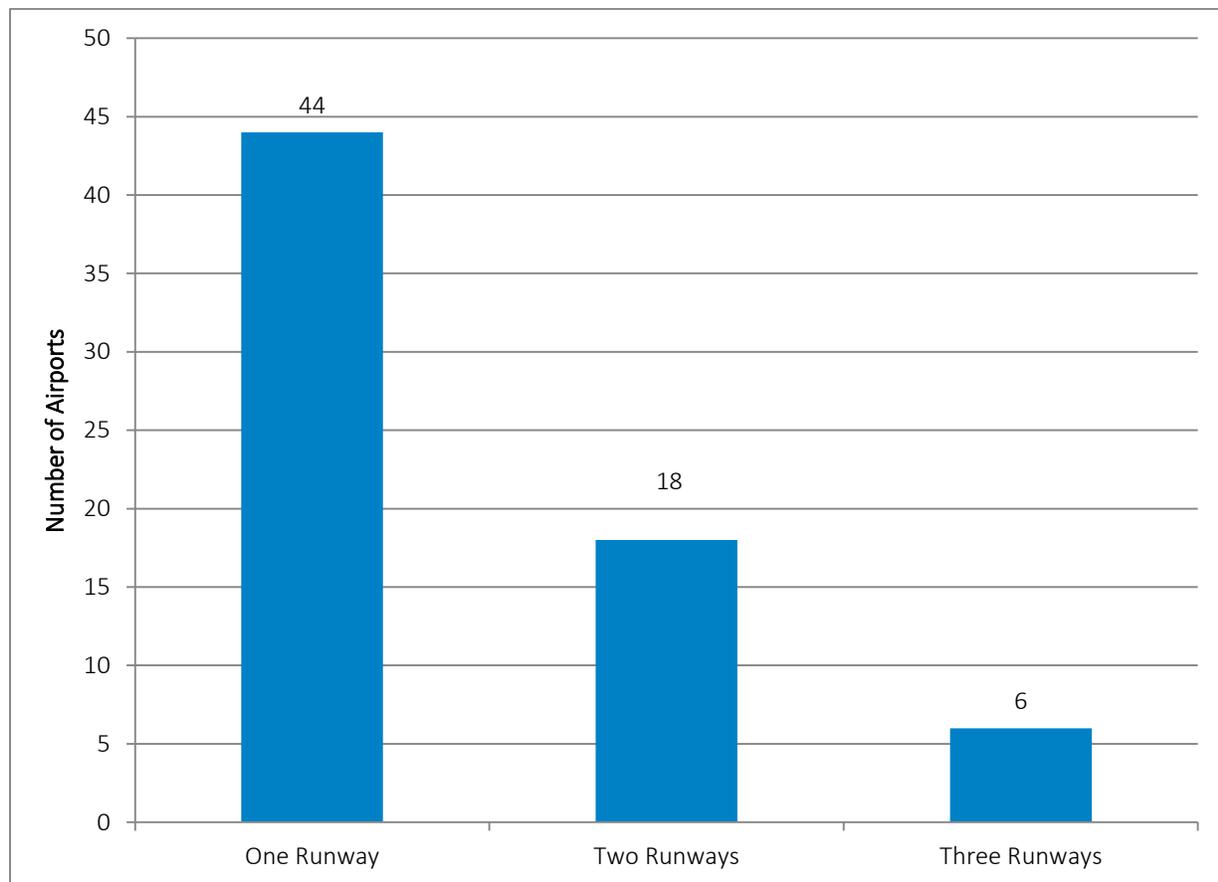
Airport activity and based aircraft information, along with other key activity statistics, form the foundation on which statewide growth trend analysis will be conducted. This section of the inventory provides key information of activities occurring at each airport. **Tables A-8** through **A-14** address the

airport operational statistics such as estimated general aviation operations, commercial service operations, based aircraft, flight activity, and passenger enplanements.

### Airside Facilities

Airside facilities at an airport consist of runways, taxiways, their associated lighting facilities, nav aids, and the navigation, communication, and weather reporting infrastructure needed to facilitate aircraft operations at airports. The primary component of an airport, and the most important airside facility, is an airport's runway. Runways support the transition of aircraft from ground to air, and can be considered the lifeline of an airport's operation. Taxiways serve as a path for aircraft to move from one part of the airport to another. If a taxiway does not exist, the runway must fulfill the taxiway's purpose. **Figure 3-1** summarizes the airports by the number of runways found at Louisiana's system airports, including grass strips and water runways.

**Figure 3-1: Number of Louisiana Airports with One, Two, and Three Runways**

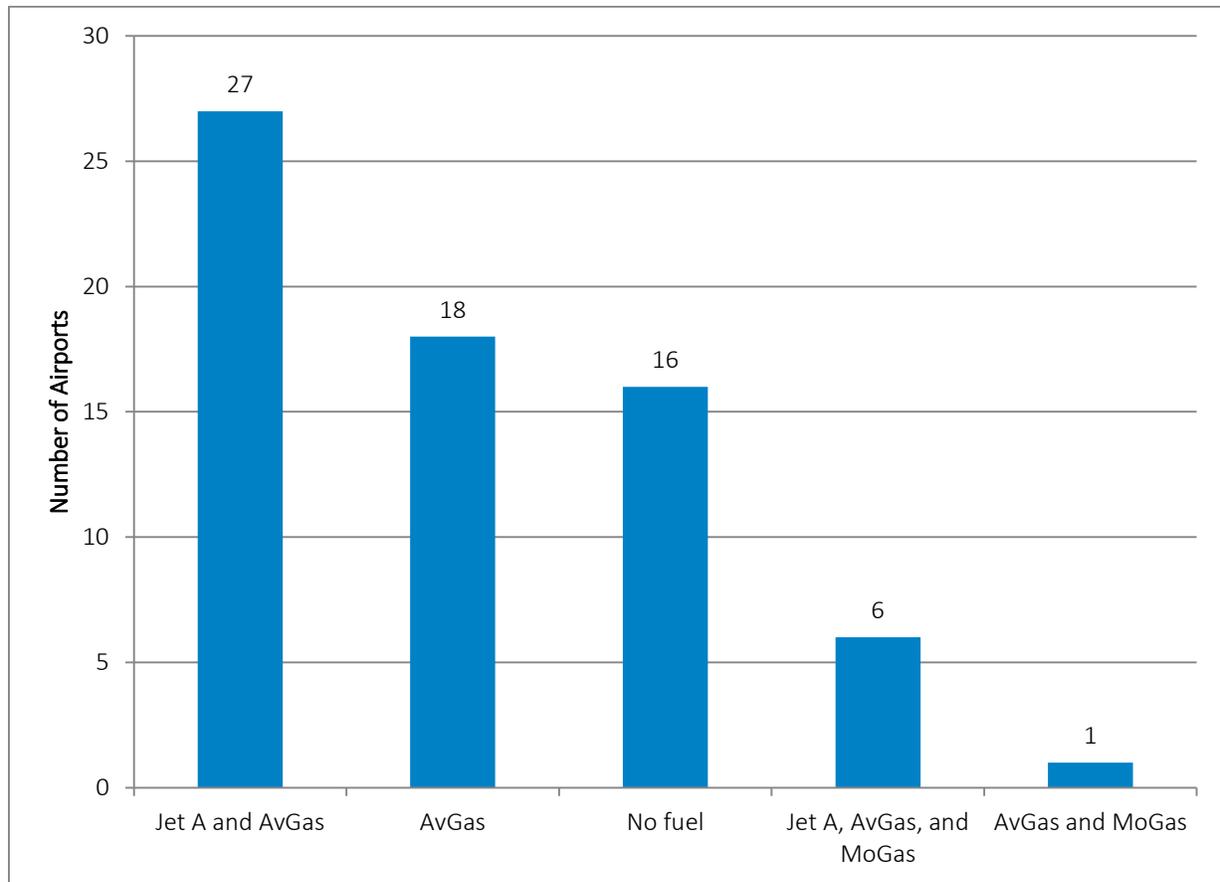


**Tables A-15** through **A-20** provide critical information regarding the primary runway's at the system airports. Further, these tables contain information on facilities associated with the runway environment such as taxiways and associated equipment, runway lighting, navigational aids pertinent to the runway utilization, types of airport approaches and the airspace associated and required by each runway environment.

## Landside Facilities and Airport Users and Services

This section of the inventory provides information related to the landside facilities and the pertinent information on the services, users, and types of aeronautical activity that can be found at each of the airports in the system. **Tables A-21** through **A-26** contain inventory information regarding the square footage of the airport's air carrier terminal, the general aviation terminal, as well as the number of gates and the number of paved and un-paved tie down areas in addition to hangar and aircraft storage information, parking capacity, fuel flowage and apron space. **Figure 3-2** summarizes the types of fuel provided at Louisiana's system airports.

**Figure 3-2: Number of Airports Providing Fuel**



Further, **Tables A-27** through **A-33** reflect the data on scheduled air carrier service, commuter air services, charter services, air taxi operations and flight instruction. These tables also include information on services offered at airports such as avionics repair, U.S. Customs Services, and industrial parks. Finally these tables will share information pertinent to the various aviation activities at airports, on a scale of low to high, and includes information such as police/law enforcement, career training/education, search and rescue operations, emergency medical evacuation, and medical shipments as well as firefighting capabilities, aerial photography, and air show activity.

## Summary

The information collected and summarized in each of the tables will be used for further analysis to formulate recommendations for the Louisiana Airport System Plan. The tables described above are presented in Appendix A.

## Section 4. System Role Analysis

This chapter examines the Louisiana airports and evaluates their role, both at the system and individual level. This analysis begins by examining what roles have been assigned to Louisiana's airports in other studies.

Airports in Louisiana are classified by role in a number of different studies, each with differing purposes. The FAA National Plan of Integrated Airport Systems (NPIAS) classifies commercial airports into several categories and general aviation airports (that are part of the NPIAS) into two categories – either as a reliever airport or as a general aviation airport. With only two categories for general aviation airports, the NPIAS does not offer much differentiation in terms of airport roles. The FAA recently addressed this shortcoming with its Asset Study which examines general aviation airports across the U.S. and was released in May 2012. The Asset Study classified 2,455 out of the 2,952 NPIAS general aviation airports into one of four categories.

- **National Airports** – these airports have very high levels of activity with many jets and multi-engine propeller aircraft. They average about 200 total based aircraft, of which 30, on average, are jets.
- **Regional Airports** – these airports have high levels of activity with some jets and multi-engine propeller aircraft. They average about 90 total based aircraft, of which 3, on average, are jets.
- **Local Airports** – these airports have moderate levels of activity with some multi-engine propeller aircraft. They average about 33 based propeller-driven aircraft and no jets.
- **Basic Airports** – these airports have moderate to low levels of activity, but often serve critical aeronautical functions within local and regional markets. They average about 10 propeller-driven based aircraft.

While the Asset Study provided greater differentiation than the NPIAS, it still had limitations. Louisiana's airport system includes 13 airports that are not in the NPIAS and were not included in the Asset Study. Additionally, the Asset Study could not establish a category for 13 of Louisiana's NPIAS airports because of different types of activities and characteristics at these airports. As a result, 26 of Louisiana's system airports – more than one-third – are not classified in the Asset Study. It is also worth noting that the Asset Study did not identify any National Airports in Louisiana, so the Asset Study essentially classified Louisiana's general aviation airports using only three roles.

Louisiana last undertook a system plan that classified its airports in 2003. The state periodically updates its aviation system plan to gauge the effectiveness of its aviation system and to determine where development may be needed. The 2003 Louisiana Airport System Plan classified airports into one of five categories.

- **Reliever Airport** – A FAA designated reliever airport.
- **National Airport** – maintains a consistent and contributing role in enabling the local, regional, and statewide economy to have access to and from the national and global economy.
- **Regional Airport** – maintains a contributing role in supporting the local and regional economies and connecting it to the State and National economies.
- **Local Airport** – maintains a supplemental contributing role for the local economy.
- **Limited Airport** – maintains a limited contributing role for the local economy.

Based on discussions with Louisiana DOTD personnel, it was determined that defining airport roles similar to the 2003 system plan would provide the necessary differentiation that was needed. It was also decided that there would be no need for a Reliever Airport role, since it encompassed few airports and relied on a single criteria for its definition.

In order to avoid confusion with the airport role labels from the last system plan (which became somewhat confusing because of the Asset Study using nearly all of the same category labels), it was decided to implement a new set of airport role labels for this system plan that used four categories of general aviation airports.

- **Level 1 Airport** – maintains a consistent and contributing role in enabling the local, regional, and statewide economy to have access to and from the national and global economy.
- **Level 2 Airport** – maintains a contributing role in supporting the local and regional economies and connecting it to the state and national economies.
- **Level 3 Airport** – maintains a supplemental contributing role for the local economy and community access.
- **Level 4 Airport** – maintains a limited contributing role for the local economy and community access.

In addition to these roles for general aviation airports, commercial service airports are assigned to their own distinct role.

To determine which airports are in each role, each airport was evaluated using 17 factors. These 17 factors were selected in an effort to measure potential need for aviation services, as well as the current level of aviation services offered. Demand for aviation services is influenced by factors that are related to aviation, as well as factors that are unrelated. It was determined that both aviation and non-aviation factors should be considered to achieve a balance in evaluating airport needs throughout the state.

Measurement criteria were established for each factor that allowed for the scoring of each airport. The airports were then ranked based on the total score from the 17 factors. This ranking was then analyzed to determine where the breaks between airport roles should occur.

It is important to note that the demand analysis is based on a “snapshot in time” of present conditions and is used only as a starting point in this system planning process. Based on analysis that will be conducted in subsequent steps, the future needs of the airport system will be identified.

## Factors in Airport Role Analysis Evaluation

The Airport role analysis evaluation was built from the framework evaluation that was used in the previous system plan. That framework used data related to individual airports, their associated cities, and the parishes in which the airports are located.

The 17 factors that were used are listed below, grouped under their respective performance category. This process provides a means to group the airports by functional level and is not intended to imply a relative level of importance among airports. This grouping is necessary to establish facility and service standards or objectives that are desirable at airports in each of the functional levels.

The following summarizes the 17 factors used by system performance category. A brief description of each category and how it is scored follows.

- **Access**
  - Population
  - Airport Distance to Metro Area
  - Registered Pilots
- **Economic**
  - Retail Sales Tax Collected
  - Direct Economic Output
  - NPIAS Status
  - Aviation Services
  - Aviation Activity
  - Aerial Application Service
- **Physical**
  - Primary Runway Length
  - Primary Runway Instrument Approach Type
  - Air Traffic Control Tower Presence
  - Aircraft Storage Demand
  - Based Jet Aircraft
  - Based Aircraft
  - Military Aircraft Operations
  - Total Aircraft Operations

## Access

**Population** – The population of the associated city for the existing airport represents the number of potential aviation users for the airport. The higher the population of the associated city for the airport, the higher the score for the airport, based upon **Table 4-1**.

**Table 4-1: Population of the Airport’s Associated City**

Population Range		Score	Number of Airports
Low	High		
0	2,499	0	8
2,500	4,999	1	18
5,000	9,999	2	12
10,000	24,999	3	16
25,000	99,999	4	8
100,000	and up	5	6

Source: U.S. Census Bureau 2011 estimates

**Distance to a Metro Area** – The driving distance from the associated city of the existing airport to the nearest Metropolitan Statistical Area (MSA) with a population of 100,000 residents was measured in miles. The towns that are in the most rural areas of the state typically possess a greater need for aviation access based on their isolation from the metropolitan areas, so airports that were farther from metro areas received higher scores. The rationale for providing higher scores for rural airports is based on the fact that these airports allow quick access to metropolitan areas of the state. Many road networks in Louisiana offer less than direct routes to metro areas due to circuitous routings which avoid wetlands and bodies of water. Direct aircraft flights avoid these distances and shorten travel time considerably. Additionally, many rural airports support air ambulance service, law enforcement aviation activities and medical doctor transport which are vital to rural parts of Louisiana. The scores were based upon **Table 4-2**. There are nine MSAs in the state.

**Table 4-2: Airport Distance to Metro Area**

Distance in Miles		Score	Number of Airports
Low	High		
0	14	0	15
15	29	1	11
30	44	2	21
45	59	3	15
60	74	4	3
75	and up	5	3

Source: CDM Smith

**Registered Pilots** – This is a broad measure of aviation demand, based on the number of registered pilots in the parish in which the airport is located. A greater number of registered pilots in a parish represent a greater demand for aviation in that parish, which translates to a higher score for the airport. Scores associated with the number of pilots in an airport’s respective parish are shown in **Table 4-3**. There are more than 8,000 registered pilots in Louisiana.

**Table 4-3: Registered Pilots in Parish**

Number of Registered Pilots in Parish		Score	Number of Airports
Low	High		
0	4	0	0
5	9	1	4
10	19	2	10
20	39	3	11
40	99	4	19
100	and up	5	24

Source: FAA

## Economic

**Retail Sales Tax Collected** – This is a broad measure of economic activity, based on gross sales taxes collected as reported by each parish in which the airport is located. The greater the retail sales tax in each parish, the higher the economic activity in the area. The associated parishes that collect greater tax revenue were awarded a higher demand score, based upon **Table 4-4**.



**Table 4-4: Retail Sales Tax Collected in the Parish**

Retail Sales Tax		Score	Number of Airports
Low	High		
-	\$499,999	0	0
\$500,000	\$999,999	1	1
\$1,000,000	\$2,999,999	2	12
\$3,000,000	\$9,999,999	3	21
\$10,000,000	\$99,999,999	4	30
\$100,000,000	and up	5	4

Source: Louisiana Department of Revenue, Annual Tax Collection Report, FY 10-11

**Direct Economic Output** – This is a more exact measurement of an airport’s economic contribution to the economy. It takes into account the economic output from businesses and government organizations on the airport (including airport management), average annual capital improvement project expenditures, and the spending by visitors to the region that use the airport. Airports with more economic output received higher scores, as shown in **Table 4-5**.

**Table 4-5: Economic Activity - Direct Output**

Airport’s Direct Economic Output		Score	Number of Airports
Low	High		
-	\$999	0	0
\$1,000	\$9,999	1	0
\$10,000	\$99,999	2	1
\$100,000	\$999,999	3	24
\$1,000,000	\$4,999,999	4	19
\$5,000,000	and up	5	24

Source: CDM Smith and GCR

**NPIAS Status** – Whether or not an airport was part of the NPIAS was deemed important because of the ability to leverage investment dollars in the airport through federal funding that is available to airports in the NPIAS. As shown in **Table 4-6**, commercial service airports were given more points than general aviation airports in the NPIAS because of the important role they play in making air transportation available to the public.

**Table 4-6: NPIAS Status**

NPIAS Classification	Score	Number of Airports
Commercial Service Airport	30	7
General Aviation Airport	10	48
Not in NPIAS	0	13

Source: FAA National Plan of Integrated Airport Systems, 2013-2017

**Aviation Services** – Nearly all airports in the state provide some level of aviation services at the airport. These services range from fuel sales and aircraft maintenance to aircraft charter operations and flight instruction. The number of services offered at an airport indicates, to a certain extent, the degree of importance of the airport. The airport’s in Louisiana offered anywhere from no services up to 22 aviation services. **Table 4-7** shows that airports with more services were given higher scores to reflect the greater diversity in aviation users they serve. It is noteworthy to point out that eight airports are unattended and offer no services.

**Table 4-7: Aviation Services Provided at Airport**

Number of Aviation Services Available		Score	Number of Airports
Low	High		
0	0	0	8
1	2	1	6
3	4	2	12
5	9	3	16
10	14	4	15
15	and up	5	11

Source: CDM Smith and GCR

**Aviation Activity** – Airport management surveys measured 21 aviation activities that can occur on an airport. These activities include corporate aviation, recreational flying, flight instruction, law enforcement and community events, to name a few. Not all activities were given equal value. Activities that were safety-related, such as medical flights or search and rescue, were given a higher value while other activities, such as air shows and prisoner transport, were given a lesser value. Airport managers indicated the activity level at their airport as high, medium, or low. Using these value factors, an aviation activity point total for each airport was produced. As shown in **Table 4-8**, the greater the variety and level of activity an airport supports, the greater its score. The maximum possible score is 120 points. England Airpark/Alexandria International Airpark had the highest score, with 74 points.

**Table 4-8: Aviation Activity**

Aviation Activity Point Total		Score	Number of Airports
Low	High		
0	4	0	7
5	9	1	8
10	24	2	20
25	49	3	20
50	74	4	13
75	120	5	0

Source: CDM Smith and GCR

**Aerial Application Activity** – Aviation’s support of Louisiana’s agriculture industry is an important aspect of the state’s airport system plan. The level of aerial applicator activity was used to score an airport’s relative importance in the system. Estimates of aerial applicator activity came from airport management. The airports that were estimated to have high activity received the highest score.

**Table 4-9** shows the scores for the various levels of aerial application activity.

**Table 4-9: Aerial Application Activity**

Aerial Application Activity Level	Score	Number of Airports
None	0	10
Low	1	26
Medium	3	15
High	5	17

Source: CDM Smith and GCR

## Physical

**Primary Runway Length** – An airport’s runway length is a major factor in determining what aircraft can use the airport. In general, larger aircraft need longer runways to operate safely and efficiently. Those airports with longer runways typically serve commercial airline operations or military units, both of which are important components of an aviation system. For these reasons, those airports with longer runways were assigned higher relative scores. The scores were based upon **Table 4-10**.

**Table 4-10: Airports Primary Runway Length**

Length of Airport’s Primary Runway		Score	Number of Airports
Low	High		
0	2,499	0	0
2,500	2,999	1	5
3,000	3,999	2	25
4,000	4,999	3	7
5,000	6,499	4	18
6,500	and up	5	13

Source: CDM Smith, GCR, and FAA 5010 Form

**Primary Runway Instrument Approach Type** – Weather can limit the operations of an airport if it does not have an instrument approach procedure to guide aircraft to the runway ends. Instrument approaches are grouped into three categories – precision, approaches with vertical guidance, and nonprecision, with each category providing different levels of utility for the airport. Precision approaches are the most stringent and demanding, providing extremely precise lateral and vertical guidance. Precision approaches can, in general, make an airport available during the most limiting weather conditions. Approaches with vertical guidance are a step down from precision approaches in terms of guidance and utility.



Nonprecision approaches offer only lateral guidance. Airports without an instrument approach procedure are referred to as visual, meaning these airports can only be used during fair weather when visibility is above certain minimums. The scores were based upon **Table 4-11**.

**Table 4-11: Instrument Approach on Primary Runway**

Type of Approach	Score	Number of Airports
Visual	0	22
Nonprecision	1	14
Approaches with vertical guidance	3	18
Precision	5	14

Source: CDM Smith and FAA

**Air Traffic Control Tower Presence** – Air traffic control towers facilitate operations at airports by sequencing air traffic so that operations are safer and more efficient. Generally, air traffic control towers are found at busier airports and their presence implies that the airport has a significant role in the aviation system. Airports with air traffic control towers were given a score of five, as shown in **Table 4-12**.

**Table 4-12: Air Traffic Control Tower Presence**

	Score	Number of Airports
Air Traffic Control Tower	5	12
No Air Traffic Control Tower	0	56

Source: CDM Smith

**Aircraft Storage Demand** – Airport management survey data indicated several public-use airports in the state have waiting lists for aircraft storage. The number of aircraft on storage waiting lists is an indicator of unfulfilled demand for use of the facility, and airport’s with greater demand have a more significant role in the aviation system. The longer the waiting list the higher the score given to the airport. Survey data indicates that 32 of the 68 airports in the LASP do not have any aircraft on waiting lists. The scores were based upon **Table 4-13**.

**Table 4-13: Aircraft Storage Waiting List**

Number of Aircraft on Waiting List		Score	Number of Airports
Low	High		
0	0	0	32
1	4	1	16
5	9	2	8
10	14	3	8
15	19	4	3
20	and up	5	1

Source: CDM Smith and GCR

**Based Jet Aircraft** – The total number of jet aircraft based at each airport were identified. Jet aircraft tend to have great facility requirements than other aircraft, so more based jet aircraft at an airport results in a higher score for that airport, as shown in **Table 4-14**.

**Table 4-14: Based Jet Aircraft**

Number of Jets Based at Airport		Score	Number of Airports
Low	High		
0	0	0	44
1	1	1	8
2	4	2	7
5	9	3	4
10	19	4	3
20	and up	5	2

Source: CDM Smith and GCR

**Based Aircraft** – The total number of aircraft based at each airport was examined. It was presumed that more based aircraft at an airport indicated greater activity and a more significant role for the airport in the aviation system. Scores were given as shown in **Table 4-15**.

**Table 4-15: Based Aircraft**

Number of Aircraft Based at Airport		Score	Number of Airports
Low	High		
0	0	0	2
1	4	1	8
5	9	2	9
10	29	3	23
30	99	4	17
100	and up	5	9

Source: CDM Smith and GCR

**Military Aircraft Operations** – Total annual military aircraft operations are a measurement of how many takeoffs and landings take place at an airport annually by various military aircraft. Most airports in Louisiana do not experience a significant number of military operations, as the military concentrates its training and other operations to a handful of airports. These airports fulfill an important role in national defense and the higher scores for these airports, as shown in **Table 4-16**, reflects that important role.

**Table 4-16: Annual Military Aircraft Operations**

Number of Annual Military Operations at Airport		Score	Number of Airports
Low	High		
0	99	0	31
100	999	1	16
1,000	1,999	2	8
2,000	7,999	3	9
8,000	11,999	4	2
12,000	and up	5	2

Source: CDM Smith and GCR

**Total Aircraft Operations** – Total annual aircraft operations are a measurement of how many takeoffs and landings take place at an airport each year. Airports in Louisiana experience a wide range of annual aircraft operations, from a low of 1,200 operations at Homer Municipal Airport, to more than 123,000 operations at Louis Armstrong New Orleans International Airport. The higher the number of annual aircraft operations, the higher the score for the airport, as shown in **Table 4-17**.

**Table 4-17: Total Annual Aircraft Operations**

Number of Annual Operations at Airport		Score	Number of Airports
Low	High		
0	4,999	0	5
5,000	9,999	1	17
10,000	24,999	2	21
25,000	49,999	3	11
50,000	99,999	4	11
100,000	and up	5	3

Source: CDM Smith and GCR

It is important to note that only those airports with an air traffic control tower actually count operations. All other airports estimate the number of operations.

## Results of Role Analysis

Each airport was evaluated in the 17 factors described previously. The scores for all 17 factors were added together to arrive at a total role analysis score for each airport. Airports were then listed in descending order of total role analysis score as shown in **Table A-34** in the Appendix.

### Airport Role Definitions

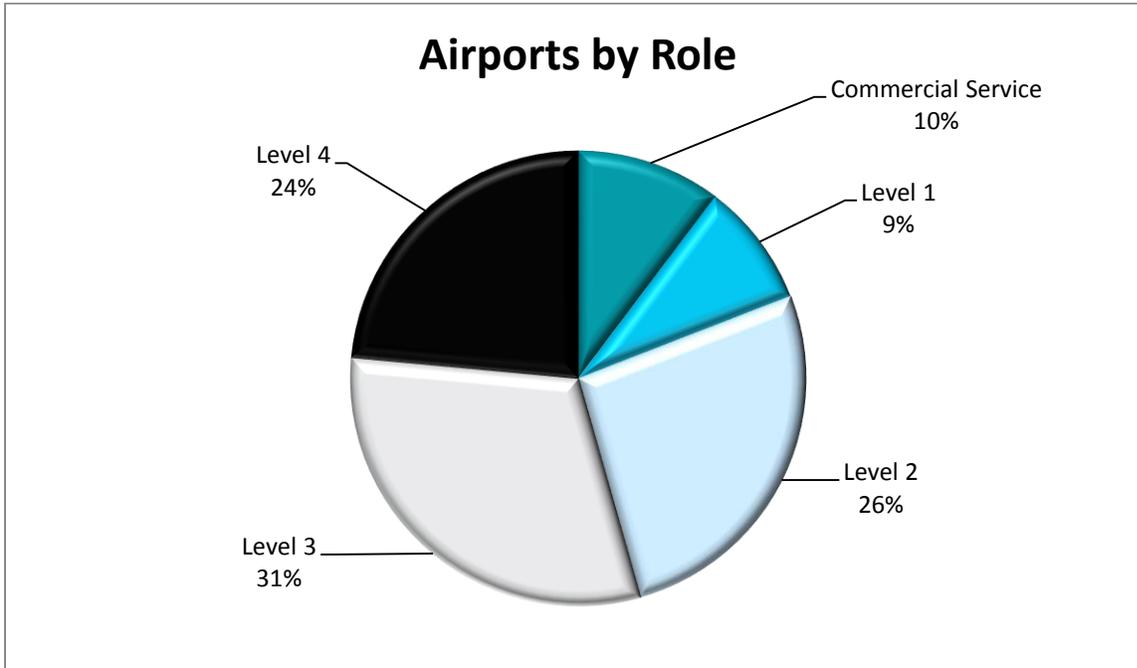
The next step in the process of classifying Louisiana’s airports into role categories is to determine the total role analysis score range for each airport role. Through discussions with staff members of Louisiana DOTD, breakouts of categories were determined as shown in **Table 4-18**.

**Table 4-18: Airport Role Scoring**

Total Role Analysis Score		Airport Role	Number of Airports
Low	High		
84	110	Commercial Service	7
61	83	Level 1	6
47	60	Level 2	18
32	46	Level 3	21
0	31	Level 4	16

Source: CDM Smith and GCR

Each airport was assigned a current role based on its total role analysis score and the criteria in Table 4-18. As shown in **Figure 4-1**, the largest percentage of airports falls into Level 3, followed closely by Level 2 and Level 4 Airports. Commercial Service and Level 1 Airports comprise the smallest percentage of the Louisiana Airport System.

**Figure 4-1: Breakdown of Louisiana System Airports by Role**

The individual airport roles are shown in **Table A-35** with airports listed in alphabetical order by associated city.

**Figure 4-2** depicts a map of the Louisiana Airport System with each airport's role indicated.



## Facility and Service Performance Measures

In order for the aviation system to function as intended, the individual airports need certain physical facilities in sufficient quantities to be able to provide services that meet the role the airport is intended to fulfill in the system. Thirteen Performance Measures, as listed in **Table 4-19**, will be used to evaluate how airports in each category are performing in terms of meeting their defined role. Each Performance Measure specifies the Benchmark, which may vary by airport role, which individual airports are recommended to meet to fulfill their airport role. It is possible that airports included in or recommended for a change in their role in later analyses, for one or more reasons, may be unable to comply with certain facility and service objectives. An airport's inability to meet the facility and service standards for its classification does not necessarily preclude that airport from performing that role within the system, but will be considered in the analysis of options to meet identified system deficiencies. Table 4-19 shows the recommended minimum facility standards for each of the five airport classifications.

**Table 4-19: Facility and Service Performance Measures and Respective Benchmarks**

Performance Measure	Commercial Service (7 Airports)	Level 1 Airports (6 Airports)	Level 2 Airports (18 Airports)	Level 3 Airports (21 Airports)	Level 4 Airports (16 Airports)
Airport Reference Code	C-II or Design Aircraft	B-II or greater	B-II or greater	B-I or greater	A-I or turf
Runway Length	75% Large Aircraft at 60% useful load	6,500'	5,000'	4,000'	Maintain existing RW length
Runway Width	To meet ARC	To meet ARC	To meet ARC	75'	60'
Taxiway	Full parallel	Full parallel	Partial parallel	Turnarounds and connectors	Turnarounds or connectors
Instrument Approach Procedure	ILS or LPV	LPV	VNAV	LNAV or non-precision	Not applicable
Visual Aids	MALS, PAPI	MALS/SALS PAPI/REILS	PAPI/REILS	PAPI/REILS	Not applicable
Lighting	HIRL, Beacon	MIRL, Beacon	MIRL, Beacon	MIRL, Beacon	Reflectors or LIRL, Beacon
Weather Reporting	Automated weather reporting	Automated weather reporting	Automated weather reporting	Local aviation weather	Not applicable
Services	Restroom, FBO, maintenance, ground transportation	Restroom, FBO, maintenance, ground transportation	Restroom, FBO, maintenance, ground transportation	Restroom	Restroom
Fuel	Jet-A, 100LL	Jet-A, 100LL	Jet-A, 100LL	100LL	Not applicable
Facilities	Terminal, aircraft apron, hangars, auto parking	Terminal, aircraft apron, hangars, auto parking	Terminal, aircraft apron, hangars, auto parking	Pilot lounge, aircraft apron, hangars, auto parking	Aircraft apron, hangars, auto parking
Backup Generators	Yes	Yes	Yes	Yes	Not applicable
Intermodal Connections	Yes	Not applicable	Not applicable	Not applicable	Not applicable

Source: CDM Smith

## Defining Facility and Service Performance Measures

Each Performance Measure listed for each airport classification in Table 4-19 is discussed below. It is important to remember that the facility Benchmarks are not requirements. Each airport's master plan, as well as unique circumstances, will dictate what types of facilities are needed at an individual airport. From a system perspective, these Benchmarks allow a broad evaluation of the current system to be made as well as general system recommendations to be prepared.

**Airport Reference Code** – The Airport Reference Code (ARC) is based on the highest runway design code found at the airport. The runway design code determines the design standards to which the runway is to be built (not to be confused with the runway reference code, which signifies the runway's current operational capabilities, which may be different from its design standards). The runway design code is based upon the largest aircraft, referred to as the critical aircraft that regularly uses, or is projected to use, the airport. The ARC is used for planning and design only and does not limit the aircraft that may be able to operate safely on the airport. The ARC is defined by two parameters of the critical aircraft – its approach speed and wingspan. The approach speed determines certain dimensions of safety areas surrounding the runway. The wingspan is a factor in some of these safety area dimensions, as well as setting distances between parallel runways, parallel taxiways, holdline distances from runways and other aspects of the airport design. Airports that serve larger or faster turbine aircraft generally need a higher ARC. The runway's current operational capabilities may be different from its design standards. For example, an airport might currently meet B-II design standards, but the airport layout plan shows a C-II ARC, indicating that a higher speed aircraft is using or will use the airport, and that future plans call for reconfiguring the runway and taxiway geometry to meet the higher standard. As a general rule, the ARC used for planning purposes should be based on a realistic assessment of both the need for the higher standard and the capability to meet it.

**Runway Length** – Aircraft with higher airspeeds and payloads generally need longer runways to take advantage of their full capabilities. As a result, airports catering to higher performance aircraft generally need longer runways than those catering to less demanding aircraft.

**Runway Width** – In general, higher performance aircraft need wider runways to accommodate their wider landing gear configuration and to allow for greater safety margins.

**Taxiway Type** – The type of taxiway system at an airport is important for reasons of safety and efficiency. Without taxiways, aircraft must use the runway to back-taxi in order to exit the runway after landing or to position the aircraft properly for departure. This increases runway occupancy times for aircraft, which is both inefficient and increases collision risks for aircraft. Since higher performance aircraft tend to be larger and less maneuverable on the ground than lower performance aircraft, these aircraft have a greater need for taxiways. For this reason, full parallel taxiways are the Benchmark for airports that serve the most demanding aircraft (Level 1 airports). Airports serving slightly less demanding aircraft can increase safety and efficiency with partial parallel taxiways without incurring the expense of a full parallel taxiway. Therefore, partial parallel taxiways are the Benchmark for Level 2 airports. Level 3 and 4 airports have a Benchmark of turnaround stubs that make it easier for aircraft to reverse direction when back-taxing and provide areas for engine run-ups prior to departure.

**Instrument Approach Procedure** – The type of instrument approach at an airport affects the overall utility of an airport and can make it possible to land at the airport during inclement weather. Higher performance aircraft tend to rely on the most exact approaches – precision and approaches with vertical guidance – since those provide both altitude and course guidance. Lower performance aircraft, with

their lower approach speeds, typically find nonprecision approaches that offer only course guidance adequate for their purposes. For the most basic airports, where use is usually limited to good weather, there is no instrument approach Benchmark.

**Visual Aids** – Visual aids include approach lighting systems and glide slope indication systems. Approach lighting systems assist pilots in identifying the runway threshold environment, helping them transition to the landing phase of their flight. Approach lighting systems are a prerequisite for many types of instrument approach procedures and are a Benchmark for airports that serve high performance aircraft since these users look for adequate instrument approaches when operating. Visual glide slope indicators assist pilots in guiding their aircraft to the runway threshold along a safe and stable descent. Visual glide slope indicators (the most common being a precision approach path indicator, or PAPI) provide visual feedback to the pilot on his vertical position relative to a fixed path that descends to the runway. Such systems enhance safety by ensuring obstacle clearance and proper aircraft positioning for a safe landing. PAPIs are a Benchmark for all but Level 4 airports.

**Airport Lighting** – All system airports should have some means of identifying the airport at night. An airport beacon is a light that aids pilots in identifying the airport from a distance. It is a fundamental component of any airport. Airports that serve higher performance aircraft are expected to have higher intensity lighting for their primary runway, suitable for both night and low visibility operations.

**Weather Reporting** – Weather conditions, especially as they relate to visibility, determine if an aircraft is capable of getting into an airport. Knowing what those weather conditions are ahead of time greatly assists pilots with flight planning. It is also of use when making a diversion decision. Weather reporting at most airports is automated, either an Automated Weather Observation System (AWOS) or Automated Surface Observing System (ASOS). Some airports have human weather observers. Some type of weather reporting is a Benchmark for all but Level 4 airports.

**Services** – The services available to an airport user can vary greatly. However, Benchmarks for airports that serve higher performance aircraft aim to provide services commensurate with the time savings that the use of higher performance aircraft generate. This includes an FBO that, at a minimum, pumps fuel, aircraft maintenance services, and some form of ground transportation so that airport users can continue their journey in an expeditious manner. Restrooms are a recommended Benchmark for all levels of airports.

**Fuel** – In order for an airport to fulfill its designated classification, it must provide the basic services to the users of the airport. Fuel is the most fundamental of these services, with users of turbine engine aircraft needing jet fuel and the users of nearly all piston engine aircraft needing 100LL avgas. All system airports, except for Level 4 airports, have a Benchmark to offer fuel for piston aircraft, and those airports with significant amounts of jet traffic have a Benchmark to have jet fuel (i.e., Level 1 and Level 2 airports).

**Facilities** – The facilities available to an airport user can vary greatly. However, airports that serve higher performance aircraft should provide facilities commensurate with the time savings that the use of higher performance aircraft generate. These Benchmarks include a terminal where pilots can flight plan and passengers can congregate, and hangars for aircraft storage. All airports are have a Benchmark to have apron space for aircraft parking and staging, and auto parking for pilots and visitors.

**Backup Generators** – The ability of an airport to operate can be hampered if electrical power is unavailable. Not only does this prevent the operation of lights, and building environmental systems, it also means that electrical pumps cannot be used to move fuel from storage tanks to aircraft. With the risk of hurricanes in Louisiana, it is a Benchmark for all but the lowest level of airports to have backup generator capabilities to allow continued operations during times of disaster and the subsequent recovery.

**Intermodal Connections** – Having a means of ground transportation available after arriving by plane is a useful convenience at any airport. For commercial service airports, it was regarded as a Benchmark of service given the large number of visitors that use the facilities.

## Section 5. Forecast of Aviation Demand

The development of aviation activity projections for the airports included in Louisiana's aviation system is an essential step in assessing the need for and phasing of future development requirements. Activity projections are used in determining the role for each airport within the State system, evaluating the ability of the system to accommodate future activity levels, and planning future airside and landside facilities for the system. For this analysis, projections were developed for a 32-year period; 2011 served as the base year for the analysis since this was the most recent period for which a complete calendar year of historic data was available.

The assumptions and methodologies used to prepare aviation demand projections for the airports included in the Louisiana Aviation System Plan are discussed in the following sections:

### General Approach to Forecasting

- Commercial Service Activity Projections
- Annual Passenger Enplanements
- Passenger Leakage and Out-of-State Passenger Catchment
- Annual Airline Operations

### General Aviation Activity Projections

- Based Aircraft Projections
- General Aviation Operations Projections
- Summary

## General Approach to Forecasting

The general approach used to develop aviation forecasts for the State of Louisiana's airport system was to identify historical relationships between Louisiana aviation factors and total U.S. aviation activity. Actual trends in demand, experienced on a statewide basis and at individual system airports, were also considered. In some cases, historical data was not available for all activity indicators at each system airport. In years for which data was not available, estimates were made concerning activity levels. Airport-specific historical data presented and discussed in this chapter was provided by the FAA, the airports, and the Louisiana Department of Transportation and Development (DOTD).

Demand projections generally fall into two distinct categories, commercial and general aviation. Significant differences in these two sectors of the aviation industry often make it necessary to modify the general approach or methodology used in forecasting to reflect specific airport or industry conditions.

Commercial service enplanement projections are prepared to provide a basis for determining various facility requirements in the terminal area, as well as the general adequacy of the commercial airport system to meet the State's needs for scheduled air travel. For this study, projections were developed using a market share approach in which airport-specific trends and conditions in aviation were compared to statewide trends and conditions during the same historical period. This approach allows the use of the approved national forecasts published by the FAA, but also takes into account historical trends in activity at each system airport. In addition, the FAA's projections of enplanements included in their Terminal Area Forecast (TAF) were also extrapolated to 2043 for comparative purposes.

Commercial airline operations were taken directly from the FAA Terminal Area Forecast (TAF). Previous forecasts of commercial airline operations have utilized a historic growth rate methodology which extends the historic growth rate of commercial airline operations from a given timeframe at each airport forward through the end of the planning period. The FAA TAF was deemed more reasonable as the FAA has likely given more consideration to market factors and historic operations growth rates are not always indicative of future performance. Further, the airline industry's shift away from smaller, less-profitable regional jets to larger aircraft is expected to result in declining operations even with potential gains in enplanements. With this approach, expected airport usage by carriers operating at Louisiana's commercial service airports can be projected.

General aviation activity, measured in terms of total annual aircraft operations (takeoffs and landings), is sometimes related to the number of aircraft based at a particular airport. Therefore, preparation of based aircraft projections is an important element in the Louisiana Aviation System Plan. Projections of based aircraft are essential to the preparation of facility requirements and to the projection of general aviation operations for system airports.

For this study, based aircraft were projected using three methodologies: top-down, bottom-up, and socioeconomic, which uses three separate demographic trends. The top-down methodology examined the projected growth rate of the statewide general aviation based aircraft fleet according to the FAA TAF and applied that growth rate to each airport through the end of the planning period. The bottom-up methodology uses each airport's historic average annual growth rate of based aircraft (as found in the TAF) to come up with an adjusted statewide average annual growth rate, which is then applied to the base year to project based aircraft through 2043. The socioeconomic methodology uses the growth rates of three separate demographic projections for each airport's corresponding parish to determine future based aircraft.

To develop projections of general aviation aircraft operations for the Louisiana airports, the FAA GA hours flown methodology was used. This methodology applies the growth rate of the FAA's national GA hours flown projection to Louisiana's base-year general aviation operations and extends it through the end of the planning period. This methodology assumes that general aviation operations are directly correlated to the number of hours flown and that if the average hours flown per operation remains constant, operations must increase if hours flown are projected to increase.

## Commercial Service Activity Projections

Since air carrier and regional/commuter operational activity levels are directly linked to enplanements, a preferred enplanement projection for each of Louisiana's commercial service airports must be established prior to development of operational demand projections for commercial carriers. Commercial service activity projections were developed for both passenger enplanements and annual operations. Calendar year 2011 was used as the base year for these projections, with the most recent FAA forecasts (*FAA Aerospace Forecasts, FY 2012-2032*) used as both a reference and a projection tool. Information from the FAA's Terminal Area Forecast (TAF) was also used in this analysis.

Before discussing the projections of enplanements and commercial operations, the following terms used must be defined:

- *Major* airlines are airlines with gross operating revenues during any calendar year of more than \$1 billion.
- *National* airlines gross between \$100 million and \$1 billion during any calendar year.

- *Regional* airlines are those airlines that gross less than \$100 million during any calendar year.
- *Commuter* airlines are classified by the type of aircraft used rather than the level of operating revenue. The term “commuter” is not associated with the U.S. Department of Transportation (DOT) reporting system for carrier earnings. Commuter airlines are those who operate aircraft with a maximum of 60 seats and who also conduct at least five scheduled round trips per week between two or more points.

Projections of commercial activity were prepared for the Louisiana airports that are expected to continue providing scheduled passenger service throughout the planning period. These airports include the following:

- |                |   |
|----------------|---|
| ▪ Alexandria   | Alexandria International (AEX)                  |
| ▪ Baton Rouge  | Baton Rouge Metropolitan (BTR)                  |
| ▪ Lafayette    | Lafayette Regional (LFT)                        |
| ▪ Lake Charles | Lake Charles Regional (LCH)                     |
| ▪ Monroe       | Monroe Regional (MLU)                           |
| ▪ New Orleans  | Louis Armstrong New Orleans International (MSY) |
| ▪ Shreveport   | Shreveport Regional (SHV)                       |

No additional assumptions were made regarding the level of air service in Louisiana while preparing these projections; only unconstrained growth was assumed. New types of service, such as transition from strictly regional commuter service to combined major/national and regional commuter service, new service at airports currently without scheduled commercial service, were not analyzed.

## Annual Passenger Enplanements

Passenger enplanement projections were developed using a market share approach. The market share/growth rate methodology examines each airport’s historical and projected share of the Louisiana market through a comparison of historical and expected growth rates for each. The statewide forecast provides a growth base, reflecting how industry traffic in general is anticipated to grow in the future, considering factors such as the nation’s economic wellbeing, aviation industry trends, and airline fuel and fare pricing trends. Based on the statewide forecast and historical activity at each airport, assumptions were made relative to how each airport’s share of Louisiana enplanements would change over the 32-year planning period. The passenger enplanements projections for Louisiana’s seven airports are discussed in the following sections.

### Alexandria International Airport

Enplanements on commercial service aircraft at Alexandria International Airport began in August 1996. Prior to this time, scheduled commercial service took place at Esler Regional Airport. Since airline operations were initiated at Alexandria International Airport, enplanement activity grew markedly from 67,941 enplanements at Esler Regional Airport in 1991 to 133,938 in 2000. Over the last decade enplanements have grown from 128,947 in 2001 to 154,342 in 2011, as shown in **Table A-36** in the Appendix. This represents an overall average annual rate of growth of 1.8 percent. During this time the airport’s market share of Louisiana enplanements continued to increase from 2.1 percent in 2001 to 2.8 percent in 2011. To develop enplanements projections for Alexandria International Airport and the remaining commercial service airports in Louisiana, the airport-specific anticipated market share was applied to the total TAF projected statewide enplanements to derive enplanement projections for each of the milestone years.

The specific formula used to develop this projection is as follows:

$$\text{Market Share} * \text{Louisiana Statewide TAF Enplanements} = 2043 \text{ Projected Enplanements}$$

$$\text{Example: } (.028) * (8,435,779) = 240,391$$

This formula is used for all enplanement projections contained in this chapter. Assuming that the airport's market share of Louisiana enplanements continues to be 2.8 percent in 2043, enplanements are projected to reach 240,391 (see Table A-36). This results in an average annual growth rate of 1.4 percent.

### **Baton Rouge Metropolitan Airport**

Enplanements at Baton Rouge Metropolitan Airport decreased from 448,534 in 1991 to 435,233 in 2000. From 2001 to 2011, enplanements increased from nearly 389,000 to over 397,000. During this time the airport's market share of Louisiana enplanements increased from 6.3 percent in 2001 to 7.3 percent in 2011. In 2002, passenger enplanements reached its lowest point of the 10-year time period. At this time, nearly 350,000 passengers boarded aircraft. By 2006, however, enplanements had rebounded to reach a high point for the time period with nearly 587,000 enplanements. Enplanements at the airport have fluctuated since 2006 but have increased overall since 2001.

To project enplanements for Baton Rouge Metropolitan, the airport's current market share of statewide enplanements was applied to the total statewide enplanements as found in the TAF and extended through the end of the planning period. Assuming that the airport's market share of statewide enplanements continues to be 7.3 percent in 2043, enplanements are projected to reach 618,836 by 2043 (see **Table A-37**). This represents an average annual growth rate of 1.4 percent.

### **Lafayette Regional Airport**

Enplanements at Lafayette Regional Airport increased from 130,163 in 1991 to 189,182 in 2000, representing an average annual growth rate of 4.2 percent. This growth rate slowed to 2.1 percent in the following decade, with enplanements increasing from over 180,000 in 2001 to over 221,000 in 2011. In 2003 passenger enplanements reached its lowest point for the 10-year time period, with just under 151,000 passenger enplanements. During this time the airport's market share of Louisiana enplanements increased from 2.9 percent in 2001 to 4.1 percent in 2011.

To project enplanements for Lafayette Regional, the airport's current market share of statewide enplanements was applied to the total statewide enplanements as found in the TAF and extended through the end of the planning period. Assuming that the airport's market share of statewide enplanements continues to be 4.1 percent in 2043, enplanements are projected to reach 344,267 by 2043 (see **Table A-38**). This represents an average annual growth rate of 1.4 percent.

### **Lake Charles Regional Airport**

Enplanements at Lake Charles Regional Airport increased from 61,862 in 1991 to 82,923 in 2000, representing an average annual growth rate of 3.3 percent. In 2001, enplanements dropped dramatically and continued to decline until 2003 when enplanements bottomed out at nearly 42,000. Overall, the average annual growth rate for the decade was 2.7 percent, with enplanements increasing from nearly 49,000 in 2001 to about 64,000 in 2011. During this time the airport's market share of Louisiana enplanements increased from 0.8 percent to 1.2 percent.

To project enplanements for Lake Charles Regional, the airports current market share of statewide enplanements was applied to the total statewide enplanements as found in the TAF and extended through the end of the planning period. Assuming that the airport's market share of statewide enplanements continues to be 1.2 percent in 2043, enplanements are projected to reach nearly 100,000 by 2043 (see **Table A-39**). This represents an average annual growth rate of 1.4 percent.

### Monroe Regional Airport

Enplanements at Monroe Regional Airport increased from 112,441 in 1991 to 126,854 in 2000, representing an average annual growth rate of 1.35 percent. This growth rate slowed to 0.2 percent in the following decade, with enplanements increasing from over 104,000 in 2001 to over 106,000 in 2011. Passenger enplanements reached its lowest point of the 10-year time period in 2009 with about 86,000 enplanements, while the high-mark for the same time-frame occurred in 2004, with over 114,000 enplanements. Enplanements have fluctuated throughout the decade but have increased overall since 2001. During this time the airport's market share of Louisiana enplanements increased from 1.7 percent to 2.0 percent.



To project enplanements for Monroe Regional, the airport's current market share of statewide enplanements was applied to the total statewide enplanements as found in the TAF and extended through the end of the planning period. Assuming that the airport's market share of statewide enplanements continues to be 2.0 percent in 2043, enplanements are projected to reach nearly 166,000 by 2043 (see **Table A-40**). This represents an average annual growth rate of 1.4 percent.

### Louis Armstrong New Orleans International Airport

Enplanements at Louis Armstrong New Orleans International Airport increased from 3,274,089 in 1991 to 4,940,011 in 2000, representing an average annual growth rate of 4.7 percent. Between 2001 and 2011, the airport's enplanements declined from over 4.95 million to over 4.2 million, which represents an average annual growth rate of -1.6 percent. During this time the airport's market share of Louisiana enplanements decreased from 80.7 percent to 77.9 percent. Multiple major events had negative impacts on the airport's enplanements numbers, including the terrorist attacks of September 11, 2001; Hurricane Katrina in 2005; and the global economic downturn of 2008/2009. In 2006, the airport experienced its lowest enplanement level of the past two decades. Despite these events, Louis Armstrong New Orleans International has seen an increase in passenger enplanements since 2009.

To project enplanements for Louis Armstrong New Orleans International, the airport's current market share of statewide enplanements was applied to the total statewide enplanements as found in the TAF and extended through the end of the planning period. Assuming that the airport's market share of statewide enplanements continues to be 77.9 percent in 2043, enplanements are projected to reach nearly 6.57 million by 2043 (see **Table A-41**). This represents an average annual growth rate of 1.4 percent.

### Shreveport Regional Airport

Enplanements at Shreveport Regional Airport increased from 310,938 in 1991 to 379,577 in 2000, representing an average annual growth rate of 2.24 percent. Between 2001 and 2011, the airport's enplanements declined from over 331,000 to nearly 255,000, which represents an average annual growth rate of -2.6 percent. During this time the airport's market share of Louisiana enplanements decreased from 5.4 percent to 4.7 percent. In 2010, passenger enplanements reached their lowest point for the time period. At this point, over 231,000 passengers boarded aircraft at the airport. Enplanements have fluctuated throughout the decade but have increased overall since 2001.

To project enplanements for Shreveport Regional, the airport's current market share of statewide enplanements was applied to the total statewide enplanements as found in the TAF and extended through the end of the planning period. Assuming that the airport's market share of statewide enplanements continues to be 4.7 percent in 2043, enplanements are projected to reach nearly 396,880 by 2043 (see **Table A-42**). This represents an average annual growth rate of 1.4 percent.

### Total Statewide Enplanements

A summary of each airport's historic and projected enplanements are shown in **Table A-43**. The totals depicted represent the total statewide enplanement projections for each benchmark year as found in the FAA TAF. These enplanement projections were used to calculate enplanements for each commercial airport using the market share methodology; therefore, summing enplanements for each airport by year results in total statewide enplanements for that particular year.

As shown in **Table A-44**, total statewide enplanements decreased from 6,135,185 in 2001 to 5,416,154 in 2011, representing an average annual growth of -1.2 percent. The three years in which enplanements declined correspond to the aforementioned major events (September 11<sup>th</sup>, 2001, Hurricane Katrina, and the global economic downturn of 2008/2009) that had negative impacts on enplanements levels at several of the individual airports. According to the FAA TAF and projections by CDM Smith, enplanements are projected to increase from 5,416,154 in 2011 to 8,435,779 in 2043. This growth in enplanements represents an overall statewide average annual growth rate of 1.4 percent. Although more conservative, this rate is considered to be in line with national projections of domestic enplanement activity, which project enplanements to increase at an average annual rate of 2.3 percent from 2011 to 2032 (according to *FAA Aerospace Forecasts, Fiscal Years 2012-2032*).

### Passenger Leakage and Out-of-State Passenger Catchment Forecast

In addition to forecasting enplaned passengers at Louisiana's commercial service airports forecasts were prepared related to passenger leakage to out of state airports as well as out of state passenger attraction to Louisiana's commercial service airports. The discussion below begins with passenger leakage forecasts to out-of-state airports.

#### Overview

One of the challenges presented to local operators of small to mid-sized airports is to retain air travelers from their immediate service areas. Too often, air travelers are lured by lower fares to drive to an alternate larger airport to begin the air portion of their trip. This is called the "drive-fly" phenomenon in this study and the term refers to the passenger leakage suffered by local airports to nearby larger airports. This cycle has hurt smaller airports by decreasing demand for airline service locally. This in turn, causes the local airline(s) to cut back the number of available seats, which in turn reduces the service choices from the local airport. The reduction in service choices spurs another round of passenger leakage and the cycle is repeated. For some airports with only one carrier, this

cycle has led to the elimination of local community airline service altogether. Centralization, much like health care and shopping malls, has been the method used by airlines to lower unit costs, and as such, consolidate air service in centralized markets.

In Louisiana, the presence of low cost carrier (LCC) Southwest Airlines in surrounding states has accentuated the drive-fly leakage problem, since lower fares stimulate demand. Industry observers have noted that Southwest Airlines has no airline “feeder” providing service from outlying communities to meet their aircraft operated at larger airports. Over the years many regional airlines have attempted to become a code share partner with Southwest Airlines, but all have failed. This is because Southwest Airlines considers the automobile its commuter carrier. Auto license tag surveys in airport parking lots have confirmed the drive-fly phenomenon for airports with Southwest Airlines showing passengers drive up to three hours to board Southwest Airlines flights.

In addition to the “Southwest effect”, larger hub airports naturally attract drivers from distant locations due to better service choices, larger aircraft equipment types, and potential nonstop service. Surveys of local communities reveal that airports such as Dallas-Ft. Worth International and Houston’s George Bush Intercontinental attract drivers from distances as far as two and three hours away. This attraction is not necessarily because of price differences, but rather, because of greater service frequencies and nonstop destinations, convenience, poor reliability of service locally, and the use of larger aircraft at the hub airport.

### Competing Out-of-State Airports

Due to the presence of LCC operations in Houston, at Hobby Airport, Dallas, at Love Field, and Jackson Mississippi; Louisiana residents often drive to these airports to board flights. The three markets in Louisiana at greatest risk of losing passengers to out-of-state airports, due to geographic proximity, include: Lake Charles (LCH), Shreveport (SHV) and Monroe (MLU). Driving times and distances to these respective competing airports are identified in **Table 5-1** below:

**Table 5-1: Competing Out-of-State Airport Distances from Select Louisiana Airports**

Louisiana Airport	Out-of-State Airport	Mileage	Driving Time
LCH	HOU	151 miles	2 hrs 31 min
LCH	IAH	141 miles	2 hrs 45 min
MLU	JAN	118 miles	1 hrs 48 min
SHV	DAL	187 miles	2 hrs 53 min
SHV	DFW	202 miles	3 hrs 4 min

Source: Rand McNally

### Lake Charles Regional Airport

The Houston market has two large commercial airports which attract southwest Louisiana residents. A survey of businesses, residents, and passengers by Wilbur Smith Associates in 2002 found that 80 percent of air travelers in the Southwest Louisiana market area utilize Lake Charles Regional Airport while 8 percent utilize airports in Houston. The remaining 12 percent use airports in Lafayette and New Orleans. These fare sensitive travelers are willing to drive two and half hours to save on air fare. This is particularly true as couples, families and business partners travel together which multiplies the air fare savings.

Analysis of the passenger enplanement data indicates that 4.3 million passenger enplanements took place in 2010 at Houston’s William Hobby Airport. Of these enplanements, 79 percent where non-

connecting (O&D) passengers with 44 percent of these passengers being residents of the Houston market area. The remaining 56 percent are visitors to the Houston area.

Assuming the local market passenger leakage to Houston Hobby is .25 percent of resident enplanements, it is estimated that 3,667 annual passengers, or 10 per day on average, drive from Southwest Louisiana to Hobby Airport. By applying a similar assumption of 0.05 percent to resident enplanements at Houston Intercontinental Airport, it is estimated that 1,959 annual passengers, or 5 per day on average, drive to IAH to board aircraft. In 2010 it is estimated that a combined 5,256 passengers in the Lake Charles market area drove to Houston to board a flight. When adding these travelers to the total annual 2010 enplanements for Lake Charles Regional it comprises 8.2 percent of the market's enplanements, which reiterates the 2002 study findings.

#### *Shreveport Regional Airport*

The Dallas market also has two large commercial airports which attracts northwest Louisiana residents. Analysis of the passenger enplanement data indicates that 3.7 million passenger enplanements took place in 2010 at Dallas Love Field Airport. Of these enplanements, 81 percent were non-connecting (O&D) passengers with 55 percent of these passengers being residents of the Dallas-Fort Worth market area. The remaining 45 percent are visitors to the Dallas market area.

Assuming the local market leakage of fare-sensitive passengers to Dallas Love Field is .5 percent of resident enplanements it is estimated that 8,312 annual passengers, or 23 per day on average, drive from Northwest Louisiana to DAL. By applying a similar assumption of 0.05 percent to resident enplanements Dallas Fort Worth International Airport it is estimated that 5,954 annual passengers, or 16 per day on average, drive from Louisiana to DFW to board aircraft. When adding these travelers to the total annual 2010 enplanements for Shreveport Regional Airport it comprises 5.8 percent of the market's enplanements.

#### *Monroe Regional Airport*

Jackson Evers International Airport (JAN) in Jackson, Mississippi, has Southwest Airlines LCC service which attracts passengers from Louisiana. Airport records indicate that during peak holiday seasons 4 percent of resident boarding passengers are Louisiana residents. During the off-peak season it is assumed that this traffic is 2 percent. Using the 2 percent as the baseline assumption the analysis indicates that of the 308,000 local residents boarding airlines at JAN, 6,171 annual passengers, or 17 per day on average, are Louisiana residents from the northeast portion of the state. This includes the Monroe market area which is less than two hours by automobile to Jackson.

#### **Forecast of Louisiana Passenger Leakage to Competing Out-of-State Airports**

A forecast of passenger leakage for three Louisiana markets was prepared to identify passenger leakage potential. For this forecast it is assumed that airports in Dallas, Houston, and Jackson, Mississippi, will continue to attract fare sensitive passengers from Louisiana markets. It also assumes that the Shreveport, Lake Charles, and Monroe markets will not gain low cost carrier service at their respective commercial service airports during the forecast period. Total passenger enplanement forecasts for DAL, DFW, IAH, HOU and JAN are based on FAA Terminal Area Forecasts and assumed passenger leakage rates are held constant at current rates throughout the forecast period. **Tables 5-2 through 5-4** identify the forecast passenger leakage and their associated passenger facility charge (PFC) annual revenue loss to 2040.

**Table 5-2: Forecast of Shreveport Market Area Passenger Leakage to Dallas Airports**

Year	FAA TAF Enplanements	Resident Passengers	Estimated Louisiana Passengers	Estimated Passengers per Day	Estimated Loss of Annual PFC Revenue
<b>Dallas Love Field</b>					
2010	3,731,604	1,662,430	8,312	23	\$37,400
2011*	3,822,931	1,703,116	8,516	23	\$38,300
2018*	5,755,967	2,564,283	12,821	35	\$57,700
2023*	7,374,848	3,285,495	16,427	45	\$73,900
2033*	9,731,617	4,335,435	21,677	59	\$97,500
2040*	11,816,755	5,264,364	26,322	72	\$118,400
<b>Dallas-Fort Worth International</b>					
2010	26,730,437	11,908,410	5,954	16	\$26,800
2011*	27,117,831	12,080,994	6,040	17	\$27,200
2018*	31,033,307	13,825,338	6,913	19	\$31,100
2023*	34,454,315	15,349,397	7,675	21	\$34,500
2033*	42,622,792	18,988,454	9,494	26	\$42,700
2040*	49,627,697	22,109,139	11,055	30	\$49,700
<b>Total Dallas Market</b>					
2010	30,462,041	13,570,839	14,266	39	\$64,200
2011*	30,940,762	13,784,109	14,556	40	\$65,500
2018*	34,898,836	15,547,431	19,734	54	\$88,800
2023*	38,434,504	17,122,572	24,102	66	\$108,500
2033*	46,758,007	20,830,692	31,171	85	\$140,300
2040*	54,168,804	24,132,202	37,376	102	\$168,200

Source: FAA TAF data, CDM Smith

**Table 5-3: Forecast of Lake Charles Market Area Passenger Leakage to Houston Airports**

Year	FAA TAF Enplanements	Resident Passengers	Estimated Louisiana Passengers	Estimated Passengers per Day	Estimated Loss of Annual PFC Revenue
<b>Houston Hobby Airport</b>					
2010	4,263,627	1,466,705	3,667	10	\$16,500
2011*	4,573,385	1,573,263	3,933	11	\$17,700
2018*	5,227,598	1,798,315	4,496	12	\$20,200
2023*	5,654,716	1,945,245	4,863	13	\$21,900
2033*	6,622,617	2,278,207	5,696	16	\$25,600
2040*	7,403,017	2,546,667	6,367	17	\$28,700
<b>George Bush Intercontinental Airport</b>					
2010	19,307,245	3,917,826	1,959	5	\$8,800
2011*	19,528,188	3,962,660	1,981	5	\$8,900
2018*	27,658,763	5,612,516	2,806	8	\$12,600
2023*	33,421,109	6,781,811	3,391	9	\$15,300
2033*	48,809,763	9,904,477	4,952	14	\$22,300
2040*	63,640,716	12,913,974	6,457	18	\$29,100
<b>Total Houston Market</b>					
2010	23,570,872	5,384,531	5,626	15	\$25,300
2011*	24,101,573	5,535,923	5,914	16	\$26,600
2018*	32,886,361	7,410,831	7,302	20	\$32,900
2023*	39,075,825	8,727,056	8,254	23	\$37,100
2033*	55,432,380	12,182,684	10,648	29	\$47,900
2040*	71,043,733	15,460,642	12,824	35	\$57,700

Source: FAA TAF data, CDM Smith

**Table 5-4: Forecast of Monroe Market Area Passenger Leakage to Jackson, Mississippi**

Year	FAA TAF Enplanements	Resident Passengers	Estimated Louisiana Passengers	Estimated Passengers per Day	Estimated Loss of Annual PFC Revenue
<b>Jackson Evers International Airport</b>					
2010	617,056	308,528	6,171	17	\$27,800
2011*	617,523	308,762	6,175	17	\$27,800
2018*	677,658	338,829	6,777	19	\$30,500
2023*	743,478	371,739	7,435	20	\$33,500
2033*	910,228	455,114	9,102	25	\$41,000
2040*	1,061,980	530,990	10,620	29	\$47,800

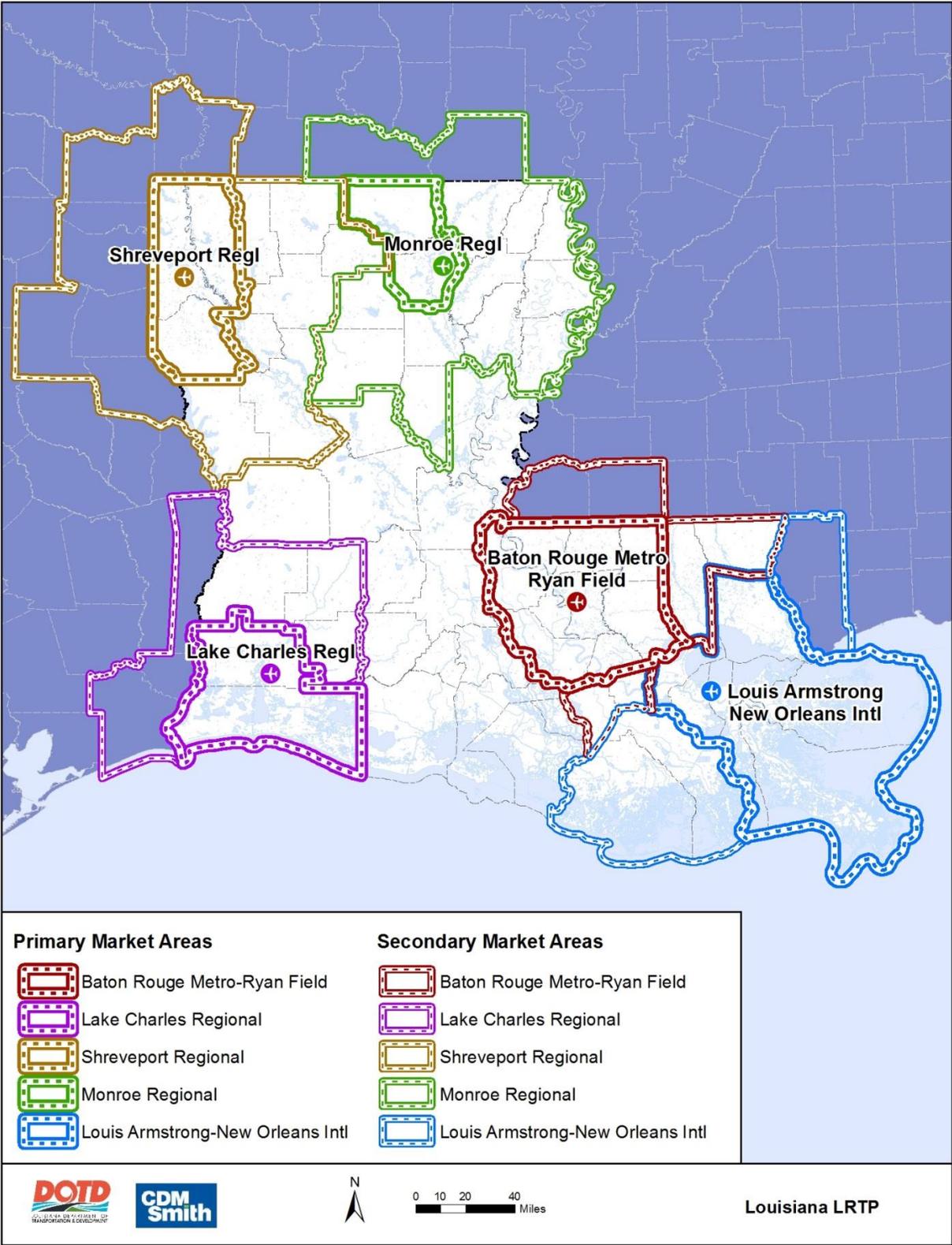
Source: FAA TAF data, CDM Smith

### Louisiana Airports Capturing Out-of-State Passengers

The likelihood of out-of-state passengers using Louisiana airports is also significant due to the relative geographies of Louisiana and its neighboring states. The best method for evaluating the rate at which this trend occurs is to conduct several state location surveys throughout the year of license plates on the cars parked at the airport(s) in question. Many airports collect this information voluntarily. However, after contacting each Louisiana airport it was revealed that none have done so recently. A methodology was therefore developed to estimate the rate at which out-of-state passengers utilize Louisiana airports.

Prior to estimating any passenger leakage or capture rates, the market area must be defined. The market area for each airport is comprised of a primary and secondary market area. Primary market areas are defined by the parishes that contain the associated city's metropolitan statistical area (MSA). Secondary market areas were derived from the regional labor market areas (RLMA) created by the Louisiana Workforce Commission. The secondary market areas for MLU, SHV, LCH, BTR, and MSY also contain contiguous counties in neighboring states so long as they are within a one hour drive of that airport. **Figure 5-1** shows all airport market areas. Given the central locations of Alexandria Regional Airport and Lafayette Regional Airport within Louisiana, out-of-state leakage and passenger attraction analysis was not performed on these two airports.

Figure 5-1: Airport Market Areas



Source: US Census, FAA TAF data, CDM Smith

### *Methodology*

The methodology to determine enplanements by out-of-state residents at Louisiana airports involved compiling the 2010 populations of each parish/county within each airport's primary and secondary market areas. Each airport's total annual enplanements were then divided by the population of each parish/county within the airport's market area to produce an enplanements per capita figure for each parish/county, as shown in **Table 5-5**. It is assumed that enplanements for the primary market area on a per capita basis are greater than enplanements per capita in the secondary market due to the fact that the primary market is the center of goods and services as well as greater personal income. For this analysis, enplanements per capita in the primary and secondary markets were weighted to estimate enplanements per resident. For example, Shreveport Regional has a primary market area consisting of three Louisiana parishes and a secondary market area consisting of seven Louisiana parishes, five Texas counties, and two Arkansas counties. The airport's primary market is assumed to have 0.4 enplanements per capita while the secondary market is estimated to have 0.15 enplanements per capita. (For other airports in this analysis the enplanements varied from nearly 3 enplanements per capita in tourist gateway of New Orleans to 0.08 per capita for out-of-state passengers in the Lake Charles market area.) In 2010, Shreveport Regional experienced 231,786 passenger enplanements. When applying the enplanements per capita ratio to the 398,600 residents in the primary market area an estimate of 162,794 enplanements is derived. Similar ratios were derived for Louisiana commercial service airports with a propensity of attracting out-of-state passengers.

It is estimated that in 2010, 75 percent of Shreveport Regional's enplaned passengers originated in its primary market area Parishes of Bossier, Caddo, and DeSoto. As shown in Table 5-5, the secondary market comprised the remaining 25 percent of 2010 enplanements and consisted of both in-state and out-of-state parishes/counties, which includes counties in neighboring states of Arkansas and Texas. On a state-by-state level, 87 percent of SHV's enplaned passengers are estimated to have originated locally in Louisiana, while 3 percent are estimated to come from Arkansas and 10 percent from eastern Texas.

### *Statewide*

Based on the analysis, five commercial service airports in Louisiana have market areas that include out-of-state counties. These airports are Baton Rouge Metropolitan, Lake Charles Regional, Monroe Regional, Shreveport Regional and Louis Armstrong New Orleans International. The primary and secondary market areas of both Alexandria International and Lafayette Regional are contained completely within the state and were therefore not analyzed. This is not to say that it is impossible for departing passengers at these two airports to originate from outside of the market areas or other states. However, due to the distances required to drive to these airports from outside their market areas and the availability of flights at competing airports, any instances are considered minimal and inconsequential at these two airports. Based on this analysis, Lake Charles Regional has the highest out-of-state passenger enplanement market share, with an estimated 23 percent of passengers originating in Texas. However, while New Orleans International Airport only has an estimated 4 percent out-of-state market share, this equates to nearly 168,000 passengers annually or 460 per day. **Table 5-6** breaks out the passenger enplanements by airport and market area/state.

**Table 5-5: Enplanements by Airport and Market Area/State**

Market Area by State	Population	Enplanements	Enplanements per Capita	Estimated Passengers per Day	Estimated Market Share
<b>Baton Rouge Metropolitan Airport (BTR)</b>					
Primary	802,484	312,002	0.39	855	85%
Secondary (LA)	213,788	49,955	0.23	137	14%
Secondary (MS)	23,009	5,376	0.23	15	1%
<b>TOTAL</b>	<b>1,039,281</b>	<b>367,335</b>		<b>1,006</b>	<b>100%</b>
<b>Lake Charles Regional Airport (LCH)</b>					
Primary	199,607	48,293	0.24	132	77%
Secondary (LA)	93,012	7,092	0.08	19	11%
Secondary (TX)	96,282	7,342	0.08	20	12%
<b>TOTAL</b>	<b>388,901</b>	<b>62,727</b>		<b>172</b>	<b>100%</b>
<b>Monroe Regional Airport (MLU)</b>					
Primary	176,441	62,241	0.35	171	66%
Secondary (LA)	162,788	23,357	0.14	64	25%
Secondary (AR)	63,492	9,110	0.14	25	10%
<b>TOTAL</b>	<b>402,721</b>	<b>94,708</b>		<b>259</b>	<b>100%</b>
<b>Louis Armstrong New Orleans International Airport (MSY)</b>					
Primary	1,167,764	3,482,453	2.98	9,541	87%
Secondary (LA)	208,178	350,358	1.68	960	9%
Secondary (MS)	99,763	167,899	1.68	460	4%
<b>TOTAL</b>	<b>1,475,705</b>	<b>4,000,710</b>		<b>10,961</b>	<b>100%</b>
<b>Shreveport Regional Airport (SHV)</b>					
Primary	398,604	173,674	0.44	476	75%
Secondary (LA)	192,380	27,993	0.15	77	12%
Secondary (AR)	51,107	7,437	0.15	20	3%
Secondary (TX)	155,876	22,682	0.15	62	10%
<b>TOTAL</b>	<b>797,967</b>	<b>231,786</b>		<b>635</b>	<b>100%</b>

Source: US Census, FAA TAF data, CDM Smith

Statewide, an estimated 3.6 percent of passengers originate in Mississippi, which represents the largest market share of out-of-state passengers departing at Louisiana airports. Passengers from Texas make up 0.6 percent and 0.3 percent originate in Arkansas. As shown in Table 5-6, 5 percent of Louisiana's 2010 enplanements are estimated to originate out-of-state. This represents a ratio of 21 in-state passengers for every one (1) out-of-state passenger with the majority of the out-of-state passenger traffic assigned to New Orleans International.

**Table 5-6: Statewide Enplanements by Market Area/State**

Market Area by State	Population	Enplanements	Estimated Passengers per Day	Market Share
Primary (LA)	2,744,900	4,078,663	11,174	85.7%
Secondary (LA)	870,146	458,757	1,257	9.6%
Secondary (AR)	114,599	16,547	45	0.3%
Secondary (MS)	122,772	173,275	475	3.6%
Secondary (TX)	252,158	30,023	82	0.6%
<b>In-State</b>	<b>3,615,046</b>	<b>4,537,421</b>	<b>12,431</b>	<b>95%</b>
<b>Out-of-State</b>	<b>489,529</b>	<b>219,845</b>	<b>602</b>	<b>5%</b>
<b>TOTAL</b>	<b>4,104,575</b>	<b>4,757,266</b>	<b>13,034</b>	<b>100%</b>

Source: US Census, FAA Terminal Area Forecast, CDM Smith

## Annual Airline Operations

Commercial airline operations refer to those takeoffs and landings performed by scheduled airlines, including major, national, regional, and commuter carriers. Commercial service airports in Louisiana are served by a variety of carriers, with three out of the seven being served strictly by smaller commuter airlines.

There is a direct correlation between enplanements and commercial operations, but the correlation is not the same for airports served by a mix of major and commuter airlines. Major carriers typically operate equipment with seating capacities between 110 and 300 seats. Commuter operators in Louisiana operate aircraft with seating capacities between 37 and 99 seats. With these varying seating capacities, operational needs are determined by enplanements and average load factors. Additionally, the airline industry's shift away from smaller, less-profitable regional jets to larger aircraft is expected to result in declining operations even with potential gains in enplanements.

**Table 5-7** identifies the seven commercial service airports in Louisiana and their historic annual commercial service airline operations as found in the FAA TAF. Projections of airline operations at Louisiana's commercial service airports were also taken directly from the FAA TAF. FAA TAF data indicates national air carrier activity from 2011 to 2043 is anticipated to grow at an average annual rate of 0.79 percent. Commuter operations are anticipated to grow at an annual average rate of 1.19 percent. Commuter aircraft operations are regarded as regional air carriers operating aircraft with 60 seats or less. When combined, total commercial service airline operations are projected to grow at an average annual growth rate of 1.07 percent through 2040. This growth rate was extended forward to 2043, which is the final year of the planning period. **Table A-43** identifies the seven commercial service airports in Louisiana and their forecasted annual commercial service operations as found in the FAA TAF. Shreveport Regional is projected to grow the fastest, with an average annual growth rate of 1.55 percent. Baton Rouge Metropolitan and Alexandria International are projected to have the second and third fastest growth rates, with average annual growth rates of 1.5 and 1.45 percent, respectively. Lake Charles Regional is projected to have the slowest growth, with an average annual growth rate of 0.75 percent. Statewide, the average annual growth rate is projected to be 1.07 percent, which takes Louisiana's commercial service airline operations from 211,122 in 2011 to 290,782 in 2043. Statewide airline aircraft operations have increased historically from 268,339 operations in 1990 to 309,742 operations in 2000, representing an average annual growth rate of 1.45 percent during the time period. In the following decade, statewide airline aircraft operations declined from over 278,000 in 2001 to over 211,000 in 2011, representing an average annual growth rate of -2.72 percent, as shown in **Table 5-8**.

**Table 5-7: Comparison of Historic & Projected Airline Operations by Airport**

Historic	AEX	BTR	LCH	LFT	MLU	MSY	SHV
2001	12,733	25,262	12,938	37,993	12,092	138,930	38,310
2002	11,117	24,921	10,209	34,102	11,026	127,041	35,803
2003	11,036	24,991	9,136	30,893	11,109	125,280	34,048
2004	10,737	22,277	8,491	30,765	11,059	130,229	32,039
2005	10,298	26,979	8,106	31,283	9,559	121,548	30,002
2006	10,018	32,920	16,817	40,829	9,666	75,778	27,637
2007	12,227	30,634	13,646	32,534	11,697	95,458	30,292
2008	11,628	28,790	14,797	38,202	11,191	108,669	29,983
2009	12,262	22,766	21,193	39,447	10,113	98,368	24,405
2010	11,360	23,432	15,255	30,513	8,932	98,733	24,231
2011	10,204	24,682	8,993	32,965	8,310	103,139	22,829
<b>AAGR 2001-2011</b>	<b>-2.19%</b>	<b>-0.23%</b>	<b>-3.57%</b>	<b>-1.41%</b>	<b>-3.68%</b>	<b>-2.93%</b>	<b>-5.05%</b>
Projected	AEX	BTR	LCH	LFT	MLU	MSY	SHV
2011	10,204	24,682	8,993	32,965	8,310	103,139	22,829
2018	11,253	27,397	9,474	35,486	8,892	109,120	25,252
2023	12,085	29,508	9,834	37,405	9,341	113,733	27,215
2033	13,971	34,247	10,593	41,566	10,330	123,741	31,822
2043	15,720	38,579	11,242	45,230	11,209	132,538	36,263
<b>AAGR 2011-2043</b>	<b>1.45%</b>	<b>1.50%</b>	<b>0.75%</b>	<b>1.06%</b>	<b>1.00%</b>	<b>0.84%</b>	<b>1.55%</b>

Source: FAA Terminal Area Forecast, CDM Smith

**Table 5-8: Historic & Projected Airline Operations Statewide Totals by Year**

Historic	Operations	% Growth
2001	278,258	
2002	254,219	-8.64%
2003	246,493	-3.04%
2004	245,597	-0.36%
2005	237,775	-3.18%
2006	213,665	-10.14%
2007	226,488	6.00%
2008	243,260	7.41%
2009	228,554	-6.05%
2010	212,456	-7.04%
2011	211,122	-0.63%
<b>AAGR 2001-2011</b>		<b>-2.72%</b>
Projected	Operations	% Growth
2011	211,122	
2018	226,874	7.46%
2023	239,121	5.40%
2033	266,270	11.35%
2043	290,782	9.21%
<b>AAGR 2011-2043</b>		<b>1.07%</b>

Source: FAA Terminal Area Forecast, CDM Smith

## General Aviation Activity Projections

General aviation activity represents all facets of civil aviation, except scheduled activity by certificated air carriers. Projections of based aircraft and general aviation operations were prepared for the system airports in the State of Louisiana. These terms are defined as follows:

- **Based aircraft** - The total number of general aviation aircraft that are stored in either hangars or tie downs at an airport.
- **Operations** - An operation is defined as a landing or a takeoff; both a landing and a takeoff, such as a touch-and-go, accounts for two operations.

It is important to note that general aviation activity occurs at all of the airports in Louisiana's system. Therefore, projections of these two activity indicators were prepared for all 68 Louisiana system airports.

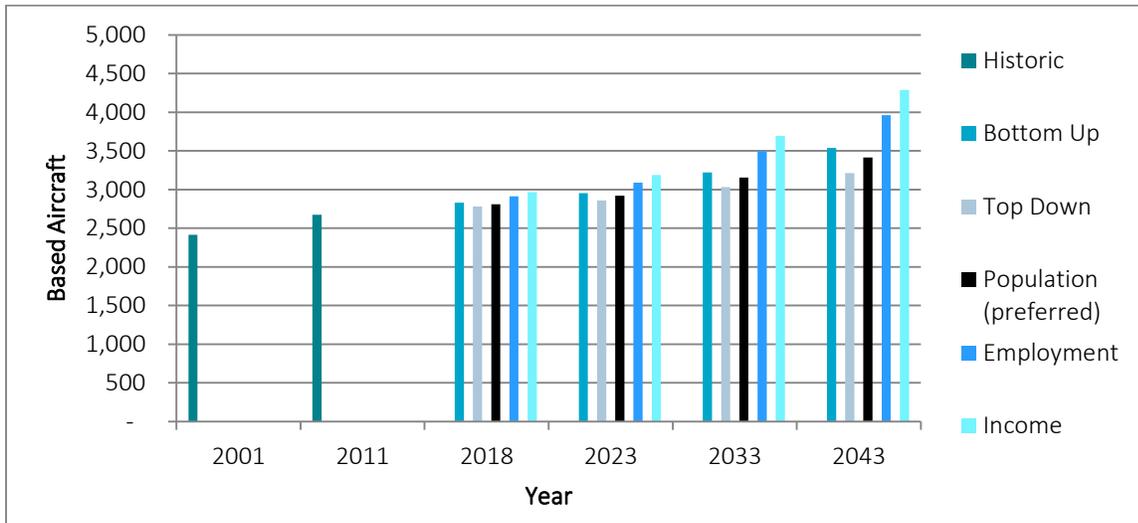
### Based Aircraft Projections

Projections of general aviation based aircraft are used in developing general aviation operations projections in later analyses. **Table A-45** presents the historical based aircraft data for each airport for the years 2001 and 2011. Data for interim years were not available for all airports. As shown in this table, total general aviation aircraft based at system airports grew at an average annual rate of 1.03 percent between 2001 and 2011 from 2,416 to 2,676 based aircraft.

Three projection methodologies were used to project based aircraft for each system airport, resulting in five based aircraft forecasts:

- The first methodology was a bottom-up approach. This approach used the historical trend experienced at each airport to forecast future based aircraft.
- The second methodology used to project based aircraft was a top-down methodology. This methodology projected based aircraft by applying the projected statewide average annual growth rate (as found in the FAA TAF) to each airport's current based aircraft count through 2043. Each airport's share of statewide-based aircraft remained constant to project based aircraft on an individual airport basis.
- The third methodology was a socioeconomic approach, which used three separate demographic trends to project based aircraft, yielding three forecasts. Using a database published by Woods & Poole Economics, this approach made three separate based aircraft projections for each airport through 2040 by using parish-specific projections of population, employment, and per capita income.

Each of these methodologies, their resultant projections, and the preferred based aircraft projections are discussed in the following sections. **Figure 5-2** shows the historic and projected based aircraft for Louisiana, with each methodology labeled and the preferred forecast (population) indicated.

**Figure 5-2: Historic and Projected Based Aircraft in Louisiana**

### Bottom-Up Methodology

The bottom-up growth rate methodology was the first approach used to project based aircraft for each of the system airports (see Table A-45). Using this methodology, the historic average annual growth rate between 2001 and 2011 at each system airport was first calculated. Because of wide swings in historical growth and decline, airports were categorized into ranges of average annual growth to project future based aircraft. Growth rates were developed for various historical ranges in growth based on the FAA's projection of demand for the general aviation industry. The FAA projected in its *FAA Aerospace Forecasts, Fiscal Years 2012-2032* that the active general aviation aircraft fleet would increase at a national average annual rate of 0.6 percent through 2032.

To project based aircraft for each of the airports in the Louisiana system, variations of the statewide historic average annual growth rate of 1.03 percent were used. Airports that experienced no growth and those that lost aircraft were given a zero percent (0.0) average annual growth rate. For airports that had between 0.1 percent and 1.0 percent growth during the 2001 to 2011 time frame, 0.45 percent was applied to the historic statewide growth rate (1.03 percent) to result in an adjusted annual growth rate of 0.46 percent. For those airports that experienced between 1.1 percent and 2.0 percent actual average annual growth historically, the FAA's average annual rate of 0.9 percent was applied, which resulted in an adjusted annual growth rate of 0.92 percent. For those airports that experienced between 2.1 percent and 5.0 percent actual growth during this time frame, a growth rate of 1.45 percent was applied, this resulted in an adjusted annual growth rate of 1.49 percent. Airports that had growth greater than 5.1 percent were assigned a growth rate of 2.0 percent, which resulted in an adjusted annual growth rate of 2.05 percent. This type of projection is referred to as a bottom-up methodology as it looks at activity from the airport-specific level and then totals the individual projections to develop a statewide total.

As shown, using the bottom-up methodology, statewide based aircraft are projected to increase from 2,676 in 2011 to 2,953 in 2023 and 3,537 in 2043, a statewide average annual growth rate of 0.87 percent over the 32-year period. This rate is higher than the FAA's projected average annual rate of 0.6 percent, but lower than the State's historical average annual growth rate of 1.03 percent during the 2001 to 2011 time period.

### Top-Down Methodology

**Table A-46** presents projected statewide based general aviation aircraft for Louisiana using the top-down methodology. As shown, the number of based aircraft in the State increased between 2001 and 2011 by 260 aircraft. The average annual growth rate for statewide based aircraft during this period was 1.03 percent. The FAA TAF projects that statewide based aircraft are projected to increase from 2,676 in 2011 to 2,861 in 2023 and 3,214 in 2043, an average annual growth rate of 0.57 percent. By applying each airport's share of statewide based aircraft in 2011 to the projection of statewide based aircraft over the planning period, individual airport projections were produced.

### Socioeconomic Methodology

As previously discussed, the socioeconomic methodology uses three separate demographic trends to project based aircraft. Using Woods & Poole Economics population data forecasts, average annual growth rates for population, employment, and per capita income between 2011 and 2040 were calculated for each airport's corresponding parish (county). These growth rates were then applied to each airport's 2011 based aircraft count and extended through the end of the planning period. **Tables A-47, A-48, and A-49** present each system airport's based aircraft projection by each of the demographic trends. As shown in **Table 5-9**, the population, employment, and per capita income demographic trend projections produce average annual growth rates of 0.76 percent, 1.23 percent, and 1.48 percent, respectfully.

**Table 5-9: General Aviation Based Aircraft Projection Comparison of Socioeconomic Methodologies**

Demographic Trend	AAGR 2011-2040	2011	2018	2023	2033	2043
Population	0.76%	2,676	2,811	2,921	3,154	3,413
Employment	1.23%	2,676	2,912	3,088	3,498	3,961
Per Capita Income	1.48%	2,676	2,967	3,190	3,695	4,288

Source: FAA Terminal Area Forecast, Woods & Poole Economics, CDM Smith

### Preferred Based Aircraft Methodology

The results from the five based aircraft projection methodologies developed in the LASP are shown in **Table 5-10** in descending order of growth. In 2011, the Louisiana airports examined as part of this analysis accommodated 2,676 based aircraft. The bottom-up methodology produced a 2043 statewide projection of 3,537 based aircraft, an average annual growth rate of 0.87 percent. The top-down methodology produced a 2043 statewide projection of 3,214 based aircraft, an average annual growth rate of 0.57 percent. The Socioeconomic methodology produced average annual growth rates of 0.76 percent, 1.23 percent, and 1.48 percent. After comparing the results and the average annual growth rates of the five methodologies (see Table 5-10), the population growth rate methodology was chosen as the preferred methodology. The rate is considered slightly higher than historic based aircraft growth rates within Louisiana's system airports, and is rather conservative nature in comparison with the three other more aggressive forecasts.

**Table 5-10: General Aviation Based Aircraft Projections Comparison of Methodologies**

Methodology	AAGR 2011-2040	2011	2018	2023	2033	2043
Socioeconomic - Per Capita Income	1.48%	2,676	2,967	3,190	3,695	4,288
Socioeconomic - Employment	1.23%	2,676	2,912	3,088	3,498	3,961
Bottom-Up	0.87%	2,676	2,380	2,953	3,222	3,537
<b>Socioeconomic - Population</b>	<b>0.76%</b>	<b>2,676</b>	<b>2,811</b>	<b>2,921</b>	<b>3,154</b>	<b>3,413</b>
Top-Down	0.57%	2,676	2,780	2,861	3,033	3,214

Source: FAA Terminal Area Forecast, Woods & Poole Economics, CDM Smith

## General Aviation Operations Projections

The projection of operational demand at an airport is critical to determining the need for airside improvements. Total annual operational demand can consist of several types of activity including air carrier, military, and general aviation. For those airports with scheduled commercial air service, air carrier (including major/national and regional/commuter operations) activity was projected separately in a previous section. For those airports with significant annual military operations, the military operations were subtracted from the total operational estimate, as were commercial operations, to arrive at a total annual general aviation activity level for each system airport.

Only those airports that have air traffic control towers have data based on records of actual activity. Airports without a tower have provided estimates of operational activity. Therefore, annual operational estimates were developed through airport, FAA, and DOTD data.

### FAA GA Hours Flown Methodology

This methodology uses the FAA's projected average annual growth rate of national general aviation hours flown (as found in *FAA Aerospace Forecasts, FY 2012-2032*) and applies that growth rate to each airport's 2011 general aviation operations. In this projection methodology, future general aviation operations are projected based on the assumption that general aviation operations are directly correlated to the number of hours flown and that if the average hours flown per operation remains constant, total operations must increase if total hours flown are projected to increase. The FAA's projected average annual growth rate of national general aviation operations from 2011 to 2032 is 1.7 percent. When this growth rate is applied to each of Louisiana's system airports, total statewide general aviation operations increase from 1,794,158 in 2011 to 3,077,023 in 2043. **Table A-50** identifies the projected general aviation operations for each of Louisiana's system airports using this methodology.

## Summary

On a statewide basis, total annual commercial enplanements at study airports are projected to increase from 5,416,154 to 6,247,170 by 2023 and 8,435,779 by 2043. Airline operations are projected to increase from 211,122 in 2011 to 239,121 in 2023 and 290,782 in 2043. The majority of the State's increase in commercial activity is projected to occur at Louis Armstrong New Orleans International Airport. Based general aviation aircraft for all system airports are projected to grow from a 2011 level of 2,676 to 2,921 in 2023 and 3,413 in 2043. Total annual general aviation operations for all system airports are projected to grow from their 2011 level of 1,794,158 to 2,196,407 in 2023 and 3,077,023 in 2043. **Table 5-11** presents a summary of the statewide totals for each aviation demand projection type, including commercial airline enplanements, commercial airline operations, based aircraft, and general aviation operations.

**Table 5-11: Forecast Summary**

Projection Type	2011	2018	2023	2033	2043
Commercial Service Enplanements	5,416,154	5,807,159	6,247,170	7,256,622	8,435,779
Commercial Airline Operations	211,122	226,874	239,121	266,270	290,782
Based Aircraft (Population)	2,676	2,811	2,921	3,154	3,413
General Aviation Operations	1,794,158	2,018,865	2,196,407	2,599,692	3,077,023

Source: CDM Smith

The projections provided in this chapter are considered planning estimates and are based on information gathered from all available sources. These projections were generated to a system planning, rather than a master planning, level of detail. Comprehensive airport development plans will continue to provide guidance for actual airport development; individual airport plans are developed from an examination of each airport's local conditions and operating environment.

## Section 6. System Adequacy and Options

The study determined what facility and service needs are recommended for each airport role. These facility and service objectives serve as Benchmarks for evaluating the overall system performance as well as recommended airport improvements for those airports that do not meet the recommended Benchmark. The adequacy of individual airports to fulfill the roles they've been assigned was evaluated based on a set of facility and service Benchmarks for respective Performance Measures. These facility and service Benchmarks were developed for each airport role. By comparing each airport's current facilities and services with the recommended facilities and services for its assigned role, the adequacy of individual airports can be determined.

Following the demand evaluation, functional roles were developed for the airports, and facility and service Performance Measures were established. Airports were classified as being in one of five functional classifications, being:

- Commercial Service
- General Aviation – Level 1
- General Aviation – Level 2
- General Aviation – Level 3
- General Aviation – Level 4

The map in **Figure 6-1** shows Louisiana's airports and respective levels.

This chapter is organized to review system Performance Measures and the Benchmarks associated with each as follows:

### Performance Measures – ACCESS

- Airports serving population centers
- All-weather coverage approach systems
- Airports supporting air ambulances

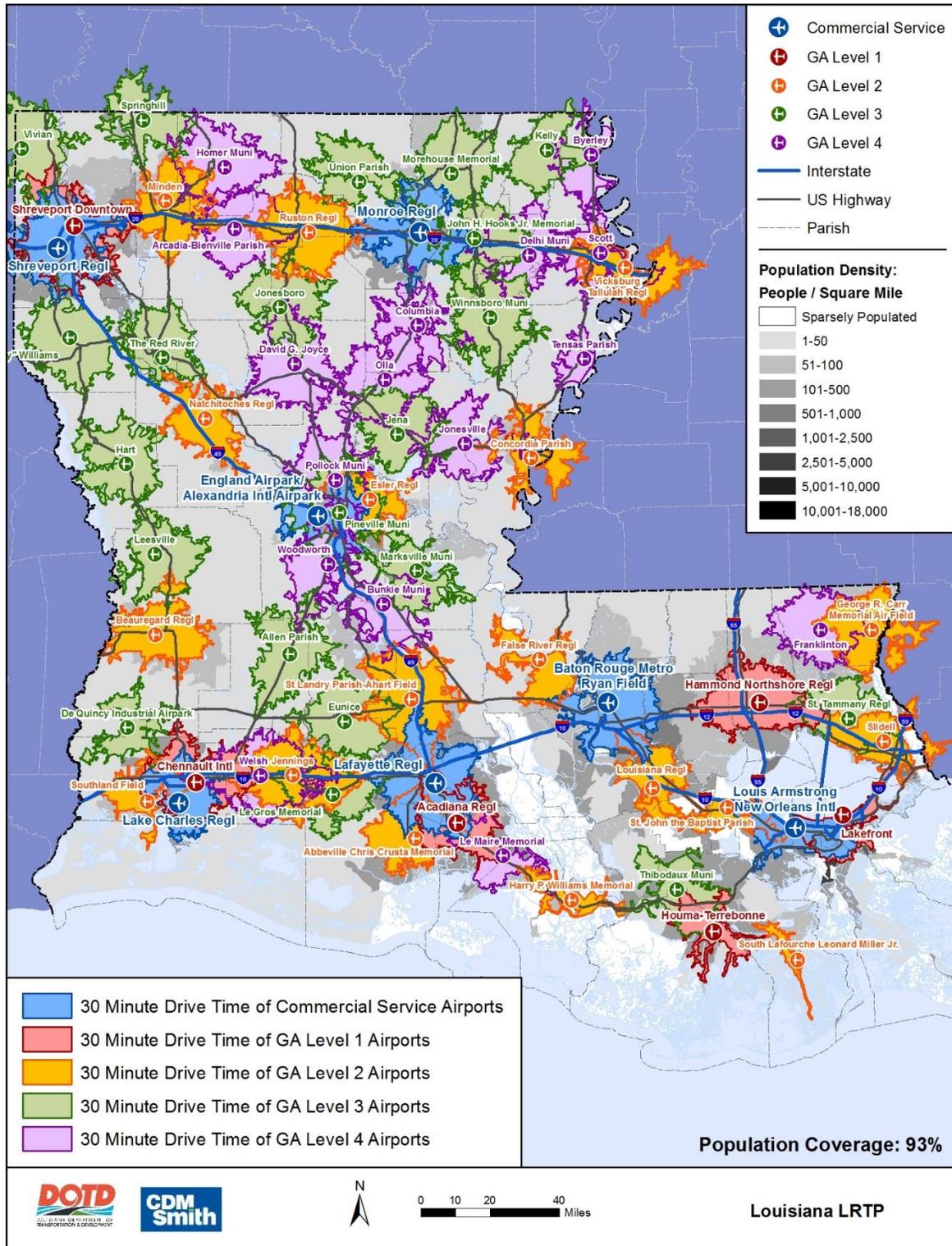
### Performance Measures – ECONOMIC

- Airports serving economic/trade centers
- Airports supporting aerial agricultural aviation
- Oil Industry use of airports

### Performance Measures – PHYSICAL

- Airports meeting minimum facility and service standards
- Airports meeting airfield capacity standards

Figure 6-1: Louisiana Population Density and System Airport Locations



The following sections of this chapter discuss the system Performance Measures with their associated Benchmarks. The Louisiana aviation system’s ability to comply with these Benchmarks is also noted.

## Access

Three Performance Measures were identified for the access goal category. An adequate airport system provides reasonable access to its users. As stated in Section 2, the Objectives for the State are to:

- Provide adequate access by air to the population and economic activity centers of the State
- Provide adequate access by air to the State’s growing petroleum, agriculture, tourism, aviation, and aeronautical industries
- Provide airports capable of supporting economic activity generated by urban development

In general terms, access refers to the ability to obtain entry from the ground and from the air. Access is sometimes referred to as “coverage” or market area, especially as it relates to the ability of people to access airports on the ground relative to driving time or distance incurred. Access to airports is also vital to many emergency situations, such as medical transport, where timing and access are of the essence. Access in aviation terms defines the distribution of facilities with various aircraft instrument approach systems to aid pilots flying in varying weather conditions. Each of the three access Performance Measures is discussed below.

### Airports Serving Densely Populated Areas

It is reasonable to assume that airports should be located in favorable proximity to existing and potential users. To determine the service area coverage of airports, analyses of drive times from each of the existing airports were performed using assumptions for driving speeds based on various roads and the distances that can be driven from the airports in a given time period were calculated. The calculations are depicted graphically as drive times on a map for each airport.

For the purpose of this analysis, 30-minute drive times were used for all airports. FAA guidelines indicate that, as a general rule, general aviation airports should be located within 30 minutes of their users. In fact, the Federal Aviation Administration’s (FAA) National Plan of Integrated Airport System (NPIAS) uses the 30-minute drive time as an airport market area requirement within the plan. Therefore, 30-minute drive times were used for all general aviation system airports. Airports with scheduled airline service typically have larger service areas because airline passengers are more willing to drive farther to access the national air transportation system via commercial airlines. In addition, integrated express air cargo operators, such as FedEx Express, typically operate their courier routes within a 60-minute drive time of an airport where they operate aircraft. In the LASP, a specific 60-minute delineation of commercial service airports was examined.

**Figure 6-2** depicts the population density in Louisiana based on US Census tracts. This figure depicts how airports in general are located near the more populated areas of the state. For example, airports in the Level 1 category tend to be located near the populated urban areas while Level 4 airports are typically located in the less densely populated areas.

The next step was to determine the level of aviation service provided to the more densely populated areas of the State. These analyses examined the coverage of the airports by category to determine how the existing classification system served the State as a whole, in terms of population served within the established 30-minute drive times from the various airports. The first of these, **Figure 6-3** presents the population density along with the composite 60-minute drive times for system airports in Louisiana

identified as Commercial Service. The 60-minute drive time analysis for Commercial Service Airports indicates that about 3,717,400 persons or 82 percent of the State's total population resides within a 60-minute drive time of the airports classified as Commercial Service Airports.

Figure 6-2: Louisiana Population Density and System Airport Locations

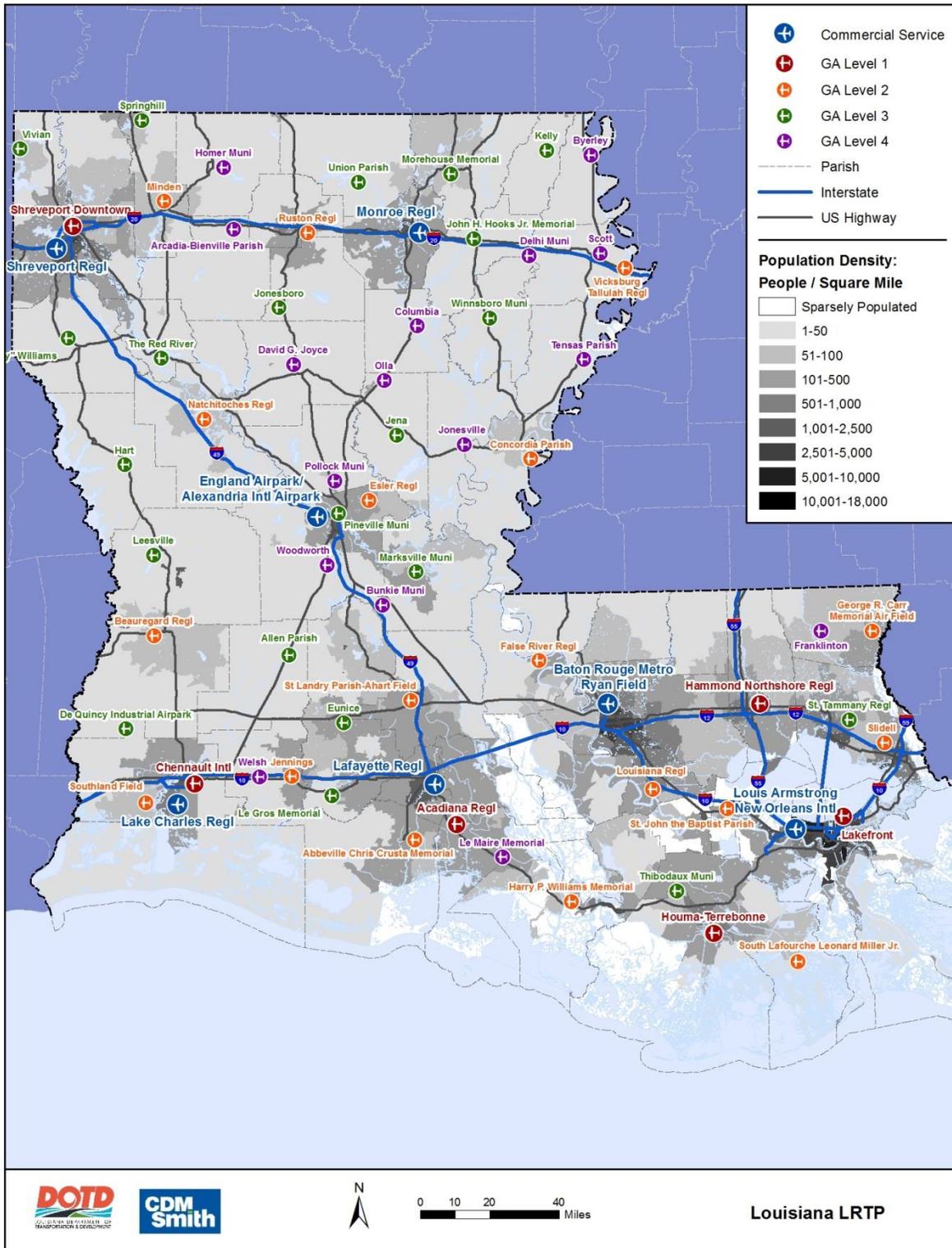
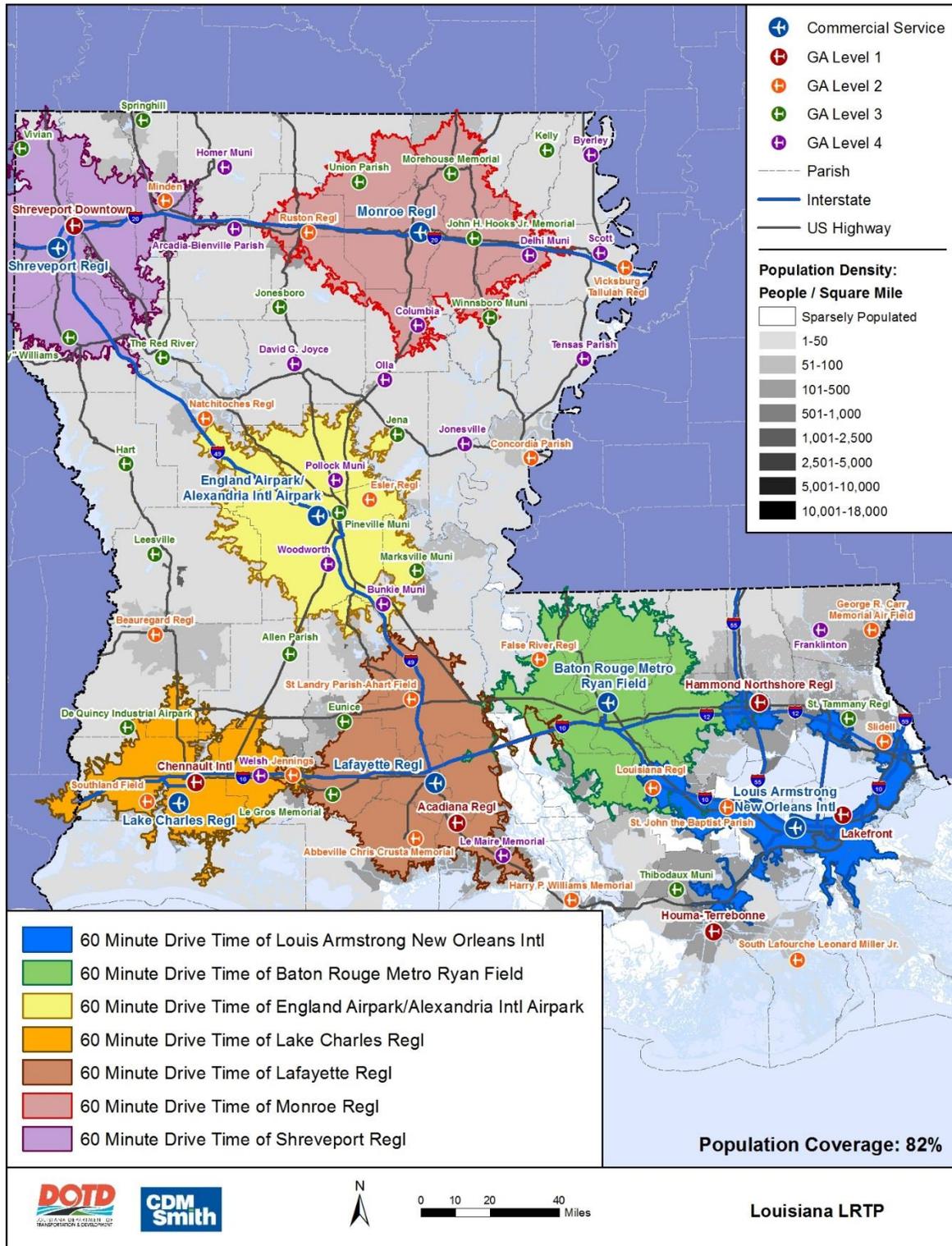


Figure 6-3: Louisiana Commercial Airports with 60-Minute Drive Times



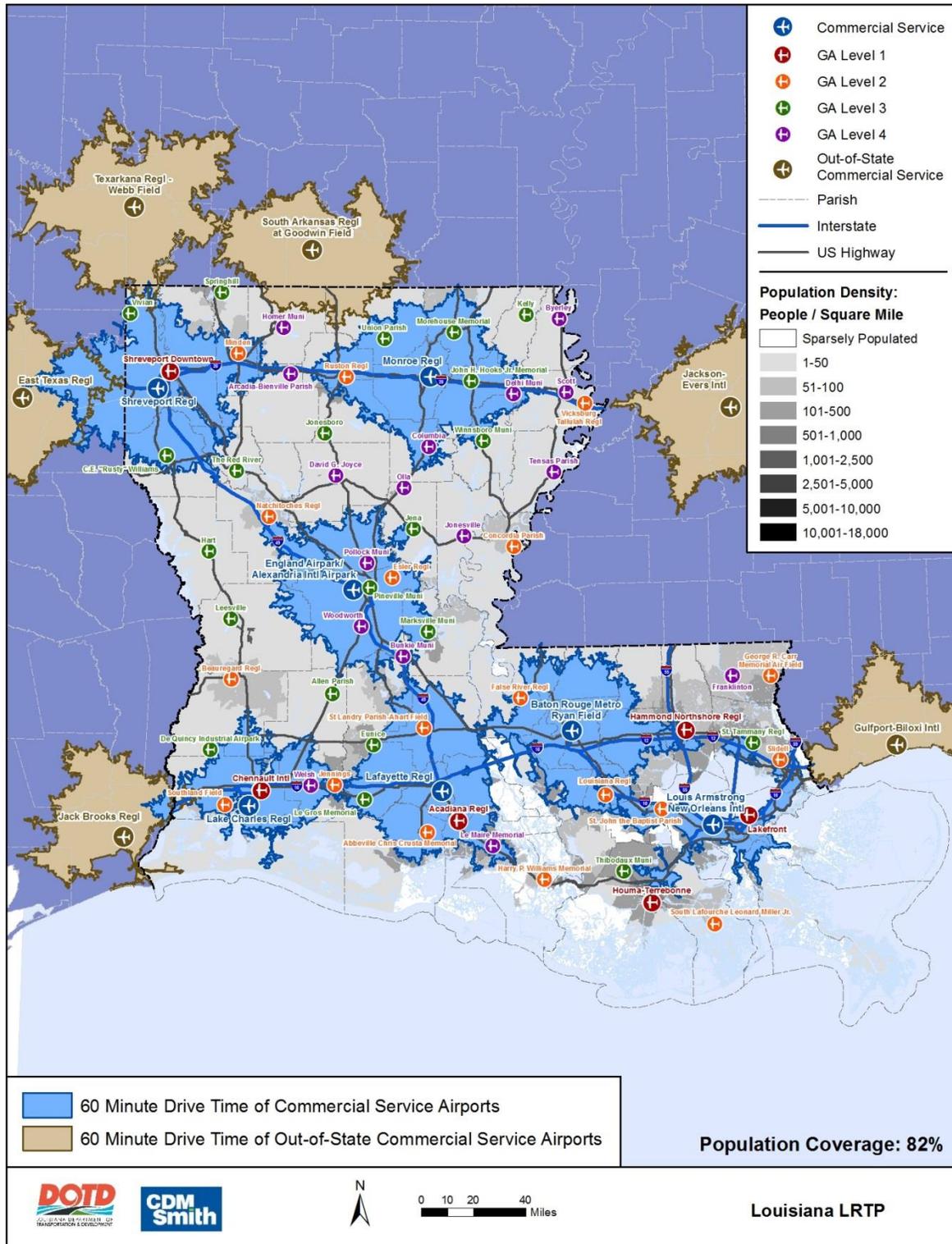
**Figure 6-4** presents the population density along with the composite 60-minute drive times for system Commercial Service airports in Louisiana as well as commercial service airports located out of the State but within proximity. The 60-minute drive time analysis for all commercial service airports indicates that about 3,731,000 persons or 82.3 percent of the State’s total population resides within a 60-minute drive time of in-state and out-of-state commercial service airports. Out of state airports then serve an additional 13,600 Louisiana residents due to geographic proximity. Out-of-state commercial service airports in this analysis include:

- East Texas Regional – Longview, Texas
- Jack Brooks Regional – Beaumont, Texas
- Texarkana Regional – Texarkana, Arkansas
- South Arkansas Regional – El Dorado, Arkansas
- Jackson-Evers International – Jackson, Mississippi
- Gulfport-Biloxi International – Gulfport, Mississippi

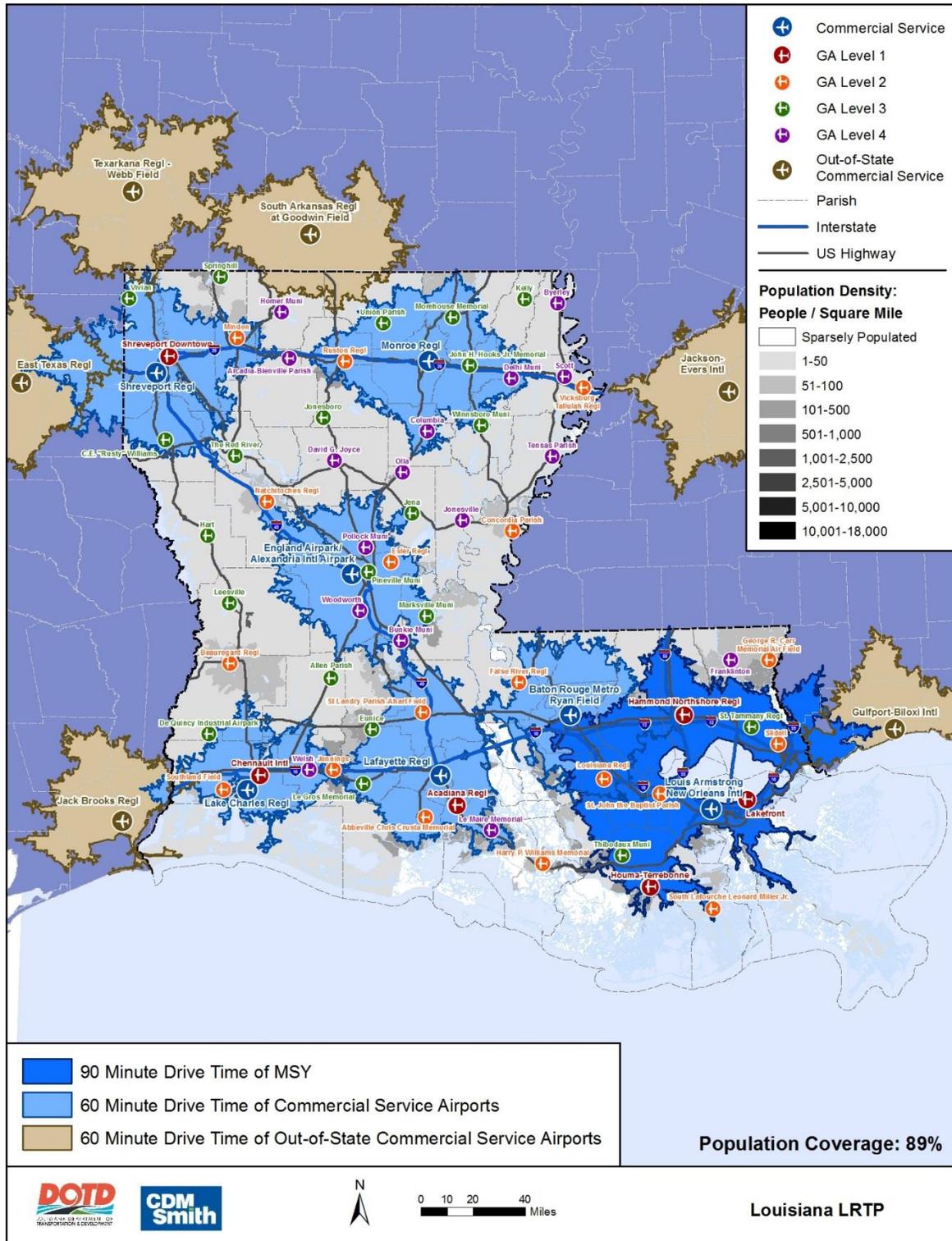
Other variables should also be considered when evaluating the 60-minute drive time areas particularly for the Commercial Service airport classification. Many air travelers are “fare sensitive” and seek out the most economic fares, which often results in these passengers to drive to a commercial airport outside of their local airport’s market area. This travel pattern has been coined as the “Southwest effect.” This is particularly evident in the in southeastern Louisiana. Southwest Airlines is one of 11 carriers serving the Louis Armstrong New Orleans International Airport. Southwest’s fare structure, and other low-cost-carriers (LCC) such as JetBlue, Frontier and Spirit Airlines, tend to have a depressive effect on air fares of many of the other competing carriers operating to identical destinations. As a result, fare sensitive travelers prefer to drive to New Orleans for a flight versus Baton Rouge or Lafayette for example, which are served by multiple carriers, but not a LCC like Southwest. Similarly, many potential passengers in other markets may perceive economic advantage by opting to drive to a hub airport such as those found in Houston or Dallas in lieu of a connecting flight from one of the smaller Commercial Service airports like Lake Charles or Shreveport regional airports. These air service topics were discussed at length in the Air Service Chapter of this report.

Since Louis Armstrong – New Orleans International Airport (MSY) is serviced by five LCC airlines it has a propensity to attract passengers residing up to 90-minutes away. **Figure 6-5** identifies the population coverage for all commercial service airports in Louisiana within a 60-minute drive time as well as a 90-minute drive time. Population analysis based on this increase drive time for New Orleans International indicates 4,034,700 or 89 percent of the state’s residents are serviced by Louisiana’s Commercial Airports. This is an increase in population coverage by 303,700. It is noteworthy to point out that care was taken in the analysis to avoid double counting population in overlapping coverage areas.

Figure 6-4: Louisiana and Out-of-State Commercial Airports with 60-Minute Drive Times



**Figure 6-5: Louisiana and Out-of-State Commercial Airports with 60-Minute Drive Times and 90-Minute Drive Times for Louis Armstrong-New Orleans International**



**Figure 6-6** displays the coverage provided by the airports currently classified as General Aviation - Level 4 (denoted in purple), General Aviation – Level 3, General Aviation – Level 2, General Aviation – Level 1 and Commercial Service. These facilities are clustered, for the most part, in northern Louisiana, along US 167, western Louisiana on the US 171 corridor, and northeast of Alexandria along US 84. There are some areas with overlaps in Level 4 coverage. These areas offer airport coverage to rural areas of the State. Quantitatively, Figure 6-6 indicates that approximately 4,216,035 persons or 93 percent of the State’s total population resides within 30 minutes driving time of the airports identified as General Aviation – Level 4, through General Aviation – Level 1 and Commercial Service. This indicates that nearly all of the State’s population have adequate airport access to general aviation airport services through the existing airport system.

### All-Weather Coverage Approach Systems

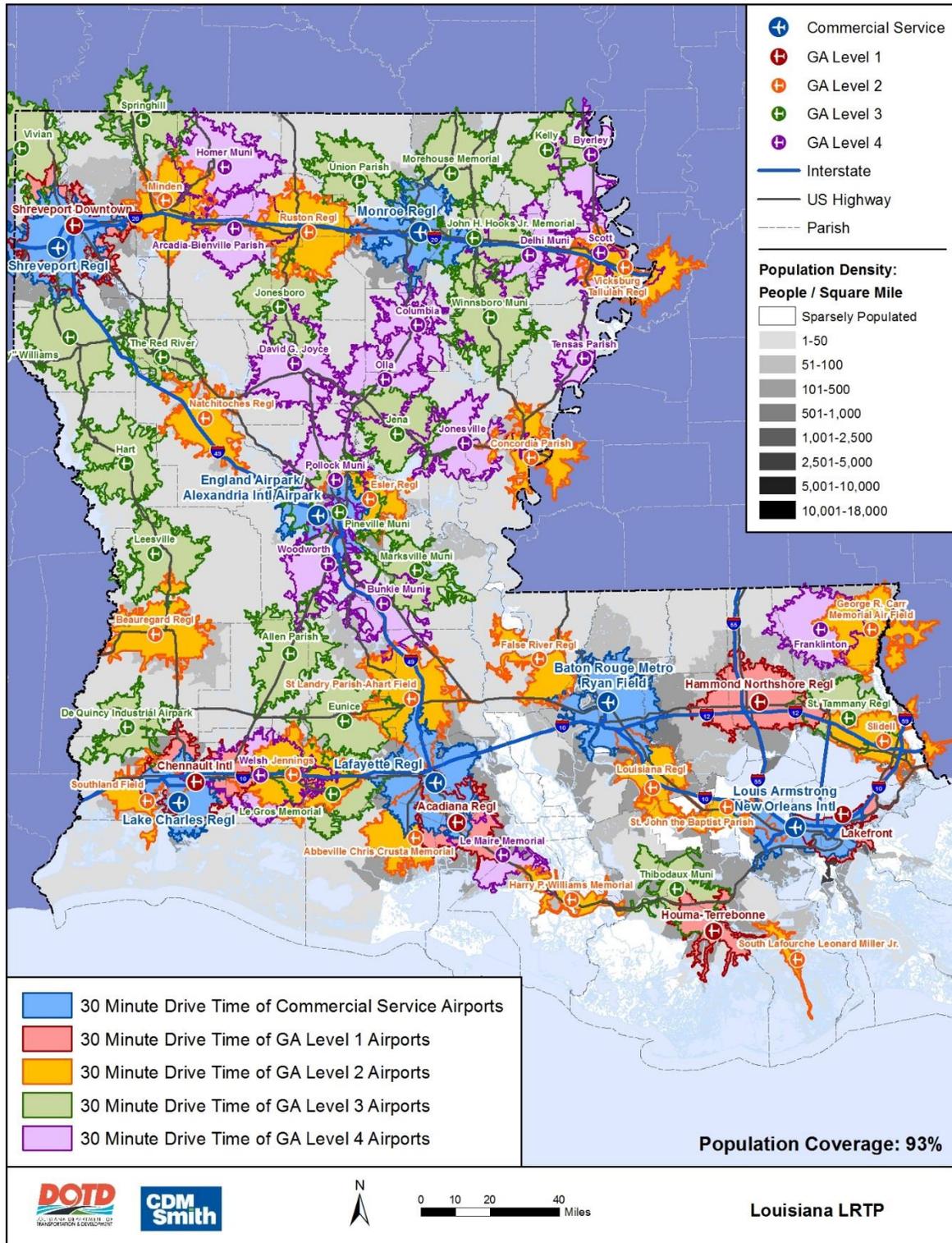
In order for an airport to operate at its optimum capacity, access must be available during all weather conditions. Access to an airport can be impaired or limited at times due to poor weather or the unavailability of facilities that allow landing and takeoff during inclement weather. To evaluate the state’s goal of providing a safe and reliable aviation system, each airport was assessed on whether it provided meteorological facilities that to enhanced the safety and reliability of operations under all weather conditions.

All-weather coverage was examined in terms of the types of instrument approach procedures (IAP) available at the airports throughout the State. IAPs provide procedures for use with electronic navigational signals that properly trained pilots can follow to aid in landing their aircraft during periods of poor visibility. **Figure 6-7** identifies airports with on-site weather reporting equipment, including automated weather observing systems (AWOS). AWOS reports weather conditions, including visibility and cloud ceiling, on a regular basis. When analyzing these airports in aggregate, approximately 3,536,000 persons or 78 percent of the State’s total population resides within 30 minutes driving time of the airports equipped with weather reporting equipment.

Instrument and GPS aircraft approach systems provide electronic runway alignment and approach path information to aircraft during their approach and landing procedures at an airport. These systems allow aircraft pilots to locate an airport and land on a specific runway during periods of poor visibility and/or inclement weather. **Figure 6-8** graphically depicts system airports in Louisiana with instrument approaches. When analyzing these airports in aggregate approximately 3,989,400 persons or 88 percent of the State’s total population resides within 30 minutes driving time of the airports equipped with aircraft guidance approach systems.

Operators of some of the most demanding general aviation aircraft typically prefer to operate at airports with the more stringent instrument approaches. The reliability that these systems provide by allowing operators to land and depart airports during periods of inclement weather is also important to business aircraft because it minimizes the periods of time that airports are closed due to poor visibility; therefore, it reduces delays related to airport closures, rerouting of aircraft, and ground travel times associated with not being able to access the nearest airport to the final destination. Air ambulance operators and the patients they transport also benefit from airports with instrument approaches.

Figure 6-6: Louisiana Level 4, Level 3, Level 2, Level 1, and Commercial Service Airports with 30-Minute Drive Times



**Figure 6-7: 30-Minute Drive Times for Louisiana Level 4, Level 3, Level 2, Level 1, and Commercial Service Airports with On Site Weather Reporting Equipment**

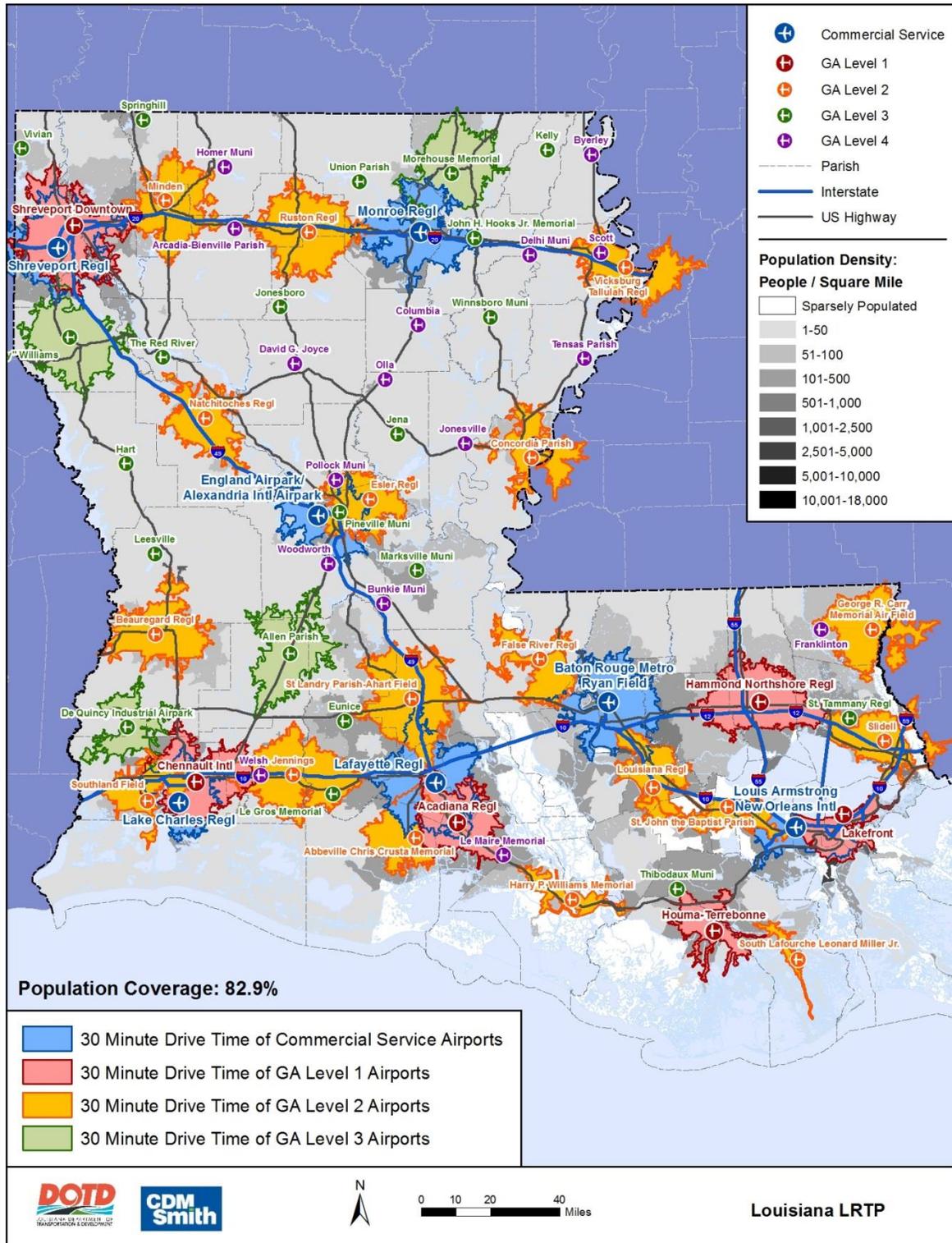
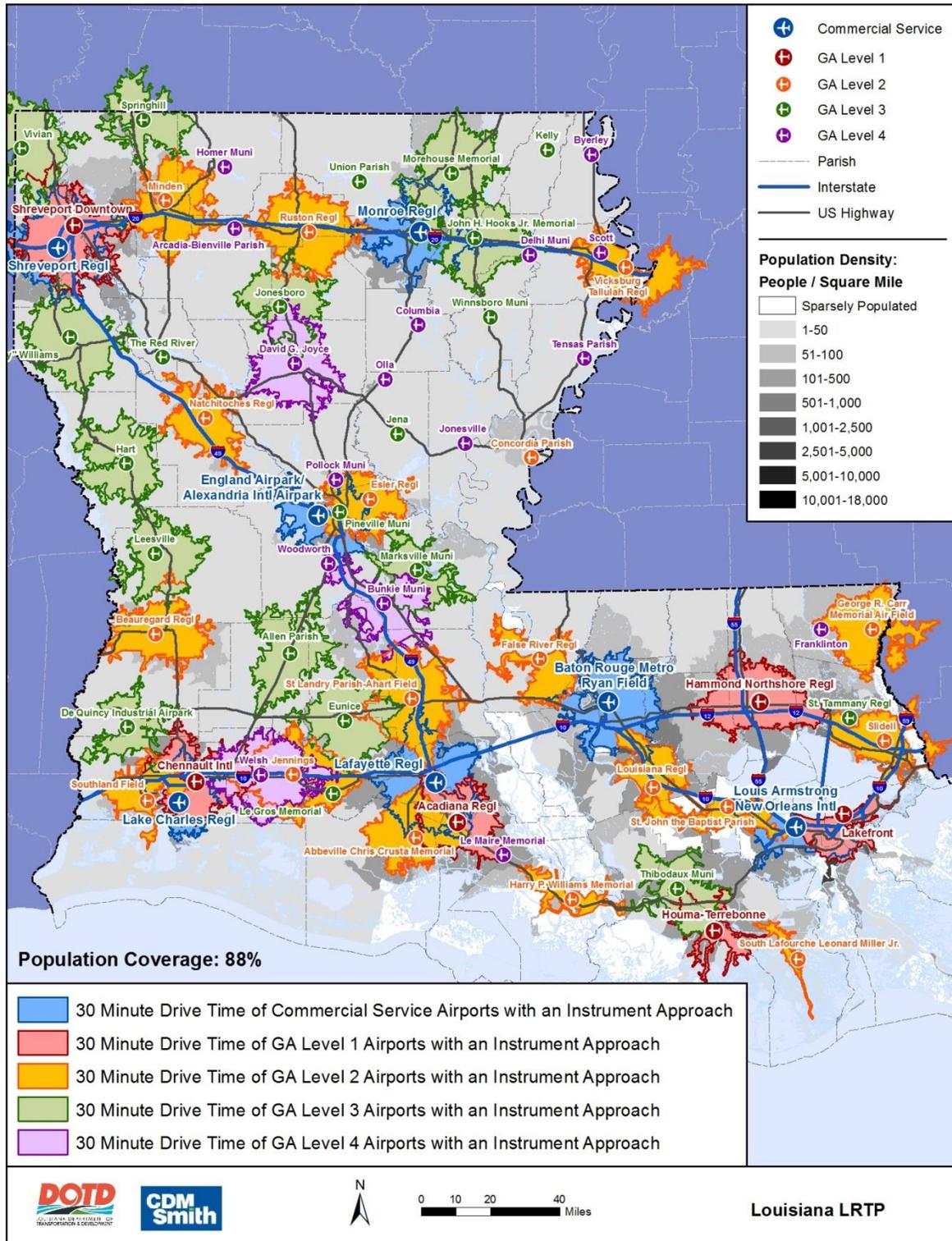


Figure 6-8: 30-Minute Drive Times for Louisiana Level 4, Level 3, Level 2, Level 1, and Commercial Service Airports with Instrument Approaches



**Figure 6-9** depicts 30-minute drive times for the airports that have instrument approaches with less than  $\frac{3}{4}$  mile of visibility. When analyzing these airports in aggregate approximately 2,901,400 persons or 64 percent of the State’s total population resides within 30 minutes driving time of the airports equipped with aircraft guidance approach systems. All airports within the Commercial Service category have approaches with  $\frac{3}{4}$  mile or less visibility minimums while three General Aviation – Level 1 airports meet the same standard. Two Level 2 airports meet the  $\frac{3}{4}$  mile visibility minimums but there are no Level 3 and Level 4 airports meeting this standard.

### Airports Accommodating Air Ambulance Flights

Air ambulance aircraft are comprised of rotor wing (helicopters) as well as fixed-wing aircraft. Air medical services, performing trauma scene and inter-facility transports, are an important element in the trauma system response in Louisiana. In addition, air medical services play an increasingly important role in the response to natural and human induced disasters. **Figure 6-10** graphically depicts the location of airports, with their 30-minute drive times, with based air ambulance aircraft or reporting medium or high air ambulance operations (including patient transfer, medical shipments, and emergency medevac) on their airport inventory survey.

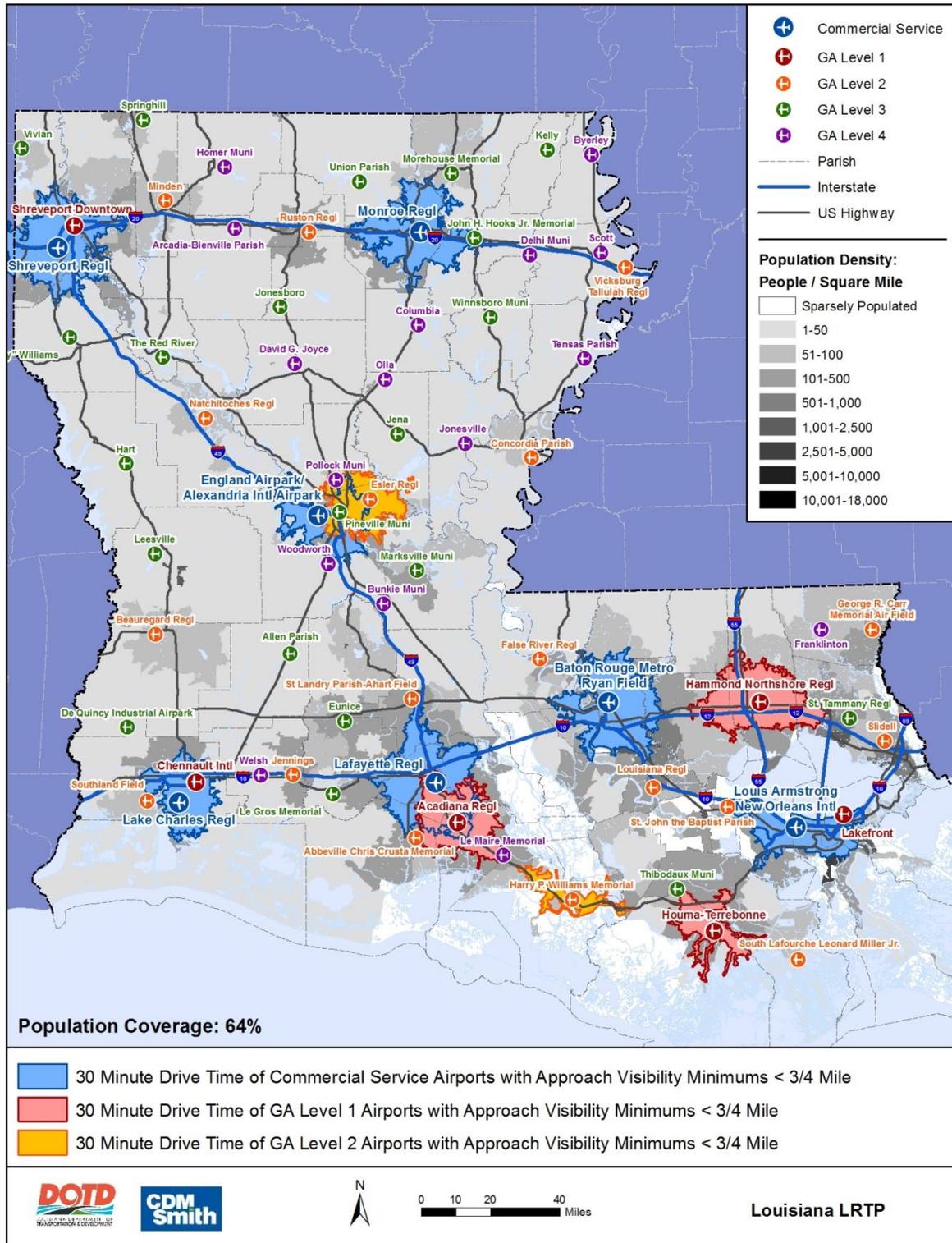
Louisiana also supports air ambulance operations through a network of aeromedical marshaling points (AMP). In the event that hospitals request assistance for evacuation and state and/or federal assets are required, the evacuating hospital patients will first be transported from the medical institution to an AMP and then from the AMP to a National Disaster Medical System destination hospital. There are five AMPs located around Louisiana listed in **Table 6-1**.

**Table 6-1: Louisiana’s Five Public Health Regions that Contain Coastal Parishes**

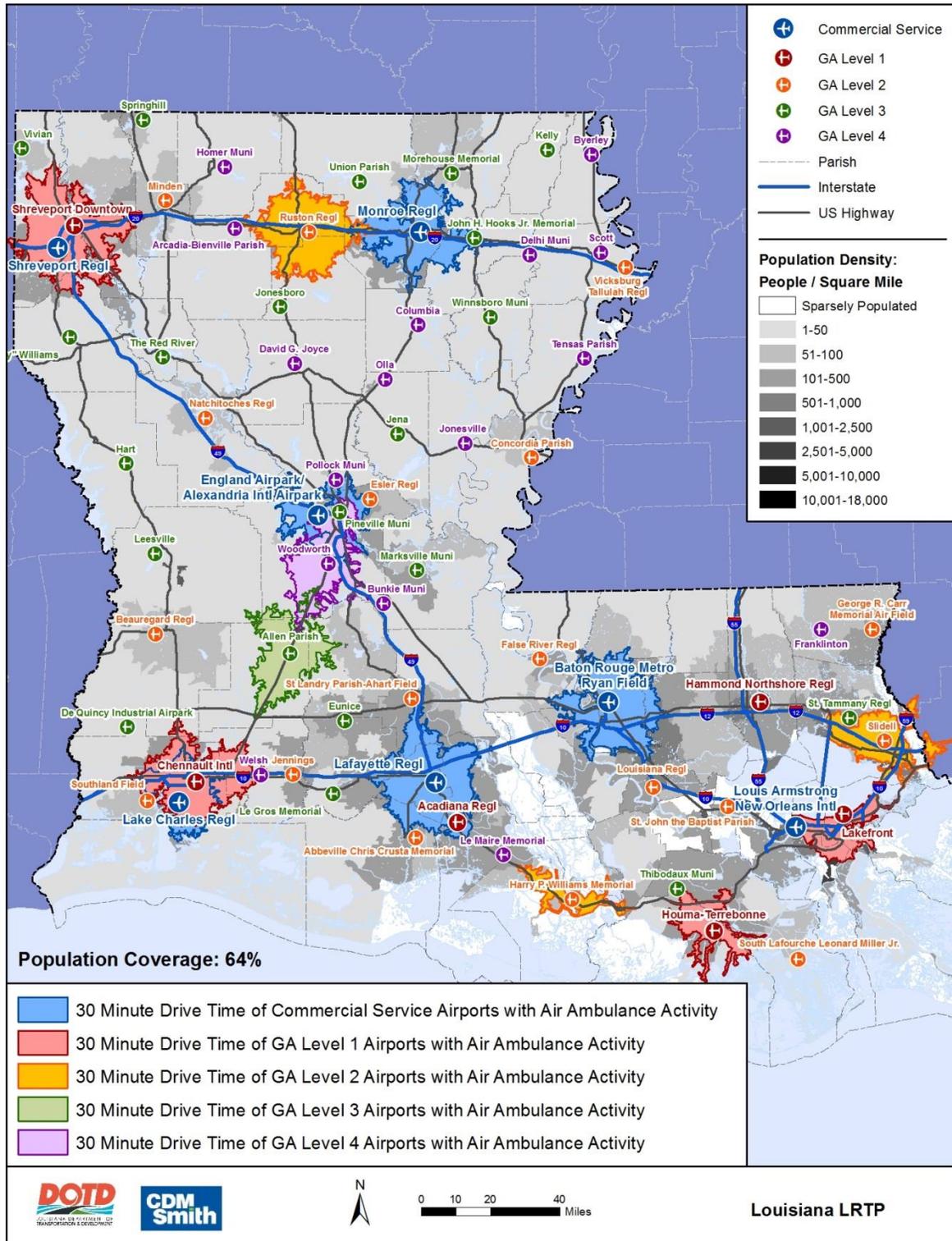
Region Area	Region Number	Aeromedical Marshalling Point Location
New Orleans	1	Belle Chase Naval Air Station
Houma	3	Houma-Terrebonne Airport
Lafayette	4	Acadiana Regional Airport
Lake Charles	5	Chennault International Airport
New Orleans	1	Lakefront Airport

Source: LADOTD

Figure 6-9: 30-Minute Drive Times for Louisiana Level 2, Level 1, and Commercial Service Airports with Instrument Approaches  $\frac{3}{4}$  Mile or Less Visibility



**Figure 6-10: 30-Minute Drive Times for Louisiana Level 4, Level 3, Level 2, Level 1, and Commercial Service Airports that Reported Air Ambulance Activity**



## Comparison of Louisiana’s Airport System to Other State Airport Systems

While no two statewide system plans compare exactly, a review of several recent statewide system plans provides an overview of national trends and compares similarities and differences that aid in the analysis of the Louisiana Aviation System Plan. For the purpose of this study, the most recent statewide system plans chosen for comparison are those from Ohio, Montana, Kansas, Arkansas, New Mexico, and Oklahoma. As seen in **Table 6-2**, factors for comparison include the number of airports in the system, percentage of population coverage statewide, and the number of system airports per capita.

**Table 6-2: Comparison of Statewide System Plans**

State	Airports in the State System	NPIAS Airports in the State	Percentage of Population Coverage	System Airports per 100,000 Residents	NPIAS Airports per 100,000 Residents
Louisiana	68	55	93%	1.5	1.2
Ohio	104	97	97%	0.9	0.8
Montana	121	70	80%	12.2	7.1
Kansas	142	79	98%	5.0	2.8
Arkansas	91	77	82%	3.1	2.6
New Mexico	62	52	66%	3.0	2.5
Oklahoma	114	101	98%	3.0	2.7

Source: CDM Smith, US Census 2010

The National Plan of Integrated Airport Systems (NPIAS) is a FAA plan that identifies those airport facilities that are considered important to the national airport system. NPIAS contains all commercial service airports, reliever airports, and selected general aviation airports. Based on the evaluation of the seven statewide system plans, Louisiana, Ohio, New Mexico, and Oklahoma all have more than 80 percent of total airports classified under NPIAS. While only half of the total number of airports in Montana and Kansas are NPIAS airports.

Each airport classification was evaluated for the percentage of the State’s population that was covered by a reasonable drive time. Total statewide coverage was determined by evaluating 30-minute drive times for each of the states. Oklahoma has the greatest percentage of population coverage, with roughly 98 percent of the population within 30-minutes commute. New Mexico had the least amount of population coverage at 66 percent.

The number of airports per capita is evaluated by applying the total number of system airports to the state’s total population. Utilizing 2010 US Census population data, Montana has the greatest number of airports per capita, with 12.2 airports per 100,000 residents. Moreover, Ohio had the least number of airports per capita; with less than one airport for every 100,000 residents.

## Economic

Airports play an essential role in helping to meet the economic needs of the State. Airports are used for business and recreational purposes, but the importance of airports to businesses throughout the State is growing. Many of the top national firms use general aviation aircraft in their business activity to transport employees and commodities, and also have customers and suppliers who come to visit via general aviation airports. The importance of commercial airline service is generally recognized, while general aviation airports continue to quietly service some of these transportation needs. In fact, there

are fewer than 500 airports in the U.S. that are served by commercial airlines, compared to more than 4,000 public general aviation airports.

### Airports Serving Economic/Trade Centers

Much of the State's population is distributed across nine Metropolitan Statistical Areas (MSAs) throughout Louisiana, in descending order of population as shown in **Table 6-3**.

**Table 6-3: Louisiana MSA Population Estimates**

Metropolitan Statistical Area	Population Estimate
New Orleans-Metairie	1,227,096
Baton Rouge	815,298
Lafayette	474,415
Shreveport-Bossier City	447,193
Houma-Thibodaux	208,922
Lake Charles	201,195
Monroe	177,782
Alexandria	154,441
Hammond	123,441

Source: US Census July 2012 Estimates, Louisiana.gov

The distribution of population among these areas, however, is disproportional. Nearly one-third of the State's population of 4,533,400 is concentrated in the New Orleans area and according to U.S. Census Bureau County Estimates for 2012 approximately 84.5 percent of Louisiana's population is concentrated in the nine MSAs. **Figure 6-11** illustrates the extent and distribution of all airports in Louisiana in relationship to the nine MSAs. Most of the MSAs have more than one airport. Houma-Thibodaux, lacks a commercial service airport, however demand is likely satisfied by facilities in New Orleans as it is within the 60-minute drive time radius.

### Airports Meeting Agricultural Aviation Needs

Louisiana is among the ten largest producers in the U.S. of cotton, sugar cane, yams, rice and pecan nuts and significant contributor of soybeans, beef cattle, corn, strawberries and truck crops. Many of these commodities are dependent on aerial application for pest control, fertilizing and seeding. According to the Louisiana Agricultural Center, "Agriculture in Louisiana is a big business and...it continues to be a major contributor to the state's economy. Many areas of the state are highly dependent on agriculture, forestry, fisheries and wildlife for their livelihood. The heart of agronomic agriculture is found in northeastern and southwestern Louisiana." Forestry production is also substantial in western and central Louisiana's "hill parishes." Agronomic agriculture and forestry generate demand for aviation services such as agricultural aerial spraying and firefighting and prevention.

**Figure 6-12** represents airports with agricultural aerial spraying activity, showing both the level of aerial application activity and where aerial applicators are based. In addition, a 10-mile radius was included around each airport with agricultural spraying activity to represent the maximum range agricultural spray aircraft can economically operate. It should be noted that the radius of operations is not all-inclusive to public use airports.

Figure 6-11: 30-Minute Drive Times for Louisiana Level 2, Level 1, and Commercial Service Airports and Proximity to Louisiana Metropolitan Statistical Areas

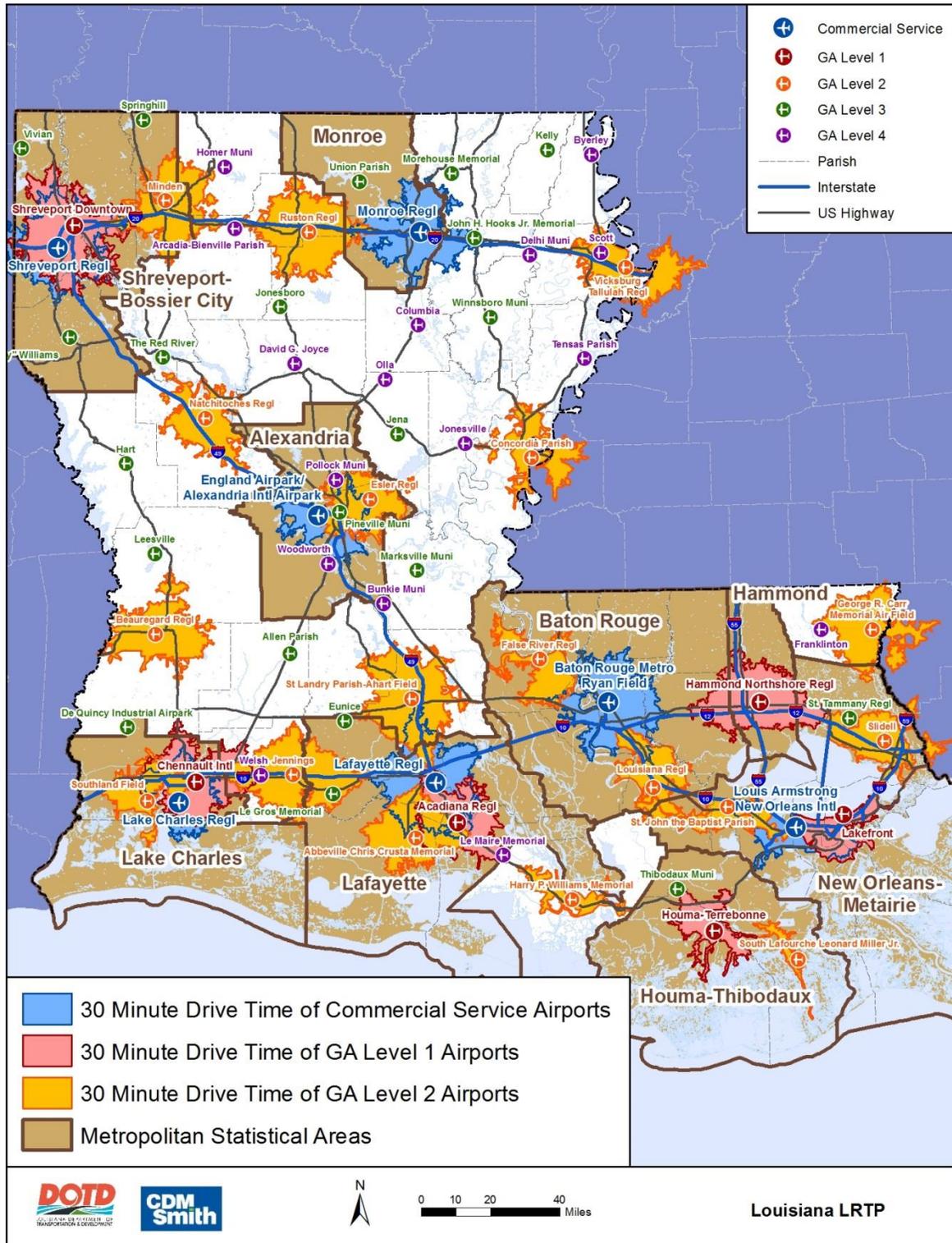
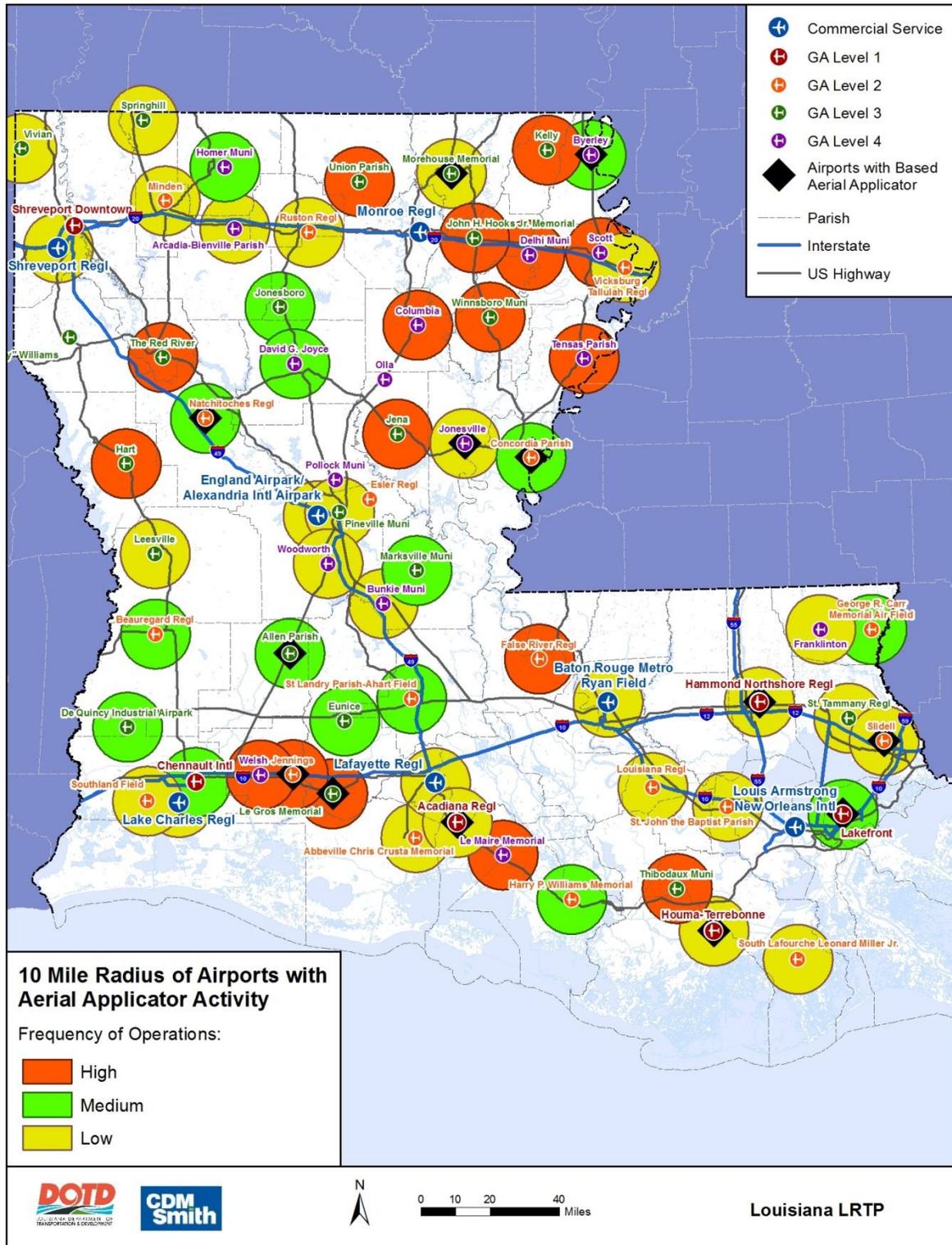


Figure 6-12: 10-Mile Radius for Louisiana System Airports with Aerial Application Activity



While agricultural aviation is needed to ensure the success of numerous Louisiana agricultural crops, the actual facility needs for aerial applicators are minimal in contrast to other industry requirements. Aerial applicators can operate with basic provisions, such as turf strip runways or smaller General Aviation – Limited airports, but need to be based near agricultural crops targeted for application as depicted by the 10-mile radius around airports that reported agricultural spraying activity. During periods of heavy rainfall in the State, many agricultural aerial operators relocate their operations from privately owned turf airstrips to publicly owned airports with paved runways. Although these operations are generally welcome at these airports, it does create increased “wear and tear” on the facilities and increase demand for aircraft and support.

The need for separation of aerial application operations by creating dedicated agricultural loading aprons from normal general aviation aircraft operations is critical to asphalt apron pavement preservation in Louisiana. Construction of agricultural loading aprons ensures the farmer and aerial application operator needs can be address by general aviation airports without damaging critical airport aprons. The ultimate solution is construction of all airport aprons in concrete. However, a mixture of both asphalt aprons and concrete agricultural loading areas best serves the public need.

## Helicopter / Oil Revenues

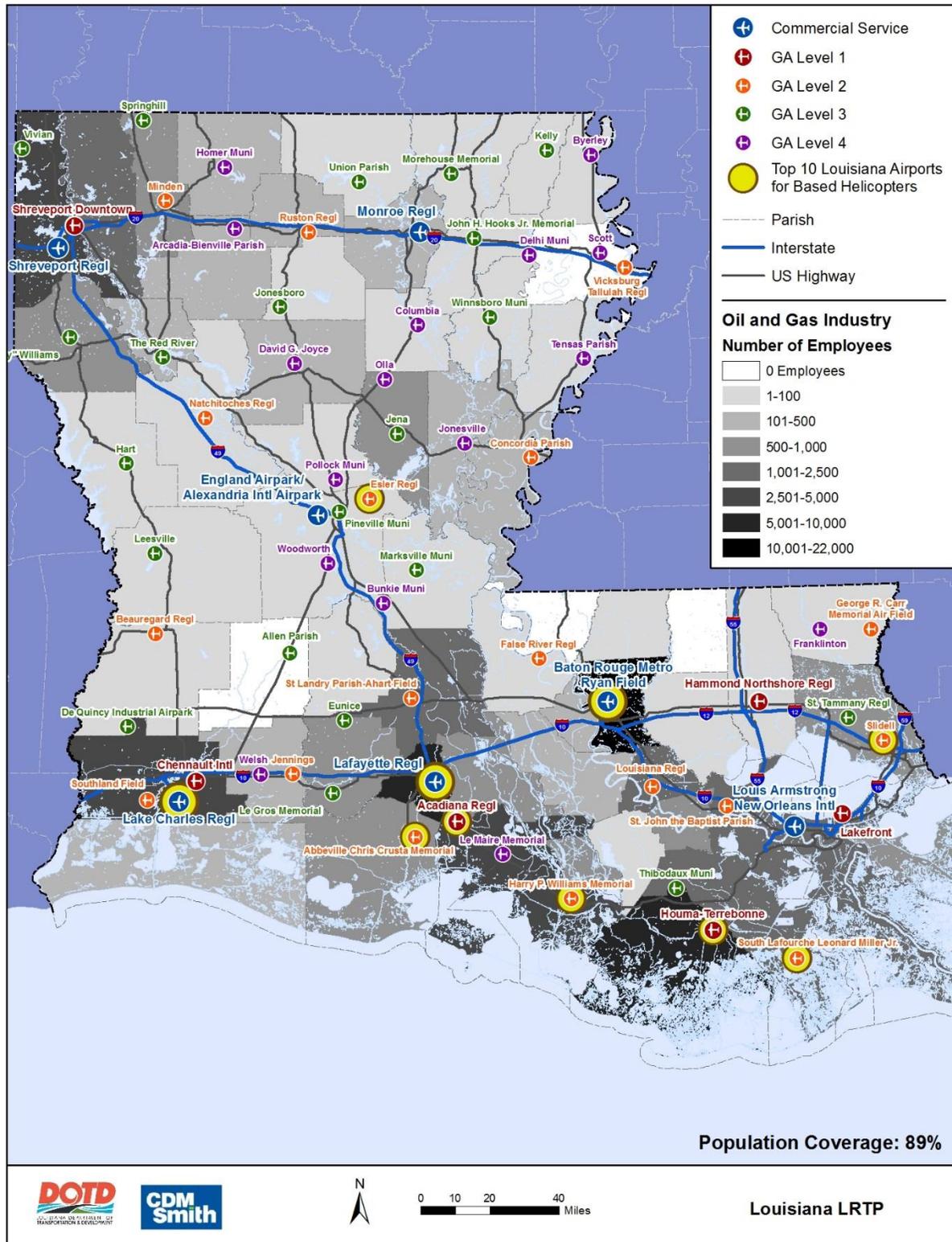
**Table 6-4** identifies the system airports with the high number of based helicopters. Many helicopters are based at public airport facilities in Louisiana and are correlated to oil drilling activities. Helicopters based at these airports are highly utilized to service various functions of the on- and offshore oil and gas industry. In fact, Houma-Terrebonne Airport is home to three large commercial helicopter businesses, including: Air Logistics, Inc. Era Helicopters, and PHI, Inc. Lafayette Regional is headquarters to one of the largest helicopter companies in the world, PHI, Inc. (formerly Petroleum Helicopters Inc.). Although LFT only reflects 17 based rotor wing aircraft on any given day, one will find many more that are ferried in from other airports for maintenance. Lake Charles Regional Airport also has a PHI base on the airport. Airports with the greatest number of helicopters tend to have good proximity to Gulf waters, but are located further inland and near existing infrastructure and developed land. As depicted in **Figure 6-13**, the oil and gas industry employees are significantly concentrated in southern Louisiana and northwest Louisiana. A number of oil and gas businesses use Louisiana airports to support the aviation needs. The southern tier of the state has oil and gas industry businesses supporting the more than 800 oil rigs located in the Gulf of Mexico. The top 10 airports in terms of based helicopters are circled in yellow.

**Table 6-4: Top 10 Louisiana System Airports with Helicopter Activity**

City	Airport	Based Helicopters
Houma	Houma-Terrebonne	72
Lake Charles	Lake Charles Regional	40
Abbeville	Abbeville Chris Crusta Memorial	26
Galliano	South Lafourche Leonard Miller Jr.	19
Patterson	Harry P. Williams Memorial	19
Lafayette	Lafayette Regional	17
Alexandria	Esler Regional	15
Baton Rouge	Baton Rouge Metropolitan, Ryan Field	8
New Iberia	Acadiana Regional	8
Slidell	Slidell	7

Source: Airport Inventory & Data Survey

Figure 6-13: Louisiana System Airports and Their Proximity to Oil and Gas Industry Employment



## Physical

An important goal of any aviation system is to provide physical facilities to meet the needs of the users. The mission of airports is to provide quick, convenient, and safe transportation of people and goods. An adequate airport system needs certain facilities to process the movement and storage of aircraft and to satisfy the needs of the people who use airports.

Physical performance of the aviation system is determined by examining the ability of the airports to meet facility and service Performance Measures and the specific Benchmarks associated with their airport classification. It is important to note that the facility and service Performance Measures and Benchmarks delineated in this section are recommendations, not requirements. It is possible that airports included in or recommended for an increase in their classification in later analyses may, for one or more reasons, be unable to meet certain Benchmarks. An airport's inability to meet the specific facility and service Benchmarks for its classification does not necessarily prevent that airport from performing that role or function within the system.

The previous section established the Performance Measures by which the Louisiana airport system is to be measured. In addition to these Performance Measures, the Louisiana airport system will be evaluated in terms of the population coverage it provides, as defined by drive times. Together, these two analyses will be used to shape the options and recommendations for the future of the Louisiana airport system.

### Evaluating Facility and Service Performance Measures

This analysis looks at the extent to which the current airport system meets the Performance Measures outlined in the previous section and summarized again in Table 6-5. Each airport, based upon its current classification, was evaluated against its respective Benchmark for each Performance Measure. These results were then tabulated by airport classification and expressed as a percentage of the airports in that classification category that meet the Benchmarks. Each Performance Measure was also evaluated on the basis of what percentage of all airports in the system meets their respective Benchmark. For those airports where there was no Benchmark to meet (i.e., shown as "Does Not Apply" on the figures), that group of airports was counted as meeting the Benchmark when calculating the percent of the entire airport system that meet the Benchmark.

**Figure 6-14** shows the percentage of airports meeting the Airport Reference Code (ARC) Performance Measure. Nearly all of Louisiana's 68 system airports meet the ARC Benchmark associated with their classification. The single airport that does not meet its Benchmark is Jennings Airport, a Level 2 Airport. It is reported as having a C-I ARC, which does not meet the B-II ARC Benchmark for Level 2 Airports. The II category provides wider separations for aircraft wing spans.

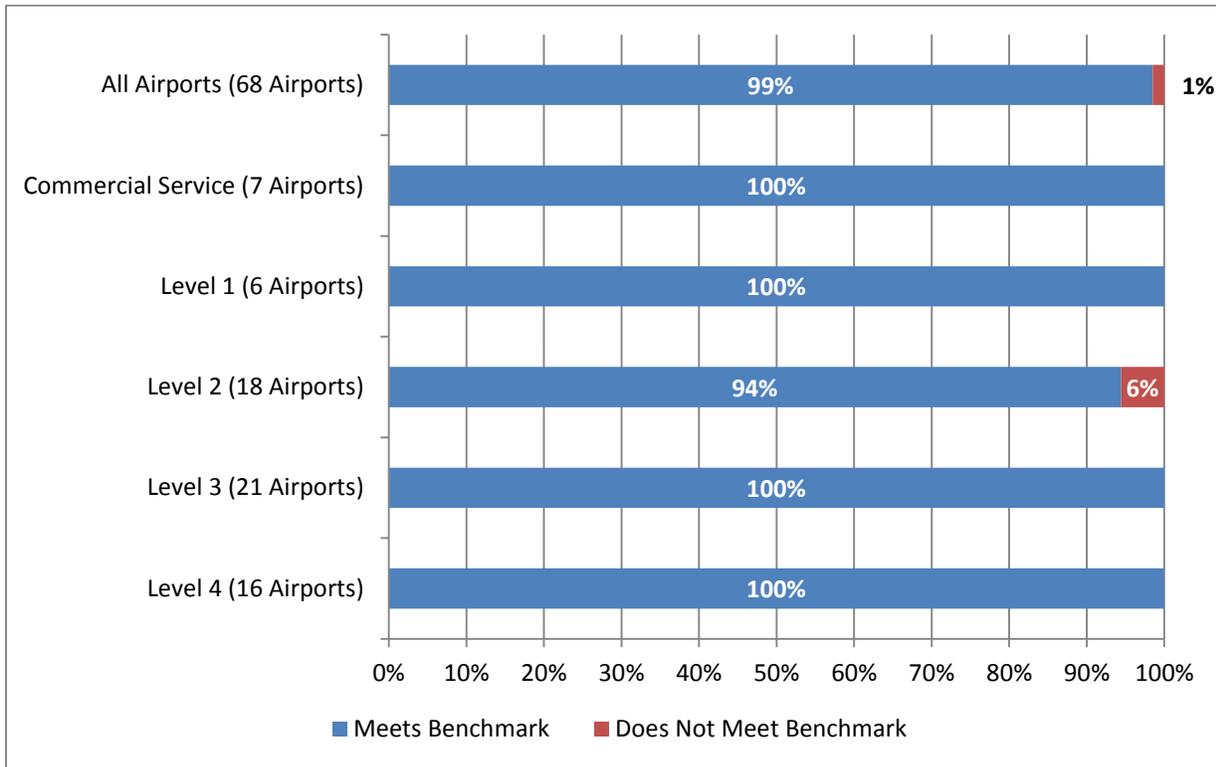
**Table 6-5: Facility and Service Performance Measures and Respective Benchmarks**

Performance Measure	Commercial Service (7 Airports)	Level 1 Airports (6 Airports)	Level 2 Airports (18 Airports)	Level 3 Airports (21 Airports)	Level 4 Airports (16 Airports)
Airport Reference Code	C-II or Design Aircraft	B-II or greater	B-II or greater	B-I or greater	A-I or turf
Runway Length	75% Large Aircraft at 60% useful load	6,500'	5,000'	4,000'	Maintain existing RW length
Runway Width	To meet ARC	To meet ARC	To meet ARC	75'	60'
Taxiway	Full parallel	Full parallel	Partial parallel	Turnarounds and connectors	Turnarounds or connectors
Instrument Approach Procedure	ILS or LPV	LPV	VNAV	LNAV or non-precision	Not applicable
Visual Aids	MALS, PAPI	MALS/SALS, PAPI/REILS	PAPI/REILS	PAPI/REILS	Not applicable
Lighting	HIRL, Beacon	MIRL, Beacon	MIRL, Beacon	MIRL, Beacon	Reflectors or LIRL, Beacon
Weather Reporting	Automated weather reporting	Automated weather reporting	Automated weather reporting	Local aviation weather	Not applicable
Services	Restroom, FBO, maintenance, ground transportation	Restroom, FBO, maintenance, ground transportation	Restroom, FBO, maintenance, ground transportation	Restroom	Restroom
Fuel	Jet-A, 100LL	Jet-A, 100LL	Jet-A, 100LL	100LL	Not applicable
Facilities	Terminal, aircraft apron, hangars, auto parking	Terminal, aircraft apron, hangars, auto parking	Terminal, aircraft apron, hangars, auto parking	Pilot lounge, aircraft apron, hangars, auto parking	Aircraft apron, hangars, auto parking
Backup Generators	Yes	Yes	Yes	Yes	Not applicable
Intermodal Connections	Yes	Not applicable	Not applicable	Not applicable	Not applicable

Source: CDM Smith

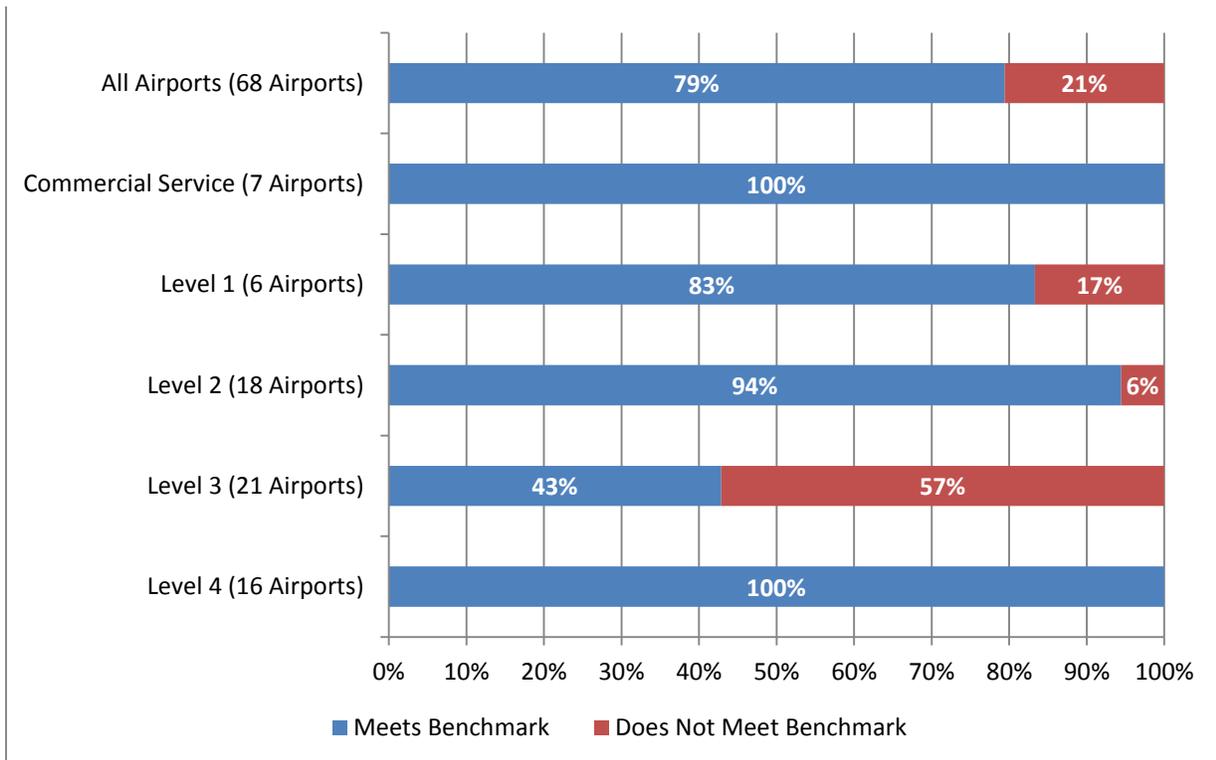
Approximately 79 percent of all system airports meet runway length Benchmarks associated with their classification, as shown in **Figure 6-15**. All of the Air Carrier Airports meet the Benchmark of having a primary runway of 6,500 feet or longer. All the Level 4 Airports meet the Benchmark of simply maintaining their existing runway length. Among Level 1 Airports, 83 percent meet the Benchmark of having a 6,500-foot or longer primary runway. Shreveport Downtown's primary runway is 5,018 feet in length and it is the only Level 1 Airport that falls short of this Benchmark.

**Figure 6-14: Airport Reference Code Performance Measure**



Source: CDM Smith

**Figure 6-15: Runway Length Performance Measure**



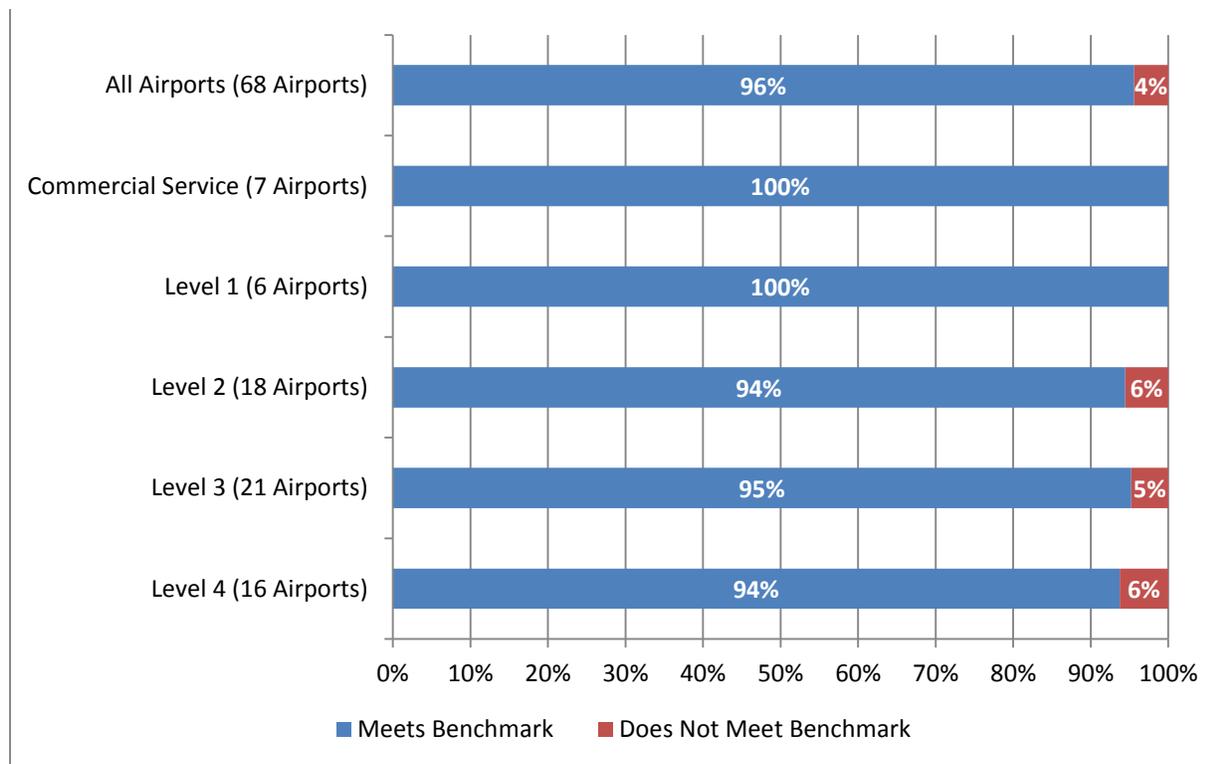
Source: CDM Smith

Approximately 94 percent of Level 2 Airports meet their primary runway length Benchmark of 5,000 feet or more. The Level 2 Airport with insufficient runway length for its classification is Concordia Parish Airport in Vidalia with a 3,701-foot runway.

Only 43 percent of the Level 3 Airports meet their primary runway length Benchmark of 4,000 feet. The 12 Level 3 Airports that do not meet runway length Benchmarks have primary runways ranging in length from 2,997 feet to 3,998 feet.

**Figure 6-16** summarizes the system compliance with the runway width Performance Measure. The majority of airports meet Benchmarks for their classifications, with only 4 percent having runways that ought to be widened.

**Figure 6-16: Runway Width Performance Measure**



Source: CDM Smith

All of the commercial service and Level 1 Airports meet runway width Benchmarks. Among the other general aviation airports, a total of three airports have primary runways that are not as wide as recommended. Jennings Airport is the single Level 2 Airport with a primary runway narrower than its Benchmark. Among Level 3 Airports, only The Red River Airport has a runway width that falls short of its Benchmark. Likewise, Level 4 Airports have a single airport – Welsh Airport – that has a runway with a width that does not meet its Benchmark.

**Figure 6-17** shows that 96 percent of system airports meet taxiway Performance Measure. All of the Commercial Service and Level 1 Airports meet the Benchmark of having a full parallel taxiway. Two Level 2 Airports – George R. Carr Memorial Air Field and Minden Airport – lack the partial parallel taxiway Benchmark for their airport classifications. A single Level 3 Airport – Winnsboro Municipal – doesn't have any taxiway turnarounds as suggested for its airport role. All of the Level 4 Airports meet their taxiway type Benchmark.

Among system airports, 82 percent meet the instrument approach procedure Performance Measure, as shown in **Figure 6-18**. All of the Commercial Service and Level 1 Airports meet Benchmarks for these classifications. Approximately 78 percent of the Level 2 Airports meet the Benchmark of having an approach with some type of vertical guidance. Of the Level 2 Airports that do not meet this Benchmark, three out of the four have a non-precision approach, while the fourth has no instrument approach procedure.

Only 62 percent of the Level 3 Airports meet the Benchmark of having a non-precision approach. All eight of the Level 3 Airports that fall short of this Benchmark lack any type of instrument approach procedure. There is no instrument approach Benchmark for Level 4 Airports.

**Figure 6-19** shows that 97 percent of system airports meet the visual approach aids Performance Measure. All Commercial Service, Level 1, and Level 2 Airports meet Benchmark of having a precision approach path indicator (PAPI). Approximately 90 percent of the Level 3 Airports meet the Benchmark, with two airports lacking a PAPI. This is no visual approach aids Benchmark for Level 4 Airports.

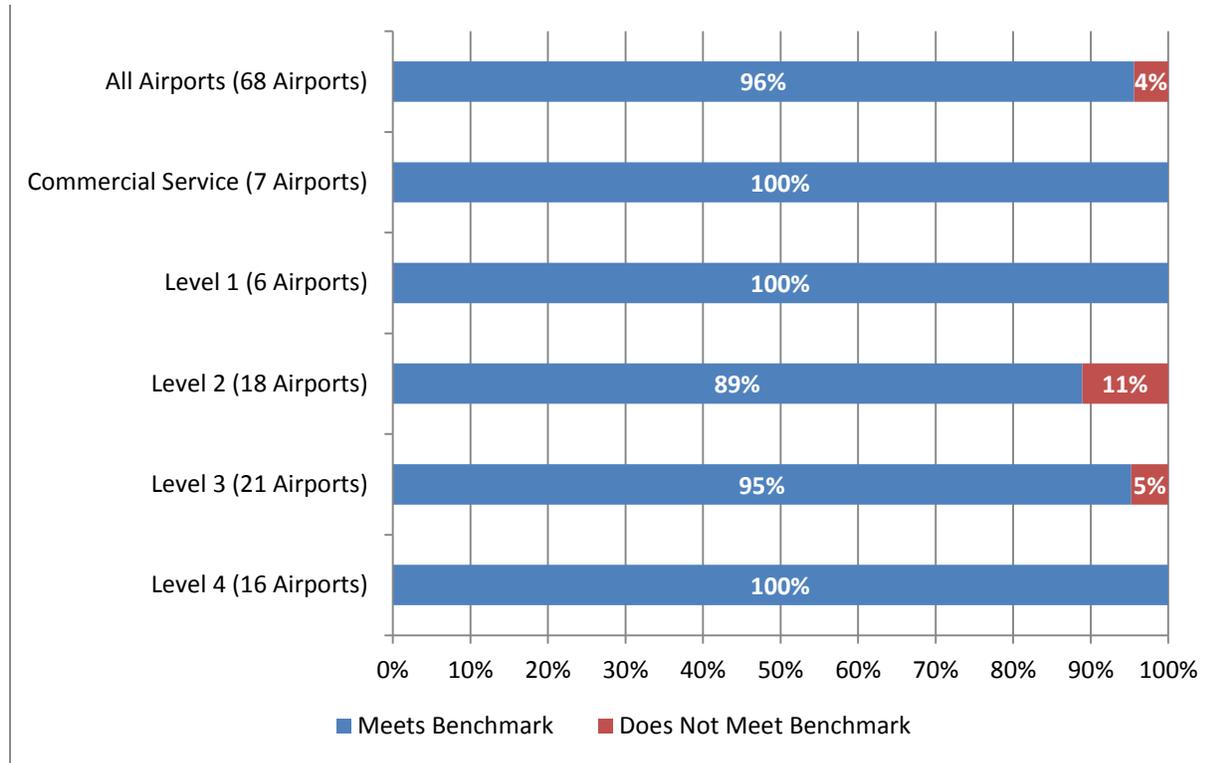
**Figure 6-20** shows system performance regarding the airport beacon Performance Measure. This Benchmark is met by all system airports with the exception of Jena Airport, which lacks an airport beacon.

Nearly all of the system airports meet the runway lighting Performance Measure, as shown in **Figure 6-21**. The Commercial Service, Level 1, Level 2, and Level 3 Airports meet their respective runway lighting Benchmarks. Only a single Level 4 Airport – Olla Airport – does not have any type of runway lighting.

**Figure 6-22** shows that 87 percent of the system airports meet the weather reporting Performance Measure. All of the Commercial Service Level 1 and Level 2 Airports meet the Benchmark of having some type of weather reporting equipment.

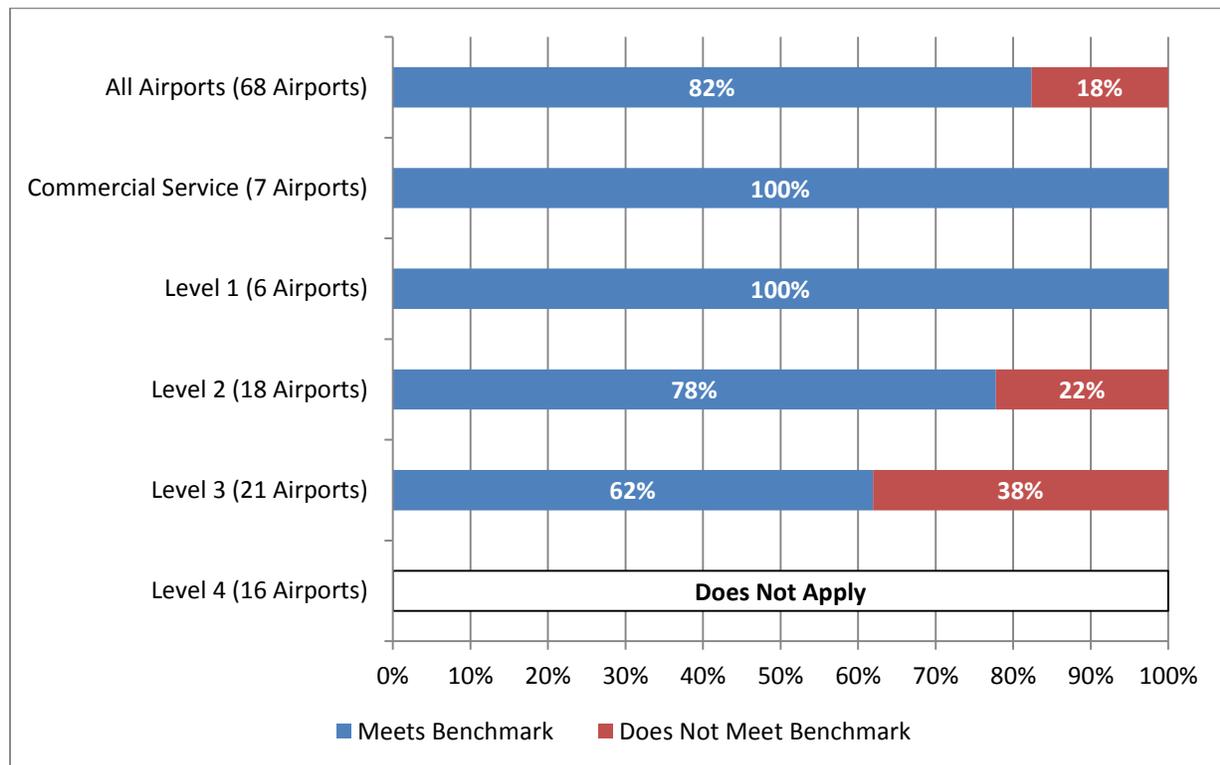
Only 57 percent of Level 3 Airports have some type of local aviation weather capability. Weather reporting is not a Benchmark for Level 4 Airports.

**Figure 6-17: Taxiway Type Performance Measure**



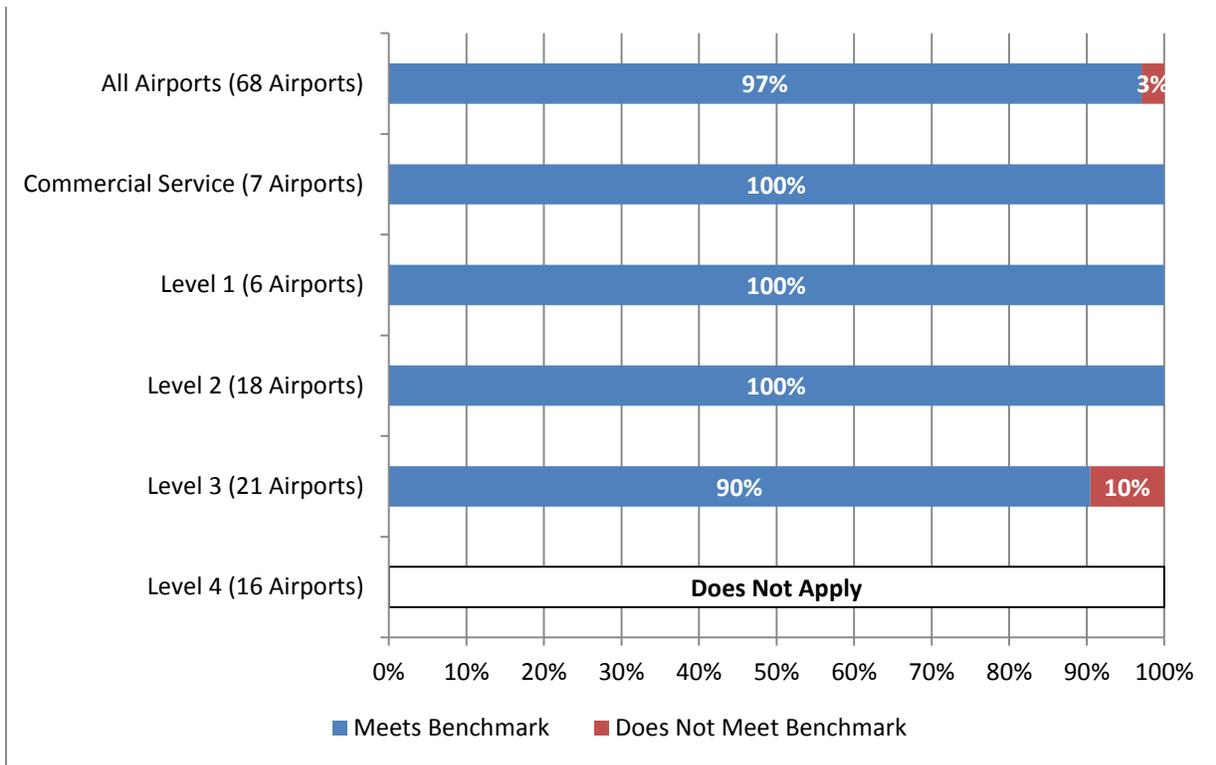
Source: CDM Smith

**Figure 6-18: Instrument Approach Procedure Performance Measure**



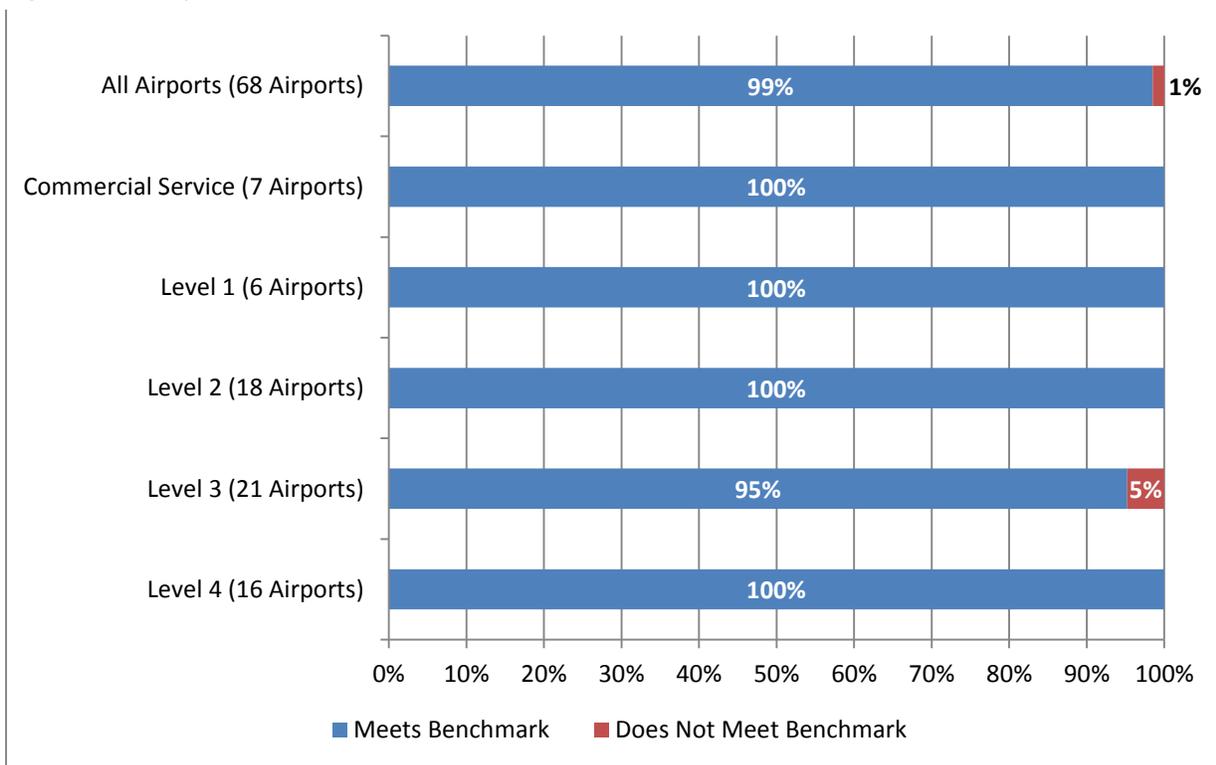
Source: CDM Smith

**Figure 6-19: Visual Approach Aids Performance Measure**



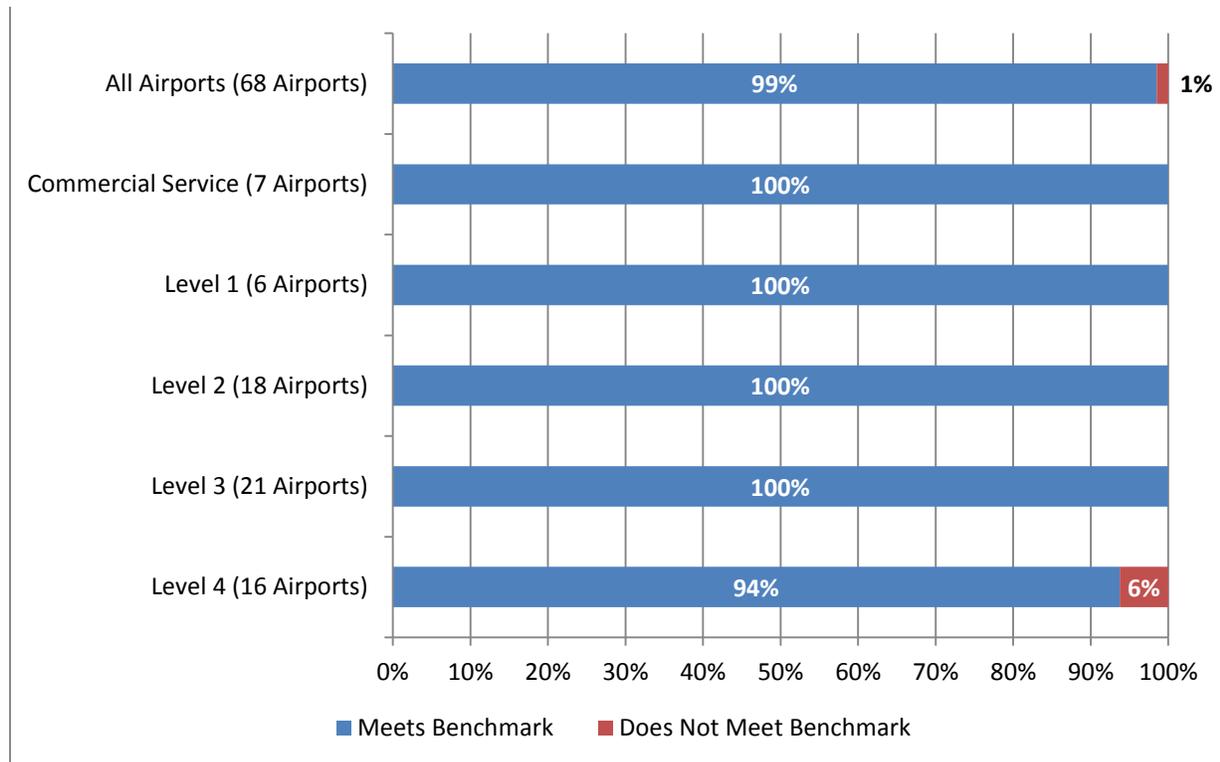
Source: CDM Smith

**Figure 6-20: Airport Beacon Performance Measure**



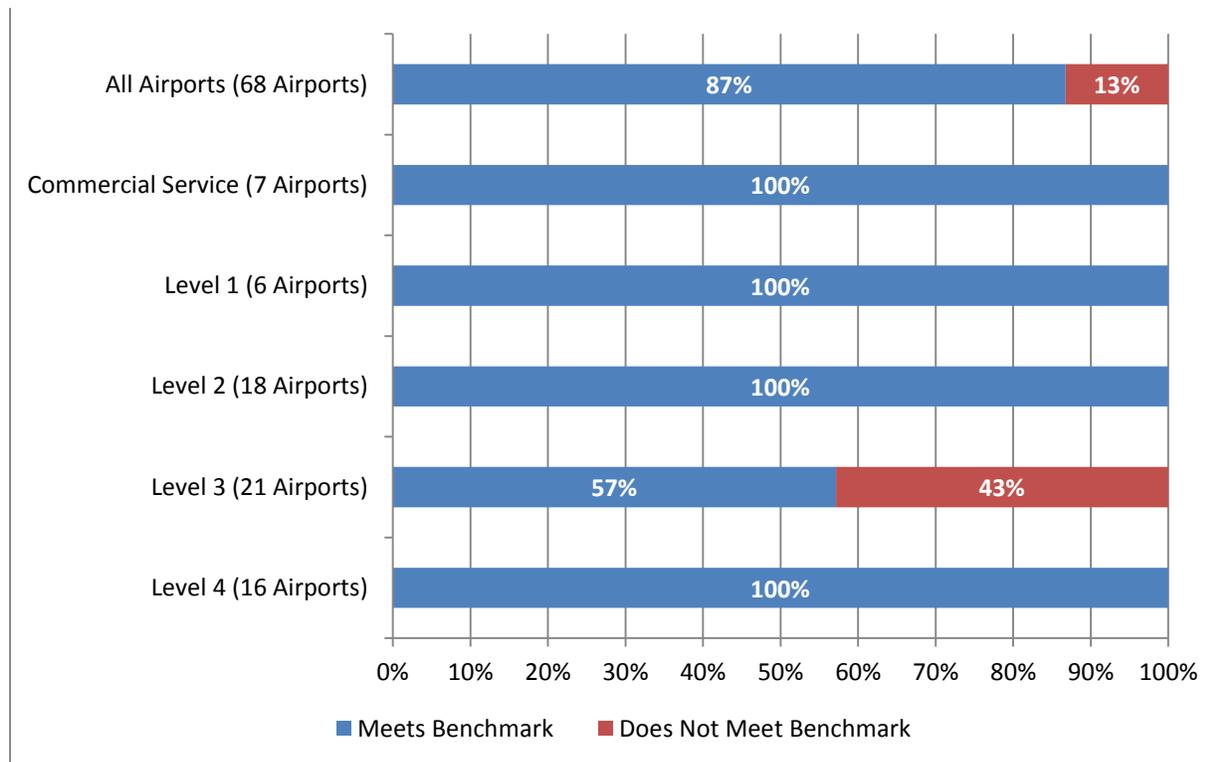
Source: CDM Smith

**Figure 6-21: Runway Lighting Performance Measure**



Source: CDM Smith

**Figure 6-22: Weather Reporting Performance Measure**



Source: CDM Smith

**Figure 6-23** shows that 88 percent of the system airports meet classification Benchmarks of having aircraft maintenance services available. Nearly all of the Commercial Service Airports have aircraft maintenance services, as only Louis Armstrong New Orleans International Airport does not offer aircraft maintenance. Every Level 1 Airport meets this Benchmark. Just over 60 percent of the Level 2 Airports attain this Benchmark. There are no maintenance Benchmarks for Level 3 and Level 4 Airports.

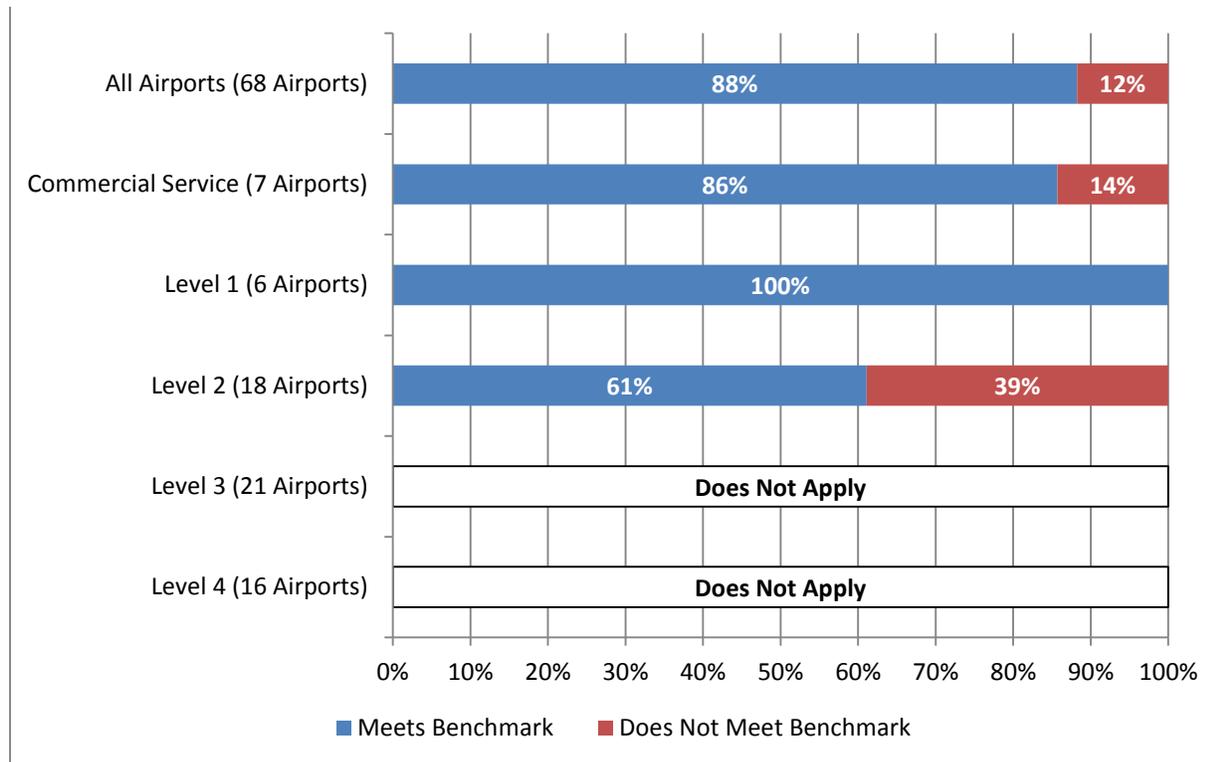
Nearly all of the system airports meet the ground transportation Performance Measure, with 97 percent attaining Benchmarks for their classifications, as shown in **Figure 6-24**. All of the Commercial Service and Level 1 Airports provide some type of ground transportation option. Out of the 18 Level 2 Airports, 16, or 89 percent, meet the Benchmark of providing ground transportation. The two Level 2 Airports that lack ground transportation services are Esler Regional and False River Regional. There is no ground transportation Benchmark for Level 3 and Level 4 Airports.

The vast majority of those airports serving turbine aircraft meet the objective of providing jet fuel, with **Figure 6-25** showing that 96 percent attain this Benchmark. All of the Commercial Service and Level 1 Airports provide jet fuel. Among Level 2 Airports, 83 percent meet the Benchmark of providing jet fuel. The three Level 2 Airports that do not offer jet fuel are False River Regional, St. John the Baptist Parish, and Concordia Parish Airports.

Making jet fuel available is not a Benchmark for Level 3 and Level 4 Airports, which are not as focused on serving turbine aircraft as Level 1, Level 2, and Commercial Service Airports.

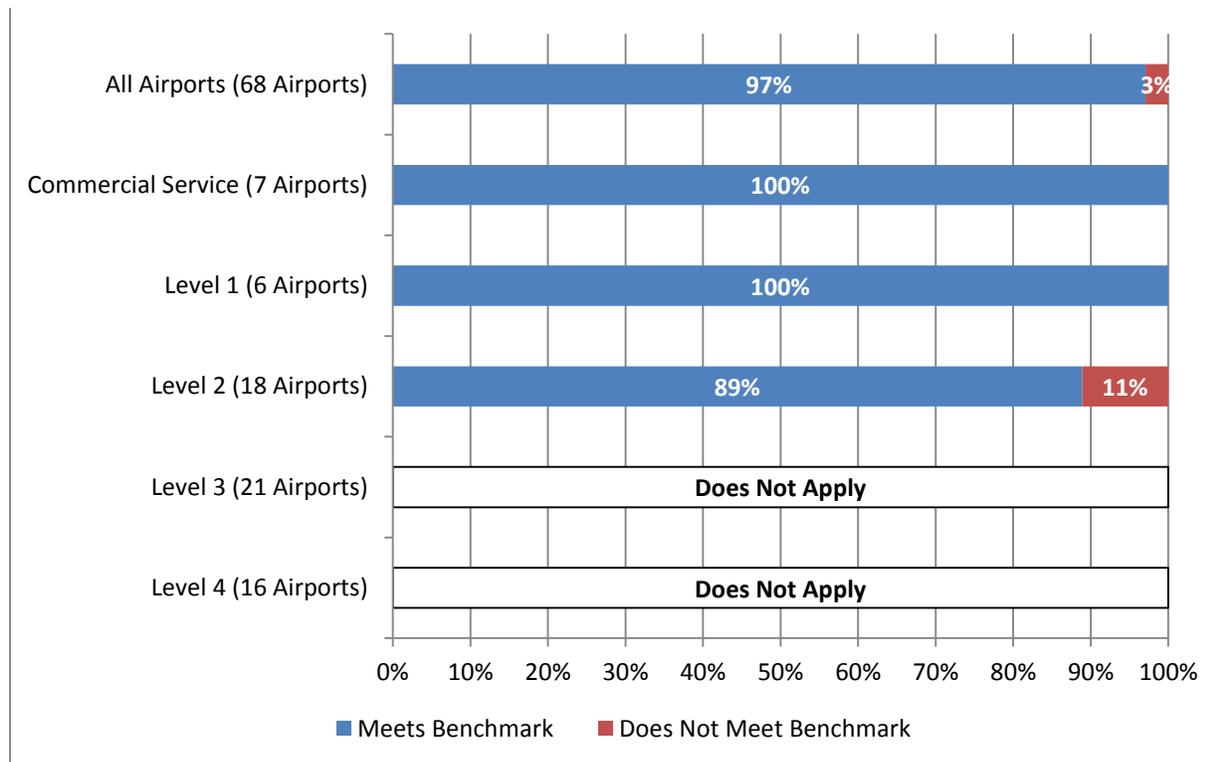
Avgas is widely available at airports throughout Louisiana. Its importance to the aviation system is evident since its availability is a Benchmark for all but Level 4 Airports. Throughout the system, 88 percent of airports meet this Benchmark, as shown in **Figure 6-26**, All Commercial Service, Level 1, and Level 2 Airports provide avgas. Approximately 62 percent of Level 3 Airports meet the Benchmark of providing avgas, meaning eight Level 3 Airports lack avgas service.

**Figure 6-23: Aircraft Maintenance Performance Measure**



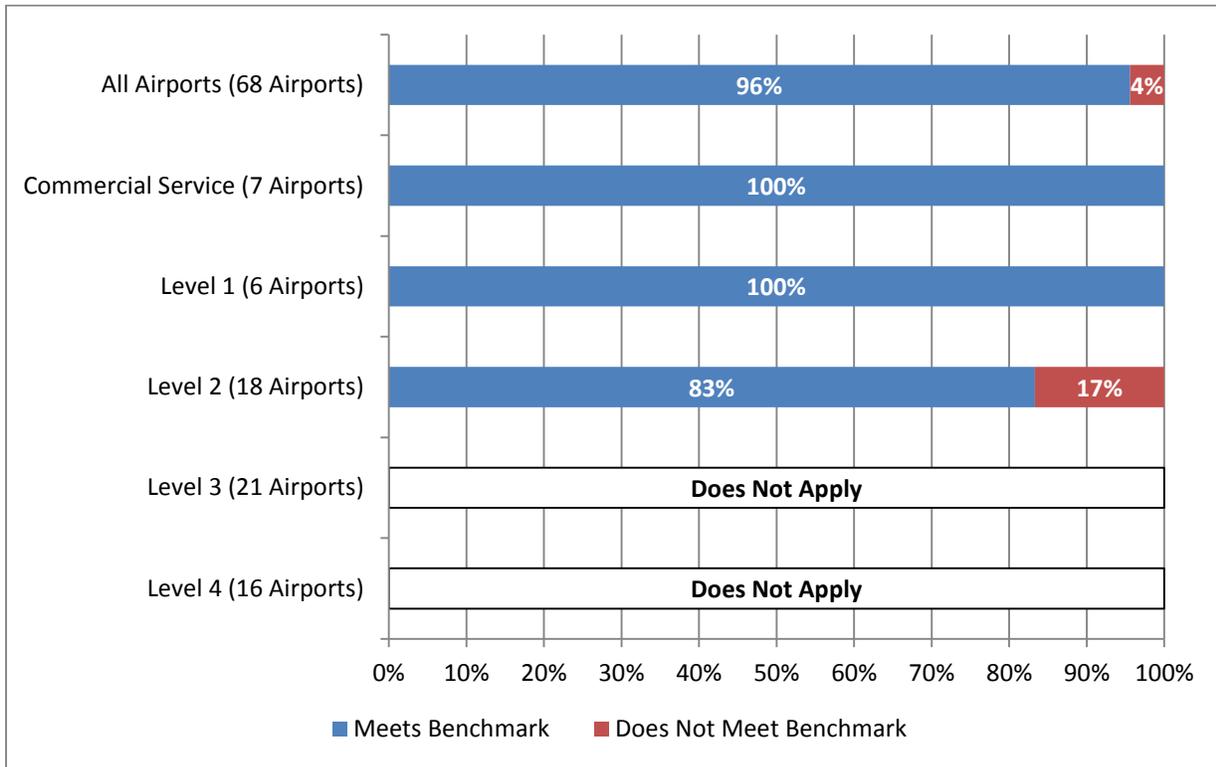
Source: CDM Smith

**Figure 6-24: Ground Transportation Performance Measure**



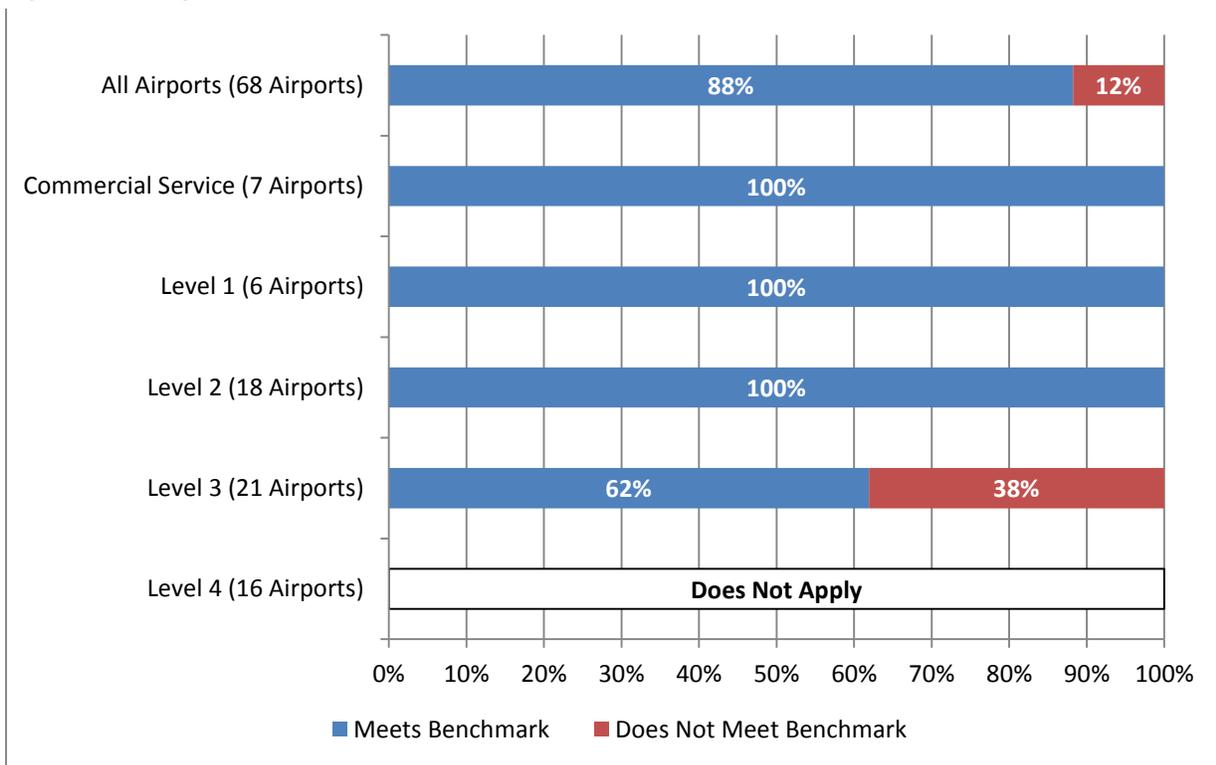
Source: CDM Smith

**Figure 6-25: Jet Fuel Performance Measure**



Source: CDM Smith

**Figure 6-26: Avgas Performance Measure**



Source: CDM Smith

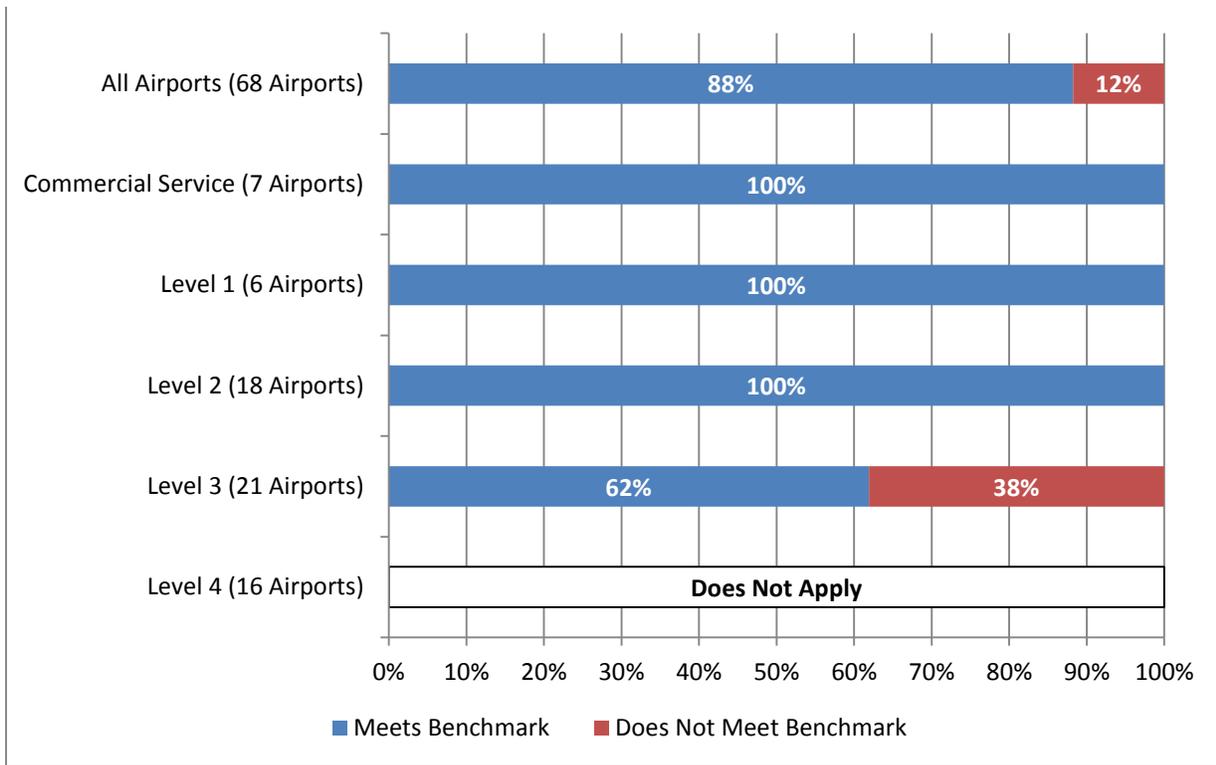
**Figure 6-27** shows that 88 percent of system airports meet the Benchmark of having a terminal or pilot lounge. All Commercial Service Airports, Level 1, and Level 2 Airports meet this Benchmark of having some sort of structure for use as a terminal building. Approximately 62 percent of Level 3 Airports meet this Benchmark by having a terminal building. This Benchmark does not apply to Level 4 Airports.

As shown in **Figure 6-28**, every airport meets the Benchmark of having a paved aircraft apron. This Performance Measure did not determine whether airports had adequate aircraft apron space, just whether it was available.

**Figure 6-29** shows that less than half of the system airports meet the hangar Performance Measure. Benchmarks for this Performance Measure evaluated whether there was sufficient hangar space at each airport based upon hangar waiting lists. Throughout the system, only 46 percent of the airports have sufficient hangar space. Among Commercial Service Airports, 43 percent meet the hangar Benchmark. Half of the Level 1 Airports meet the Benchmark while less the 25 percent of Level 2 airports meet the storage Benchmark. Level 3 and Level 4 Airports also fall short.

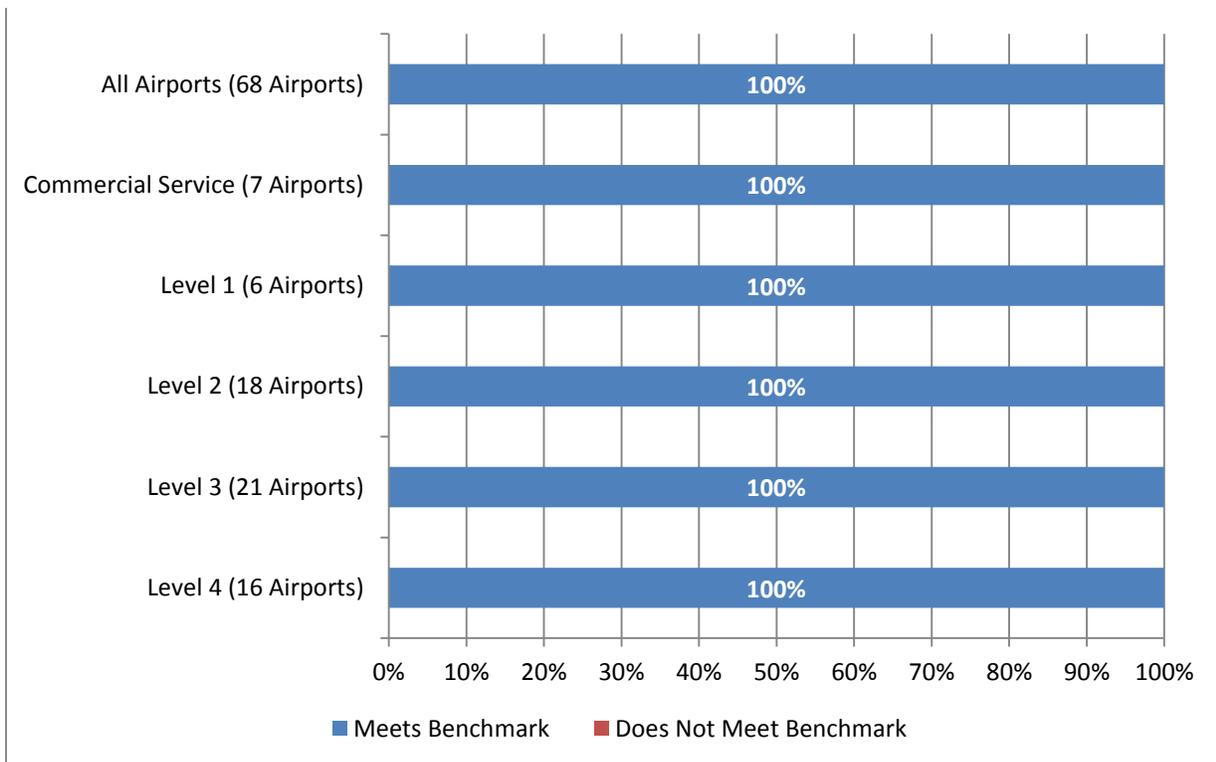
**Figure 6-30** shows that 90 percent of system airports meet the auto parking Performance Measure. All Commercial Service, Level 1, and Level 2 Airports have paved auto parking. Two out of the 21 Level 3 Airports lack auto parking, and five of the 16 Level 4 Airports do not meet the Benchmark of paved auto parking.

**Figure 6-27: Terminal Performance Measure**



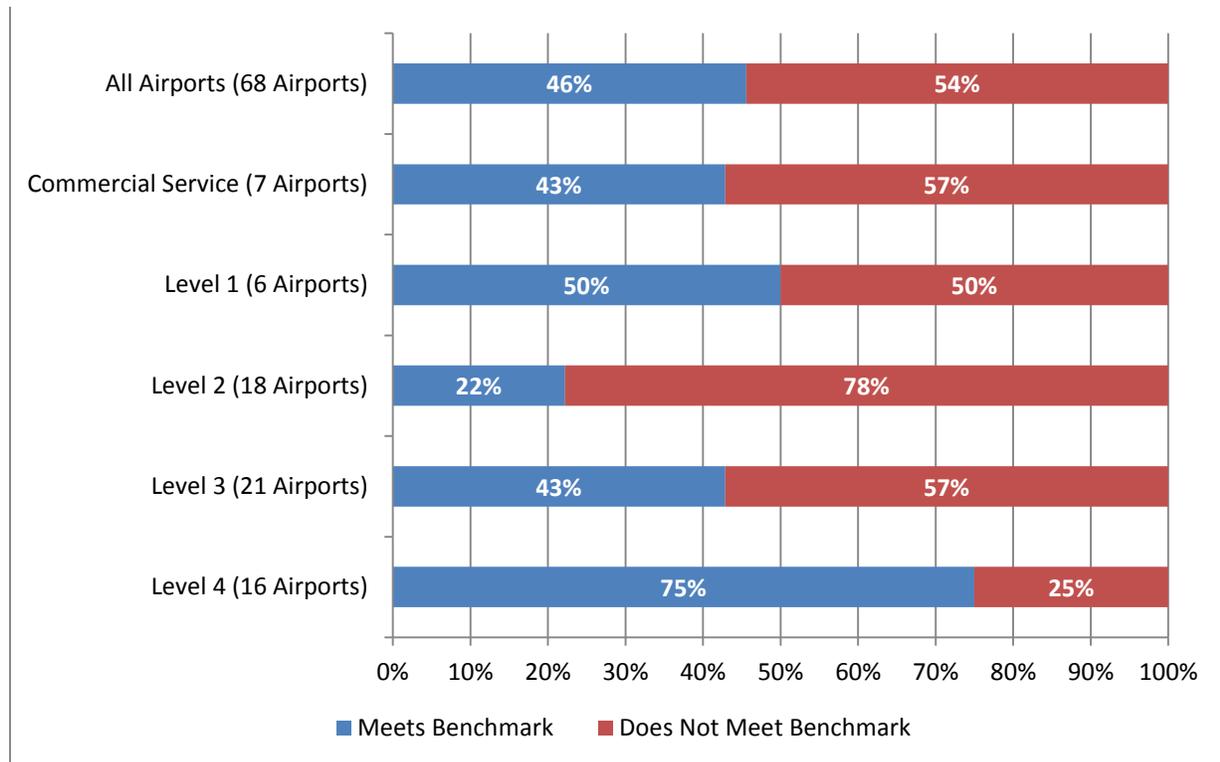
Source: CDM Smith

**Figure 6-28: Paved Apron Performance Measure**



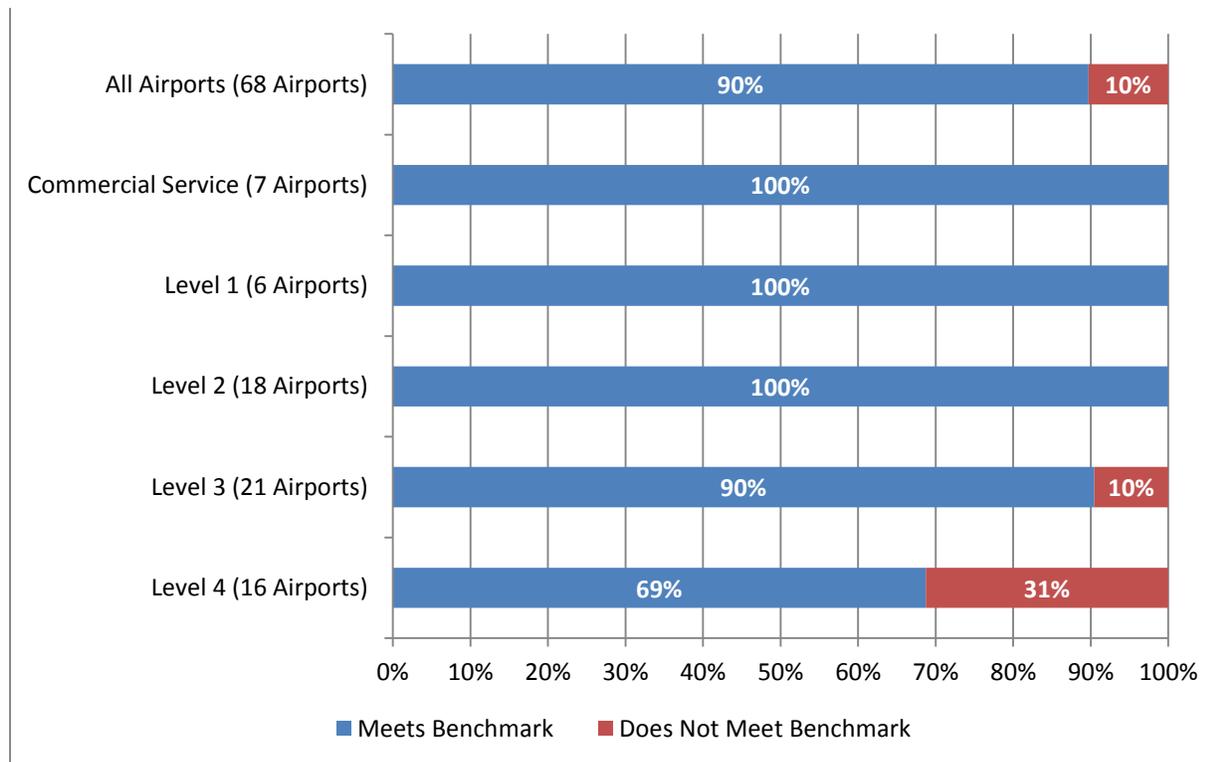
Source: CDM Smith

**Figure 6-29: Hangar Performance Measure**



Source: CDM Smith

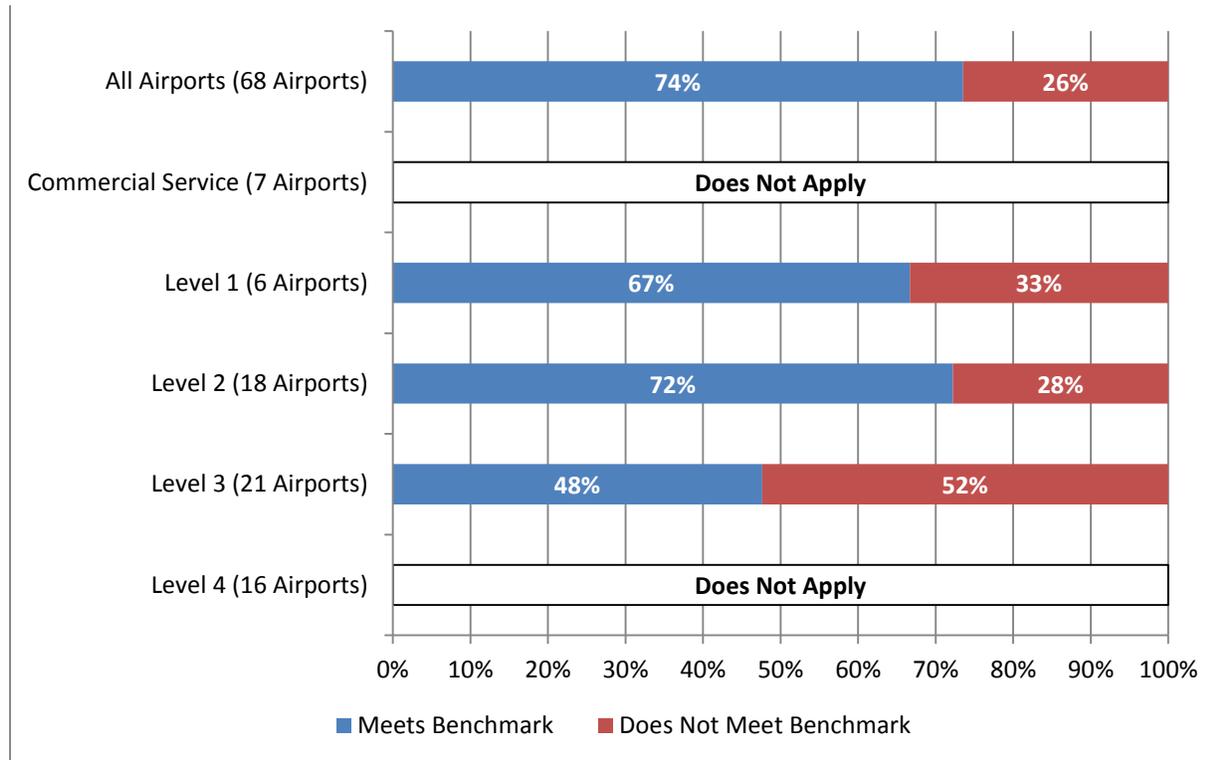
**Figure 6-30: Auto Parking Performance Measure**



Source: CDM Smith

**Figure 6-31** shows that 74 percent of system airports meet the Benchmark of the generator Performance Measure. Airports need electricity to operate airfield lighting, terminal buildings and fuel facilities. This is especially important during emergencies, such as hurricanes, when airports become critical assets during recovery efforts and need to be able to support aircraft operations even before other infrastructure is restored. Electrical generators are the key components that enable airports to continue operating during periods of power loss.

**Figure 6-31: Generator Performance Measure**



Source: CDM Smith

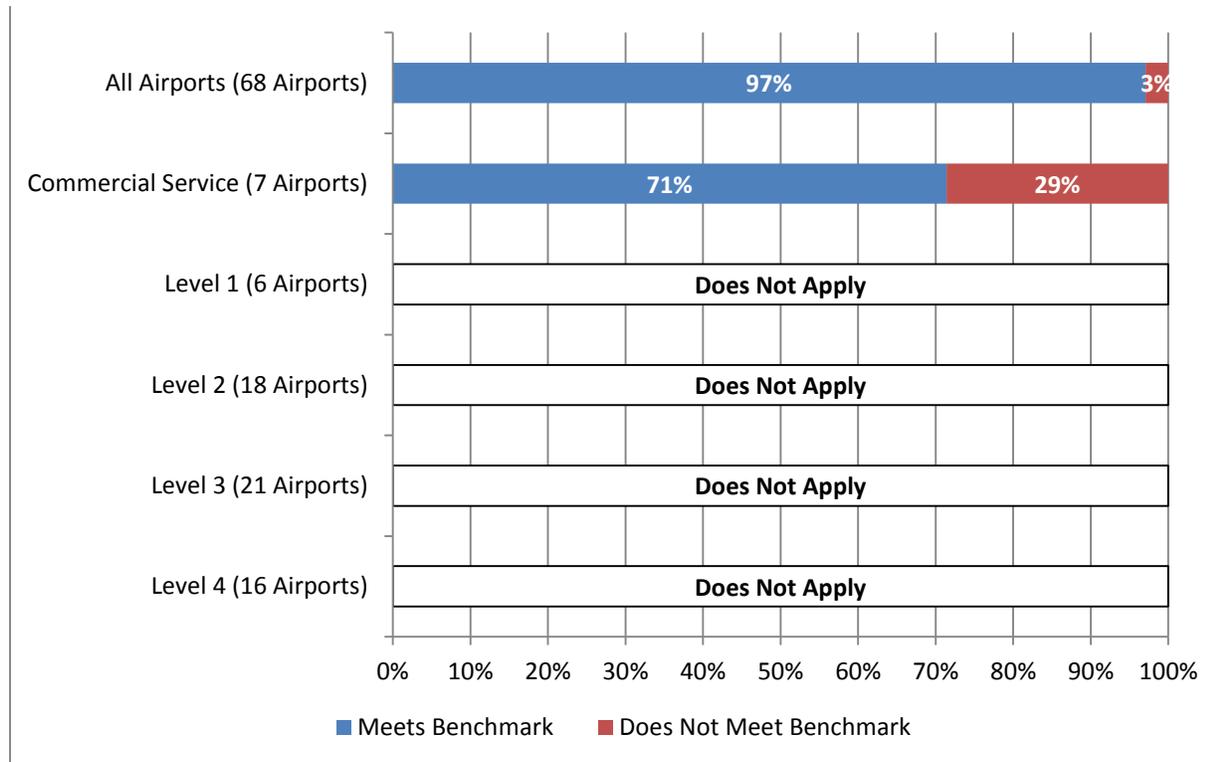
Data was not available for the commercial service airports. The generator Benchmark for Level 1 Airports consists of having two independent generators – one for the terminal building and one for the airfield lighting and 67 percent of the Level 1 Airports meet this Benchmark. The two airports that do not meet this Benchmark – Chennault International and Lakefront – both have airfield lighting generators, but no terminal generators. Level 2 Airports have the same Benchmark as Level 1 Airports and 72 percent meet the benchmark. Four Level 2 Airports have airfield lighting generators, but no terminal generator, and one airport has a single generator that serves both the airfield lighting and the terminal.

The Benchmark for Level 3 Airports is a dual-purpose backup generator for the terminal and airfield lighting. Approximately 48 percent of the Level 3 Airports meet this Benchmark. Of the 11 airports that fall short of this Benchmark, seven lack backup generator capability for their terminal, and four have no backup generators whatsoever. This is no generator Benchmark for Level 4 Airports.

The intermodal Performance Measure applies only to Commercial Service Airports. As shown in **Figure 6-32**, only 29 percent, or two out of the seven Commercial Service Airports, do not meet the Benchmark of public transit bus service available to and from the airport terminal area. The two airports without

this transit service are Lake Charles Regional and Baton Rouge Metropolitan Airport. There is a bus stop a quarter mile from the passenger terminal at Baton Rouge.

**Figure 6-32: Intermodal Performance Measure**



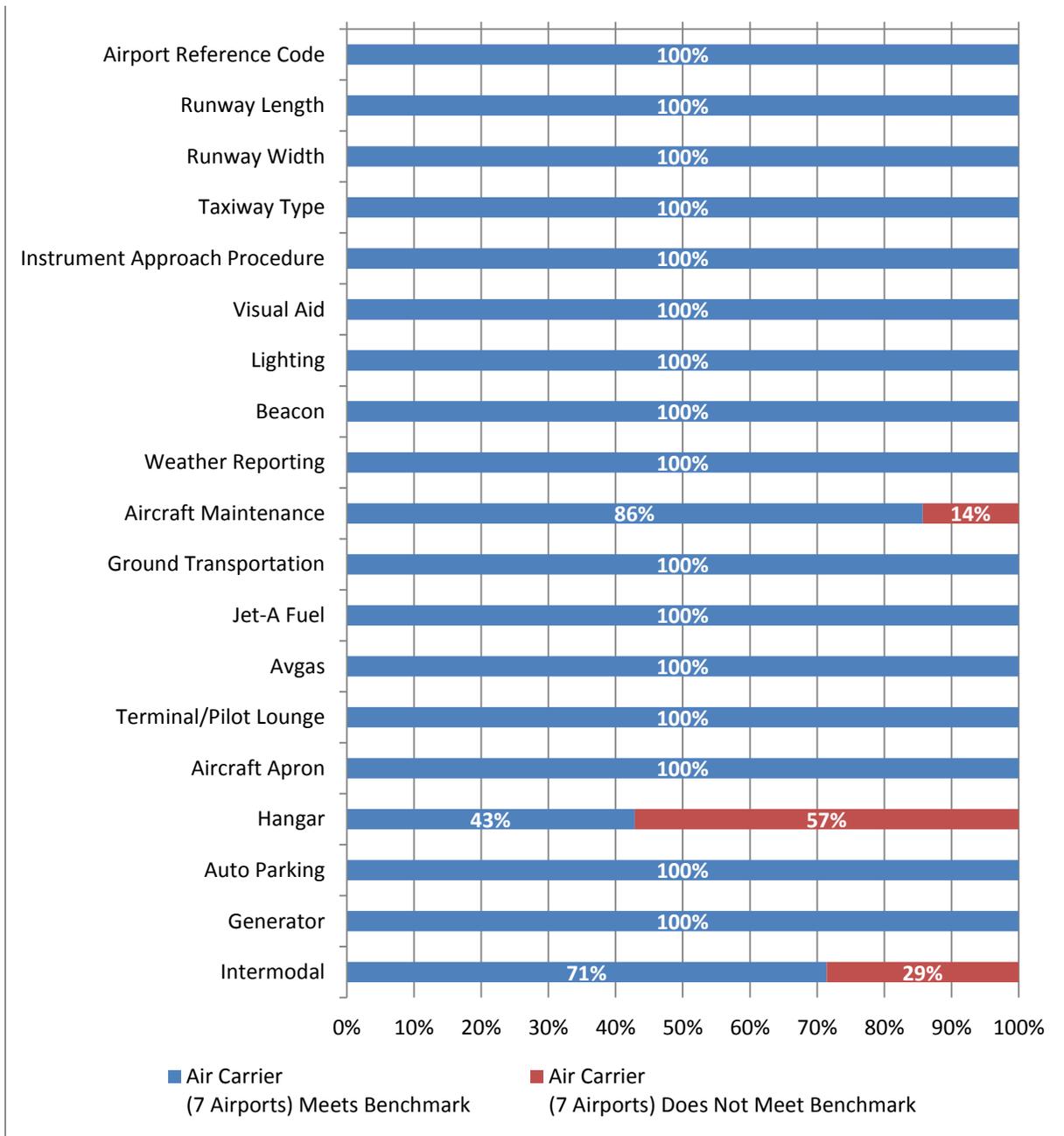
Source: CDM Smith

## Summary

The previous figures highlight those facility and services that the Louisiana airport system adequately provides and those that may be lacking. That information is summarized by airport classification in the following figures.

**Figure 6-33** shows that the seven Commercial Service Airports meet nearly all of the Benchmarks associated with the Performance Measures, indicating that, from a system perspective, these airports have the facilities and services needed to fulfill their assigned system classification as Commercial Service Airports. Two Commercial Service Airports lack intermodal or public transit bus connections. Additionally, more than half of the Commercial Service Airports need additional hangar space as indicated by the hangar Performance Measure. Lastly, Louis Armstrong New Orleans International Airport is the only Commercial Service Airport that fell short of its respective aircraft maintenance Benchmark.

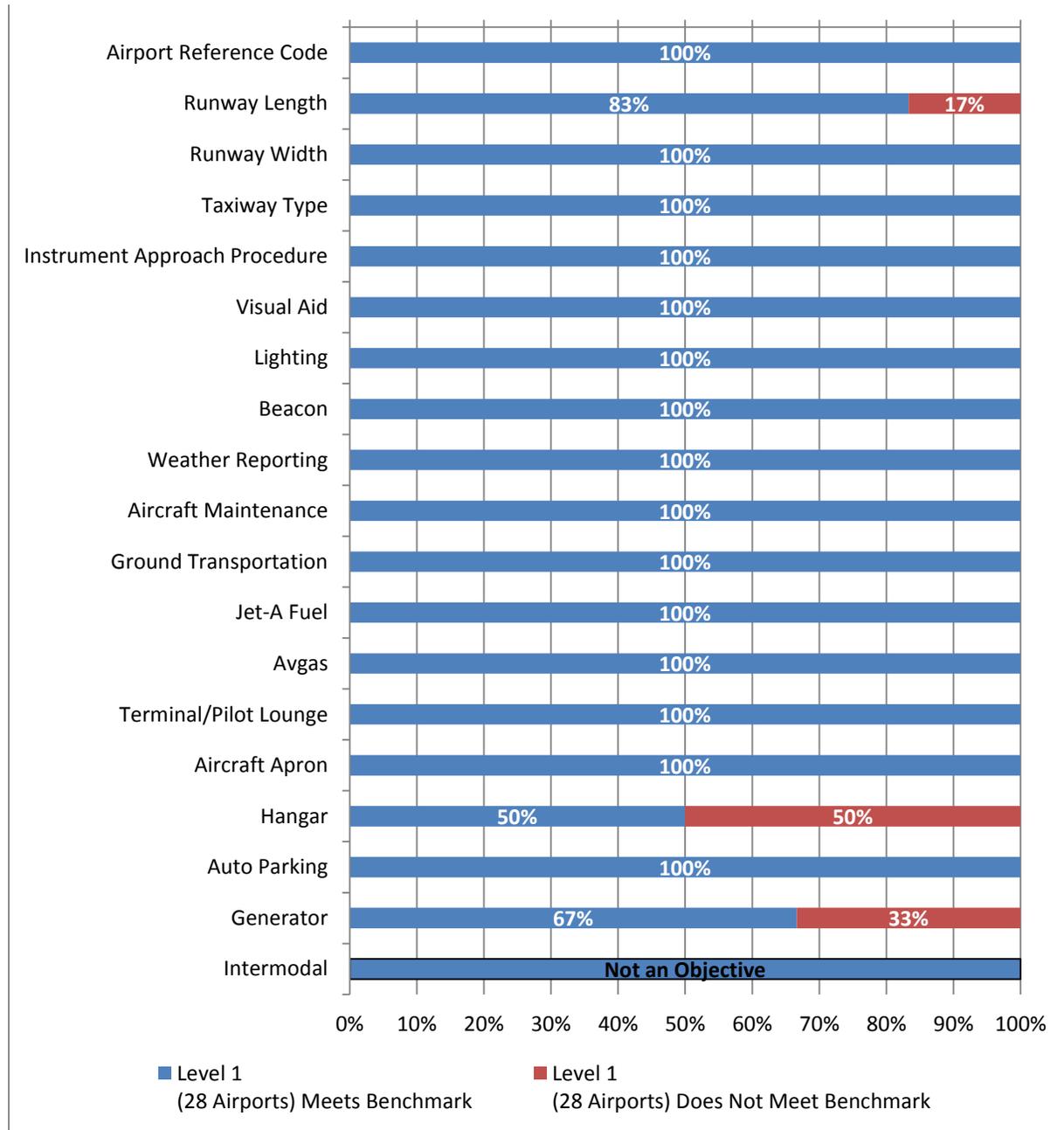
**Figure 6-33: Commercial Service Airport Performance Measures**



Source: CDM Smith

**Figure 6-34** summarizes Performance Measures for the Level 1 Airports. Like the Commercial Service Airports, Louisiana’s Level 1 Airports are well equipped to perform their role. Shreveport Downtown is the only Level 1 Airport with a runway shorter than the 6,500 feet Benchmark. Two Level 1 Airports fall short of the generator Benchmark – Chennault International and Lakefront Airport. Both lack a back-up generator for their terminals. The Benchmark needing the most improvement is that related to hangar space, indicating that there is pent up demand for aircraft storage at Level 1 Airports.

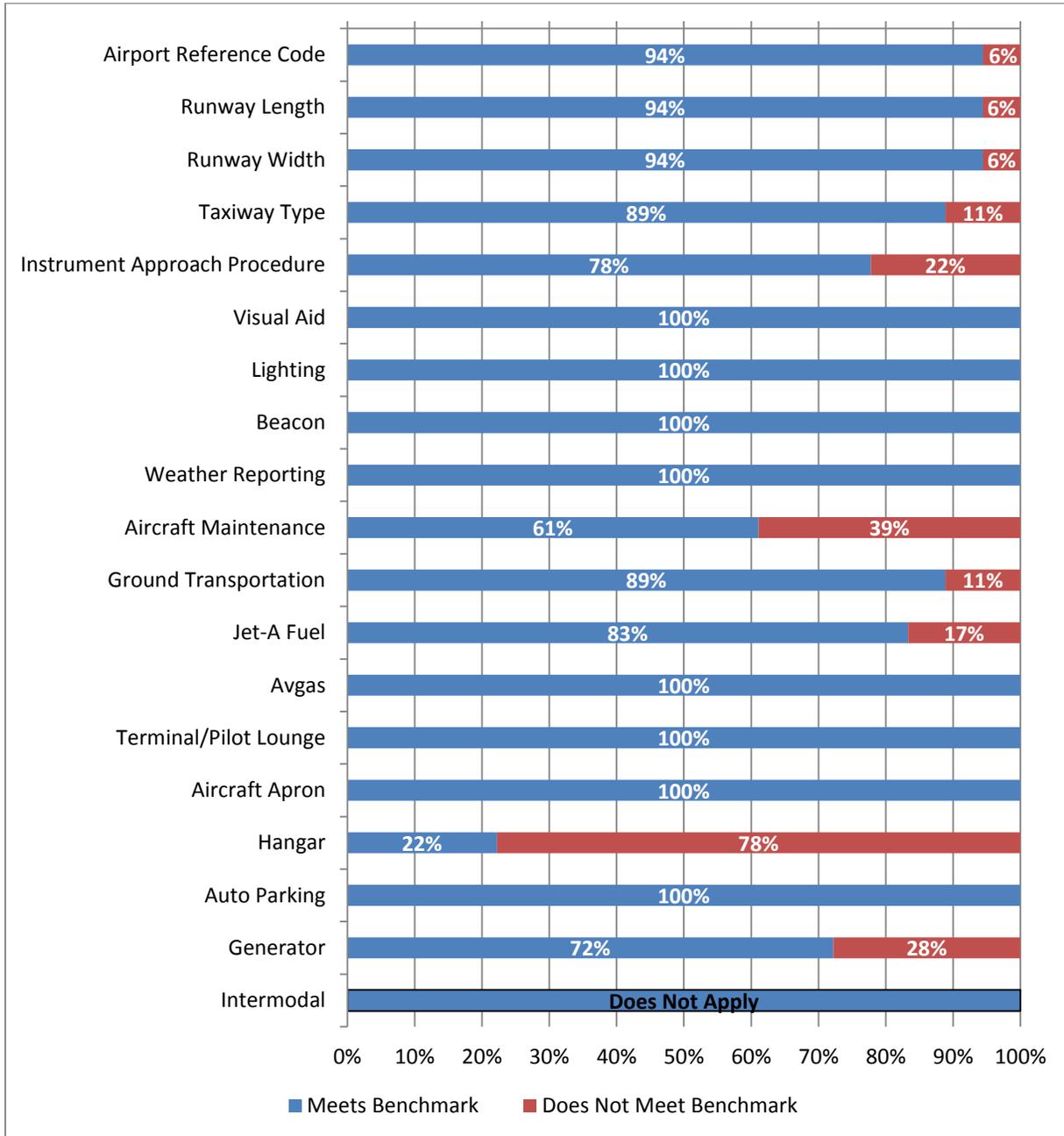
**Figure 6-34: Level 1 Airport Performance Measures**



Source: CDM Smith

As shown in **Figure 6-35**, there are a number of Performance Measures where Level 2 Airports have room for improvement. Slightly more than one out of five, or four Level 2 Airports, do not meet the instrument approach procedure Benchmark of having vertical guidance. More than three-quarters of the Level 2 Airports do not meet the hangar Benchmark. A small percentage of Level 2 Airports fall short of various other Performance Measures, including Benchmarks for airport reference code, runway length, and availability of jet fuel.

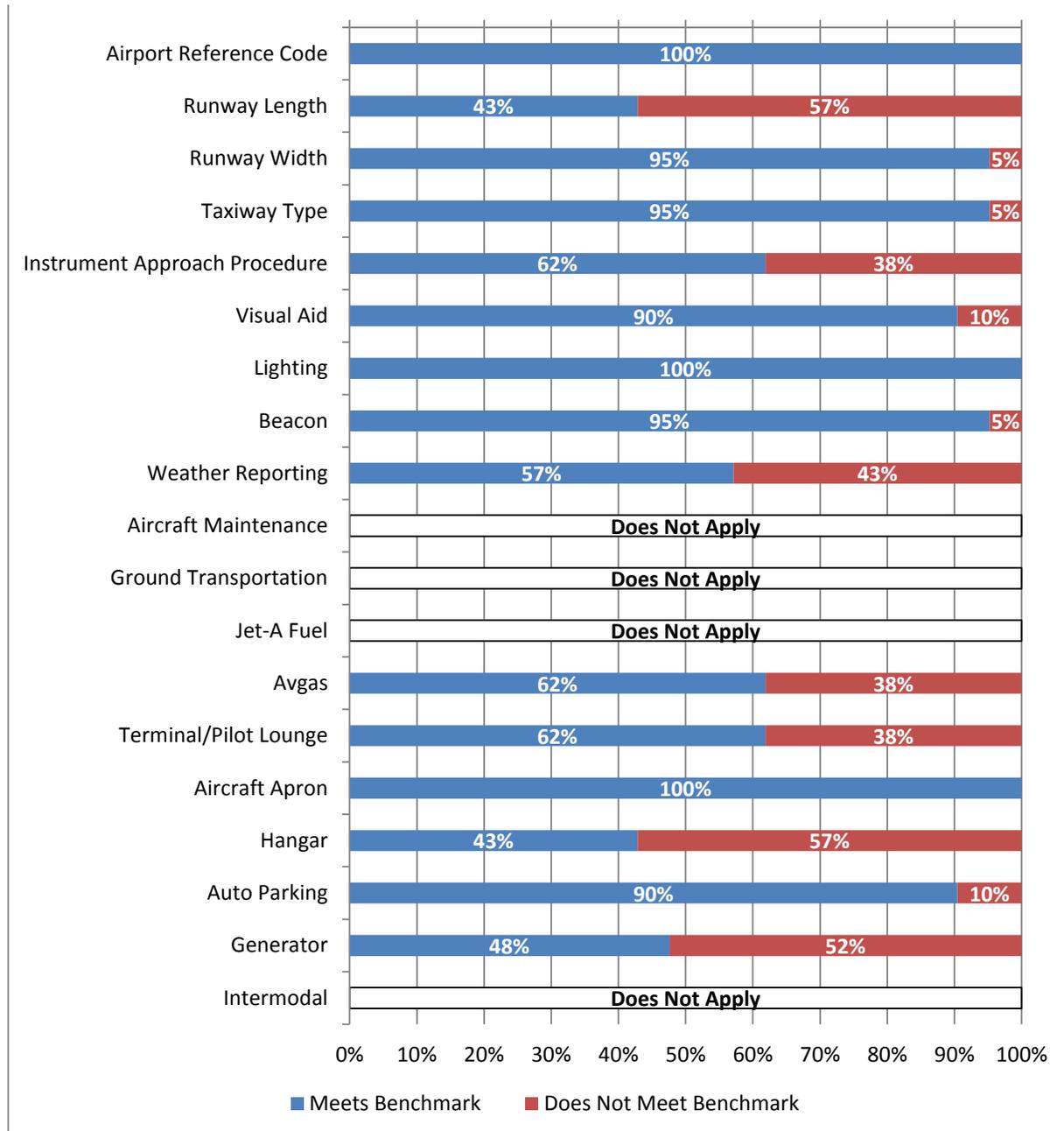
**Figure 6-35: Level 2 Airport Performance Measures**



Source: CDM Smith

**Figure 6-36** shows that Level 3 Airports completely meet only a handful of Performance Measures – airport reference code, airfield lighting, and aircraft apron Benchmarks. At least one airport falls short of Benchmark in all the other Performance Measures. The largest shortfalls are found in the Benchmarks for runway length, instrument approach procedure, weather reporting, avgas, hangar, terminal, and generator.

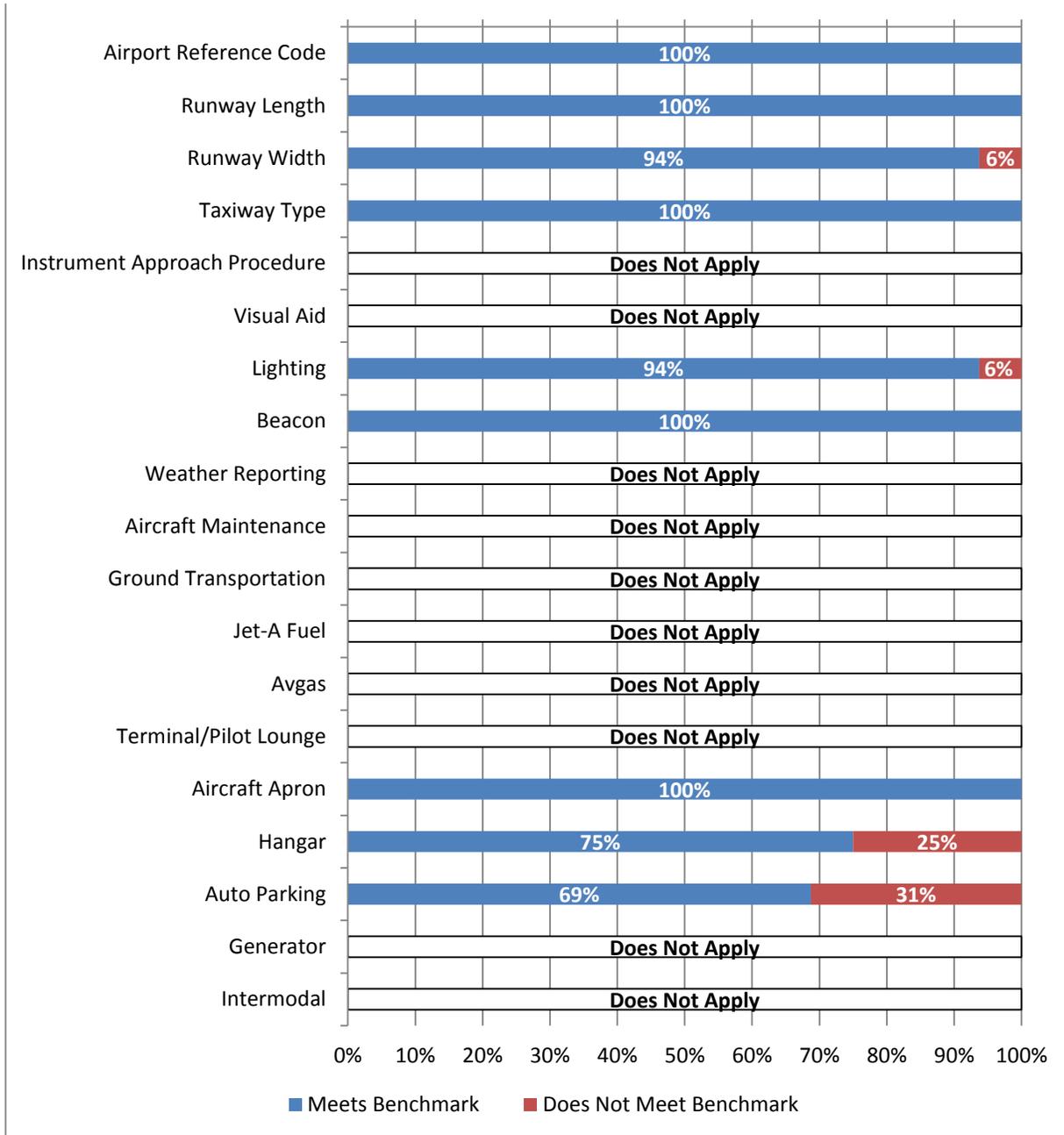
**Figure 6-36: Level 3 Airport Performance Measures**



Source: CDM Smith

Level 4 Airports meet the majority of their Benchmarks, as shown in **Figure 6-37**. The most common shortfalls among Level 4 Airports are found in the hangar and auto parking Performance Measures.

**Figure 6-37: Level 4 Airport Performance Measures**



Source: CDM Smith

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## Section 7. Trends and Issues Identification

Recent trends, both national and statewide, are important considerations in the development of an aviation system plan, as these trends can influence the supply of and the demand for aviation services. At the national level, fluctuating trends regarding aviation usage and economic swings resulting from the nation's business cycle and record high oil prices have all impacted aviation demand. Many of these national trends are reflected within Louisiana, along with aviation developments that are unique to the state.

This section examines trends in the commercial airline and general aviation industries, as well as changes in aviation technology that are expected to have a lasting influence on aviation in Louisiana.

### Commercial Airline Industry

The airline industry operates in a perpetual state of adjustment and change. During the last 30 years, the United States has experienced unprecedented expansion of air carrier capacity and large investments by carriers to control the flow of traffic through networks of hub airports. In various markets, there have been documented skirmishes between the major carriers and new entrants. Where competition prevailed, air passengers reaped the rewards of low fares. At single-carrier hubs and local airports, passengers paid, on average, much higher fares. In the 1990s, the carriers lost billions of dollars. Those losses had a profound effect on the way airlines subsequently operated. Some of the most dramatic changes that occurred included the sudden and complete shutdown of several hub operations and the demise of several flagship carriers, notably Eastern Airlines, Braniff, and Pan Am.

The 1990s ushered in a new period of mergers, global alliances, and joint marketing agreements, as well as domestic alliances between major and regional carriers. In addition, there have been significant structural changes in the way airlines conduct business. The airlines have examined every aspect of their operations to reduce costs. A "shifting downstream" of service to smaller communities marked the mid-1990s. The regional carriers, with lower labor costs, came into their own. Shorter haul service to hub airports was turned over to the regional carriers, and they provided high frequency, turboprop service to and from their major carrier affiliate's hub airport. For many communities, the turboprops were never fully accepted. As the domestic system solidified, the major carriers have re-entered this segment of the airlines business by acquisition of the regional carriers and by replacement of turboprops with regional jets. This process has left smaller cities with few options for air service.

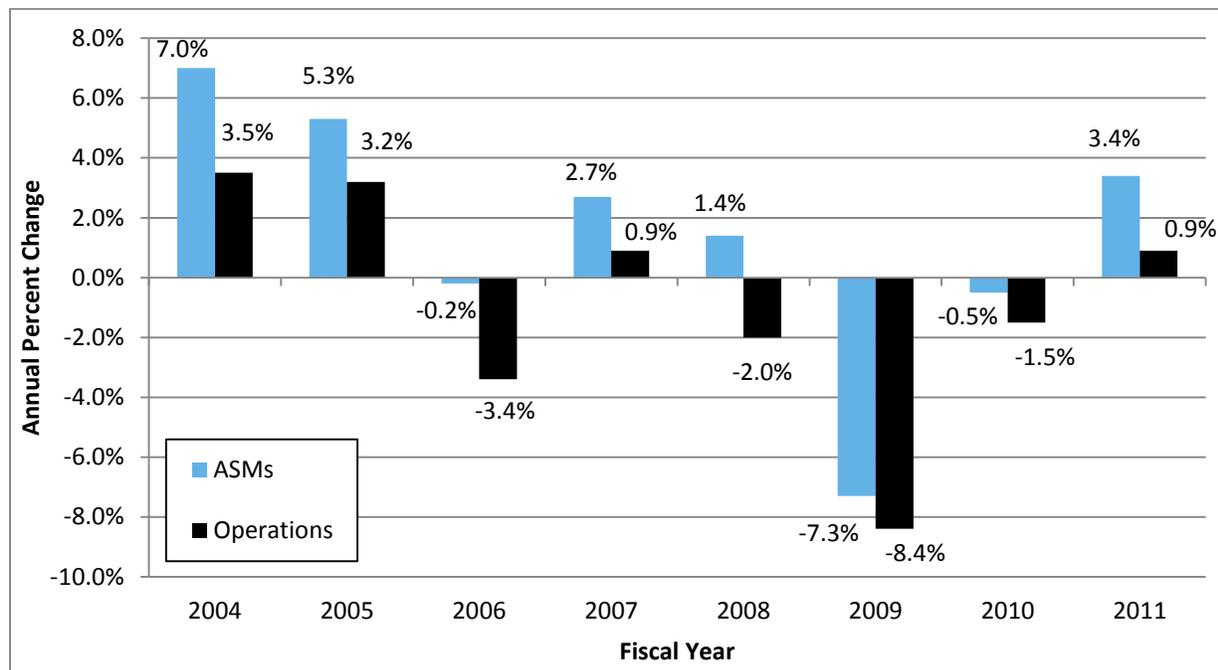
The new millennium brought new challenges to the airline industry. In 2000, the tech bubble burst, sending the U.S. economy into a downturn that slowed commercial aviation activity. The impact of the economic downturn was a reduction in business travel, which has a tremendous impact on commercial airline profitability. According to Peter Morris, chief economist at Ascend, business travelers accounted for less than 20 percent of the passenger volume, but were responsible for as much as 50 percent of the airlines' revenues. Business travelers typically pay higher fares because of their non-discretionary travel, bolstering the average airline yield. So when business cuts back on air travel, yields at airlines decline more than when leisure travelers reduce air travel.

While airlines were adjusting to the economic downturn, a more significant impact was on the horizon. On September 11<sup>th</sup>, 2001, terrorists hijacked four U.S. airliners that ultimately crashed. These

terrorist attacks resulted in the complete closure of the U.S. aviation system for two days. When the system re-opened, new airport and airline security measures were in place at the commercial airports, but the airline passenger traffic did not return to previous levels. The costs incurred by the airlines as a result of September 11<sup>th</sup> coupled with passenger traffic that did not recover for quite a while resulted in significant financial losses for almost all airlines. The terrorist attack of September 2001 initiated a shift in airport security that continues to plague the traveling public.

Record breaking fuel prices in 2008 along with the housing crisis resulted in more financial pain for the airlines. Passenger traffic declined precipitously from its high in 2007. Despite the recession ending officially in 2009, the economic recovery has been hampered by high unemployment, excessive government spending that continues to drive record-setting deficits, and uncertainty in the business climate. Nevertheless, the airline industry has seen slight improvements since 2009. As shown in **Figure 7-1**, the airline industry responded to the deep recession by drastically cutting capacity through service reductions in 2009, driving down flights and available seat miles (ASM<sup>4</sup>). The airlines slowed the pace of this strategy in 2010, finally reversing it in 2011 with a modest expansion in operations and an increase in ASMs. Despite these increases in capacity, ASMs have not yet reached the 2007 pre-recession level.

**Figure 7-1: U.S. Commercial Air Carriers System ASMs and Aircraft Operations**

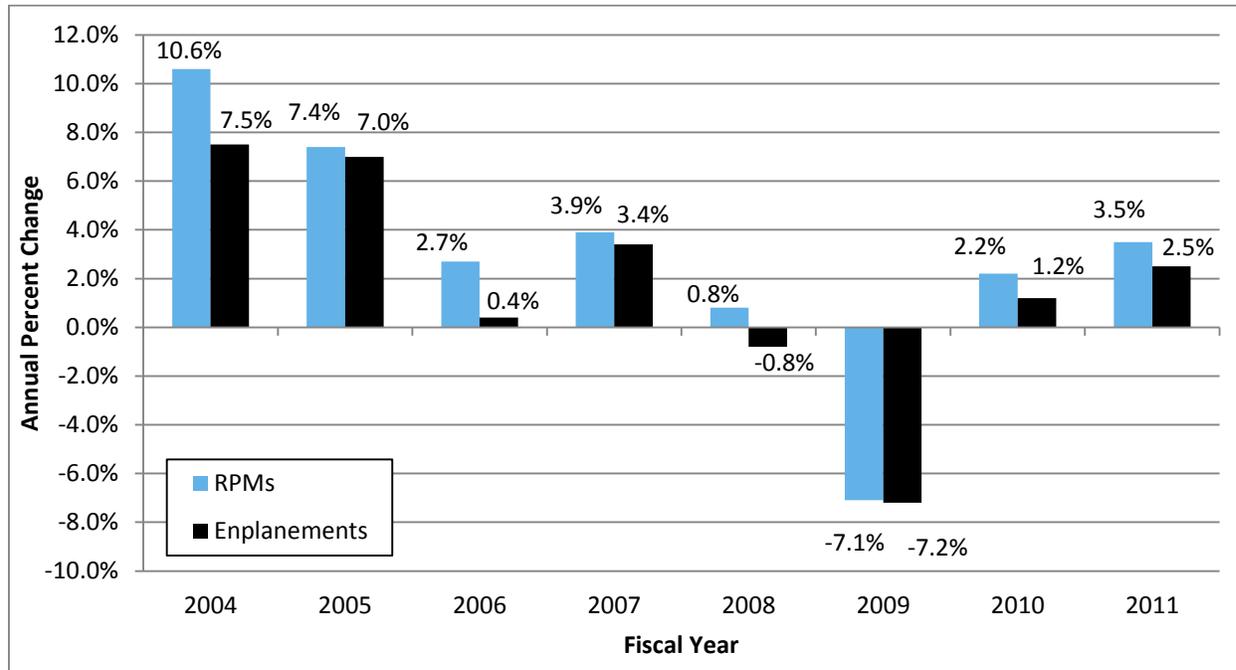


Source: FAA Aerospace Forecast Fiscal Years 2012-2032, March 2012. Prepared May 2012.

Demand for air travel started to recover in 2010, as measured by the slight increase in revenue passenger miles (RPM<sup>5</sup>) and enplanements shown in **Figure 7-2**. Growth in RPMs and enplanements was up even more in 2011.

<sup>4</sup> Available seat miles are a measure of passenger carrying capacity, determined by multiplying the number of seats in a given set of aircraft by the miles flown by those aircraft.

<sup>5</sup> Revenue passenger miles are a measure of airline passenger production, determined by multiplying the number of revenue-paying passengers by the distance traveled.

**Figure 7-2: U.S. Commercial Air Carriers System RPMs and Enplanements**

Source: FAA Aerospace Forecast Fiscal Years 2012-2032, March 2012. Prepared May 2012.

The FAA identifies three current trends in its most recent aviation forecast document that are expected to shape the near future of the airline industry.

**Airline consolidation.** The first decade of the 21<sup>st</sup> century was a period of consolidation among major U.S. airlines, starting with American Airline’s acquisition of TWA in early 2001. The merger of America West and U.S. Airways followed in 2005. The biggest airline consolidations of the decade took place in the later part of the decade. In 2008, Delta Air Lines and Northwest Airlines merged their operations. United Airlines and Continental joined together in 2010. There are signs that this trend is not over. U.S. Airways has suggested a merger with bankrupt American Airlines, with American’s unions supporting the proposal.<sup>6</sup> All of this consolidation has resulted in a reduction in airline capacity. The FAA estimated that from 2001 to 2011, domestic available seat miles (ASM) for U.S. carriers fell 7 percent.<sup>7</sup> Any additional airline consolidation would be expected to result in further reductions in ASMs.

**Convergence of the business models of network and low cost carriers.** Ten years ago, the way a low cost carrier operated was very different from the way a network carrier operated. Since then, changes have resulted that have pushed each business toward models that now share more in common than they did previously. For example, over time the workforce of low cost carriers has gained in seniority, making labor costs more similar across the two types of air carriers. Competitive forces have pushed the network carriers to squeeze more utility out of their aircraft and crews. Low cost carriers have expanded their markets, in some cases subtly shifting their point-to-point networks into hub-and-spoke systems that challenge the network carriers.

<sup>6</sup> “US Airways Walks AMR Tightrope,” *Wall Street Journal*, 23 April 2012, retrieved 9 May 2012.

<sup>7</sup> Federal Aviation Administration, *FAA Aerospace Forecast Fiscal Years 2012-2032*, March 2012.

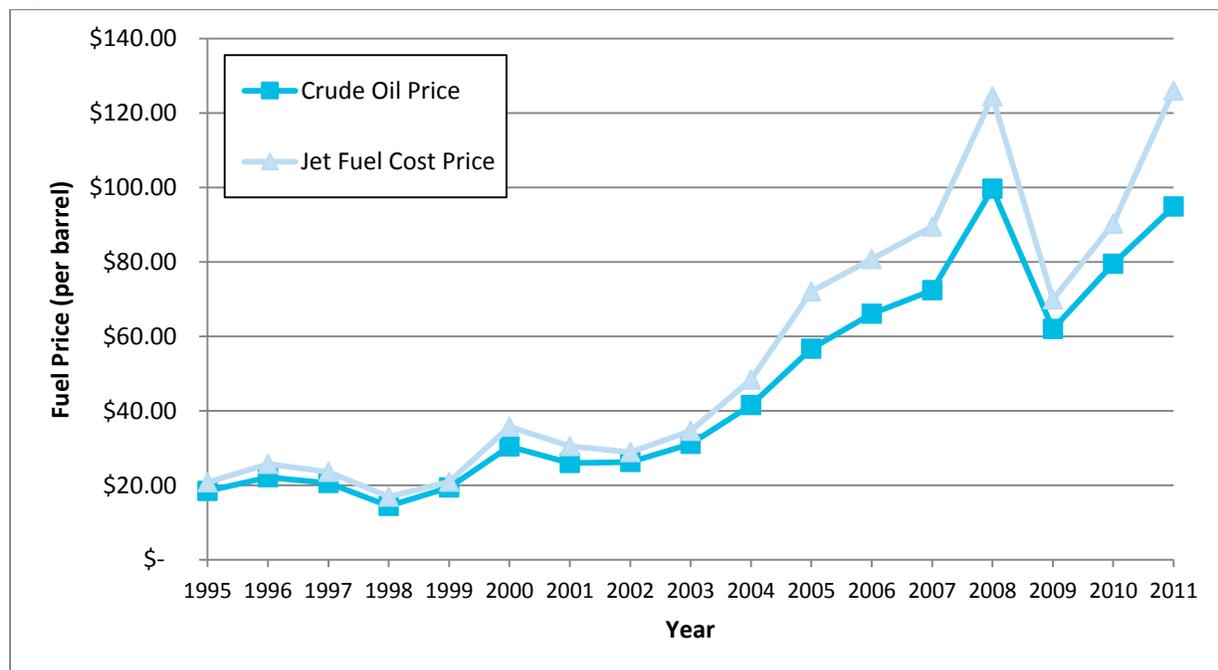
Statistics support this convergence of the two business types. The FAA reported that in 2000 the average domestic yield (revenue per revenue passenger mile) for low cost and network carriers differed by more than two cents, with low cost carriers pulling in 12.4 cents per revenue passenger mile and network carriers yielding 14.5 cents. By 2011, the average yield for both types of carriers was 13.4 cents.

**Revenue enhancement through supplementary charges.** Airlines have managed to bolster their bottom line by unbundling many of their services and charging for them on an ala carte basis. Examples include fees for checked baggage, ticket booking, ticket changes, reserved seats, exit row and other premium seat locations, and, in some cases, blankets and pillows. Given the competitive pressures of the industry, it is expected that this trend will continue, and that airlines will factor into their air service decisions the degree to which a destination contributes to the bottom line through both ticket prices and supplementary fees.

In addition to these three issues highlighted by the FAA is the concern over rising fuel prices. In 2008, the cost of fuel surpassed the cost of labor as the most expensive line item for an airline.

**Jet Fuel Prices.** The high cost of fuel continues to disrupt the financial recovery of the commercial airlines. **Figure 7-3** shows the pricing trends of crude oil and jet fuel since 1995. In the last 30 years, there have been three pricing spikes. In 1973-74, the Oil Embargo caused the price of oil to spike from \$3 per barrel to over \$11 per barrel. In the 1980s, the price of crude oil moved into the \$20 range. In the 1990s, the price fluctuated between \$20 and \$30 per barrel. In 2000, crude oil jumped above \$30 per barrel and, starting in 2003, began a rapid rise to nearly \$100. Crude oil experienced a sharp drop in 2009 following the recession, but it has quickly risen again, approaching its 2009 peak in 2011. Jet fuel prices have closely mirrored crude oil prices, rising above \$120 per barrel in both 2009 and 2011. In addition, the difference between crude and jet fuel cost per barrel, known as the “crack spread” has increased as well, from a historical average of \$5 to over \$20 since Hurricane Katrina.

**Figure 7-3: Crude Oil and Jet Fuel Price Trends**



Source: Airlines for America. Prepared June 2012.

## Cargo

Air cargo fulfills the need for transportation of material or goods between two points in an expeditious manner. Cargo moves in the bellies of passenger aircraft and in dedicated all-cargo aircraft on both scheduled and nonscheduled service. Products that benefit from increased speed of distribution or better stock availability that can be gained through air cargo shipping include automotive; computers; and perishable items such as flowers, vegetables and fish. All of these are high value, relatively light weight, and time critical.

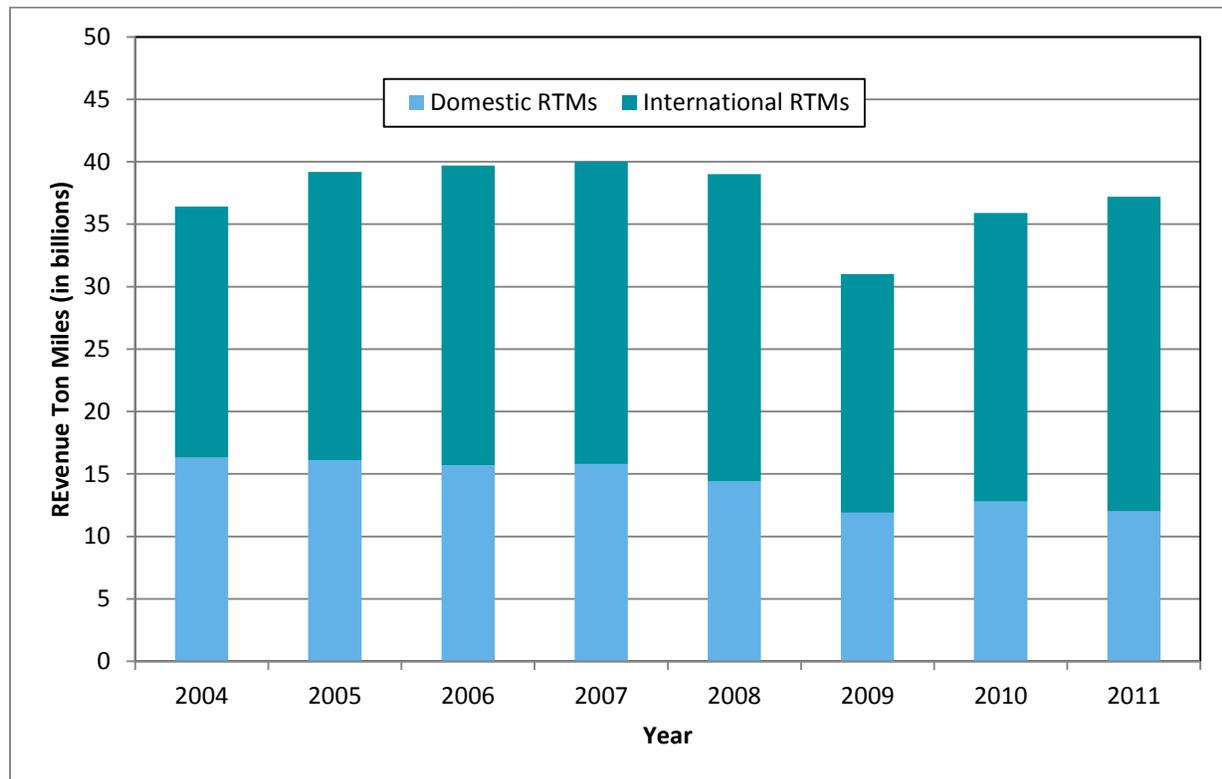
- Louisiana is home to seven commercial service airports in the state that accommodate freight. These include: New Orleans, Shreveport, Lafayette Regional, Lake Charles Regional, Monroe Regional, Baton Rouge, and Alexandra International.
- Louisiana airports carry fewer inbound tons than other transport modes in the state; however, airports provide a critical service to the State's businesses. New Orleans International and Shreveport Regional are the two busiest airports in Louisiana in terms of total cargo handled, with 266,000 and 170,000 tons respectively handled between 2006 and 2010.
- Outbound air traffic accounted for over 54 percent of all air cargo traffic by weight (88.0 thousand tons) in 2009. By 2038, air cargo traffic is estimated to increase by over 190 percent (468.4 thousand tons, up from 160.9 thousand tons in 2009), with outbound traffic accounting for roughly 53 percent of all traffic by weight. Freight of All Kinds (FaK) shipments which include ad hoc shipments that are time sensitive and crucial for various manufacturing and building processes and transportation equipment are the number one air cargo commodity by weight in Louisiana.
- By value, air cargo traffic is slated to grow more than threefold (approximately 364 percent) from \$12.8 million in 2009 to \$59.6 million in 2038. This sharp increase is primarily attributed to increases in the volume and value of radio, TV, and vehicle equipment. These are currently the top commodities handled by Louisiana airports.

The air cargo market faces stiff competition, not just among air carriers, but from alternative shipping modes such as trucks, container ships, and rail cars.

**Figure 7-4** shows the trend in air cargo activity by U.S. air carriers. The quantity of air cargo shipped, measured in revenue ton miles (RTM<sup>8</sup>), increased more than 3 percent from 2010 to 2011, resulting in 37 billion RTMs. That increase in air cargo, a continuation of growth from the low point of 2009, was led by international air cargo, which grew more than 9 percent year over year. Domestically, air cargo RTMs contracted more than 6 percent from 2010 to 2011, an indication that yet another segment of aviation is struggling to recover from the recession.

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<sup>8</sup> Revenue ton miles is a measure of airline cargo production, determined by multiplying the number of tons of paid cargo by the distance transported.

**Figure 7-4: U.S. Commercial Air Carriers Cargo Revenue Ton Miles (RTM)**

Source: FAA Aerospace Forecast Fiscal Years 2012-2032, March 2012. Prepared May 2012.

**Vertical Integration** – As the air cargo industry has matured, the rapid growth experienced in the 1980s and 1990s has moderated and the industry has shifted from opening new markets to optimizing existing ones. Many companies are looking at vertical integration for opportunities. UPS started as a trucking company and expanded into air cargo, while FedEx began as an integrated express company that is now expanding into trucking through the acquisition of several companies, including RPS and American Freightways. In response to the needs of supply-chain managers, many suppliers of overnight package delivery now offer time-definite cargo services in the form of two- or three-day delivery.

**Modal Shift** – Air cargo is facing greater competition from trucks, as the cargo industry shifts focus from integrated express to time-definite service and more emphasis is placed on cost-saving measures. This is especially relevant on longer routes where trucks are supplanting the aircraft that traditionally moved cargo. This modal shift is particularly pronounced within the integrated express carrier community. Less-than-truckload (LTL) companies have become major competitors to air freight. These companies enjoy a significant cost advantage over air cargo carriers because of lower capital costs for equipment and lower wage scales. To compete effectively in this segment, FedEx Express has formed its own LTL subsidiary, FedEx LTL. Other larger LTL companies competing for time-definite shipments include ABF Freight System, Inc., Yellow Freight System, and Con-Way. The United States Postal Service (USPS) has also increased the use of trucks to transport mail, finding that mail can be transported by truck for 80 percent less than air transportation costs.

**Declining Availability of Belly Space on Domestic Carriers** – While 50 percent of international air cargo is transported on passenger aircraft, only a small percentage of air cargo is carried on domestic passenger aircraft in the U.S. This is because fewer wide-body aircraft are in use on domestic routes in

North America. The increased use of regional jets offers limited cargo capacity. Higher load factors, which mean more passenger baggage, further reduce belly cargo capacity. In August 2010, new security rules went into effect requiring 100 percent screening of all cargo transported on U.S. domestic passenger aircraft, creating an additional obstacle for providers of air cargo belly space.

**Decrease in USPS Mail Volume** – The USPS has scaled back the amount of mail it moves by air for a number of reasons. Reduced capacity offered by regional jets has resulted in the USPS relying more heavily on trucks than aircraft. Historically, mail traveling more than 500 miles made use of aircraft, but with the proliferation of regional jets reducing air cargo capacity, the threshold for the use of trucking for mail has shifted to up to 800 miles. In the past, USPS formed several business alliances and capacity agreements with multiple all-cargo carriers, blurring the distinction between postal and private delivery. However, in August 2001, FedEx Express and the USPS initiated an exclusive strategic alliance. Through a business agreement, the USPS allows FedEx Express to locate FedEx overnight service collection boxes at post offices nationwide. FedEx Express, in return, provides space on FedEx Express airplanes for the transportation of Express Mail, Priority Mail, First-Class Mail, and some International Mail. This agreement yielded approximately 3.5 million pounds of mail each day for FedEx Express, enough to fill 30 DC-10-30 freighters. In addition, the increased use of email and overnight delivery services like DHL has decreased the amount of mail carried on passenger aircraft by the USPS.

## Issues Relevant to Louisiana

Louisiana, like any other state, is subject to the previously described trends in commercial aviation. There are additional issues that are specific to Louisiana aviation.

Passenger airline service at Louisiana’s seven commercial service airports is provided by nine different airlines, primarily domestic legacy carriers. However, several low-cost carriers such as Allegiant, jetBlue, Southwest/AirTran, and Frontier, also operate at system airports. Legacy carriers are those airlines that had established interstate routes by the time of the Airline Deregulation Act of 1978 and are distinguished from the relatively newly established low-cost carriers that compete with the legacy carriers. **Table 7-1** lists the air carriers operating out of Louisiana’s commercial service airports. Many of the airlines serving Louisiana are involved in the trends discussed previously.

**Table 7-1: Air Carriers Operating in the Louisiana Airport System**

ID	Associated City	Airport	Nonstop Destinations	Number of Air Carriers	Air Carriers
AEX	Alexandria	Alexandria International	3	3	United, American, Delta
BTR	Baton Rouge	Baton Rouge Metropolitan, Ryan Field	5	4	United, American, Delta, US Airways
LCH	Lake Charles	Lake Charles Regional	2	2	United, American
LFT	Lafayette	Lafayette Regional	3	3	United, American, Delta
MLU	Monroe	Monroe Regional	4	3	United, American, Delta
MSY	New Orleans	New Orleans Louis Armstrong International	37	8	United, American, Delta, Air Canada, Frontier, JetBlue, Southwest/AirTran, US Airways
SHV	Shreveport	Shreveport Regional	7	4	United, American, Delta, Allegiant

Source: Individual Airport Websites, May 2012

United Airlines and American Airlines serve all seven commercial airports, while Delta Air Lines serves six of the seven airports. US Airways, also a legacy carrier, serves two out of the seven commercial service airports. Low-cost carriers primarily serve the state's busiest airport (in terms of passenger enplanements), New Orleans International, but also operate out of Shreveport Regional, Louisiana's third busiest airport.

Between 2000 and 2010, passenger enplanements at Louisiana's commercial service airports have largely declined. Albeit at very slow rates, Alexandria International and Lafayette Regional are the only airports that experienced growth in enplanements in that same time frame. **Table 7-2** lists the total enplanements for each commercial service airport from 2000 to 2010.

**Table 7-2: Historical Enplanements, 2000 to 2010**

Year	AEX	BTR	LCH	LFT	MLU	MSY	SHV
2000	117,924	417,366	71,677	180,158	116,575	4,879,278	364,578
2001	128,947	388,845	48,847	180,026	104,362	4,952,820	331,338
2002	103,839	349,899	43,730	154,951	88,656	4,562,315	282,098
2003	98,006	360,795	41,889	150,856	100,425	4,593,475	289,869
2004	123,038	363,191	42,598	162,283	114,370	4,785,475	300,763
2005	128,220	431,630	49,291	167,535	112,694	4,741,333	315,971
2006	122,440	586,986	50,781	205,140	110,902	2,663,723	309,605
2007	133,607	479,082	53,690	214,872	110,162	3,671,647	305,018
2008	124,127	435,617	48,596	212,314	93,106	3,996,066	295,942
2009	134,932	354,024	50,593	203,785	86,496	3,879,231	251,703
2010	140,911	367,335	62,727	216,092	94,708	4,000,710	231,786
CAGR (2000-2010)	1.8%	-1.3%	-1.3%	1.8%	-2.1%	-2.0%	-4.4%

Source: FAA TAF issued January 2012

Similarly, air carrier operations at each of Louisiana's commercial service airports from 2000 to 2010 also declined. **Table 7-3** lists air carrier operations at each commercial service airport between 2000 and 2010.

**Table 7-3: Historical Air Carrier Operations, 2000 to 2010**

Year	AEX	BTR	LCH	LFT	MLU	MSY	SHV
2000	15,177	26,087	15,908	39,802	12,254	137,333	42,106
2001	12,733	25,262	12,938	37,993	12,092	138,930	38,310
2002	11,117	24,921	10,209	34,102	11,026	127,041	35,803
2003	11,036	24,991	9,136	30,893	11,109	125,280	34,048
2004	10,737	22,277	8,491	30,765	11,059	130,229	32,039
2005	10,298	26,979	8,106	31,283	9,559	121,548	30,002
2006	10,018	32,920	16,817	40,829	9,666	75,778	27,637
2007	12,227	30,634	13,646	32,534	11,697	95,458	30,292
2008	11,628	28,790	14,797	38,202	11,191	108,669	29,983
2009	12,262	22,766	21,193	39,447	10,113	98,368	24,405
2010	11,360	23,432	15,255	30,513	8,932	98,733	24,231
CAGR (2000-2010)	-2.9%	-1.1%	-0.4%	-2.6%	-3.1%	-3.2%	-5.4%

Source: FAA TAF issued January 2012

The decline and slow growth of both enplanements and air carrier operations over the past decade are not unique to Louisiana and can be at least partially attributed to three events: the terrorist attacks of September 11<sup>th</sup>, 2001, the global financial crisis of 2008, and the subsequent rising cost of fuel.

On top of these challenges, airlines at Louis Armstrong New Orleans International Airport suffered from the devastation of Hurricane Katrina in 2005, resulting in a huge drop in both enplanements and operations. However, enplanements at Lafayette and Baton Rouge increased significantly following Hurricane Katrina and are a result of the shift in population to these two markets.

Air cargo operators are another major user of Louisiana's airports, with integrated express, all-cargo carriers, contract feeders, and regional cargo airlines all making use of airport facilities in the state. New Orleans International and Shreveport Regional are the two busiest airports in Louisiana in terms of total cargo handled, with 266,000 and 170,000 tons respectively handled between 2006 and 2010. **Table 7-4** below lists the total tonnages handled by each commercial service airport between 2006 and 2010.

**Table 7-4: Historic Air Cargo Tonnage (short tons), 2006 to 2010**

Airport	2006	2007	2008	2009	2010	TOTAL
AEX	35	40	29	20	9	132
BTR	26,577	23,044	14,643	55	31	64,350
LFT	15,343	15,959	14,086	12,513	12,469	70,370
LCH*	3	2	2	-	-	7
MLU*	780	744	303	106	75	2,008
MSY	50,688	49,463	49,866	57,939	57,986	265,941
SHV	31,537	34,835	37,240	33,007	33,322	169,941

Source: ACI North America, \*estimates by CDM Smith

## Commercial Service Airport Navigational Aids

Not all airports are created equal in terms of access during low visibility weather. Whether an airport can be used during low visibility is dependent upon a number of factors, but a rather important one is the type of instrument approach found at the airport. For commercial service airports, the instrument

landing system (ILS) is the standard instrument approach. The ILS is classified into three categories, based upon the weather limits in which the system can be used. In its most basic form, an ILS permits aircraft to land at the airport when cloud ceilings are as low as 200 feet above the ground and visibility is half a mile. This is referred to as a category I ILS. A Cat II ILS allows aircraft to land with ceilings down to 100 feet above the ground and visibility of 1,200 feet. The category III ILS provides properly equipped aircraft with certified crews the ability to land when cloud ceilings reach all the way to the ground and visibility is 700 feet or less. In some cases, visibility may be so low that it is impossible for the aircraft crew to taxi to the gate after successfully landing.

There are a total of 113 category III ILS approaches installed in the U.S. These highly accurate approaches are found at 64 different airports, most with a single Cat III approach, but some have multiple Cat III approaches, with seven operating at Chicago's O'Hare International Airport. In most cases, these airports are major air carrier hubs, either for passenger airlines, cargo airlines, or both. Other reasons for these airports having Cat III landing capabilities include their role as a gateway to a region or a propensity for low visibility weather, often because of nearby geography that promotes fog or other visibility limiting phenomenon.

The major limit on the proliferation of Cat III approaches is cost. In addition to the expense of the navigational equipment, airports may have additional expenses related to acquiring and protecting the area around the components of the Cat III system, as well as the larger airspace a Cat III approach needs. Furthermore, Cat III systems are more expensive to maintain than other approach systems. Beyond the airport costs, aircraft operators need to equip their aircraft with Cat III certified avionics, which includes multiple autopilot systems, and the aircraft must be capable of performing an automated landing, since the crew typically cannot see the runway prior to touchdown. In addition to this specialized equipment, crews must receive initial and ongoing training to maintain their Cat III certification. In many cases, these costs cannot be justified by the small number of diverted flights that a Cat III system prevents.

In Louisiana, only Louis Armstrong New Orleans International Airport has a Cat III approach. Shreveport Regional Airport is equipped with a Cat II approach, while all other commercial service airports in Louisiana have Cat I approaches.

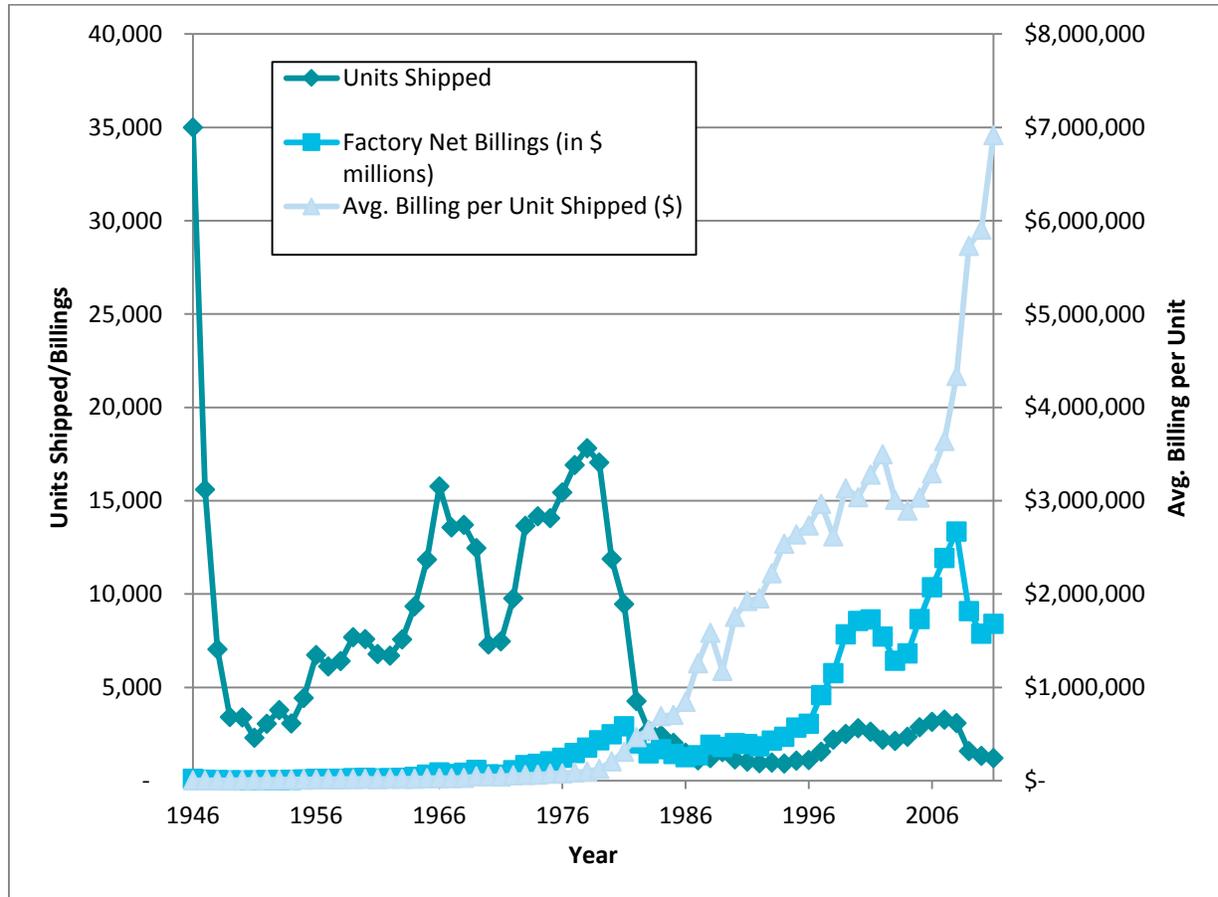
## General Aviation Activity

General aviation, like any business, is subject to the business cycle. It is an industry that tends to be among the first to suffer the effects of an economic downturn and the last to benefit from the follow on recovery. Key indicators of the vitality of the general aviation industry are the number of new aircraft that factories ship each year and the dollar value of those shipments. The following section describes general aviation trends at the national level.

## Aircraft Shipments and Billings

As shown in **Figure 7-5**, the general aviation industry grew steadily following World War II until the late 1970s. However, general aviation manufacturing took a sharp dive in the early 1970s and again in the early 1980s. Both periods corresponded to eras of high interest rates and difficult economic conditions. The large drop off in general aviation shipments that started in 1979 was exacerbated by a surge in product liability costs that culminated with Cessna Aircraft Company ending production of all of its piston models in 1986.

**Figure 7-5: General Aviation Industry Trends**



Source: GAMA 2011 General Aviation Statistical Databook & Industry Outlook

For the next 10 years, product liability costs limited general aviation manufacturing. In 1994, legislation went into effect that shielded general aviation manufacturers from lawsuits on aircraft and aviation parts that were more than 18 years old. With this protection in place, general aviation aircraft shipments began a slow but steady rise until the tech bubble burst in early 2001, followed by the terrorist attacks of September 11<sup>th</sup>. General aviation manufacturing recovered briefly, but then was hit by the housing collapse recession that started in December 2007.

The resurgence of general aviation manufacturing in the 1990s also marked the start of another trend – a shift in emphasis to turboprop and jet aircraft. This is illustrated in Figure 7-5 by the sharp rise in factory net billings as well as the obvious increase in average billing per unit.

## Pilot Population

The pilot population is a prime driver of general aviation activity. Without pilots, planes cannot fly and demand for associated aviation services, found at many general aviation airports, suffers.

Pilot certificates fall into one of eight classifications by the FAA:

- **Student Pilot** – Pilots in training. Student pilots may fly aircraft solo when properly authorized by a flight instructor. In 2009, the FAA eased the requirements for a student pilot, resulting in a significant increase in student pilots.
- **Sport Pilot** – Certified to fly light sport aircraft. Limited to 2-seats and day-time flying only. This category did not exist in 2000.
- **Recreational Pilot** – Certified to fly aircraft with up to 180 horsepower and 4 seats. Limited to day-time flying.
- **Private Pilot** – Certified to fly aircraft, as long as it is not for compensation or hire
- **Commercial Pilot** – Certified to fly for compensation or hire. Required to have 250 hours of flight time.
- **Airline Transport Pilot** – Certified to fly as pilot in command for a scheduled airline. Required to have 1,500 hours of flight time.
- **Rotorcraft Pilot** – Pilots certified to fly helicopters and gyrocopters. This category includes those people that are certified to fly only rotorcraft. Pilots that are certified to fly both fixed wing and rotorcraft are included in the appropriate previously mentioned categories.
- **Glider Pilot** – Pilots certified to fly gliders and sailplanes. This category includes those people that are certified to fly only gliders. Pilots that are certified to fly aircraft in addition to gliders are included in the appropriate previously mentioned categories. In 2002, the FAA changed the method of counting glider pilots, resulting in a large increase.

**Table 7-5** shows that the total number of pilots in the U.S. have fallen by 1.4 percent since 2000. This is despite changes in counting methodology that significantly boosted student and glider pilot counts during the period.

**Table 7-5: Pilot Certificates Held in the U.S.**

Pilot Certificate	Number of Certificates		Percent Change
	2000	2011	
Airline Transport Pilot	141,596	142,511	0.6%
Commercial	121,858	120,865	-0.8%
Private	251,561	194,441	-22.7%
Recreational	340	227	-33.2%
Sport	0	4,066	n/a
Student	93,064	118,657	27.5%
Rotorcraft	7,775	15,220	95.8%
Glider	9,387	21,141	125.2%
Total Certificates	625,581	617,128	-1.4%

Source: FAA

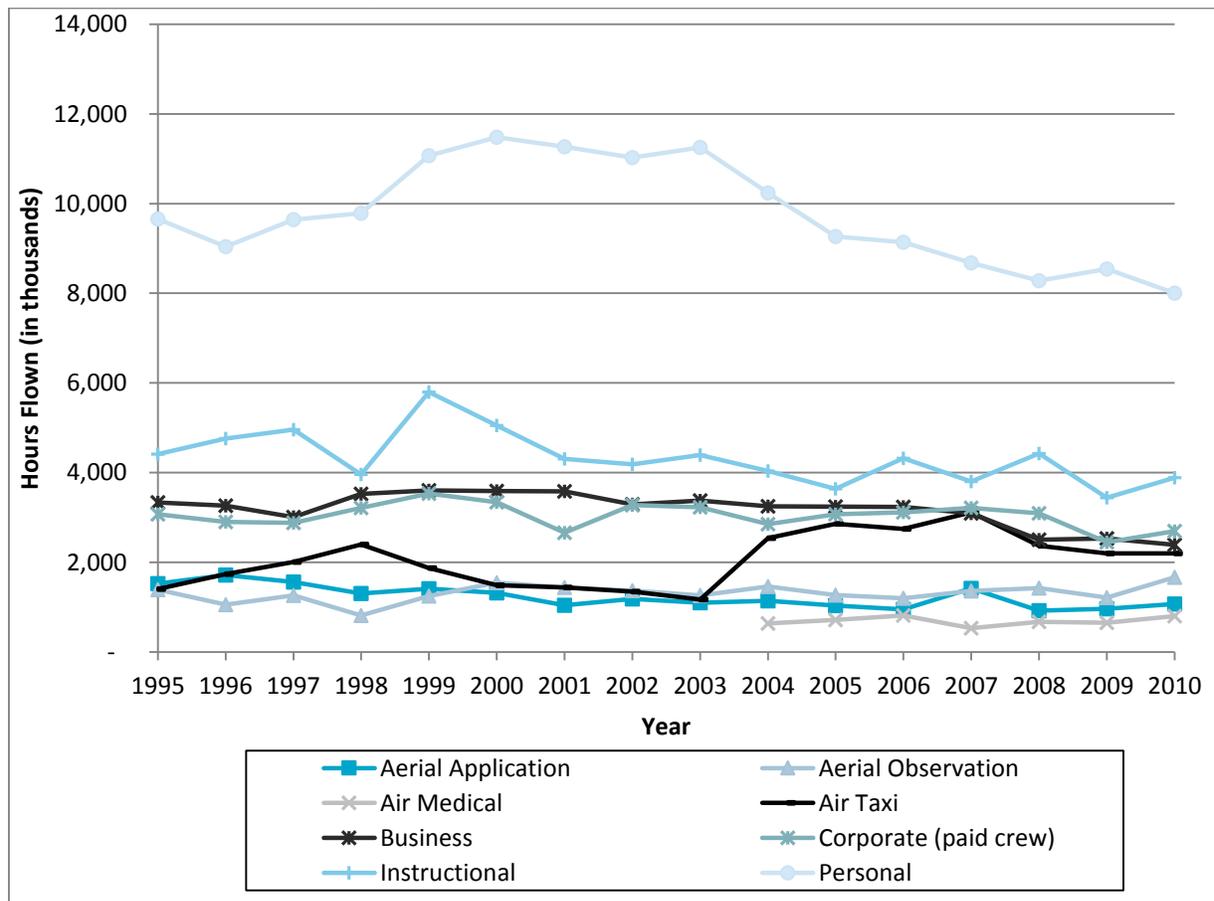
Of particular concern is the nearly 23 percent drop in private pilots since this is the single largest pilot segment. Private pilots are significant contributors to many general aviation airports in terms of financial support through fuel and maintenance expenditures.

Aviator ranks swelled following World War II from returning pilots and servicemen that took advantage of the G.I. Bill to earn a pilot certificate. That generation of aviators has experienced severe attrition in the past two decades, depleting the ranks of aviators. The high cost of flight training, in part due to rising fuel costs, has hampered efforts to replenish the declining number of aviators. With fewer pilots, overall flight hours flown by general aviation aircraft have fallen.

### Aviation Activity by Sector

Figure 7-6 shows the estimated number of hours flown annually since 1995 by U.S. registered aircraft in selected categories of use. Each category is explained in more detail in the following section.

Figure 7-6: General Aviation Flight Hours



Source: Airlines for America

### Aerial Application

This category includes aircraft flown to apply pesticides, fertilizer, and seeds for crop and timber production. Aerial application flight hours saw a gradual decline from a peak of 1.7 million hours flown in 1996 until 2006, when hours jumped back to 1999 levels of approximately 1.2 million hours. The following year experienced a return to falling flight hours, but the trend has been on the upswing in 2009 and 2010 with more than 1 million hours flown by aerial applicators in 2010.

Aerial applicator work is influenced by a number of factors. One is simply the demand for aerial applications. In years of unusual outbreaks of insects or plant disease, demand for aerial applicators can increase. Likewise, in years when these pests are not as prevalent, the need for aerial application

services drops. The widespread use of genetically engineered crops in the farming industry has reduced the need for certain types of spraying since these crops are more resistant to bugs and disease. On the other hand, many crops have been engineered to be resistant to herbicides, which promote the widespread application of these chemicals in no-till farming.

Likely the biggest impact on aerial application operations is the profitability of the farming and timber industries. When crop yields increase and prices are up, producers have a financial incentive to protect their investment through the use of aerial applicators. In contrast, when yields decline and prices drop, the cost of aerial application of pesticides is harder to justify, leading to a reduction in its use.

Another factor that is contributing to the reduction of aerial application flight time is the shift from the use of piston-powered ag aircraft to turbine powered. Turbine powered ag aircraft typically carry heavy payloads and are more efficient in applying pesticides than piston powered aircraft. This higher efficiency translates into reduced flight hours, even though the same or even greater pesticide application is achieved.

### **Aerial Observation**

This category includes aircraft used to perform aerial mapping and photography, pipeline and powerline patrols, search and rescue, traffic advisory, and oil and mineral exploration. Aerial observation operations involve a wide variety of aircraft uses, ranging from search and rescue flights to aerial photography. Included in these activities are pipeline and powerline inspections and oil and gas exploration. Since 1995, aerial observation flight hours nationally have remained fairly steady, with only minor fluctuations around an average of 1.3 million annual hours flown. Louisiana saw an additional use of aircraft following the Deepwater Horizon oil spill in 2010 when aircraft were pressed into service to apply chemical dispersants, and to monitor and track the spill.

### **Air Medical**

This category includes flights used to transport patients and organs. Due to data gathering methods, data for this category is not available prior to 2004. Air medical flights are dominated by helicopter operations, with helicopters flying an estimated 80 percent of the 500,000 patients transported every year on air medical flights. Since the FAA began keeping data on air medical flights in 2004, estimated flight hours have climbed 26 percent to more than 800,000 in 2010. According to a 2010 Government Accounting Office report,<sup>9</sup> the air ambulance industry has experienced growth from 1999 to 2008, with dedicated air ambulance helicopters nearly doubling during that time, rising from 360 to 677. A large part of this growth was from the expansion of independent air ambulance operators (as opposed to those operators affiliated with a specific hospital). Growth in air medical flights in Louisiana has been supported by the use of aeromedical marshalling points (AMP).

In the event that hospitals request assistance for evacuation and state and/or federal assets are required, the evacuating hospital patients will first be transported from the medical institution to an AMP and then from the AMP to a National Disaster Medical System destination hospital.

### **Air Taxi**

This category represents on-demand passenger and cargo flights, frequently referred to as charter flights. The air taxi industry has seen peaks and valleys of flight activity from 1995 to 2010, which is

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<sup>9</sup> *Air Ambulance: Effects of Industry Changes on Services are Unclear*, September 2010. GAO-10-907.

not surprising since the industry typically is among the first to feel the effects of an economic recession and last to benefit from an economic boom. Air taxi activity peaked in 1998, then suffered a steady decline until 2003. This drop in activity corresponded with the bursting of the dotcom bubble. From 2003 to 2007, air taxi activity climbed to another peak, capitalizing on the economic growth driven by the housing bubble. Air taxi activity has fallen with the economic collapse of 2008, but still reported a higher level of activity than what was reported in 1995.

### **Business**

Aircraft flown to transport people in the support of a business where the crew is not compensated for their aviation duties comprise this category. The 28 percent decline in flight hours from 1995 to 2010 in this sector is likely the result of numerous factors, including the rising cost of aviation fuel, and the declining pilot population. A smaller pilot population means fewer business owners that have a pilot certificate since, unlike airlines and charter companies, higher pay and other incentives can't be used to attract business owners to flying.

### **Corporate (paid crew)**

This category includes aircraft flown to transport people in the support of a business where the crew is compensated for their aviation duties. This includes fractional ownership operations. Hours flown by corporate operators have been essentially flat since 1995, slipping 12 percent to 2.7 million hours in 2010.

### **Instructional**

This includes flights conducted under the supervision of a flight instructor and solo flights conducted by a student pilot. Proficiency and training flights are not included in this category. Despite growth in instructional hours during the late 1990s, activity in this category declined from 4.4 million hours in 1995 to 3.9 million hours in 2010, a decline of 11 percent. This is not surprising given the increase in fuel costs, decline in pilot population and the drop off in personal flying hours (see below).

### **Personal**

These are flights taken for personal reasons, including proficiency and training flights. Figure 7-6 highlights the gradual decline in hours flown for personal reasons, reflecting a combination of factors, but predominately the poor economy and high aviation fuel prices. Personal hours flown dropped from 9.7 million in 1995 to 8.0 million in 2010, a 17 percent drop. There was a boost in personal hours flown that started in 1996, which corresponds to the passage of the General Aviation Revitalization Act – legislation that limited liability for aircraft manufacturers and contributed to growth in small aircraft production.

### **Future of Avgas**

A looming issue for general aviation is whether avgas will be available in the future. Of concern is the question surrounding the additive tetra ethyl lead (TEL). It is added to avgas to prevent valve wear and engine knocking.

Its economic future is in doubt because there is a single worldwide manufacturer of TEL. Innospec operates a facility in the United Kingdom that is the only producer of TEL. With the nearly global phase out of leaded automotive gasoline, avgas is one of the few products that still use TEL as a fuel additive. And since avgas comprises only 0.1 percent of U.S. fuel production, demand for TEL has dropped over the years. Should Innospec decide that the rewards of manufacturing TEL are not worth

the risks, the supply of TEL could end, and with it the availability of avgas. More than 70 percent of the U.S. general aviation fleet relies on avgas.

Beyond the economic risk to avgas is a regulatory threat. In 2007, the Environmental Protection Agency (EPA) began a process aimed at significantly reducing the amount of lead in numerous sources, including avgas. However, it is unclear whether it is the EPA or FAA that has the authority to regulate the amount of lead in avgas. Regardless, the EPA's action focused attention on the public's desire to rid avgas of lead, and, as a result, the industry has increased its efforts to find a replacement for avgas. Several alternatives have been proposed or are under development, but they all face numerous challenges. Any avgas replacement must meet industry specifications, pose no problems for the existing distribution system, and solve the problems that TEL addresses in avgas, all while being economically competitive with avgas. In May 2012, the FAA's unleaded avgas transition rulemaking committee outlined a fuel approval process that could take as long as 11 years to find a replacement for avgas.

## Issues Relevant to Louisiana

As with commercial aviation, the national trends in general aviation are of concern to Louisiana's airports.

### Louisiana Pilot Population

According to FAA records, the Louisiana pilot population in 2012 consists of 5,585 aviators. The largest portion of that group consists of private pilots, followed by commercial pilots. **Table 7-6** shows the number of aviators by type of pilot certificate.

**Table 7-6: Pilot Certificates Held by Louisiana Residents**

Pilot Certificate	Number of Certificates	
	2009	2012
Airline Transport Pilot	955	873
Commercial	1,538	1,414
Private	2,039	1,956
Recreational	4	3
Sport	31	42
Student	660	1,032
Data not available*	69	265
Total Certificates	5,296	5,585

\* Pilots listed in the FAA database but their pilot certificate is not listed.

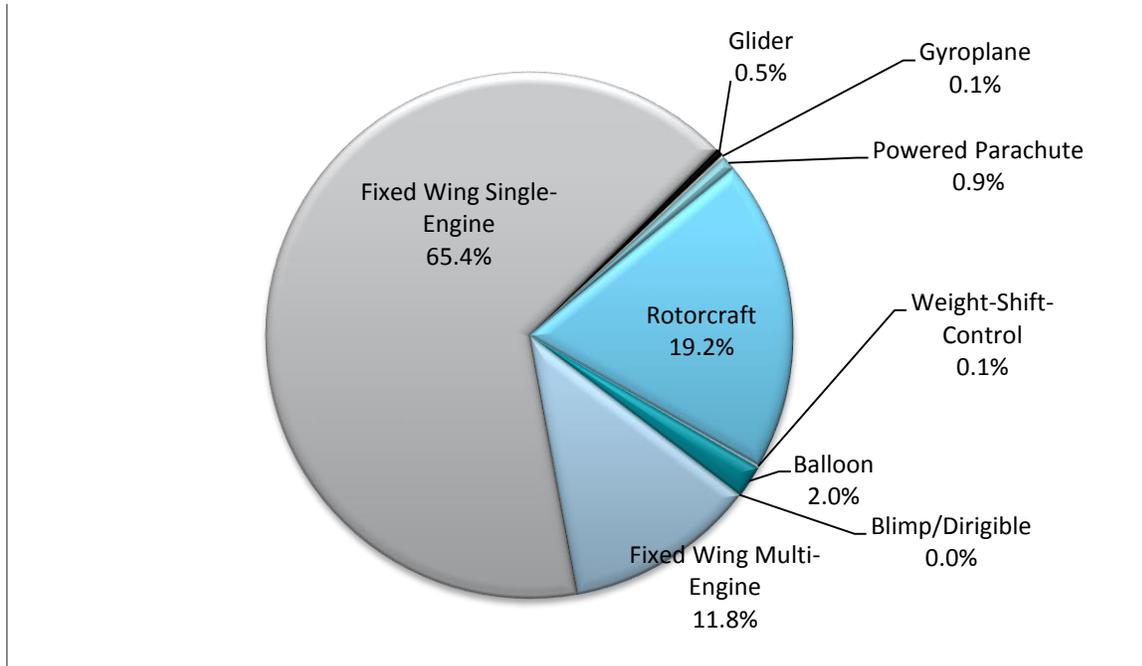
Source: FAA

As can be seen in Table 7-6, the number of student pilots in Louisiana has increased substantially since 2009, while the other categories have declined slightly. As explained previously, the increase in student pilot population is due to a change in how the FAA tabulated student pilots. The decline in the other pilot categories reflects what is happening at the national level, as increasing costs are eroding the ranks of aviators.

As compared to other states, Louisiana has a relatively low pilot population on a per capita basis. **Table A-51** in the Appendix shows the number of pilots per 100,000 citizens for each state. Louisiana has approximately 121 pilots per 100,000 citizens, which is slightly below the national average of 168. Louisiana Aircraft Registrations

FAA records show that Louisiana has 4,960 registered aircraft, with more than 65 percent of those falling into the fixed wing, single-engine category, as indicated in **Figure 7-7**.

**Figure 7-7: Aircraft Registered in Louisiana in 2012**



Source: FAA

Rotorcraft comprise the next largest aircraft type in Louisiana. The oil and gas industry make extensive use of helicopters. In Louisiana, numerous helicopters operate in the southern part of the state, transporting workers and parts to and from oil rigs in the Gulf of Mexico. They also serve the oil fields and the timber industry in the northwestern part of the state.

The aerial applicator industry is another significant aviation operator in Louisiana. According to FAA records, 425 of the aircraft registered in Louisiana are used for agricultural aerial application work. Only the states of Arkansas, California, Oklahoma, and Texas have more registered ag aircraft, indicating how important aerial application work is to the state of Louisiana.

Due to the significant aerial application operations throughout Louisiana there are times when aerial applications from turf strips must be terminated due to ground water saturation. During these frequent periods of weather the local aerial applicator operators must relocate to the nearest general aviation airport that can serve as a temporary base of operations while continuing to serve the needs of the Louisiana farmer. The need for separation of aerial application operations by creating dedicated agricultural loading aprons from normal general aviation aircraft operations is critical to asphalt apron pavement preservation in Louisiana. Construction of agricultural loading aprons ensures the farmer and aerial application operator needs can be address by the general aviation airport without damaging critical airport apron infrastructure. The ultimate solution is construction of all airport aprons in concrete. However, a mixture of both asphalt aprons and concrete agricultural loading areas best serves the public need.

## Changes in Technology

Aviation has evolved over its history as new technology has made flying safer, faster, and more efficient. As an example, the invention of the jet engine enabled aircraft to fly faster and farther than piston-powered aircraft, opening new commercial opportunities for aviation. Technological change will continue to alter the ways in which aviation is used. Two innovations that are likely to impact aviation in Louisiana are unmanned aerial vehicles and the development of a new air traffic control technology known as ADS-B.

### Unmanned Aerial Vehicles

Unmanned aerial vehicles, or UAVs, appear to have significant growth potential in the U.S. based upon the demand for these aircraft and regulatory changes that are planned for the future. More than 50 companies, educational institutions, and government agencies are involved in the development, testing, and production of UAVs.

UAVs have made headlines through their military use overseas, but pressure is mounting for their use in domestic U.S. airspace for a number of applications. Customs and border patrol already make use of UAVs along the Mexican and Canadian borders. Numerous law enforcement agencies have applied to the FAA for special operating permits for UAVs. Private companies are also interested in using UAVs for tasks such as taking video of real estate, and monitoring pipelines. The FAA has taken a measured approach to allowing UAVs in U.S. airspace out of safety concerns – primarily over how UAVs will be able to avoid colliding with manned aircraft. But since the law reauthorizing the FAA requires that the agency come up with rules that will safely integrate UAVs into U.S. airspace by 2015, it is obvious that UAV operations will increase in the coming years. Prior to that, the FAA is looking for six sites to use for testing UAV integration. Numerous locations are getting ready to apply for one of these slots in anticipation of the economic windfall such a testing site could bring to a region.

### Automatic Dependent Surveillance – Broadcast (ADS-B)

The FAA's implementation of Automatic Dependent Surveillance – Broadcast (ADS-B) has brought improved safety and efficiency to aviation operations in the Gulf region. ADS-B uses a combination of satellites and ground-based stations to provide accurate tracking of properly equipped aircraft. The system provides air traffic controllers better situational awareness by providing more coverage than traditional radar systems that are limited by line of sight and terrestrial locations. The ADS-B system can also provide weather and traffic information to aircraft. The Gulf of Mexico has especially benefitted since ADS-B was put into operation in 2010. Traditional radar coverage for air traffic control services could not extend much beyond the coastline due to the limits of where radar antenna sites can be located. ADS-B provides greater coverage, both in range and altitude, through the use of the GPS system and the installation of surveillance and communication equipment on offshore oil platforms.

When ADS-B became operational over the Gulf, air traffic controllers had access to better situational awareness and were able to compress more aircraft operations into the same airspace. Where they previously had to impose 100-mile separation requirements between aircraft to maintain safety, ADS-B allowed them to safely shrink that separation requirement to as little as five miles in certain situations. Additionally, the precise position information that all ADS-B aircraft provide enhances safety by making search and rescue operations more effective should an accident occur. Optional ADS-B services such as traffic alerts and weather updates provide added safety benefits.

As of mid-2012, ADS-B services in Louisiana are advisory only, except over the Gulf of Mexico where it is in operational use. The FAA expects to go from advisory services to operational services throughout Louisiana in late 2015.

Aircraft planning to use air traffic control services are required to be outfitted with ADS-B equipment no later than 2020, so not all aircraft are benefitting from the new system. However, the benefits provided to low-altitude helicopters, such as receiving air traffic services direct to their destinations instead of less efficient fixed navigation points, have stimulated companies that provide transportation to oil rigs to invest in ADS-B equipment. With as many as 9,000 daily helicopter operations to oil platforms, the oil and gas industry is expected to leverage the efficiencies provided by ADS-B and expand operations. The cost of ADS-B equipment for the remainder of the general aviation fleet may be a barrier to entry for some.

## Issues Summary

A number of issues affecting Louisiana aviation have been described in the preceding section. Each of those issues is described briefly below.

- **Funding** – Shrinking federal, state, and local budgets put financial pressure on airports. This category covers funding for both capital projects and ongoing operations and maintenance expenses.
- **Air Service** – Commercial service airports provide communities with access to the national airspace system. The adequacy of that access in terms of destinations and frequency is typically decided at the local level, but has implications at the system level.
- **Pilot Population** – Planes need pilots to fly. A growing pilot population is needed to support growth in both commercial and general aviation.
- **Fuel Price** – The high cost of aviation fuels can put a damper on aviation activity. Additionally, airports that rely on fuel sales tend to take a financial hit with increased fuel prices.
- **Availability of Avgas** – With 70 percent of the general aviation fleet dependent upon avgas, public environmental policy may impact the future availability of this fuel having implications for the airports that provide this fuel to their users.
- **Aircraft Storage** – Without adequate hangar space, airports are unable to attract based users that help drive aviation growth.
- **Cat III Availability** – Nearly all weather access at certain commercial service airports can be a boon for service reliability, but the cost versus the benefits of providing such service may not be justifiable.
- **Unmanned Aerial Vehicles** – Growing demand for the use of unmanned aerial vehicles to operate commercially is being held in check by FAA prohibitions against such use. Once the FAA develops rules for the commercial use of unmanned aerial vehicles, significant operations by these aircraft is expected.
- **Equipping GA Fleet for ADS-B** – The FAA’s modernization of the air traffic control system through the use of ADS-B is expected to bring efficiencies to aviation, but the cost to equip the general aviation fleet, especially at the lower end, may end up driving away general aviation

activity. The FAA estimated that it would cost the general aviation fleet in the U.S. as much as \$4.5 billion<sup>10</sup> to equip all aircraft with the necessary equipment.

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<sup>10</sup> *Automatic Dependent Surveillance–Broadcast (ADS–B) Out Performance Requirements to Support Air Traffic Control (ATC) Service Final Rule*, FAA, May 2010.

## Section 8. System Option Recommendations

Previously, the Louisiana Aviation System Plan (LASP) identified and described the process used to structure the airport system based on demand for aviation services. Following the demand evaluation, functional roles were developed for the airports, and facility and service Performance Measures were established. Airports were classified as being in one of five functional classifications, so that the system could be evaluated in terms of the access it provided to the people of Louisiana.

### Population Served

As described previously, the Louisiana Airport System serves approximately 93 percent of the state's population, or 4.2 million residents, as defined by 30-minute drive times from each airport. The coverage of the airport system can be expected to change as population grows and shifts over time. It is important to understand where these demographic changes are expected to occur when evaluating how the airport system will serve in the future.

### Fastest Growing Parishes in State

The overall population of Louisiana grew from 4.47 million in 2003 to 4.60 million in 2013, averaging a compound annual growth rate of 0.3 percent. However, this growth was not evenly distributed throughout Louisiana. Out of Louisiana's 64 parishes, 22 saw a decline in population from 2003 to 2013. The other 42 parishes experienced varying degrees of population growth over the 10-year period. The three parishes with the highest growth rates were all concentrated in the southeast portion of Louisiana around the Interstate 12 corridor. From 2003 to 2013, Ascension, Livingston, and St. Tammany Parishes were the fastest growing parishes in Louisiana. All three experienced compound annual growth rates in excess of 2.0 percent. Ascension Parish, with its compound annual growth rate of 3.4 percent from 2003 to 2013, drove its recent growth rate into the top 100 fastest growing counties in the U.S. It should be noted that these growth rates were achieved over a period that included Hurricanes Katrina and Rita (both in 2005). All three parishes are expected to continue growing rapidly out through 2040, according to projections by Woods and Poole Economics, Inc. Ascension and Livingston Parish are forecast to increase population from 2013 to 2040 at a compound annual growth rate of 2.0 percent, while St. Tammany Parish is expected to grow at 1.7 percent over the same period. The state's population overall is predicted to grow at a compound annual growth rate of 0.8 percent during that period.

### System Coverage Performance Analysis

Classification groupings of airports have been examined to determine current system coverage performance. Options for improving system coverage performance are identified and examined in the following sections. Possibilities that were considered for these options included reclassifying an existing airport to a higher classification, or the construction of a new airport facility. Inclusion or exclusion of an airport in the NPIAS or state system is analyzed in a later section. Options for improving system coverage performance by reclassifying an airport are examined for the following classification groupings of system airports:

- Commercial Service Airports
- Level 1 General Aviation Airports
- Level 2 General Aviation Airports

- Level 3 General Aviation Airports
- Level 4 General Aviation Airports
- Overall Airport Coverage Performance

Each group of airport roles is evaluated in terms of its coverage of state population below. Following the coverage performance analysis of Louisiana’s system airports by role, the overall system is examined for gaps and overlaps.

### **Commercial Service Airports**

As presented in a previous chapter, current coverage performance for the Commercial Service Airport classification based on a 60-minute drive time is approximately 82 percent of the State’s population. When considering the 30-minute drive time, as it relates to general aviation services, commercial service airports coverage is approximately 55 percent of the State’s population. Based on the factors examined in this analysis for improving Commercial Service Airports, there are no recommendations for reclassifying any of these airports.

### **Level 1 General Aviation Airports**

As presented in a previous chapter, Level 1 General Aviation Airports increase coverage performance to approximately 65 percent of the State’s population when combined with the Commercial Service Airports. Based on the factors examined in this analysis for improving Level 1 General Aviation Airports, there are no recommendations for reclassifying any of these airports.

### **Level 2 General Aviation Airports**

As presented in a previous chapter, Level 2 General Aviation Airports expand current population coverage performance to 81 percent in combination with Commercial Service and Level 1 General Aviation Airports. Based on the factors examined in this analysis for improving Level 2 General Aviation Airports, there are no recommendations for reclassifying any of these airports.

### **Level 3 General Aviation Airports**

As presented in a previous chapter, population coverage performance provided by the Level 3 General Aviation Airports increases the system to approximately 90 percent of the State’s population. Based on the factors examined in this analysis for improving Level 3 General Aviation Airports, there are no recommendations for reclassifying any of these airports.

### **Level 4 General Aviation Airports**

As presented in a previous chapter, current coverage performance for the Level 4 General Aviation Airports is approximately 93 percent of the State’s population. Based on the factors examined in this analysis for improving Level 4 General Aviation Airports, there are no recommendations for reclassifying any of these airports.

### **Overall Airport Coverage Performance**

The previous GIS analysis indicates that existing coverage performance by the Commercial Service, Level 1, and Level 2 General Aviation Airports is estimated at approximately 81 percent of the State’s population. The Commercial Service, Level 1 and Level 2 General Aviation Airports are considered the core system, and they should support the majority of the system’s aviation needs. When Level 3 and

Level 4 General Aviation Airports are added to this analysis, overall state airport system coverage performance increases to approximately 93 percent of the state’s population.

Based on this analysis, the vast majority of the State’s population are located within the 30-minute drive time of an existing Commercial Service, Level 1, Level 2, Level 3, and Level 4 General Aviation Airport.

The next section examines the gaps and overlaps in the state airport system by examining those airports that are eligible to receive federal funding, which is a subgroup of the entire state airport system. The analysis also looks at airports in the state system that are not eligible for federal funding and develops a framework for considering what it means for an airport to be included in the state system plan. Finally, this next section considers proposed new airports and how they may impact the system, both from a financial perspective as well as what additional coverage they may offer.

## NPIAS List

The Louisiana system of airports consists of 68 airports, 55 of which are part of the FAA’s National Plan of Integrated Airport Systems<sup>11</sup> (NPIAS), making them eligible for federal funding. Ideally, every airport in the system would be a NPIAS airport and could draw on federal support when needed. However, the FAA’s resources are not unlimited, so it is forced to curtail the number of airports that it supports. Because of the potential for federal funding, NPIAS airports typically have more financial resources available and are often easier to expand and maintain than non-NPIAS airports. Therefore it is important that the limited number of NPIAS airports in the state are located where they can provide the most benefit.

## NPIAS Airport Service Area Overlaps

To assess the Louisiana Airport system for excessive coverage by NPIAS airports, a definition of overlapping airport service area coverage was needed. The study team elected to define overlapping airport service areas as any airport that fell within the 30-minute drive time of another airport (i.e., it would take 30 minutes or less to drive from one airport to the other). Using this definition, two pairs of overlapping NPIAS airport service areas were identified:

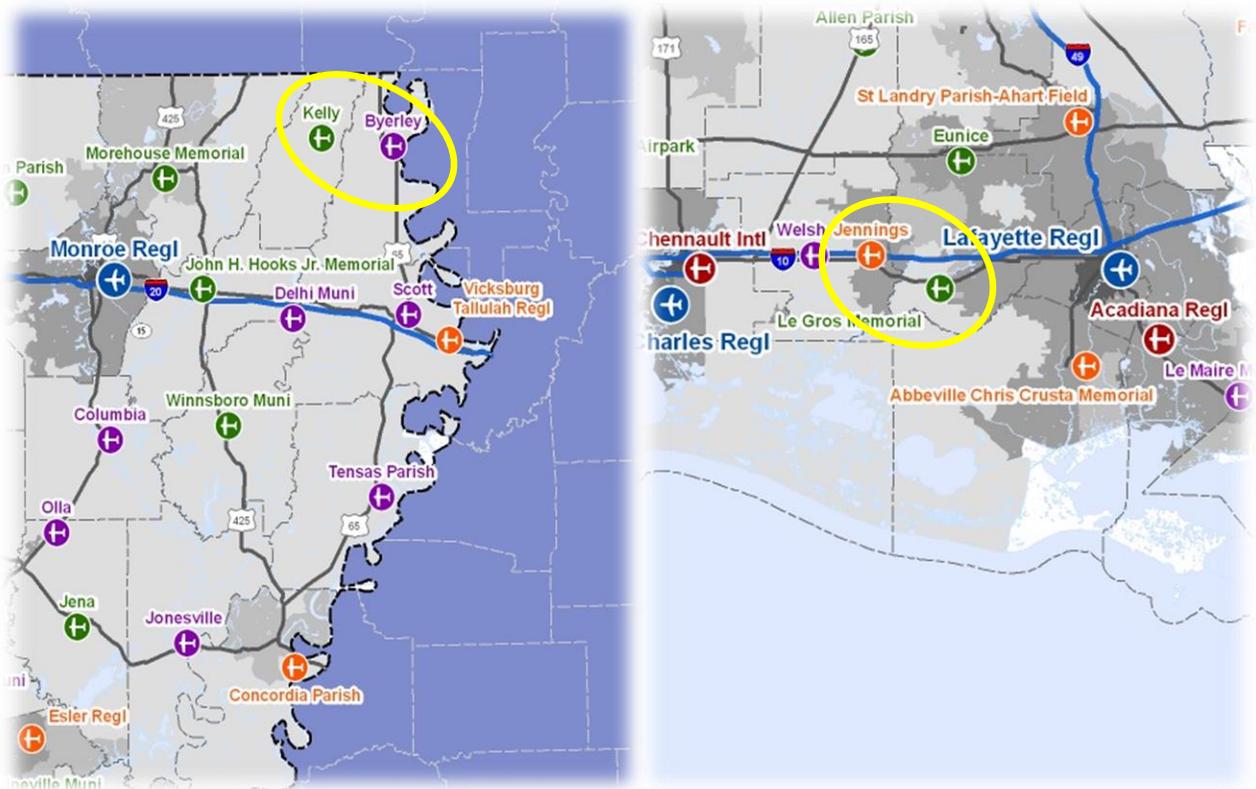
- Byerley Airport and Kelly Airport in northeast Louisiana
- Jennings Airport and Le Gros Memorial Airport in southwest Louisiana

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<sup>11</sup> There are 56 NPIAS airports in Louisiana. One of these is the New Orleans Downtown Heliport, which is not part of this airport system plan, since it is a heliport.

**Figure 8-1** shows the proximity of these airports to each other.

**Figure 8-1: Maps of Byerley and Kelly Airports and Jennings and Le Gros Memorial Airports**



The following section addresses these two service area overlaps between NPIAS airports and provides recommended actions for each case.

## NPIAS Designation Removals

An area of airport overlap previously identified is in northeast Louisiana. In that region, two airports – Kelly (9M6) and Byerley (0M8) – are within 30 minutes’ drive time and 20 miles of each other. This part of the state has a low population density, so there is little need for the FAA and the state to financially support two airports in the region. It is recommended that Byerley Airport be removed from the NPIAS and the LASP. As shown in **Table 8-1**, Byerley Airport has a 3,196-foot runway that is slightly shorter than the 3,799-foot runway at Kelly Airport. However, Byerley’s runway has displaced thresholds at each end, indicating that constraints limit expansion of the runway in both directions, whereas Kelly Airport’s runway has a displaced threshold at only one end. Byerley Airport reported only four based aircraft on its FAA 5010 form, compared to the 12 at Kelly Airport. Byerley also reported fewer aviation operations than Kelly. For these reasons, Byerley Airport is the logical choice for removal from the NPIAS and LASP to alleviate the airport overlap in northeastern Louisiana. This does not result in the airport being closed but does help the state and FAA focus their funding resources on those airports deemed to be a priority.

**Table 8-1: Comparison of Byerley and Kelly Airport Attributes**

Airport	Runway Length	Displaced Thresholds	Based Aircraft	Aircraft Operations
Byerley Airport	3,196 feet	Both ends	4	7,000
Kelly Airport	3,799 feet	One end	12	8,000

Source: FAA 5010 Form and Airport Inventory & Data Survey

Another area of Louisiana with airport service area overlap is the region along I-10 between Lake Charles and Lafayette. Jennings Airport (3R7) and Le Gros Memorial Airport (3R2) are within 14 miles of each other. Of the two, Jennings clearly has more activity and a longer runway, as shown in **Table 8-2**. However, the fact that both airports have 10 or more based aircraft, no action is recommended regarding the disposition of these two airports in regards to their NPIAS status.

**Table 8-2: Comparison of Jennings and Le Gros Memorial Airport Attributes**

Airport	Runway Length	Displaced Thresholds	Based Aircraft	Aircraft Operations
Jennings Airport	5,002 feet	None	41	53,010
Le Gros Memorial Airport	4,304 feet	None	10	7,000

Source: FAA 5010 Form and Airport Inventory & Data Survey

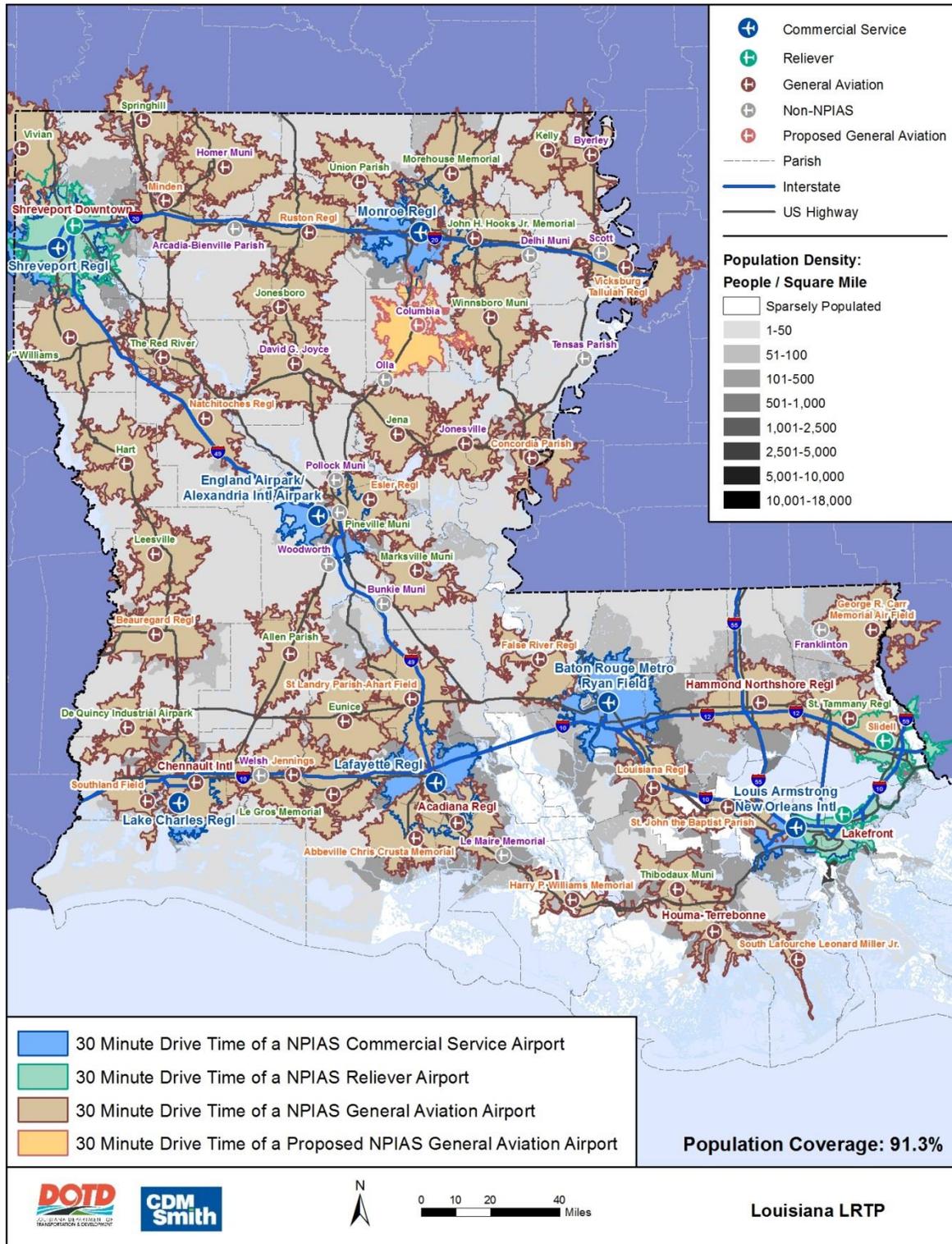
## NPIAS Designation Additions

Coverage of Louisiana by NPIAS airports could be improved through the designation of additional NPIAS airports, both existing and yet to be constructed airports. Should the opportunity present itself, the following airports are should be considered for inclusion in the NPIAS.

### NPIAS Airport Re-Alignment

One of the largest gaps in NPIAS coverage is centered very near Columbia Airport (F86), south of Monroe, Louisiana. This airport has a 3,501-foot long runway and reported 12 based aircraft with 13,750 annual operations. Adding this airport to the NPIAS would provide an additional 12,400 Louisiana residents, or 0.2 percent, with adequate access to a NPIAS airport, as shown in **Figure 8-2**. For these reasons, it is recommended that Columbia Airport be considered for inclusion in the NPIAS.

Figure 8-2: 30-minute Drive Time from Columbia Airport



There are several other considerations for adding airports to the NPIAS, including both an existing airport and two proposed new construction airports. Each is described in more detail in the following sections.

## New Airports – New Construction

There are two proposed new airports under consideration for inclusion in the Louisiana Airport System Plan, and, by extension, the NPIAS. One proposed airport is in Plaquemines Parish and the other is in Livingston Parish, east of Baton Rouge.

### Proposed Plaquemines Parish Airport

The proposed Plaquemines Parish airport adds very little to the system in terms of population coverage. Its proposed location is shown in **Figure 8-3** with a yellow circle. Due to its location, less than 5,000 Louisiana residents are within 30 minutes-drive time of the proposed airport location<sup>12</sup>. The proposed airport would add less than 0.1 percent to the population coverage of the airport system. However, it would provide access to a remote part of the state that is otherwise difficult to get to by any other means particularly if portions of Plaquemines Parish are cut off due to storm damage and flooding. It should also be noted that this area of Louisiana has extensive oil and gas industry activity. Numerous oil wells, both onshore and offshore, are prevalent in this region.

### Proposed Livingston Airport

The Livingston Parish Airport is a facility that is proposed by the Livingston parish government as a public-owned/public-use aviation facility that would fill a gap in NPIAS airport coverage between Baton Rouge and Hammond, as shown in **Figure 8-4** with a yellow circle. While there would be some coverage overlap with the 30-minute drive times of Baton Rouge Metropolitan Airport and the Hammond Northshore Regional Airport, the proposed Livingston Parish Airport itself would meet the basic NPAIS criteria of being beyond a 30-minute drive time from the nearest NPAIS airport. It is estimated that this proposed airport would bring more than 40,000 Louisiana residents within a 30-minute drive time of a NPIAS airport that were previously outside that limit.

The system plan recognizes and acknowledge the collective efforts of the state elected officials, community leaders, pilots and parish groups engaged in the positive growth of the parish and the planning toward a public-use aviation

**Figure 8-3: Proposed Plaquemines Parish Airport**



**Figure 8-4: Proposed Livingston Airport**



<sup>12</sup> *General Aviation Airport Feasibility Study Plaquemines Parish, Louisiana*, GCR, August 10, 2009.

facility in Livingston Parish. Within the past 10 years, the aforementioned groups and individuals brought many local resources to bear for the completion of an airport feasibility study, identified a potential location to construct a facility, and received a non-objectionable airspace determination for the proposed facility from the FAA. In addition, Livingston Parish airport officials continue to move forward with an airport master plan, an airport business plan and environmental assessment planning. Also, parish and airport officials continue to work diligently and are aware of the need for height restriction ordinances and land use compatibility zoning for the long-term protection of the proposed public-use aviation facility. Through this system plan, the Department will give positive consideration to including the Livingston Parish Airport in the Louisiana Airport System as a public-owned and public-use airport facility.

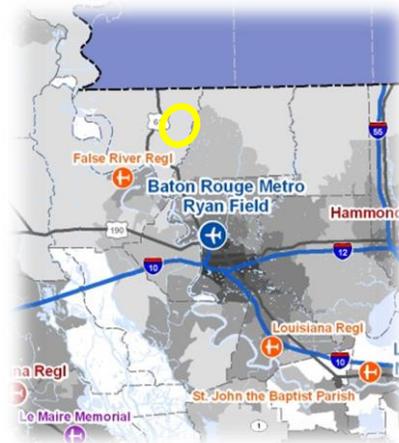
The Department looks forward to continuing a constructive dialogue relating to the planning of an airport in Livingston Parish and is committed to working with the community as they evolve this project into a broader vision of aviation alternatives in the parish.

**East Feliciana Airpark**

East Feliciana Airpark (4LA3), located approximately 20 miles northwest of Baton Rouge Metropolitan, Ryan Field Airport in Jackson, Louisiana, is owned by the Dixon Correctional Institute and is restricted to private use. Dixon Correctional Institute is one of 12 facilities run by the Louisiana Department of Public Safety and Corrections.

**Figure 8-5** shows the approximate location of East Feliciana Airpark with a yellow circle. The airport is not part of the NPIAS or Louisiana Airport System. It has a 3,000-foot long runway with a road to the south less than 200 feet from the approach end. Adding this airport to the NPIAS and the state system would provide access to nearly 17,000 Louisiana residents that currently live outside a 30-minute drive time to a system airport.

**Figure 8-5: East Feliciana Airpark**



**Table 8-3** summarizes the pros and cons of the three airports proposed for inclusion in the NPIAS and state airport system.

**Table 8-3: Matrix for Proposed Airports**

Airport	Initial Outlay	Annual Entitlement	Pros		Cons	
			Federal Funding	New Residents with 30-Minute Access to a NPIAS Airport	Reduce Based Aircraft, Operations, and Economic Benefits from Existing System Airports	Divert AIP Funds from Existing System Airports
East Feliciana Airpark	Unknown	\$150,000	Yes	16,800	Yes	Yes
Plaquemines Airport	\$17 million	\$150,000	Yes	4,600	No	Yes
Livingston Airport	\$12 million	\$150,000	Yes	41,700	Yes	Yes

Source: FAA and CDM Smith

There are three basic strategies that the state can take in regards to these proposed airports. They are as follows:

- **Option 1:** The state can recommend one of the three airports for inclusion in the NPIAS. Factors to consider include population growth and the amount of coverage each airport provides. However, because of limited financial resources, the state would not provide funding and would stress that federal funds may not be available either. It would be up to the local sponsor to pursue the FAA petition process for inclusion in the NPIAS and federal funding.
- **Option 2:** The state can recommend one of the three airports for inclusion in the NPIAS, and, if appropriate, support and recommend construction of the new airport. However, the state should not support or recommend construction of a new airport unless, and until, it can be shown through study, by a qualified analyst, that there is a true need for the facility and that the facility can be self-supporting or that the local sponsors will guarantee annual operating subsidies without state or federal support.
- **Option 3:** The state can choose none of the proposed airports for addition to the NPIAS. This would drop the total number of NPIAS airports in Louisiana to 55, allowing the state to focus its funding on the existing system airports.

## Address LASP Airport Redundancies/Designations

### LASP List

The Louisiana Airport System consists of 68 airports and a single heliport that was not part of this analysis. Unlike the FAA's NPIAS system, where inclusion in the NPIAS system is a prerequisite for federal AIP funding, the Louisiana airport system does not limit or give priority for funding to state system airports. Every publicly owned airport in Louisiana is permitted to apply for state funding whether it is part of the state airport system or not.

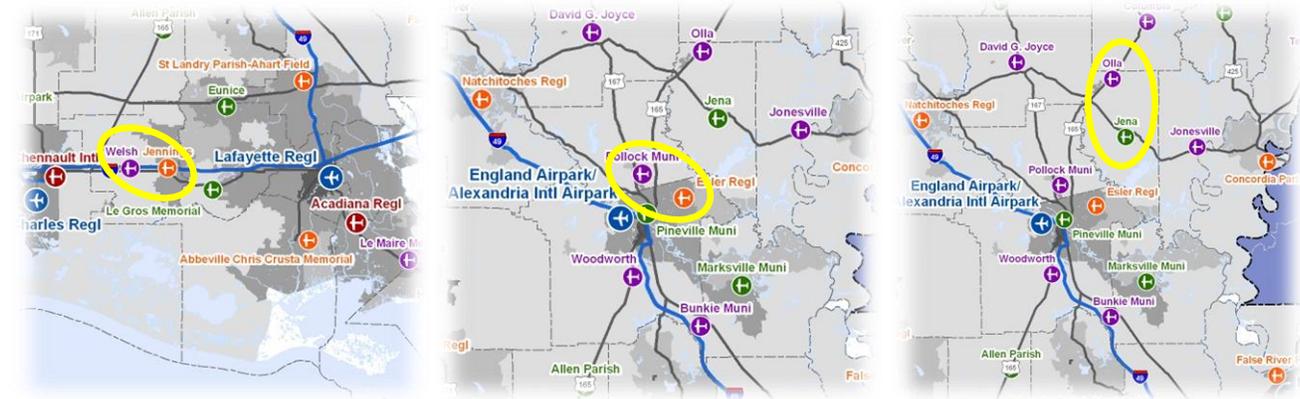
As was done with the NPIAS airports in Louisiana, the state airport system was analyzed using 30-minute drive times for each airport to assess how well the system covered the state and its population. This analysis was also the basis for examining the service area overlaps in the state system.

### LASP Service Area Overlaps

Just like the previous service area overlap analysis with the NPIAS airports, overlaps amongst state airports were defined as any two airports that were within a 30-minute drive of each other. This analysis included all state system airports, both NPIAS and non-NPIAS. The analysis identified three pairs of overlapping airports, as shown in **Figure 8-6**, where each pair consisted of a NPIAS airport and a non-NPIAS airport. Those three pairs are:

- Jennings Airport and Welsh Airport (a non-NPIAS airport) in southwest Louisiana
- Esler Regional Airport and Pollock Airport (a non-NPIAS airport) near Alexandria
- Jena Airport and Olla Airport (a non-NPIAS airport) northeast of Alexandria

**Figure 8-6: LASP Service Area Overlaps**



The following section addresses these three areas of overlap between system airports and provides recommended actions for each case.

### LASP Designation Removals

One area of system airport overlap identified lies in the southwest part of Louisiana between Lake Charles and Lafayette. Along I-10, Welsh Airport is situated only 11 miles from Jennings Airport, making the drive between the two airports well under 30 minutes. As shown in **Table 8-4**, Jennings Airport has a longer runway, more based aircraft and more aviation activity.

**Table 8-4: Comparison of Welsh and Jennings Airport Attributes**

Airport	Runway Length	Displaced Thresholds	Based Aircraft	Aircraft Operations
Welsh Airport	2,700 feet	None	13	7,300
Jennings Airport	5,002 feet	None	41	53,010

Source: FAA 5010 Form and Airport Inventory & Data Survey

Since Welsh Airport is not a NPIAS airport, it does not receive federal AIP funding. It is reliant upon the state to assist with funding its capital needs. Because of its close proximity to Jennings Airport, it is recommended that Welsh Airport be dropped from the state airport system. This will not result in the airport closing, but will assist DOTD in prioritizing its funding.

The next pair of airports to consider is Pollock Airport and Esler Regional Airport. These airports are on the northeast side of Alexandria and are within 11 miles of each other. As can be seen in **Table 8-5**, Pollock has no based aircraft. Its 4,499-foot long runway is not well maintained, with cracks greater than ¼ of an inch and grass growing in the cracks. The northern 1,000 feet of runway is closed indefinitely according to the airport’s FAA 5010 form. Its medium intensity runway lights are out of service. The runway markings are reported to be in poor condition. While the airport reported more operations than Esler Regional, approximately one-third of the operations are military training in nature, with the majority of these originating from Esler Regional.

**Table 8-5: Comparison of Pollock and Esler Regional Airport Attributes**

Airport	Runway Length	Displaced Thresholds	Based Aircraft	Aircraft Operations
Pollock Airport	4,499 feet	None	0	3,000
Esler Regional Airport	5,999 feet	None	36	8,300

Source: FAA 5010 Form and Airport Inventory & Data Survey

Pollock Airport is not a part of the NPIAS, so it does not receive federal AIP grants. Due to its poor condition, lack of preventative maintenance, and inadequate sponsor support, it is recommended that Pollock Airport be removed from the state airport system. This will not result in the airport closing, but will assist DOTD in prioritizing its funding.

The final service area overlap situation is located north of Alexandria and includes Olla Airport and Jena Airport. **Table 8-6** lists several attributes of these two airports and shows that Olla Airport has a shorter runway (with constraints at one end as evidenced by the displaced threshold), fewer based aircraft and less aviation activity than Jena Airport.

**Table 8-6: Comparison of Olla and Jena Airport Attributes**

Airport	Runway Length	Displaced Thresholds	Based Aircraft	Aircraft Operations
Olla Airport	3,010 feet	One end	1	3,700
Jena Airport	3,805 feet	None	8	15,000

Source: FAA 5010 Form and Airport Inventory & Data Survey

Olla Airport's runway condition is reported as being poor, and, as non-NPIAS airport, federal AIP funds are not available to improve the runway. For these reasons, Olla Airport is recommended for removal from the state airport system.

## LASP Airport Funding Strategies

Under the current Louisiana Airport System regulations, there is no distinction between publicly-owned airports that are in the system and those that are not in terms of state funding eligibility. Non-system airports are allowed to apply for and compete with system airports for state funding. It is recommended that the state develop a funding policy that allows it to concentrate its resources on what it deems the most important airports in the state – those in the state airport system.

There are at least three different policies that the state could employ. Each is described below in more detail.

**Prioritize state funding to airports in state airport system.** A policy of prioritizing projects for state funds only to those airports in the state airport system through Title 70 revisions would focus 100 percent of the state's resources on those airports designated as being important enough to be included in the state system. The advantage of this policy is that no funding would be siphoned out of the state airport system. There are several aspects of this policy that should be considered. To start with, it would require action by the state legislature to limit state funding to only airports in the state system. Additionally, this policy reduces the flexibility of the Aviation Section in terms of its ability to fund airports outside of the state system, should it be worthwhile to do so. Lastly, implementing a policy like this could alienate airports and their communities that are outside of the system.

**Prioritize state grants using a ranking system for projects.** By implementing a ranking system for projects, this policy permits the state to continue to fund non-system airports, but only when the project priority calls for it. Such a system typically makes use of a point allocation methodology and could provide the same level of priority for projects at system airports, or provide different levels of priority based on the type of project, the cost of the project, or other factors.

**Develop a policy that uses separate accounts for system airports and non-system airports.** The use of this policy involves segregating the state aviation funds into two accounts – one for system airports and the other for non-system airports. There are various methods by which this can be accomplished, such as dividing the money in proportion to the number of airports in each group, by the number of based aircraft in each group, or by fixed percentages of the total into each account. The disbursement of these funds could follow the methodology currently in use, or use a prioritization methodology as described previously. Parameters could also be established for moving money between the two accounts. Priority for funding system airports would be determined through how much money is allocated to the system airport account and the parameters under which money can be transferred between accounts.

It is recommended that the Aviation Section of the DOTD discuss each of these airport funding policies with stakeholders and select one or some combination of one more for implementation.

## Estimated Cost of Improving Louisiana airports

The cost of maintaining and improving the Louisiana airport system is born by the airport sponsors, the state, and the FAA, with the FAA providing a significant portion of the funding support for general aviation capital projects. **Table 8-7** shows the amount of AIP funding that the FAA has provided to Louisiana’s commercial service and general aviation airports since 2006.

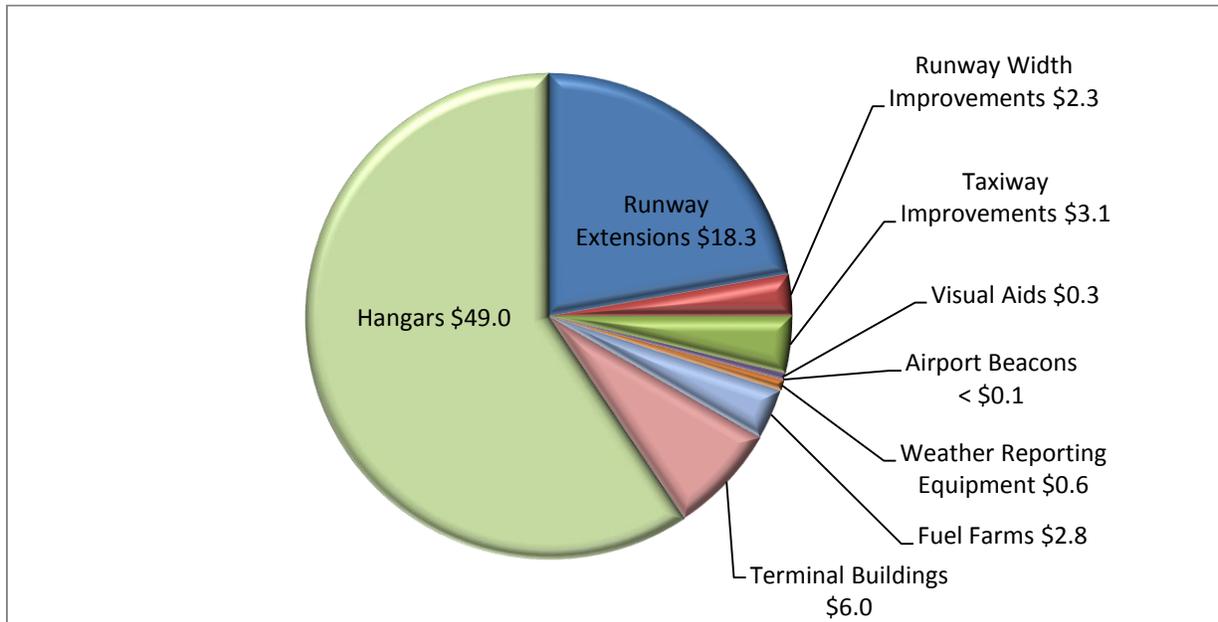
**Table 8-7: Historic AIP Funding to Louisiana Airports (in Millions of \$)**

Airport	2006	2007	2008	2009	2010	2011	2012
Commercial Service Airports	\$41.0	\$46.5	\$42.1	\$70.6	\$44.3	\$49.7	\$33.3
General Aviation Airports	\$31.6	\$11.9	\$18.2	\$16.0	\$11.5	\$12.1	\$9.0
Total	\$72.6	\$58.4	\$60.5	\$86.6	\$55.8	\$61.8	\$42.3

Source: FAA

With 56 airports in the NPIAS, annual AIP entitlements alone are approximately \$8 million, if every airport were to apply for the funds, which they don’t.

The analysis in Chapter 6 identified the areas of airport improvement the system needed to adequately meet the roles each airport was assigned. It is estimated that the costs of those improvements amounts to \$82.4 million, with more than half of that cost attributed to hangars, as shown in **Figure 8-7**.

**Figure 8-7: Allocation of System Improvement Costs, (in millions of \$)**

Source: CDM Smith

Table A-52 in the appendix lists system improvements recommended for each airport to meet its assigned role. Table A-53 and Table A-54 provide costs estimates for each of these recommended system improvements.

## Total System Costs

The prior section described the capital costs associated with improvements determined at the system level. These are only a fraction of the total system costs. To adequately plan for the aviation system's capital needs over the next 33 years, the costs of non-system related capital projects at airports, of off-airport NAVAIDs, and other costs need to be taken into account.

Table 8-8 lists the major cost items that will drive the capital needs of the Louisiana aviation system over the next 33 years. The system plan improvements, discussed above, are estimated to cost more than \$80 million. Using 5-year CIP plans submitted by each system airport, it was estimated that unfunded system airport needs over the next 33 years are approximately \$1.1 billion.

**Table 8-8: Louisiana Aviation System Needs over 33 Years**

System Need	Estimated Cost (in \$ billions)
System plan improvements	\$0.08
Unfunded system airport needs over 33 years, based on 5-year CIP plans	\$1.10
Alternatively funded local construction projects	\$0.92
Pavement maintenance	\$0.53
NAVAID projects	\$0.03
New terminal at MSY	\$0.65
Contingency projects funding	\$0.17
<b>Total Costs</b>	<b>\$3.48</b>

Source: CDM Smith

Projects funded by passenger facility charges (PFC), which are collected at all seven commercial service airports in Louisiana, were estimated through the forecast of enplanements for the state. Assuming that these airports continue to collect PFCs through 2043, it is estimated that these funds will support \$916 million in project needs. Upkeep and maintenance of airport pavement, which includes runways, taxiways, and aprons at the system airports, is expected to cost approximately \$534 million out to 2043.

NAVAID projects called for \$30 million in funding over the next 33 years. Another \$648 million was budgeted for a new terminal at New Orleans International Airport. Lastly, \$170 million was added to the budget to account for unforeseen contingencies. This was estimated by taking 15 percent of the unfunded system airport needs.

When all these items are totaled, the Louisiana aviation system is estimated to need \$3.48 billion over the next 33 years.

## LSTP Aviation Recommendations Discussion

As part of the system planning process, progress was reviewed with the study's advisory council. Part of these regular reviews involved discussions of recommendations for the aviation system from previous long range transportation plans and the generation of new recommendations. **Table 8-9** lists the recommendations that came out of the meeting with the advisory council in October 2013. Two recommendations from the last long range transportation plan were dropped. One was A-7, a recommendation to update the intrastate air service study. Because of the lack of current intrastate air service in Louisiana, and that the likelihood of gaining such service is remote, there did not appear to be much value in updating such a study. The other dropped recommendation was A-23, which supported construction of a new terminal at Louis Armstrong New Orleans International Airport.

Following discussions with the advisory council, Aviation Section staff met with members of the Louisiana Airport Managers and Associates (LAMA) to discuss the system plan and its recommendations. This meeting resulted in two additional recommendations, A-26 and A-27. The Aircraft Owners and Pilots Association (AOPA) also weighed in on the study following the advisory council meeting resulting in recommendation A-28.

Those recommendations with an impact on the system plan study are discussed below in more detail.

Recommendations A-20 and A-21, which deal with recommended changes to airports in the NPIAS and in the state system plan, were originally tabled during the October 2013 advisory council meeting so that there could be more time to consider and discuss the particular changes to each system. Based upon those follow on discussions, the changes to the NPIAS and state airport system were amended to the recommendations found in this document.

Recommendation A-29 is driven by the growth in the wind energy industry. Meteorological towers are frequently erected in potential wind farm areas. Currently, there are no guidelines or policies for these towers in Louisiana, which can pose a hazard to air navigation, especially for aerial applicators. Therefore, it is recommended that the Aviation Section examine what other states have done to address the risk of meteorological towers. For example, Wyoming established a meteorological tower reporting system that catalogs these towers. Nebraska passed legislation establishing marking requirements for meteorological towers.

**Table 8-9: Statewide Transportation Plan Recommendations for Aviation**

ID	Recommendation	Priority	Notes
A-4	Upgrade General Aviation infrastructure identified in the Louisiana Airport System Plan to minimum standards.	High	
A-5	Develop aviation marketing program, using General Fund monies, to attract additional air service, air cargo, and aerospace companies.	High	
A-6	Bring back program of land acquisition/aviation easements for obstruction removal (state funds only).	High	
A-8	Study challenges/opportunities of rotary wing industry in support of Louisiana business, industry and economic growth.	High	
A-9	Consider the public/private development of intermodal transportation center(s) in Louisiana.	Low	
A-13	Increase the level of funding to accommodate needs of Louisiana's aviation system.	High	
A-14	Support an ongoing annual appropriation to support the General Aviation & Air Carrier Maintenance Programs.	High	
A-15	Support a reauthorization of the Federal Airport Improvement Program that best benefits Louisiana aviation.	High	
A-16	Provide state support for commercial service airport development in accordance with approved master plans.	High	
A-17	Define strategic roles of Louisiana aviation resources during natural disasters. (e.g., ANG nursing home evacuation plan).	Medium	
A-18	Update Statewide Economic Impact of Aviation Study every 3 to 5 years.	Medium	
A-19	Recommend the DOTD Aviation Section evaluate options for giving priority to LA aviation system airports for state funded projects.	High	
A-20	Consider changing NPIAS airport designations based on LASP analysis and recommendations.	Tabled	See text.
A-21	Consider changing state system airports designations based on LASP analysis and recommendations.	Tabled	See text.
A-22	Update LASP every 5 to 10 years.	High	
A-24	Support continued federal funding of air traffic control towers (both federal and contract).	High	
A-25	Develop and implement a pavement management system that predicts pavement needs and costs.	New	
A-26	Conduct a study of the effects of proposed airports on existing airports within 30 minutes' drive time of the proposed airport	New	LAMA recommendation
A-27	Develop criteria for new airports that defines the need of the airport within the community/state.	New	LAMA recommendation
A-28	Consider occasional state grants to non-system airports whose sponsors demonstrate a willingness to support the airport.	New	AOPA recommendation
A-29	Recommend the DOTD Aviation Section review meteorological tower policies in other states.	New	

Source: DOTD and CDM Smith

## Summary

The Louisiana Airport System is a robust aviation system that provides access to more than 90 percent of the population of Louisiana, as defined by a 30-minute drive time from each system airport. Maintaining such a system requires extensive resources, both in terms of capital and man hours. Properly allocating these resources involves deciding what airports are important to the Louisiana Airport System and the coverage it provides the state.

This system plan analyzed the Louisiana Airport System and identified areas with overlaps and gaps. From that analysis, the following changes to the NPIAS system were recommended:

- Remove Byerley Airport from the NPIAS and the state system
- Add Columbia Airport to the NPIAS, or;
- Consider adding one of the following to the NPIAS:
  - Proposed airport in Plaquemines
  - Proposed airport in Livingston
  - Existing airport in Jackson

In order to make the state system more meaningful, it was recommended that the state adopt a funding strategy that either restricted state funding to state system airports, or at least gave some degree of priority to state system airports.

The following changes to the state system were recommended:

- Remove Welsh Airport from the state system
- Remove Pollock Airport from the state system
- Remove Olla Airport from the state system

In addition, numerous recommendations from the previous long range transportation plan were reviewed and updated, as shown in **Table 8-9**.

# Appendix A

**Table A-1: Louisiana Airport Classification Systems**

Airport	NPIAS Classification	FAA 2012 Asset Study	State Aviation System Plan
Louis Armstrong New Orleans International	Commercial	Not included in study	Commercial Service
Baton Rouge Metropolitan, Ryan Field	Commercial	Not included in study	Commercial Service
England Airpark/Alexandria International Airpark	Commercial	Not included in study	Commercial Service
Lafayette Regional	Commercial	Not included in study	Commercial Service
Lake Charles Regional	Commercial	Not included in study	Commercial Service
Monroe Regional	Commercial	Not included in study	Commercial Service
Shreveport Regional	Commercial	Not included in study	Commercial Service
Lakefront	Reliever	Regional	Level 1
Shreveport Downtown	Reliever	Regional	Level 1
Slidell	Reliever	Local	Level 2
Abbeville Chris Crusta Memorial	General Aviation	Regional	Level 2
Acadiana Regional	General Aviation	Local	Level 1
Allen Parish	General Aviation	Not classified	Level 3
Beauregard Regional	General Aviation	Local	Level 2
Byerley	General Aviation	Not classified	Level 4
C.E. "Rusty" Williams	General Aviation	Basic	Level 3
Chennault International	General Aviation	Regional	Level 1
Concordia Parish	General Aviation	Local	Level 2
David G. Joyce	General Aviation	Not classified	Level 4
De Quincy Industrial Airpark	General Aviation	Not classified	Level 3
Esler Regional	General Aviation	Local	Level 2
Eunice	General Aviation	Local	Level 3
False River Regional	General Aviation	Local	Level 2
George R. Carr Memorial Air Field	General Aviation	Local	Level 2
Hammond Northshore Regional	General Aviation	Regional	Level 1
Harry P. Williams Memorial	General Aviation	Local	Level 2
Hart	General Aviation	Not classified	Level 3
Homer Municipal	General Aviation	Not classified	Level 4
Houma-Terrebonne	General Aviation	Regional	Level 1
Jena	General Aviation	Not classified	Level 3
Jennings	General Aviation	Local	Level 2
John H. Hooks Jr. Memorial	General Aviation	Local	Level 3
Jonesboro	General Aviation	Not classified	Level 3
Jonesville	General Aviation	Not classified	Level 4
Kelly	General Aviation	Not classified	Level 3
Le Gros Memorial	General Aviation	Basic	Level 3
Leesville	General Aviation	Basic	Level 3

Airport	NPIAS Classification	FAA 2012 Asset Study	State Aviation System Plan
Louisiana Regional	General Aviation	Regional	Level 2
Marksville Municipal	General Aviation	Basic	Level 3
Minden	General Aviation	Local	Level 2
Morehouse Memorial	General Aviation	Local	Level 3
Natchitoches Regional	General Aviation	Local	Level 2
Ruston Regional	General Aviation	Regional	Level 2
South Lafourche Leonard Miller Jr.	General Aviation	Regional	Level 2
Southland Field	General Aviation	Local	Level 2
Springhill	General Aviation	Not classified	Level 3
St. John the Baptist Parish	General Aviation	Local	Level 2
St. Landry Parish-Ahart Field	General Aviation	Local	Level 2
St. Tammany Regional	General Aviation	Basic	Level 3
The Red River	General Aviation	Not classified	Level 3
Thibodaux Municipal	General Aviation	Not classified	Level 3
Union Parish	General Aviation	Local	Level 3
Vicksburg Tallulah Regional	General Aviation	Local	Level 2
Vivian	General Aviation	Basic	Level 3
Winnsboro Municipal	General Aviation	Basic	Level 3
Arcadia-Bienville Parish	Not in NPIAS	Not included in study	Level 4
Bunkie Municipal	Not in NPIAS	Not included in study	Level 4
Columbia	Not in NPIAS	Not included in study	Level 4
Delhi Municipal	Not in NPIAS	Not included in study	Level 4
Franklinton	Not in NPIAS	Not included in study	Level 4
Le Maire Memorial	Not in NPIAS	Not included in study	Level 4
Olla	Not in NPIAS	Not included in study	Level 4
Pineville Municipal	Not in NPIAS	Not included in study	Level 3
Pollock Municipal	Not in NPIAS	Not included in study	Level 4
Scott	Not in NPIAS	Not included in study	Level 4
Tensas Parish	Not in NPIAS	Not included in study	Level 4
Welsh	Not in NPIAS	Not included in study	Level 4
Woodworth	Not in NPIAS	Not included in study	Level 4

Source: FAA and Louisiana Statewide Aviation System Plan, 2003

**Table A-2: Facility and Service Performance Measures and Benchmarks for each Airport Role**

Performance Measure	Commercial Service (7 Airports)	Level 1 Airports (6 Airports)	Level 2 Airports (18 Airports)	Level 3 Airports (21 Airports)	Level 4 Airports (16 Airports)
ARC	C-II or Design Aircraft	B-II or greater	B-II or greater	B-I or greater	A-I or turf
Runway Length	75% Large Aircraft at 60% useful load	6,500'	5,000'	4,000'	Maintain existing RW length
Runway Width	To meet ARC	To meet ARC	To meet ARC	75'	60'
Taxiway	Full parallel	Full parallel	Partial parallel	Turnarounds and connectors	Turnarounds or connectors
IAP	ILS or LPV	LPV	VNAV	LNAV or non-precision	Not applicable
Visual Aids	MALSR, PAPI	MALSR/SALSR PAPI/REILS	PAPI/REILS	PAPI/REILS	Not applicable
Lighting	HIRL, Beacon	MIRL, Beacon	MIRL, Beacon	MIRL, Beacon	Reflectors or LIRL, Beacon
Weather Reporting	Automated weather reporting	Automated weather reporting	Automated weather reporting	Local aviation weather	Not applicable
Services	Restroom, FBO, maintenance, ground transportation	Restroom, FBO, maintenance, ground transportation	Restroom, FBO, maintenance, ground transportation	Restroom	Restroom
Fuel	Jet-A, 100LL	Jet-A, 100LL	Jet-A, 100LL	100LL	Not applicable
Facilities	Terminal, aircraft apron, hangars, auto parking	Terminal, aircraft apron, hangars, auto parking	Terminal, aircraft apron, hangars, auto parking	Pilot lounge, aircraft apron, hangars, auto parking	Aircraft apron, hangars, auto parking
Backup Generators		Yes	Yes	Yes	Not applicable
Intermodal Connections	Yes	Not applicable	Not applicable	Not applicable	Not applicable

Source: DOTD Aviation and CDM Smith

## General Airport Information

Basic airport ownership, and classification in the National Plan of Integrated Airport Systems (NPIAS), is presented in **Table A-3**. The NPIAS is a FAA plan that identifies those airport facilities that are considered important to the national airport system. Airports included in the NPIAS are eligible for FAA funding for improvements to, and the development of, public use facilities. The airports included in the NPIAS are classified in the following categories based on the types of activity occurring at the facility, the levels of activity occurring, and the airports role in national and regional aviation systems. NPIAS airports are classified into two major categories, commercial and general aviation. Within each major category, airports are further classified based on the types and levels of activity occurring at each facility. Contact information for each airport is shown in **Table A-4**.

Louisiana has 56 airports in the NPIAS, including a heliport (New Orleans Downtown – 7N0) that is part of the state airport system but not included in this study since it is not an airport. Seven of the NPIAS airports are commercial service airports and three are reliever airports. There are 13 airports in the state system plan that are not part of the NPIAS.

**Table A-4** provides contact information for each airport participating in the survey. Initial information was collected from the FAA 5010 form, with corrections generated from returned surveys.

**Table A-5** contains information regarding the publication date of any airport plans, such as Airport Layout Plans, Airport Master Plans, and Business Plans. Table A-5 also lists the airport reference code for each airport.

**Table A-6** is a continuation of Table A-5, and provides information on other airport studies, such as, Economic Impact Studies, Cargo Studies, Industrial Park Studies, and Rates and Charges Studies.

**Table A-7** is a continuation of Tables A-5 and A-6, and provides information on airport documents such as Marketing Brochures and Videos, Activity Forecasts, and Minimum Standards.

## Activity Statistics

Airport activity and based aircraft information, along with other key activity statistics, form the foundation on which statewide growth trend analysis will be conducted. This section of the inventory provides key measurements of activities occurring at each airport.

**Table A-8** provides operations data at each airport. This table includes annual estimated local GA operations, air taxi operations, transient military and general aviation operations, and commercial operations.

**Table A-9** summarizes total based aircraft by airport. It lists based aircraft in the categories of single-engine, multi-engine, jet, helicopter, and other.

**Table A-10** summarizes airport activity levels as either increasing/decreasing or maintaining the same levels from prior years. It also indicates which month airport managers reported as being their busiest.

**Table A-11** contains the estimated percentage of flight activity classified as business flying, flight training, agricultural use, recreational flying, or other.

**Table A-12** provides a summary of the percentage of operations related to general aviation activity at each airport in the study. Categories include piston single-engine, piston multi-engine, turboprop single-engine, turboprop multi-engine, jet, helicopter, and other.

**Table A-13** provides the airport's most demanding aircraft for airports that provided the information.

**Table A-14** provides passenger total enplanements for 2011 by airport.

## Airside Facilities

Airside facilities at an airport consist of runways, taxiways, their associated lighting facilities, nav aids, and the navigation, communication, and weather reporting infrastructure needed to facilitate aircraft operations at airports. The primary component of an airport, and the most important airside facility, is an airport's runway. Runways support the transition of aircraft from ground to air, and can be considered the lifeline of an airport's operation. Taxiways serve as a path for aircraft to move from one part of the airport to another. If a taxiway does not exist, the runway must fulfill the taxiway's purpose. **Table A-15** contains summary information regarding the primary runway at Louisiana's system airports. Fifty-three out of the 68 airports responded to the inventory survey. However, not all

data requested was provided by airports that responded. Data is shown for airports that provided it. The following data is provided in Table A-15:

- **Number of Runways:** The number of designated landing areas, including paved, unpaved, and water surfaces.
- **Primary Runway ID:** The designation of the airport's main runway.
- **Runway Length and Width:** The length and width of the airport's primary runway is presented.
- **Strength:** The maximum weight bearing capacity of the runway is presented, for single-wheel (sw), double-wheel (dw), dual-tandem (dtw), and double dual-tandem (ddtw) landing gear aircraft, where available.
- **Pavement/Condition:** The surface composition of the runway and its maintenance status, where available.
- **Runway Lighting:** The type of lighting, according to intensity, that exists on the runway, is presented. Those types of runway lighting identified in the table include Low Intensity Runway Lighting (LIRL), Medium Intensity Runway Lighting (MIRL), and High Intensity Runway Lighting (HIRL).
- **Displaced Thresholds:** The length of any displaced threshold, in feet, is indicated from the respective runway end. Displaced thresholds may be used for takeoff, and landing roll out, but not for landing on approach.

**Table A-16** continues with the following facilities associated with the primary runway.

- **Taxiway Type:** The presence or absence of a taxiway for the primary runway for each system runway is noted. A parallel taxiway is a taxiway that spans the entire length of the primary runway. A partial parallel taxiway spans only part of the length of its associated primary runway. Runways without a taxiway system may have areas at one or both ends of the runway for aircraft to reverse direction and perform other operations off the runway. These are called turnarounds. Airports that only have a single taxiway connecting its ramp to the runway are listed as having no taxiway.
- **Taxiway Width:** The width of the main taxiway for the primary runway is listed.
- **Taxiway Pavement/Condition:** Where available, the composition of the taxiway and its condition are listed.
- **Number of Taxiway Exits:** The number of taxiway exits from the primary runway is listed.
- **Spacing between Exits:** The distance between runway exits, if more than one exits exists.
- **Taxiway Lighting:** The intensity of the taxiway lighting is listed, where available.
- **PAPI:** Indicates the presence of precision approach path indicators (PAPI), a set of four horizontal lights generally located on the left side of the runway and used to provide visual glide slope guidance to pilots. Two indications are provided, one for each end of the primary runway.
- **VASI:** Indicates the presence of visual approach slope indicators (VASI), a set of vertical light bars generally located on the left side of the runway and used to provide visual glide slope guidance to pilots. Two indications are provided, one for each end of the primary runway.

**Table A-17** concludes the primary runway characteristics with the following parameters.

- **REIL:** Indicates the presence of runway end identifier lights (REIL), a pair of synchronized flashing lights located on the corners of the runway landing threshold to provide rapid and

positive identification of the approach end of the runway. Two indications are provided, one for each end of the primary runway.

- **ILS:** Indicates the presence of an instrument landing system (ILS), a system for providing radio navigation signals that guide aircraft horizontally and vertically to the runway threshold. Two indications are provided, one for each end of the primary runway.
- **ALS:** Indicates the presence of an approach lighting system (ALS), a system for providing visual guidance to the runway threshold. The appropriate end of the primary runway is indicated.
- **DME:** Indicates the presence of distance measuring equipment (DME), a system for providing electronic signals to aircraft that convey distance to the airport or other NAVAID. Two indications are provided, one for each end of the primary runway.
- **Localizer:** Indicates the presence of a radio navigation system that provides horizontal guidance to the runway threshold. Two indications are provided, one for each end of the primary runway.
- **VOR/TVOR:** Indicates the presence of an instrument approach procedure using a VOR or TVOR navigation aid. Two indications are provided, one for each end of the primary runway.
- **GPS:** Indicates the presence of an instrument approach procedure using GPS. Two indications are provided, one for each end of the primary runway.
- **NDB:** Indicates the presence of an instrument approach procedure using a NDB navigation aid. Two indications are provided, one for each end of the primary runway.
- **Circling Approach:** Indicates the presence of an instrument approach procedure that permits a circle to land maneuver to another runway. Two indications are provided, one for each end of the primary runway.

**Table A-18 (Primary Runway RNAV Approaches)** summarizes the types of GPS approaches at each airport's primary runway.

**Table A-19** summarizes NAVAIDs that are present at each airport, but not associated with any specific runway. This table lists the number of wind cones at each airport, whether they are lit, whether an airport has a segmented circle, and the type of automated weather reporting system, if any, at the airport.

**Table A-20** lists the type of airspace over each airport, the airport's elevation, and whether that elevation was obtained through a survey or estimated.

## Landside Facilities

This section of the survey provides information related to the landside facilities found at each airport.

**Table A-21** provides information regarding the square footage of the airport's air carrier terminal, the general aviation terminal, and the airport's administrative building. Total number of gates and the number of paved and unpaved tie-downs are also listed in this table. The presence of a foreign trade zone is indicated.

**Table A-22** provides hangar information for each airport, listing total T-Hangar units, conventional hangar square footage, and total number of portable storage units. The presence of an aircraft storage waiting list is noted, along with the number of aircraft on the waiting list.

**Table A-23** summarizes vehicle-parking capacity for air carrier patrons, general aviation patrons, rental car parking, and employee parking.

**Table A-24** contains information for each airport about annual fuel flowage for the year 2011, including total fuel usage, and totals by category of fuel.

**Table A-25** summarizes fuel facility information by airport, including type of fuel, number of tanks, if they are above or below ground, total capacity of the tanks in gallons, and what method of distribution is used.

**Table A-26** provides information on airport apron area, the type of pavement, and its condition, where available.

## Airport Users and Services

This section of the inventory provides pertinent information on the services, users, and types of aeronautical activity at each airport.

**Table A-27** lists information regarding scheduled air carrier service, commuter air services, charter services, air taxi operations, tie-downs, aircraft rental, aircraft sales, and flight instruction.

**Table A-28** lists information regarding fueling services (both jet and avgas), aircraft repair, avionics repair, avionics sales, U.S. Customs services, public phone service, and the presence of any industrial park.

**Table A-29** lists information regarding an airport restaurant, vending machine availability, car rental, skydiving, Foreign Trade Zone, FAA Written Test Center, and if a loaner car option is available.

**Table A-30** provides responses to certain aviation activities that occur on each airport, including recreational flying, agricultural spraying, corporate/business activities, aerial inspections, shipping of “Just-In-Time” perishables, whether the airport serves as a gateway for resort visitors, and whether the airport is used as a staging area for community events. Each of these aviation activities is rated on a scale of low to high activity, or none, if the activity does not occur at the airport.

**Table A-31** categorizes various additional aviation activities, on a scale of low to high activity, and includes information such as police/law enforcement activity, prisoner transport, location for community facilities, career training/education, search and rescue/Civil Air Patrol, environmental patrols, emergency medical evacuation, and medical shipments/patient transfers.

**Table A-32** provides additional aviation activity information, such as, forest firefighting, aerial photography/surveying, real estate tours, aerial advertising/banner towing, traffic/news, and air shows (these items are also summarized on a scale of low activity to high activity, or none if it does not occur at the airport).

## Airport Funding

This section addresses funding issues and development challenges faced by airports in Louisiana.

**Table A-33** summarizes responses to questions that were asked within the survey regarding funding support that the airport may receive from a local sponsor.

**Table A-3: Airport Ownership**

Associated City	Airport	Ownership	NPIAS Classification	NPIAS ID
<b>Primary Commercial - Medium Hub</b>				
New Orleans	Louis Armstrong New Orleans International	Public	CS	22-0037
<b>Primary Commercial - Small Hub</b>				
Baton Rouge	Baton Rouge Metropolitan, Ryan Field	Public	CS	22-0006
<b>Primary Commercial - Non-Hub</b>				
Alexandria	England Airpark/Alexandria International Airpark	Public	CS	07411.A
Lafayette	Lafayette Regional	Public	CS	22-0025
Lake Charles	Lake Charles Regional	Public	CS	22-0026
Monroe	Monroe Regional	Public	CS	22-0033
Shreveport	Shreveport Regional	Public	CS	22-0048
<b>Reliever</b>				
New Orleans	Lakefront	Public	R	22-0038
Shreveport	Shreveport Downtown	Public	R	22-0047
Slidell	Slidell	Public	R	22-0060
<b>General Aviation</b>				
Abbeville	Abbeville Chris Crusta Memorial	Public	GA	22-0001
Alexandria	Esler Regional	Public	GA	22-0002
Arcadia	Arcadia-Bienville Parish	Public	Not in NPIAS	
Bastrop	Morehouse Memorial	Public	GA	22-0004
Bogalusa	George R. Carr Memorial Air Field	Public	GA	22-0007
Bunkie	Bunkie Municipal	Public	Not in NPIAS	
Columbia	Columbia	Public	Not in NPIAS	
Coushatta	The Red River	Public	GA	22-0011
Covington	St. Tammany Regional	Public	GA	22-0012
Crowley	Le Gros Memorial	Public	GA	22-0013
De Quincy	De Quincy Industrial Airpark	Public	GA	22-0014
De Ridder	Beauregard Regional	Public	GA	22-0015
Delhi	Delhi Municipal	Public	Not in NPIAS	
Eunice	Eunice	Public	GA	22-0016
Farmerville	Union Parish	Public	GA	22-0017
Franklinton	Franklinton	Public	Not in NPIAS	
Galliano	South Lafourche Leonard Miller Jr.	Public	GA	22-0067
Gonzales	Louisiana Regional	Public	GA	22-0081
Hammond	Hammond Northshore Regional	Public	GA	22-0018
Homer	Homer Municipal	Public	GA	22-0019
Houma	Houma-Terrebonne	Public	GA	22-0020
Jeanerette	Le Maire Memorial	Public	Not in NPIAS	
Jena	Jena	Public	GA	22-0059
Jennings	Jennings	Public	GA	22-0022
Jonesboro	Jonesboro	Public	GA	22-0023
Jonesville	Jonesville	Public	GA	22-0087
Lake Charles	Chennault International	Public	GA	22-0086
Lake Providence	Byerley	Public	GA	22-0027
Leesville	Leesville	Public	GA	22-0057
Mansfield	C.E. "Rusty" Williams	Public	GA	22-0029

	Associated City	Airport	Ownership	NPIAS Classification	NPIAS ID
	Many	Hart	Public	GA	22-0030
	Marksville	Marksville Municipal	Public	GA	22-0031
	Minden	Minden	Public	GA	22-0032
	Natchitoches	Natchitoches Regional	Public	GA	22-0034
	New Iberia	Acadiana Regional	Public	GA	22-0036
	New Roads	False River Regional	Public	GA	22-0074
	Oak Grove	Kelly	Public	GA	22-0041
	Oakdale	Allen Parish	Public	GA	22-0042
	Olla	Olla	Public	Not in NPIAS	
	Opelousas	St. Landry Parish-Ahart Field	Public	GA	22-0043
	Patterson	Harry P. Williams Memorial	Public	GA	22-0044
	Pineville	Pineville Municipal	Public	Not in NPIAS	
	Pollock	Pollock Municipal	Public	Not in NPIAS	
	Rayville	John H. Hooks Jr. Memorial	Public	GA	22-0045
	Reserve	St. John the Baptist Parish	Public	GA	22-0064
	Ruston	Ruston Regional	Public	GA	22-0082
	Springhill	Springhill	Public	GA	22-0049
	St. Joseph	Tensas Parish	Public	Not in NPIAS	
	Sulphur	Southland Field	Public	GA	22-0080
	Tallulah	Scott	Public	Not in NPIAS	
	Tallulah/Vicksburg, MS	Vicksburg Tallulah Regional	Public	GA	22-0084
	Thibodaux	Thibodaux Municipal	Public	GA	22-0072
	Vidalia	Concordia Parish	Public	GA	22-0061
	Vivian	Vivian	Public	GA	22-0070
	Welsh	Welsh	Public	Not in NPIAS	
	Winnfield	David G. Joyce	Public	GA	22-0063
	Winnsboro	Winnsboro Municipal	Public	GA	22-0053
	Woodworth	Woodworth	Public	Not in NPIAS	

Source: FAA 5010 Form and Airport Inventory & Data Survey

CS – Commercial Service Airport

GA – General Aviation Airport

**Table A-4: Airport Point of Contact**

Associated City	Airport	Airport Manager	Phone No.	Email
<b>Primary Commercial - Medium Hub</b>				
New Orleans	Louis Armstrong New Orleans International	Iftikhar Ahmad	504-303-7560	<a href="mailto:iahmad@flymsy.com">iahmad@flymsy.com</a>
<b>Primary Commercial - Small Hub</b>				
Baton Rouge	Baton Rouge Metropolitan, Ryan Field	Anthony Marino	225-355-0333	<a href="mailto:amarino@brgov.com">amarino@brgov.com</a>
<b>Primary Commercial - Non-Hub</b>				
Alexandria	England Airpark/Alexandria International Airpark	Scott Gammel	318-449-4642	<a href="mailto:sgammel@englandairpark.org">sgammel@englandairpark.org</a>
Lafayette	Lafayette Regional	Greg Roberts	337-266-4401	<a href="mailto:greg@lftairport.com">greg@lftairport.com</a>
Lake Charles	Lake Charles Regional	Heath Allen	337-477-6051	<a href="mailto:hallen@flylakecharles.com">hallen@flylakecharles.com</a>
Monroe	Monroe Regional	Ron Phillips	318-329-2460	<a href="mailto:Ron.Phillips@ci.Monroe.La.US">Ron.Phillips@ci.Monroe.La.US</a>
Shreveport	Shreveport Regional	Bill Cooksey	318-673-5370	
<b>Reliever</b>				
New Orleans	Lakefront	Fred Pruitt	504-243-4010	<a href="mailto:airport1@lakefrontairport.com">airport1@lakefrontairport.com</a>
Shreveport	Shreveport Downtown	Stacy Kuba	318-673-5398	<a href="mailto:stacy.moritz@shreveportla.gov">stacy.moritz@shreveportla.gov</a>
Slidell	Slidell	Tim Mathison	985-641-7590	<a href="mailto:tmathison@cityofslidell.org">tmathison@cityofslidell.org</a>
<b>General Aviation</b>				
Abbeville	Abbeville Chris Crusta Memorial	Mark Piazza	337-898-4206	<a href="mailto:abbevillemayor@cox-internet.com">abbevillemayor@cox-internet.com</a>
Alexandria	Esler Regional	LTC Joseph Brocato	318-290-5611	<a href="mailto:joseph.m.brocato.mail.mil">joseph.m.brocato.mail.mil</a>
Arcadia	Arcadia-Bienville Parish	Buddy Pixley	318-263-2182	<a href="mailto:bpixley@bellsouth.net">bpixley@bellsouth.net</a>
Bastrop	Morehouse Memorial	Brent Elton	318-281-2018	<a href="mailto:airport@cityofbastrop.com">airport@cityofbastrop.com</a>
Bogalusa	George R. Carr Memorial Air Field	Lewis Busby	985-732-4521	<a href="mailto:louis.busby@bogalusa.com">louis.busby@bogalusa.com</a>
Bunkie	Bunkie Municipal	Fred Vollman	318-346-2371	<a href="mailto:fredvollman@bellsouth.net">fredvollman@bellsouth.net</a>
Columbia	Columbia	Robert Mears	318-237-0022	<a href="mailto:wandacppi@att.net">wandacppi@att.net</a>
Coushatta	The Red River	Jessie Davis	318-932-5719	<a href="mailto:jesshud@cp-tel.net">jesshud@cp-tel.net</a>
Covington	St. Tammany Regional	Jacob Bolin	985-898-2552	<a href="mailto:jabolin@stpgov.org">jabolin@stpgov.org</a>
Crowley	Le Gros Memorial	Richard D. Latiolais	318-788-8800	<a href="mailto:rlatiolais@aapi.org">rlatiolais@aapi.org</a>
De Quincy	De Quincy Industrial Airpark	Mary Jo Bayles	337-786-8211	<a href="mailto:dequincy@centurytel.net">dequincy@centurytel.net</a>
De Ridder	Beauregard Regional	Sam Lack	337-463-8250	<a href="mailto:manager@beauregional.com">manager@beauregional.com</a>
Delhi	Delhi Municipal	Steve Britton	318-878-5613	<a href="mailto:brittonsteve@bellsouth.net">brittonsteve@bellsouth.net</a>
Eunice	Eunice	Drew Miller	337-457-6585	<a href="mailto:4r7airport@gmail.com">4r7airport@gmail.com</a>
Farmerville	Union Parish	Larry Thigpen	318-355-7561	<a href="mailto:lthigpen@bayoucable.com">lthigpen@bayoucable.com</a>
Franklinton	Franklinton	Wayne Fleming	985-839-3560	<a href="mailto:wffleming@townoffranklinton.com">wffleming@townoffranklinton.com</a>
Galliano	South Lafourche Leonard Miller Jr.	Joe Wheeler	985-632-1118	<a href="mailto:JoeW@portfourchon.com">JoeW@portfourchon.com</a>
Gonzales	Louisiana Regional	Janet Gonzales	225-644-1959	<a href="mailto:laregional@eatel.net">laregional@eatel.net</a>
Hammond	Hammond Northshore Regional	Jason Ball	985-277-5667	<a href="mailto:ball_je@hammond.org">ball_je@hammond.org</a>
Homer	Homer Municipal	Danny Newell	318-927-2517	<a href="mailto:dannynewell@bellsouth.net">dannynewell@bellsouth.net</a>
Houma	Houma-Terrebonne	David Slayter	985-872-4646	<a href="mailto:ds@houma-airport.com">ds@houma-airport.com</a>
Jeanerette	Le Maire Memorial	Jason Devillier	337-365-7202	<a href="mailto:jdevillier@iberia.gov.net">jdevillier@iberia.gov.net</a>
Jena	Jena	Kary Munn	318-257-5478	<a href="mailto:kary@latech.edu">kary@latech.edu</a>
Jennings	Jennings	Dwayne Bebee	337-616-2370	<a href="mailto:ricelandav@aol.com">ricelandav@aol.com</a>
Jonesboro	Jonesboro	William Green	318-533-7456	

Associated City	Airport	Airport Manager	Phone No.	Email
Jonesville	Jonesville	Pat Mc Caughey	318-339-4747	<a href="mailto:lowgofly@bellsouth.net">lowgofly@bellsouth.net</a>
Lake Providence	Byerley	Lamar Perry	318-282-8987	
Leesville	Leesville	Paul Jackson	337-238-5968	<a href="mailto:leesvilleairport@hughes.net">leesvilleairport@hughes.net</a>
Mansfield	C.E. "Rusty" Williams	Randi Walding	318-871-8900	<a href="mailto:randi5714@yahoo.com">randi5714@yahoo.com</a>
Many	Hart	Lee Woods	318-256-5857	<a href="mailto:lwoods71052@yahoo.com">lwoods71052@yahoo.com</a>
Marksville	Marksville Municipal	Jeffery Dauzat	318-305-3461	
Minden	Minden	Travis Tucker	318-371-7862	<a href="mailto:t_tucker08@yahoo.com">t_tucker08@yahoo.com</a>
Natchitoches	Natchitoches Regional	Larry Cooper	318-352-0994	<a href="mailto:lcooper@natchitochesla.gov">lcooper@natchitochesla.gov</a>
New Iberia	Acadiana Regional	Jason Devillier	337-365-7202	<a href="mailto:jdevillier@iberia.gov.net">jdevillier@iberia.gov.net</a>
New Roads	False River Regional	Yvonne Chenevert	225-638-3192	<a href="mailto:frapla30@bellsouth.net">frapla30@bellsouth.net</a>
Oak Grove	Kelly	Dennis Bolton	318-428-3129	<a href="mailto:oakgroveaircraft@bellsouth.net">oakgroveaircraft@bellsouth.net</a>
Oakdale	Allen Parish	Joel B Johnson	318-215-0090	<a href="mailto:flyallen@bellsouth.net">flyallen@bellsouth.net</a>
Olla	Olla	Jeffrey Lasiter	318-213-1106	<a href="mailto:jeffreylasiter@centurytel.net">jeffreylasiter@centurytel.net</a>
Opelousas	St. Landry Parish-Ahart Field	Lloyd Ardoin	337-407-1551	<a href="mailto:lloyd.ardoin@stlandryparish.org">lloyd.ardoin@stlandryparish.org</a>
Patterson	Harry P. Williams Memorial	Henry L. La Grange	337-828-4100	<a href="mailto:hlagrange@stmaryparishla.gov">hlagrange@stmaryparishla.gov</a>
Pineville	Pineville Municipal	Lonnie Lucius	318-449-5679	<a href="mailto:lonnie4@bellsouth.net">lonnie4@bellsouth.net</a>
Pollock	Pollock Municipal	Gregg Jones	318-446-4040	<a href="mailto:gljplc@attglobal.net">gljplc@attglobal.net</a>
Rayville	John H. Hooks Jr. Memorial	James Smith	318-728-2011	<a href="mailto:townofrayville@hotmail.com">townofrayville@hotmail.com</a>
Reserve	St. John the Baptist Parish	Vincent Caire	985-536-1999	<a href="mailto:vcaire@portsl.com">vcaire@portsl.com</a>
Ruston	Ruston Regional	Joey Sutton	318-251-9098	
Springhill	Springhill	Jan Goodman	318-539-4568	
St. Joseph	Tensas Parish	John "Bubba" Wynn	318-201-1864	<a href="mailto:johnlf@aol.com">johnlf@aol.com</a>
Sulphur	Southland Field	Tim LaFleur	337-583-9144	<a href="mailto:southlandfield@aol.com">southlandfield@aol.com</a>
Tallulah	Scott	Steve Gustafson	318-574-1470	<a href="mailto:stevegus7462@aol.com">stevegus7462@aol.com</a>
Tallulah/Vicksburg, MS	Vicksburg Tallulah Regional	Randy Woods	318-574-5841	<a href="mailto:rwoods@inetsouth.com">rwoods@inetsouth.com</a>
Thibodaux	Thibodaux Municipal	Roland Soignet	985-446-7208	
Vidalia	Concordia Parish	Carl D. Sayers	601-597-2930	<a href="mailto:csayers@callon.com">csayers@callon.com</a>
Vivian	Vivian	Stephen Taylor	318-375-3856	<a href="mailto:vivantaylorjs@aol.com">vivantaylorjs@aol.com</a>
Welsh	Welsh	Carolyn Louviere	337-734-2231	<a href="mailto:welshla@centurytel.net">welshla@centurytel.net</a>
Winnfield	David G. Joyce	Tara Keith	318-302-1890	<a href="mailto:tara_milby@yahoo.com">tara_milby@yahoo.com</a>
Winnsboro	Winnsboro Municipal	Lanny Rundell	318-435-4401	<a href="mailto:turbinelegendac@gmail.com">turbinelegendac@gmail.com</a>
Woodworth	Woodworth	Peter Rudesill	225-952-8169	<a href="mailto:prudesill@ldaf.la.gov">prudesill@ldaf.la.gov</a>

Source: FAA 5010 Form and Airport Inventory & Data Survey

**Table A-5: Airport Plans**

Associated City	Airport	ARC	Airport Master Plan	Airport Layout Plan	Business Plan
<b>Primary Commercial - Medium Hub</b>					
New Orleans	Louis Armstrong New Orleans International	D-V	2007	2009	2001
<b>Primary Commercial - Small Hub</b>					
Baton Rouge	Baton Rouge Metropolitan, Ryan Field	D-IV	2007	2007	2009
<b>Primary Commercial - Non-Hub</b>					
Alexandria	England Airpark/Alexandria International Airpark		2009	2009	2009
Lafayette	Lafayette Regional	D-IV	2005	2010	
Lake Charles	Lake Charles Regional	D-IV	1992	1992	
Monroe	Monroe Regional	D-IV	2004	2004	
Shreveport	Shreveport Regional	D-VI	2000	2000	2000
<b>Reliever</b>					
New Orleans	Lakefront	D-IV	2012	2012	1997
Shreveport	Shreveport Downtown	B-II	2006	2006	
Slidell	Slidell	B-II	2000	2000	
<b>General Aviation</b>					
Abbeville	Abbeville Chris Crusta Memorial	B-II			
Alexandria	Esler Regional	D-V	1983	1998	
Arcadia	Arcadia-Bienville Parish	B-II			
Bastrop	Morehouse Memorial	B-II			
Bogalusa	George R. Carr Memorial Air Field	C-II	1975	2006	2011
Bunkie	Bunkie Municipal	A-II	1990		
Columbia	Columbia	B-II			
Coushatta	The Red River	B-II		2005	
Covington	St. Tammany Regional	A-II			
Crowley	Le Gros Memorial	B-II	1975	1979	
De Quincy	De Quincy Industrial Airpark	B-II			
De Ridder	Beauregard Regional	C-II		2003	
Delhi	Delhi Municipal	A-II	1998		
Eunice	Eunice	B-II	1998	1998	
Farmerville	Union Parish	A-I	1999	1999	
Franklinton	Franklinton	B-II	1995	1995	
Galliano	South Lafourche Leonard Miller Jr.	B-II	2012	2012	
Gonzales	Louisiana Regional	B-II	1992	2010	
Hammond	Hammond Northshore Regional	D-III	1994	2008	
Homer	Homer Municipal	B-I	2000	2000	2001
Houma	Houma-Terrebonne	D-IV	2012	2012	
Jeanerette	Le Maire Memorial	B-I	1979	1998	
Jena	Jena	B-II	1999	1999	
Jennings	Jennings	C-I	1995	2000	
Jonesboro	Jonesboro	B-I			
Jonesville	Jonesville	B-II			
Lake Charles	Chennault International	D-IV	2009	2011	2011
Lake Providence	Byerley	B-II			
Leesville	Leesville	B-II	1985	1985	

Associated City	Airport	ARC	Airport Master Plan	Airport Layout Plan	Business Plan
Mansfield	C.E. "Rusty" Williams	B-II			
Many	Hart	B-II		2004	
Marksville	Marksville Municipal	B-II		2008	
Minden	Minden	B-II		2009	
Natchitoches	Natchitoches Regional	C-II	1993	1999	
New Iberia	Acadiana Regional	D-IV	2012	1990	
New Roads	False River Regional	B-II	1980	1998	1998
Oak Grove	Kelly	B-I			
Oakdale	Allen Parish	B-II	1999	2000	
Olla	Olla	A-II	1999	1999	
Opelousas	St. Landry Parish-Ahart Field	C-II		2010	
Patterson	Harry P. Williams Memorial	C-IV	1992	2000	
Pineville	Pineville Municipal	B-I			
Pollock	Pollock Municipal	B-II			
Rayville	John H. Hooks Jr. Memorial	B-II			
Reserve	St. John the Baptist Parish	B-II	1994	1994	1999
Ruston	Ruston Regional	C-II	1994	1994	
Springhill	Springhill	B-I	2000	2000	
St. Joseph	Tensas Parish	B-II		2012	
Sulphur	Southland Field	B-II		1999	
Tallulah	Scott	B-I	1998	1998	1998
Tallulah/Vicksburg, MS	Vicksburg Tallulah Regional	C-II			
Thibodaux	Thibodaux Municipal	A-II			
Vidalia	Concordia Parish	B-II		2012	
Vivian	Vivian	A-II	1980	2009	
Welsh	Welsh	A-I			
Winnfield	David G. Joyce	B-II			
Winnsboro	Winnsboro Municipal	A-I	1998	1999	
Woodworth	Woodworth	A-II	1998	1998	

Source: Airport Inventory & Data Survey

**Table A-6: Airport Studies**

Associated City	Airport	Economic Impact Study	Air Service Study/Market Analysis	Capacity Enhancement Study	Cargo Study	Industrial Park Study	Rates & Charges Study
<b>Primary Commercial - Medium Hub</b>							
New Orleans	Louis Armstrong New Orleans International	2004	2001	2001	2001	1998	2001
<b>Primary Commercial - Small Hub</b>							
Baton Rouge	Baton Rouge Metropolitan, Ryan Field	2008	2010	2010	2009	2007	2011
<b>Primary Commercial - Non-Hub</b>							
Alexandria	England Airpark/Alexandria International Airpark	2009		2009		2009	
Lafayette	Lafayette Regional	2005	2011				2005
Lake Charles	Lake Charles Regional	1990	2000			1994	1998
Monroe	Monroe Regional						
Shreveport	Shreveport Regional	2000	2000	2000	1995	2000	1994
<b>Reliever</b>							
New Orleans	Lakefront	2003	1993				2012
Shreveport	Shreveport Downtown						
Slidell	Slidell						2011
<b>General Aviation</b>							
Abbeville	Abbeville Chris Crusta Memorial						
Alexandria	Esler Regional				1983		
Arcadia	Arcadia-Bienville Parish						
Bastrop	Morehouse Memorial						
Bogalusa	George R. Carr Memorial Air Field	1994				2005	2001
Bunkie	Bunkie Municipal						
Columbia	Columbia						
Coushatta	The Red River						
Covington	St. Tammany Regional						
Crowley	Le Gros Memorial						
De Quincy	De Quincy Industrial Airpark						
De Ridder	Beauregard Regional					1996	
Delhi	Delhi Municipal						
Eunice	Eunice						
Farmerville	Union Parish	1999					
Franklinton	Franklinton	1995				2001	
Galliano	South Lafourche Leonard Miller Jr.						2012
Gonzales	Louisiana Regional						
Hammond	Hammond Northshore Regional						2008
Homer	Homer Municipal	2000	1999	1999	1998	2000	
Houma	Houma-Terrebonne					2012	

	Associated City	Airport	Economic Impact Study	Air Service Study/Market Analysis	Capacity Enhancement Study	Cargo Study	Industrial Park Study	Rates & Charges Study
	Jeanerette	Le Maire Memorial						
	Jena	Jena						
	Jennings	Jennings	2000					
	Jonesboro	Jonesboro						
	Jonesville	Jonesville						
	Lake Charles	Chennault International	2011					
	Lake Providence	Byerley						
	Leesville	Leesville						
	Mansfield	C.E. "Rusty" Williams						
	Many	Hart						
	Marksville	Marksville Municipal						
	Minden	Minden						
	Natchitoches	Natchitoches Regional					1993	
	New Iberia	Acadiana Regional			2012	1997		
	New Roads	False River Regional	1998	1998			1980	2000
	Oak Grove	Kelly						
	Oakdale	Allen Parish	2000					
	Olla	Olla						
	Opelousas	St. Landry Parish-Ahart Field						
	Patterson	Harry P. Williams Memorial						
	Pineville	Pineville Municipal						
	Pollock	Pollock Municipal						
	Rayville	John H. Hooks Jr. Memorial						
	Reserve	St. John the Baptist Parish						
	Ruston	Ruston Regional						
	Springhill	Springhill						
	St. Joseph	Tensas Parish						
	Sulphur	Southland Field						
	Tallulah	Scott	1998	1998	1998	1998	1998	2001
	Tallulah/Vicksburg, MS	Vicksburg Tallulah Regional						
	Thibodaux	Thibodaux Municipal						
	Vidalia	Concordia Parish						
	Vivian	Vivian						
	Welsh	Welsh						
	Winnfield	David G. Joyce						
	Winnsboro	Winnsboro Municipal						
	Woodworth	Woodworth						

Source: Airport Inventory & Data Survey

**Table A-7: Airport Documents**

Associated City	Airport	Minimum Standards	Annual Budget	Aviation Activity Forecasts	Marketing Brochures/Video	Environmental Analysis
<b>Primary Commercial - Medium Hub</b>						
New Orleans	Louis Armstrong New Orleans International	No	2001	2001	2001	2001
<b>Primary Commercial - Small Hub</b>						
Baton Rouge	Baton Rouge Metropolitan, Ryan Field	Yes	2012	2007	2011	2009
<b>Primary Commercial - Non-Hub</b>						
Alexandria	England Airpark/Alexandria International Airpark	No	2012	2009	2011	
Lafayette	Lafayette Regional	Yes	2012	2011	2009	
Lake Charles	Lake Charles Regional	No	2001		2001	2001
Monroe	Monroe Regional	No				
Shreveport	Shreveport Regional	No	2000	2000	2000	1995
<b>Reliever</b>						
New Orleans	Lakefront	No	2012			2012
Shreveport	Shreveport Downtown	Yes	2012			
Slidell	Slidell	No	2012	2000		2005
<b>General Aviation</b>						
Abbeville	Abbeville Chris Crusta Memorial	No				
Alexandria	Esler Regional	No				
Arcadia	Arcadia-Bienville Parish	No				
Bastrop	Morehouse Memorial	No				
Bogalusa	George R. Carr Memorial Air Field	No	2012	2012		2011
Bunkie	Bunkie Municipal	No				
Columbia	Columbia	No				
Coushatta	The Red River	No	2012			
Covington	St. Tammany Regional	No				
Crowley	Le Gros Memorial	No	2012			1978
De Quincy	De Quincy Industrial Airpark	No				
De Ridder	Beauregard Regional	No				
Delhi	Delhi Municipal	No				
Eunice	Eunice	No				
Farmerville	Union Parish	No				
Franklinton	Franklinton	No	1995			
Galliano	South Lafourche Leonard Miller Jr.	Yes	2012	2012	2012	
Gonzales	Louisiana Regional	Yes	2012			
Hammond	Hammond Northshore Regional	No	2012		2011	2000
Homer	Homer Municipal	No				1998
Houma	Houma-Terrebonne	Yes	2012	2012	2011	

	Associated City	Airport	Minimum Standards	Annual Budget	Aviation Activity Forecasts	Marketing Brochures/Video	Environmental Analysis
	Jeanerette	Le Maire Memorial	No	2000		1990	
	Jena	Jena	No				
	Jennings	Jennings	No				1984
	Jonesboro	Jonesboro	No				
	Jonesville	Jonesville	No				
	Lake Charles	Chennault International	Yes	2012		2012	2012
	Lake Providence	Byerley	No				
	Leesville	Leesville	No	2012			
	Mansfield	C.E. "Rusty" Williams	No				
	Many	Hart	No				
	Marksville	Marksville Municipal	No				
	Minden	Minden	No				2012
	Natchitoches	Natchitoches Regional	No	2000			1998
	New Iberia	Acadiana Regional	Yes	2012		2008	
	New Roads	False River Regional	Yes	2001	2007		1998
	Oak Grove	Kelly	No				
	Oakdale	Allen Parish	No	2001	2001		
	Olla	Olla	No				
	Opelousas	St. Landry Parish-Ahart Field	No				
	Patterson	Harry P. Williams Memorial	No				
	Pineville	Pineville Municipal	No				
	Pollock	Pollock Municipal	No				
	Rayville	John H. Hooks Jr. Memorial	No				
	Reserve	St. John the Baptist Parish	Yes	2001			
	Ruston	Ruston Regional	No	2000			
	Springhill	Springhill	No				
	St. Joseph	Tensas Parish	No				
	Sulphur	Southland Field	No	2011			
	Tallulah	Scott	No	2001	2001	1998	1998
	Tallulah/Vicksburg, MS	Vicksburg Tallulah Regional	No	2012			
	Thibodaux	Thibodaux Municipal	No				
	Vidalia	Concordia Parish	No	2012			
	Vivian	Vivian	No				
	Welsh	Welsh	No				
	Winnfield	David G. Joyce	No				
	Winnsboro	Winnsboro Municipal	No				
	Woodworth	Woodworth	No				

Source: Airport Inventory & Data Survey

Table A-8: Airport Operations

	Associated City	Airport	Local GA	Air Taxi	Military	Transient GA	Commercial	Total Ops
<b>Primary Commercial - Medium Hub</b>								
	New Orleans	Louis Armstrong New Orleans International	0	13,103	1,321	18,515	90,201	123,140
<b>Primary Commercial - Small Hub</b>								
	Baton Rouge	Baton Rouge Metropolitan, Ryan Field	9,113	21,781	922	34,279	24,176	90,271
<b>Primary Commercial - Non-Hub</b>								
	Alexandria	England Airpark/Alexandria International Airpark	14,492	10,205	11,357	4,627	2,127	42,808
	Lafayette	Lafayette Regional	22,428	32,778	1,586	9,793	824	67,409
	Lake Charles	Lake Charles Regional	14,323	2,535	4,959	25,336	45	47,198
	Monroe	Monroe Regional	6,471	5,351	8,558	17,231	4,602	42,213
	Shreveport	Shreveport Regional	6,102	23,719	3,311	11,706	0	44,838
<b>Reliever</b>								
	New Orleans	Lakefront	21,733	2,772	3,872	38,992	0	67,369
	Shreveport	Shreveport Downtown	31,762	310	254	28,343	0	60,669
	Slidell	Slidell	78,000	0	4,000	30,000	0	112,000
<b>General Aviation</b>								
	Abbeville	Abbeville Chris Crusta Memorial	25,266	48,942	825	17,312	0	92,345
	Alexandria	Esler Regional	1,350	0	1,950	5,000	0	8,300
	Arcadia	Arcadia-Bienville Parish	5,200	0	0	3,200	0	8,400
	Bastrop	Morehouse Memorial	20,000	0	200	10,000	0	30,200
	Bogalusa	George R. Carr Memorial Air Field	16,000	0	0	8,000	0	24,000
	Bunkie	Bunkie Municipal	4,500	400	260	2,000	0	7,160
	Columbia	Columbia	10,000	0	0	3,750	0	13,750
	Coushatta	The Red River	3,000	0	0	1,000	0	4,000
	Covington	St. Tammany Regional	15,000	500	100	10,000	0	25,600
	Crowley	Le Gros Memorial	5,000	0	0	2,000	0	7,000
	De Quincy	De Quincy Industrial Airpark	4,900	0	1,000	2,600	0	8,500
	De Ridder	Beauregard Regional	5,750	0	1,000	4,750	0	11,500
	Delhi	Delhi Municipal	4,000	0	0	4,000	0	8,000
	Eunice	Eunice	10,000	0	0	5,000	0	15,000
	Farmerville	Union Parish	15,500	0	1,825	1,825	0	19,150
	Franklinton	Franklinton	960	0	0	400	0	1,360
	Galliano	South Lafourche Leonard Miller Jr.	10,200	50	50	3,260	0	13,560
	Gonzales	Louisiana Regional	50,000	500	1,000	20,000	0	71,500
	Hammond	Hammond Northshore Regional	37,800	1,500	12,000	25,550	0	76,850
	Homer	Homer Municipal	650	0	0	550	0	1,200
	Houma	Houma-Terrebonne	18,021	50,124	384	20,091	0	88,620
	Jeanerette	Le Maire Memorial	8,000	0	0	5,500	0	13,500

Appendix

Associated City	Airport	Local GA	Air Taxi	Military	Transient GA	Commercial	Total Ops
Jena	Jena	10,000	0	0	5,000	0	15,000
Jennings	Jennings	34,480	0	2,530	16,000	0	53,010
Jonesboro	Jonesboro	20,500	0	0	4,000	0	24,500
Jonesville	Jonesville	35,000	0	500	10,000	0	45,500
Lake Charles	Chennault International	2,088	386	21,944	4,799	0	29,217
Lake Providence	Byerley	5,000	0	0	2,000	0	7,000
Leesville	Leesville	11,000	0	2,000	1,600	0	14,600
Mansfield	C.E. "Rusty" Williams	4,000	0	300	5,000	0	9,300
Many	Hart	2,000	0	100	3,000	0	5,100
Marksville	Marksville Municipal	5,000	0	0	2,000	0	7,000
Minden	Minden	1,300	0	0	2,700	0	4,000
Natchitoches	Natchitoches Regional	11,440	255	150	4,300	0	16,145
New Iberia	Acadiana Regional	4,348	795	4,690	1,141	0	10,974
New Roads	False River Regional	35,000	0	125	15,000	0	50,125
Oak Grove	Kelly	3,000	0	0	5,000	0	8,000
Oakdale	Allen Parish	8,000	0	1,000	8,000	0	17,000
Olla	Olla	2,500	0	0	1,200	0	3,700
Opelousas	St. Landry Parish-Ahart Field	10,500	0	0	7,500	0	18,000
Patterson	Harry P. Williams Memorial	60,200	0	75	40,800	0	101,075
Pineville	Pineville Municipal	16,500	0	500	10,000	0	27,000
Pollock	Pollock Municipal	6,000	0	4,000	2,500	0	12,500
Rayville	John H. Hooks Jr. Memorial	12,000	0	0	6,000	0	18,000
Reserve	St. John the Baptist Parish	7,100	0	200	400	0	7,700
Ruston	Ruston Regional	80,000	0	0	6,000	0	86,000
Springhill	Springhill	3,000	0	0	2,000	0	5,000
St. Joseph	Tensas Parish	12,000	0	0	3,000	0	15,000
Sulphur	Southland Field	12,000	0	250	8,750	0	21,000
Tallulah	Scott	24,000	0	0	6,000	0	30,000
Tallulah/Vicksburg, MS	Vicksburg Tallulah Regional	2,500	0	431	4,800	0	7,731
Thibodaux	Thibodaux Municipal	3,500	0	0	2,500	0	6,000
Vidalia	Concordia Parish	4,500	0	125	4,500	0	9,125
Vivian	Vivian	8,000	0	0	2,500	0	10,500
Welsh	Welsh	7,000	0	0	300	0	7,300
Winnfield	David G. Joyce	2,000	0	0	2,500	0	4,500
Winnsboro	Winnsboro Municipal	22,000	0	0	5,000	0	27,000
Woodworth	Woodworth	10,000	0	0	8,000	0	18,000

Source: FAA 5010 Form and Airport Inventory & Data Survey

**Table A-9: Airport Based Aircraft**

	Associated City	Airport	Single-Engine	Multi-Engine	Jet	Helicopter	Other	Total Based Aircraft
<b>Primary Commercial - Medium Hub</b>								
	New Orleans	Louis Armstrong New Orleans International	6	1	7	4	0	18
<b>Primary Commercial - Small Hub</b>								
	Baton Rouge	Baton Rouge Metropolitan, Ryan Field	89	42	20	8	0	159
<b>Primary Commercial - Non-Hub</b>								
	Alexandria	England Airpark/Alexandria International Airpark	31	3	11	4	0	49
	Lafayette	Lafayette Regional	75	24	27	17	0	143
	Lake Charles	Lake Charles Regional	33	10	3	188	0	234
	Monroe	Monroe Regional	72	15	6	0	0	93
	Shreveport	Shreveport Regional	26	18	18	2	0	64
<b>Reliever</b>								
	New Orleans	Lakefront	75	24	8	3	0	110
	Shreveport	Shreveport Downtown	261	44	3	0	2	310
	Slidell	Slidell	84	11	1	7	0	103
<b>General Aviation</b>								
	Abbeville	Abbeville Chris Crusta Memorial	25	3	2	26	3	59
	Alexandria	Esler Regional	17	1	2	15	1	36
	Arcadia	Arcadia-Bienville Parish	5	0	0	0	0	5
	Bastrop	Morehouse Memorial	15	1	0	0	0	16
	Bogalusa	George R. Carr Memorial Air Field	18	2	0	0	2	22
	Bunkie	Bunkie Municipal	8	3	0	0	2	13
	Columbia	Columbia	11	0	0	1	0	12
	Coushatta	The Red River	4	0	0	0	0	4
	Covington	St. Tammany Regional	13	2	0	1	1	17
	Crowley	Le Gros Memorial	7	0	0	0	3	10
	De Quincy	De Quincy Industrial Airpark	14	0	0	0	2	16
	De Ridder	Beauregard Regional	18	5	0	0	0	23
	Delhi	Delhi Municipal	2	1	0	0	0	3
	Eunice	Eunice	23	3	0	0	2	28
	Farmerville	Union Parish	18	1	0	0	1	20
	Franklinton	Franklinton	4	0	0	0	0	4
	Galliano	South Lafourche Leonard Miller Jr.	8	0	4	19	0	31
	Gonzales	Louisiana Regional	96	8	1	3	0	108
	Hammond	Hammond Northshore Regional	84	16	13	4	20	137
	Homer	Homer Municipal	4	0	0	0	0	4
	Houma	Houma-Terrebonne	34	24	6	72	0	136
	Jeanerette	Le Maire Memorial	6	0	0	0	0	6
	Jena	Jena	4	2	0	1	1	8
	Jennings	Jennings	28	6	0	1	6	41
	Jonesboro	Jonesboro	9	0	0	0	0	9

	Associated City	Airport	Single-Engine	Multi-Engine	Jet	Helicopter	Other	Total Based Aircraft
	Jonesville	Jonesville	7	0	0	0	0	7
	Lake Charles	Chennault International	17	4	1	1	6	29
	Lake Providence	Byerley	4	0	0	0	0	4
	Leesville	Leesville	15	2	0	1	0	18
	Mansfield	C.E. "Rusty" Williams	9	1	0	0	0	10
	Many	Hart	1	0	0	0	2	3
	Marksville	Marksville Municipal	10	0	0	0	0	10
	Minden	Minden	20	0	0	0	1	21
	Natchitoches	Natchitoches Regional	32	4	0	2	1	39
	New Iberia	Acadiana Regional	27	8	3	8	0	46
	New Roads	False River Regional	29	2	1	1	1	34
	Oak Grove	Kelly	10	0	0	0	2	12
	Oakdale	Allen Parish	9	0	1	0	0	10
	Olla	Olla	1	0	0	0	0	1
	Opelousas	St. Landry Parish-Ahart Field	25	4	0	2	2	33
	Patterson	Harry P. Williams Memorial	15	4	0	19	1	39
	Pineville	Pineville Municipal	30	1	0	1	0	32
	Pollock	Pollock Municipal	0	0	0	0	0	0
	Rayville	John H. Hooks Jr. Memorial	23	4	0	0	0	27
	Reserve	St. John the Baptist Parish	36	5	1	2	33	77
	Ruston	Ruston Regional	42	7	4	2	0	55
	Springhill	Springhill	6	0	0	0	1	7
	St. Joseph	Tensas Parish	5	0	0	0	1	6
	Sulphur	Southland Field	21	5	0	1	3	30
	Tallulah	Scott	0	0	0	0	0	0
	Tallulah/Vicksburg, MS	Vicksburg Tallulah Regional	19	2	1	0	2	24
	Thibodaux	Thibodaux Municipal	4	2	0	2	0	8
	Vidalia	Concordia Parish	32	2	0	0	0	34
	Vivian	Vivian	11	0	0	1	1	13
	Welsh	Welsh	13	0	0	0	2	15
	Winnfield	David G. Joyce	5	0	0	0	2	7
	Winnsboro	Winnsboro Municipal	24	1	1	0	3	29
	Woodworth	Woodworth	5	0	0	2	0	7

Source: FAA 5010 Form and Airport Inventory & Data Survey

**Table A-10: Trends in Operations**

Associated City	Airport	Operations Trend	Busiest Month
<b>Primary Commercial - Medium Hub</b>			
New Orleans	Louis Armstrong New Orleans International	Increasing	May
<b>Primary Commercial - Small Hub</b>			
Baton Rouge	Baton Rouge Metropolitan, Ryan Field	Maintaining	Nov
<b>Primary Commercial - Non-Hub</b>			
Alexandria	England Airpark/Alexandria International Airpark	Maintaining	Aug
Lafayette	Lafayette Regional	Increasing	May
Lake Charles	Lake Charles Regional	Increasing	May
Monroe	Monroe Regional		
Shreveport	Shreveport Regional		
<b>Reliever</b>			
New Orleans	Lakefront	Increasing	Sep
Shreveport	Shreveport Downtown	Increasing	May
Slidell	Slidell	Increasing	May
<b>General Aviation</b>			
Abbeville	Abbeville Chris Crusta Memorial		
Alexandria	Esler Regional		
Arcadia	Arcadia-Bienville Parish		
Bastrop	Morehouse Memorial		
Bogalusa	George R. Carr Memorial Air Field	Maintaining	
Bunkie	Bunkie Municipal	Decreasing	Aug
Columbia	Columbia		
Coushatta	The Red River		
Covington	St. Tammany Regional	Maintaining	
Crowley	Le Gros Memorial	Maintaining	May
De Quincy	De Quincy Industrial Airpark		
De Ridder	Beauregard Regional	Decreasing	Dec
Delhi	Delhi Municipal		
Eunice	Eunice	Maintaining	May
Farmerville	Union Parish	Increasing	Nov
Franklinton	Franklinton	Maintaining	Sep
Galliano	South Lafourche Leonard Miller Jr.	Increasing	Jul
Gonzales	Louisiana Regional	Increasing	
Hammond	Hammond Northshore Regional	Increasing	Mar
Homer	Homer Municipal	Increasing	Jun
Houma	Houma-Terrebonne	Increasing	Jun
Jeanerette	Le Maire Memorial		
Jena	Jena		
Jennings	Jennings	Maintaining	May
Jonesboro	Jonesboro	Increasing	Apr
Jonesville	Jonesville		
Lake Charles	Chennault International	Increasing	Mar
Lake Providence	Byerley		
Leesville	Leesville	Maintaining	May
Mansfield	C.E. "Rusty" Williams		
Many	Hart	Maintaining	

Associated City	Airport	Operations Trend	Busiest Month
Marksville	Marksville Municipal	Maintaining	
Minden	Minden	Increasing	Jul
Natchitoches	Natchitoches Regional	Maintaining	Mar/Apr/Oct
New Iberia	Acadiana Regional	Maintaining	Jul
New Roads	False River Regional	Increasing	Jun
Oak Grove	Kelly	Increasing	Jun
Oakdale	Allen Parish	Maintaining	Mar/Oct
Olla	Olla		
Opelousas	St. Landry Parish-Ahart Field	Increasing	Nov/Dec
Patterson	Harry P. Williams Memorial		
Pineville	Pineville Municipal	Increasing	June
Pollock	Pollock Municipal		
Rayville	John H. Hooks Jr. Memorial		
Reserve	St. John the Baptist Parish	Increasing	Oct
Ruston	Ruston Regional	Maintaining	May
Springhill	Springhill	Maintaining	Feb
St. Joseph	Tensas Parish	Increasing	Aug
Sulphur	Southland Field	Maintaining	Aug
Tallulah	Scott		
Tallulah/Vicksburg, MS	Vicksburg Tallulah Regional		
Thibodaux	Thibodaux Municipal	Maintaining	Apr-Oct
Vidalia	Concordia Parish	Increasing	Sep
Vivian	Vivian	Maintaining	Jun
Welsh	Welsh	Maintaining	Apr
Winnfield	David G. Joyce	Maintaining	Mar
Winnsboro	Winnsboro Municipal	Maintaining	Aug
Woodworth	Woodworth	Maintaining	

Source: Airport Inventory & Data Survey

Table A-11: Airport Operations by Flight Purposes

	Associated City	Airport	Business Flying	Flight Training	Agricultural Use	Recreational	Other
<b>Primary Commercial - Medium Hub</b>							
	New Orleans	Louis Armstrong New Orleans International	85%	0%	0%	15%	0%
<b>Primary Commercial - Small Hub</b>							
	Baton Rouge	Baton Rouge Metropolitan, Ryan Field	50%	10%	0%	20%	10%
<b>Primary Commercial - Non-Hub</b>							
	Alexandria	England Airpark/Alexandria International Airpark					
	Lafayette	Lafayette Regional	74%	10%	1%	10%	5%
	Lake Charles	Lake Charles Regional	60%	5%	10%	20%	5%
	Monroe	Monroe Regional					
	Shreveport	Shreveport Regional					
<b>Reliever</b>							
	New Orleans	Lakefront					
	Shreveport	Shreveport Downtown	35%	15%	0%	50%	0%
	Slidell	Slidell	25%	20%	30%	20%	5%
<b>General Aviation</b>							
	Abbeville	Abbeville Chris Crusta Memorial					
	Alexandria	Eslar Regional	35%	40%	0%	25%	0%
	Arcadia	Arcadia-Bienville Parish					
	Bastrop	Morehouse Memorial					
	Bogalusa	George R. Carr Memorial Air Field	30%	10%	5%	55%	0%
	Bunkie	Bunkie Municipal	60%	5%	10%	15%	10%
	Columbia	Columbia					
	Coushatta	The Red River					
	Covington	St. Tammany Regional					
	Crowley	Le Gros Memorial	15%	4%	65%	15%	1%
	De Quincy	De Quincy Industrial Airpark					
	De Ridder	Beauregard Regional	10%	15%	3%	70%	2%
	Delhi	Delhi Municipal					
	Eunice	Eunice	40%	20%	30%	10%	0%
	Farmerville	Union Parish	2%	0%	10%	88%	12%
	Franklinton	Franklinton	10%	0%	5%	85%	0%
	Galliano	South Lafourche Leonard Miller Jr.	90%	6%	1%	3%	0%
	Gonzales	Louisiana Regional	30%	30%	0%	40%	0%
	Hammond	Hammond Northshore Regional	20%	35%	0%	20%	25%
	Homer	Homer Municipal	25%	0%	10%	65%	0%
	Houma	Houma-Terrebonne	93%	2%	2%	3%	0%
	Jeanerette	Le Maire Memorial					

Appendix

	Associated City	Airport	Business Flying	Flight Training	Agricultural Use	Recreational	Other
	Jena	Jena					
	Jennings	Jennings	25%	5%	60%	10%	0%
	Jonesboro	Jonesboro	10%	10%	30%	50%	0%
	Jonesville	Jonesville					
	Lake Charles	Chennault International	5%	85%	3%	1%	1%
	Lake Providence	Byerley					
	Leesville	Leesville	10%	60%	10%	20%	0%
	Mansfield	C.E. "Rusty" Williams					
	Many	Hart					
	Marksville	Marksville Municipal	20%	40%	20%	20%	0%
	Minden	Minden	60%	5%	0%	30%	5%
	Natchitoches	Natchitoches Regional	30%	5%	10%	50%	5%
	New Iberia	Acadiana Regional	10%	75%	0%	15%	0%
	New Roads	False River Regional	5%	5%	10%	75%	5%
	Oak Grove	Kelly	15%	0%	25%	60%	0%
	Oakdale	Allen Parish	40%	15%	35%	10%	0%
	Olla	Olla					
	Opelousas	St. Landry Parish-Ahart Field	20%	5%	40%	35%	0%
	Patterson	Harry P. Williams Memorial					
	Pineville	Pineville Municipal	7%	80%	1%	10%	2%
	Pollock	Pollock Municipal					
	Rayville	John H. Hooks Jr. Memorial					
	Reserve	St. John the Baptist Parish	25%	20%	5%	50%	0%
	Ruston	Ruston Regional	15%	70%	0%	5%	10%
	Springhill	Springhill	30%	5%	10%	55%	0%
	St. Joseph	Tensas Parish	5%	0%	35%	60%	0%
	Sulphur	Southland Field	65%	15%	2%	17%	1%
	Tallulah	Scott					
	Tallulah/Vicksburg, MS	Vicksburg Tallulah Regional	40%	5%	5%	40%	10%
	Thibodaux	Thibodaux Municipal	0%	0%	70%	10%	20%
	Vidalia	Concordia Parish	20%	20%	20%	40%	0%
	Vivian	Vivian	20%	40%	10%	25%	5%
	Welsh	Welsh	4%	2%	90%	4%	0%
	Winnfield	David G. Joyce	5%	10%	40%	45%	0%
	Winnsboro	Winnsboro Municipal	5%	5%	75%	10%	5%
	Woodworth	Woodworth	30%	0%	40%	30%	0%

Source: Airport Inventory & Data Survey

Table A-12: Airport Operations by Aircraft Type

	Associated City	Airport	Piston Single-Engine	Piston Multi-Engine	Turboprop Single-Engine	Turboprop Multi-Engine	Jet	Helicopter	Other
<b>Primary Commercial - Medium Hub</b>									
	New Orleans	Louis Armstrong New Orleans Int'l	6%	10%	0%	0%	58%	15%	11%
<b>Primary Commercial - Small Hub</b>									
	Baton Rouge	Baton Rouge Metropolitan, Ryan Field	40%	30%	0%	0%	20%	8%	2%
<b>Primary Commercial - Non-Hub</b>									
	Alexandria	England Airpark/Alexandria International Airpark	10%	10%	0%	0%	70%	10%	0%
	Lafayette	Lafayette Regional	52%	17%	0%	0%	19%	12%	0%
	Lake Charles	Lake Charles Regional	30%	15%	0%	0%	15%	40%	0%
	Monroe	Monroe Regional							
	Shreveport	Shreveport Regional							
<b>Reliever</b>									
	New Orleans	Lakefront							
	Shreveport	Shreveport Downtown	50%	15%	0%	20%	9%	5%	1%
	Slidell	Slidell	40%	10%	3%	15%	10%	22%	0%
<b>General Aviation</b>									
	Abbeville	Abbeville Chris Crusta Memorial							
	Alexandria	Esler Regional	25%	20%	0%	0%	15%	40%	0%
	Arcadia	Arcadia-Bienville Parish							
	Bastrop	Morehouse Memorial							
	Bogalusa	George R. Carr Memorial Air Field	50%	20%	0%	0%	20%	10%	0%
	Bunkie	Bunkie Municipal	75%	20%	0%	0%	0%	5%	0%
	Columbia	Columbia							
	Coushatta	The Red River							
	Covington	St. Tammany Regional							
	Crowley	Le Gros Memorial	92%	5%	0%	0%	2%	0%	1%
	De Quincy	De Quincy Industrial Airpark	75%	0%	25%	0%	0%	0%	0%
	De Ridder	Beauregard Regional	80%	10%	1%	3%	5%	1%	0%
	Delhi	Delhi Municipal							
	Eunice	Eunice	40%	10%	10%	20%	0%	10%	10%
	Farmerville	Union Parish	90%	9%	0%	0%	0%	1%	0%
	Franklinton	Franklinton	98%	1%	0%	0%	0%	1%	0%
	Galliano	South Lafourche Leonard Miller Jr.	10%	4%	0%	0%	20%	66%	0%
	Gonzales	Louisiana Regional							

Appendix

	Associated City	Airport	Piston Single-Engine	Piston Multi-Engine	Turboprop Single-Engine	Turboprop Multi-Engine	Jet	Helicopter	Other
	Hammond	Hammond Northshore Regional	30%	30%	0%	<b>0%</b>	20%	20%	0%
	Homer	Homer Municipal	75%	13%	0%	<b>0%</b>	2%	10%	0%
	Houma	Houma-Terrebonne	8%	10%	0%	<b>0%</b>	10%	72%	0%
	Jeanerette	Le Maire Memorial	95%	0%	0%	<b>0%</b>	0%	5%	0%
	Jena	Jena							
	Jennings	Jennings	65%	25%	0%	<b>0%</b>	5%	5%	0%
	Jonesboro	Jonesboro	70%	5%	20%	<b>0%</b>	0%	5%	0%
	Jonesville	Jonesville							
	Lake Charles	Chennault International	60%	30%	0%	<b>0%</b>	5%	4%	1%
	Lake Providence	Byerley							
	Leesville	Leesville	90%	5%	0%	<b>0%</b>	0%	5%	0%
	Mansfield	C.E. "Rusty" Williams							
	Many	Hart							
	Marksville	Marksville Municipal	90%	5%	0%	<b>0%</b>	0%	5%	0%
	Minden	Minden	60%	15%	0%	<b>0%</b>	15%	10%	0%
	Natchitoches	Natchitoches Regional	25%	10%	10%	<b>24%</b>	20%	10%	1%
	New Iberia	Acadiana Regional	8%	3%	1%	<b>2%</b>	7%	79%	0%
	New Roads	False River Regional	65%	16%	5%	<b>10%</b>	1%	2%	1%
	Oak Grove	Kelly	30%	5%	50%	<b>5%</b>	5%	10%	0%
	Oakdale	Allen Parish	50%	10%	0%	<b>0%</b>	35%	5%	0%
	Olla	Olla							
	Opelousas	St. Landry Parish-Ahart Field	50%	30%	0%	<b>0%</b>	10%	10%	0%
	Patterson	Harry P. Williams Memorial							
	Pineville	Pineville Municipal	95%	1%	0%	<b>0%</b>	0%	4%	0%
	Pollock	Pollock Municipal							
	Rayville	John H. Hooks Jr. Memorial							
	Reserve	St. John the Baptist Parish	70%	10%	1%	<b>3%</b>	1%	5%	10%
	Ruston	Ruston Regional	80%	5%	0%	<b>0%</b>	5%	10%	0%
	Springhill	Springhill	70%	20%	0%	<b>0%</b>	5%	5%	0%
	St. Joseph	Tensas Parish	90%	4%	2%	<b>2%</b>	0%	1%	2%
	Sulphur	Southland Field	60%	10%	0%	<b>6%</b>	4%	19%	1%
	Tallulah	Scott							
	Tallulah/Vicksburg, MS	Vicksburg Tallulah Regional	35%	10%	5%	<b>20%</b>	25%	5%	0%
	Thibodaux	Thibodaux Municipal	50%	20%	0%	<b>0%</b>	0%	30%	0%
	Vidalia	Concordia Parish							
	Vivian	Vivian	75%	15%	0%	<b>0%</b>	5%	5%	0%

	Associated City	Airport	Piston Single-Engine	Piston Multi-Engine	Turboprop Single-Engine	Turboprop Multi-Engine	Jet	Helicopter	Other
	Welsh	Welsh	90%	4%	0%	<b>0%</b>	0%	6%	0%
	Winnfield	David G. Joyce	54%	2%	40%	<b>1%</b>	0%	3%	0%
	Winnsboro	Winnsboro Municipal	30%	2%	65%	<b>1%</b>	0%	1%	1%
	Woodworth	Woodworth	30%	0%	0%	<b>0%</b>	0%	40%	30%

Source: Airport Inventory & Data Survey

**Table A-13: Airport Most Demanding Aircraft**

	Associated City	Airport	Most Demanding Aircraft
<b>Primary Commercial - Medium Hub</b>			
	New Orleans	Louis Armstrong New Orleans International	Boeing 737
<b>Primary Commercial - Small Hub</b>			
	Baton Rouge	Baton Rouge Metropolitan, Ryan Field	Regional Jet
<b>Primary Commercial - Non-Hub</b>			
	Alexandria	England Airpark/Alexandria International Airpark	Boeing 707
	Lafayette	Lafayette Regional	Regional Jet
	Lake Charles	Lake Charles Regional	ATR-42
	Monroe	Monroe Regional	
	Shreveport	Shreveport Regional	Boeing 737
<b>Reliever</b>			
	New Orleans	Lakefront	
	Shreveport	Shreveport Downtown	Cessna Citation
	Slidell	Slidell	Cessna Citation
<b>General Aviation</b>			
	Abbeville	Abbeville Chris Crusta Memorial	
	Alexandria	Esler Regional	
	Arcadia	Arcadia-Bienville Parish	
	Bastrop	Morehouse Memorial	
	Bogalusa	George R. Carr Memorial Air Field	G.A.
	Bunkie	Bunkie Municipal	Cessna P210
	Columbia	Columbia	
	Coushatta	The Red River	
	Covington	St. Tammany Regional	Cessna 172
	Crowley	Le Gros Memorial	Ag-Cat
	De Quincy	De Quincy Industrial Airpark	
	De Ridder	Beauregard Regional	Cessna Citation
	Delhi	Delhi Municipal	
	Eunice	Eunice	King Air 200
	Farmerville	Union Parish	Cessna 172
	Franklinton	Franklinton	Cessna 172
	Galliano	South Lafourche Leonard Miller Jr.	Gulfstream IV
	Gonzales	Louisiana Regional	Cessna Citation CJ4
	Hammond	Hammond Northshore Regional	Gulfstream V
	Homer	Homer Municipal	Cessna 206
	Houma	Houma-Terrebonne	Cessna Citation
	Jeanerette	Le Maire Memorial	Ag-Cat
	Jena	Jena	
	Jennings	Jennings	Fairchild Swearingen Metroliner
	Jonesboro	Jonesboro	Cessna 172
	Jonesville	Jonesville	
	Lake Charles	Chennault International	T-45
	Lake Providence	Byerley	
	Leesville	Leesville	Cessna 172
	Mansfield	C.E. "Rusty" Williams	
	Many	Hart	Cessna 172

	Associated City	Airport	Most Demanding Aircraft
	Marksville	Marksville Municipal	Cessna 172
	Minden	Minden	Cessna 182
	Natchitoches	Natchitoches Regional	King Air 200
	New Iberia	Acadiana Regional	T-45
	New Roads	False River Regional	Beech Bonanza
	Oak Grove	Kelly	AirTractor 502
	Oakdale	Allen Parish	Hawker 800 XP
	Olla	Olla	
	Opelousas	St. Landry Parish-Ahart Field	
	Patterson	Harry P. Williams Memorial	
	Pineville	Pineville Municipal	Cirrus SR-22
	Pollock	Pollock Municipal	
	Rayville	John H. Hooks Jr. Memorial	
	Reserve	St. John the Baptist Parish	Cessna Citation CJ4
	Ruston	Ruston Regional	King Air 200
	Springhill	Springhill	Cessna 172
	St. Joseph	Tensas Parish	Cessna 172
	Sulphur	Southland Field	King Air 200
	Tallulah	Scott	
	Tallulah/Vicksburg, MS	Vicksburg Tallulah Regional	Beech Bonanza
	Thibodaux	Thibodaux Municipal	
	Vidalia	Concordia Parish	Cessna 172
	Vivian	Vivian	Cessna 182
	Welsh	Welsh	AirTractor 502
	Winnfield	David G. Joyce	
	Winnsboro	Winnsboro Municipal	AirTractor 502
	Woodworth	Woodworth	Cessna 182

Source: Airport Inventory & Data Survey

**Table A-14: Enplanements**

	Associated City	Airport	2011 Enplanements
<b>Primary Commercial - Medium Hub</b>			
	New Orleans	Louis Armstrong New Orleans International	4,270,866
<b>Primary Commercial - Small Hub</b>			
	Baton Rouge	Baton Rouge Metropolitan, Ryan Field	404,735
<b>Primary Commercial - Non-Hub</b>			
	Alexandria	England Airpark/Alexandria International Airpark	174,858
	Lafayette	Lafayette Regional	226,583
	Lake Charles	Lake Charles Regional	63,987
	Monroe	Monroe Regional	106,544
	Shreveport	Shreveport Regional	254,815

Source: Airport Inventory & Data Survey

Table A-15: Primary Runway Characteristics

Associated City	Airport	Number of Runways	Primary Runway ID	Length x Width (in feet)	Runway Strength (in thousands of pounds)	Runway Surface-Condition	Runway Lighting	Displaced Thresholds (distance, in feet, and runway end)
<b>Primary Commercial - Medium Hub</b>								
New Orleans	Louis Armstrong New Orleans International	3	10/28	10,104 x 150	sw:75 / dw:180 / dtw:380 / ddtw:	Concrete-Excellent	High	/304
<b>Primary Commercial - Small Hub</b>								
Baton Rouge	Baton Rouge Metropolitan, Ryan Field	3	04L/22R	7,500 x 150	sw:120 / dw:170 / dtw:300 / ddtw:	Concrete-Excellent	High	600/424
<b>Primary Commercial - Non-Hub</b>								
Alexandria	England Airpark/Alexandria International Airpark	2	14/32	9,352 x 150	sw:81 / dw:180 / dtw:330 / ddtw:850	Concrete-Good	High	
Lafayette	Lafayette Regional	3	04R/22L	8001 x 150	sw:140 / dw:170 / dtw:290 / ddtw:	Asphalt-Good	High	/342
Lake Charles	Lake Charles Regional	2	15/33	6,500 x 150	sw:100 / dw:145 / dtw:260 / ddtw:	Concrete-Good	High	
Monroe	Monroe Regional	3	04/22	7,505 x 150	sw:75 / dw:170 / dtw:290 / ddtw:	Asphalt-Good	High	
Shreveport	Shreveport Regional	2	14/32	8,351 x 200	sw:75 / dw:190 / dtw:400 / ddtw:	Asphalt-Excellent	High	/375
<b>Reliever</b>								
New Orleans	Lakefront	3	18R/36L	6,879 x 150	sw:60 / dw:175 / dtw:200 / ddtw:350	Asphalt-Good	Medium	239/820
Shreveport	Shreveport Downtown	2	14/32	5,018 x 150	sw:35 / dw:55 / dtw:/ ddtw:	Asphalt-Good	High	
Slidell	Slidell	1	18/36	5,001 x 100	sw:48 / dw:/ dtw:/ ddtw:	Asphalt-Good	Medium	944/

Appendix

	Associated City	Airport	Number of Runways	Primary Runway ID	Length x Width (in feet)	Runway Strength (in thousands of pounds)	Runway Surface-Condition	Runway Lighting	Displaced Thresholds (distance, in feet, and runway end)
<b>General Aviation</b>									
	Abbeville	Abbeville Chris Crusta Memorial	1	16/34	5,000 x 75	sw:17 / dw:/ dtw:/ ddtw:	Asphalt-Good	Medium	
	Alexandria	Esler Regional	2	09/27	5,999 x 150	sw:75 / dw:150 / dtw:220 / ddtw:	Asphalt-Good	High	
	Arcadia	Arcadia-Bienville Parish	1	14/32	3,000 x 75	sw:16 / dw:/ dtw: / ddtw:	Asphalt-Good	Medium	
	Bastrop	Morehouse Memorial	1	16/34	4,002 x 100	sw:15.5 / dw: / dtw: / ddtw:	Asphalt-Good	Medium	
	Bogalusa	George R. Carr Memorial Air Field	1	18/36	5,000 x 100	sw:22 / dw: / dtw: / ddtw:	Asphalt-Good	Medium	
	Bunkie	Bunkie Municipal	1	18/36	3,005 x 75	sw:8 / dw: / dtw: / ddtw:	Asphalt-Good	Medium	
	Columbia	Columbia	1	01/19	3,501 x 75	sw:6 / dw: / dtw: / ddtw:	Asphalt-Good	Medium	
	Coushatta	The Red River	1	18/36	5,002 x 74	sw:44 / dw: / dtw: / ddtw:	Asphalt-Good	Medium	
	Covington	St. Tammany Regional	1	18/36	2,999 x 75	sw:17.5 / dw: / dtw: / ddtw:	Asphalt-Good	Medium	
	Crowley	Le Gros Memorial	2	04/22	4,300 x 150	sw:30 / dw:47 / dtw:87 / ddtw:	Concrete-Good	Medium	
	De Quincy	De Quincy Industrial Airpark	1	16/34	4,997 x 75	sw:18 / dw: / dtw: / ddtw:	Asphalt-Good	Medium	
	De Ridder	Beauregard Regional	2	18/36	5,495 x 100	sw:60 / dw: / dtw: / ddtw:	Asphalt/Concrete-Good	Medium	
	Delhi	Delhi Municipal	1	18/36	3,000 x 75	sw:5 / dw: / dtw: / ddtw:	Asphalt-Good	Medium	155/
	Eunice	Eunice	1	16/34	5,001 x 75	sw:21 / dw: / dtw: / ddtw:	Asphalt-Fair	Medium	
	Farmerville	Union Parish	1	16/34	3,002 x 75	sw:8 / dw: / dtw: / ddtw:	Asphalt-Fair	Medium	130/
	Franklinton	Franklinton	1	13/31	3,000 x 75	sw:20 / dw: / dtw: / ddtw:	Asphalt-Good	Medium	
	Galliano	South Lafourche Leonard Miller Jr.	2	18/36	6,502 x 100	sw:60 / dw: 75 / dtw: / ddtw:	Asphalt-Excellent	Medium	
	Gonzales	Louisiana Regional	1	17/35	5,002 x 100	sw: 30 / dw: 60 / dtw: / ddtw:	Asphalt-Good	Medium	/1,006
	Hammond	Hammond Northshore Regional	2	13/31	6,502 x 100	sw:22 / dw:33 / dtw: / ddtw:	Asphalt/Concrete-Good	Medium	/690
	Homer	Homer Municipal	1	12/30	3,199 x 60	sw:12 / dw: / dtw: / ddtw:	Asphalt-Fair	Medium	
	Houma	Houma-Terrebonne	2	18/36	6,508 x 150	sw:70 / dw:137 / dtw:130 / ddtw:	Concrete-Excellent	High	
	Jeanerette	Le Maire Memorial	1	04/22	3,000 x 75	sw:6 / dw: / dtw: / ddtw:	Asphalt-Good	Medium	/603
	Jena	Jena	1	17/35	3,805 x 75	sw:12 / dw: / dtw: / ddtw:	Asphalt-Excellent	Medium	

Appendix

	Associated City	Airport	Number of Runways	Primary Runway ID	Length x Width (in feet)	Runway Strength (in thousands of pounds)	Runway Surface-Condition	Runway Lighting	Displaced Thresholds (distance, in feet, and runway end)
	Jennings	Jennings	3	08/26	5,002 x 75	sw:12 / dw: / dtw: / ddtw:	Asphalt-Excellent	Medium	
	Jonesboro	Jonesboro	1	18/36	3,203 x 75	sw:28 / dw: / dtw: / ddtw:	Asphalt-Good	Medium	
	Jonesville	Jonesville	1	06/24	3,000 x 75	sw:16 / dw: / dtw: / ddtw:	Asphalt-Excellent	Medium	
	Lake Charles	Chennault International	1	15/33	10,702 x 200	sw:75 / dw:200 / dtw:320 / ddtw:750	Concrete-Fair	High	
	Lake Providence	Byerley	1	17/35	3,196 x 75	sw:4 / dw: / dtw: / ddtw:	Asphalt-Good	Medium	175/530
	Leesville	Leesville	1	18/36	3,807 x 75	sw:12 / dw: / dtw: / ddtw:	Asphalt-Good	Medium	
	Mansfield	C.E. "Rusty" Williams	1	18/36	5,005 x 100	sw:12 / dw: / dtw: / ddtw:	Asphalt-Poor	Medium	
	Many	Hart	2	12/30	4,402 x 75	sw:6 / dw: / dtw: / ddtw:	Asphalt-Good	Medium	
	Marksville	Marksville Municipal	1	04/22	3,799 x 75	sw:19 / dw: / dtw: / ddtw:	Asphalt-Good	Medium	
	Minden	Minden	1	01/19	5,004 x 75	sw:30 / dw:45 / dtw: / ddtw:	Asphalt-Excellent	Medium	
	Natchitoches	Natchitoches Regional	2	17/35	5,003 x 150	sw:30 / dw: / dtw: / ddtw:	Asphalt-Good	Medium	
	New Iberia	Acadiana Regional	2	16/34	8,002 x 200	sw: / dw:105 / dtw:163 / ddtw:400	Concrete-Good	High	
	New Roads	False River Regional	1	18/36	5,003 x 75	sw:14 / dw: / dtw: / ddtw:	Asphalt-Good	Medium	
	Oak Grove	Kelly	1	18/36	3,000 x 60	sw:10 / dw: / dtw: / ddtw:	Asphalt-Good	Medium	250/
	Oakdale	Allen Parish	1	18/36	4,994 x 75	sw:11 / dw: / dtw: / ddtw:	Asphalt-Good	Medium	
	Olla	Olla	1	03/21	3,010 x 75	sw:9 / dw: / dtw: / ddtw:	Asphalt-Poor	None	/190
	Opelousas	St. Landry Parish-Ahart Field	2	18/36	5,999 x 100	sw:30 / dw: / dtw: / ddtw:	Concrete-Fair	Medium	150/789
	Patterson	Harry P. Williams Memorial	2	06/24	5,399 x 150	sw:32 / dw: / dtw: / ddtw:	Asphalt-Good	Medium	394/
	Pineville	Pineville Municipal	2	18/36	3,000 x 75	sw:15.5 / dw: / dtw: / ddtw:	Asphalt-Good	Medium	
	Pollock	Pollock Municipal	1	18/36	4,499 x 75	sw:49 / dw: / dtw: / ddtw:	Asphalt-Fair	Medium	
	Rayville	John H. Hooks Jr. Memorial	1	18/36	3,998 x 75	sw:12 / dw: / dtw: / ddtw:	Asphalt-Good	Medium	/291
	Reserve	St. John the Baptist Parish	1	17/35	5,150 x 75		Asphalt-Good	Medium	746/405
	Ruston	Ruston Regional	1	18/36	5,000 x 100	sw:30 / dw: 50 / dtw: / ddtw:	Asphalt-Good	Medium	
	Springhill	Springhill	1	18/36	4,202 x 75	sw:30 / dw: / dtw: / ddtw:	Asphalt-Good	Medium	200/
	St. Joseph	Tensas Parish	1	16/34	3,500 x 75	sw:12 / dw: / dtw: / ddtw:	Asphalt-Good	Medium	
	Sulphur	Southland Field	1	15/33	5,001 x 75	sw:30 / dw: 50 / dtw: / ddtw:	Asphalt-Good	Medium	

Appendix

	Associated City	Airport	Number of Runways	Primary Runway ID	Length x Width (in feet)	Runway Strength (in thousands of pounds)	Runway Surface-Condition	Runway Lighting	Displaced Thresholds (distance, in feet, and runway end)
	Tallulah	Scott	2	18/36	3,014 x 75	sw:12 / dw: / dtw: / ddtw:	Asphalt-Good	Medium	/250
	Tallulah/Vicksburg, MS	Vicksburg Tallulah Regional	1	18/36	5,002 x 100	sw:60 / dw:75 / dtw: / ddtw:	Asphalt-Good	Medium	
	Thibodaux	Thibodaux Municipal	1	08/26	2,999 x 75	sw:6 / dw: / dtw: / ddtw:	Asphalt-Good	Medium	/90
	Vidalia	Concordia Parish	1	14/32	3,701 x 75	sw:12 / dw: / dtw: / ddtw:	Asphalt-Good	Medium	
	Vivian	Vivian	1	09/27	2,998 x 75	sw:12 / dw: / dtw: / ddtw:	Asphalt-Good	Medium	
	Welsh	Welsh	2	07/25	2,700 x 50	sw:6 / dw: / dtw: / ddtw:	Asphalt-Good	Medium	
	Winnfield	David G. Joyce	1	09/27	3,002 x 100	sw:4 / dw: / dtw: / ddtw:	Asphalt-Good	Medium	
	Winnsboro	Winnsboro Municipal	1	18/36	3,000 x 75	sw:11 / dw: / dtw: / ddtw:	Asphalt-Fair	Medium	
	Woodworth	Woodworth	1	01/19	3,100 x 75	sw:12 / dw: / dtw: / ddtw:	Asphalt-Good	Medium	

Source: FAA 5010 Form and Airport Inventory & Data Survey

**Table A-16: Primary Runway Characteristics**

Associated City	Airport	Primary Runway ID	Taxiway Type	Taxiway Width (in feet)	Taxiway Surface Condition	Number of Taxiway Exits	Spacing between Exits	Taxiway Lighting	PAPI (which ends)	VASI (which ends)
<b>Primary Commercial - Medium Hub</b>										
New Orleans	Louis Armstrong New Orleans International	10/28	Parallel	75	Asphalt-Fair	13		MITL	Yes/Yes	No/No
<b>Primary Commercial - Small Hub</b>										
Baton Rouge	Baton Rouge Metropolitan, Ryan Field	04L/22R	Parallel	75	Asphalt/Concrete	11		MITL	No/No	Yes/Yes
<b>Primary Commercial - Non-Hub</b>										
Alexandria	England Airpark/Alexandria International Airpark	14/32	Parallel	75		3		HITL	Yes/Yes	No/No
Lafayette	Lafayette Regional	04R/22L	Parallel			8			Yes/Yes	No/No
Lake Charles	Lake Charles Regional	15/33	Parallel		Concrete-Good	5		LITL	Yes/No	No/Yes
Monroe	Monroe Regional	04/22	Parallel	50		6			Yes/Yes	No/No
Shreveport	Shreveport Regional	14/32	Parallel						No/No	No/No
<b>Reliever</b>										
New Orleans	Lakefront	18R/36L	Parallel	75		10		Yes	Yes/Yes	No/No
Shreveport	Shreveport Downtown	14/32	Parallel	60	Asphalt-Fair	2	1,500	MITL	Yes/Yes	No/No
Slidell	Slidell	18/36	Parallel	35	Asphalt	4	1,000	MITL	Yes/Yes	No/No
<b>General Aviation</b>										
Abbeville	Abbeville Chris Crusta Memorial	16/34	Parallel	40	Asphalt	5			Yes/Yes	No/No

Appendix

Associated City	Airport	Primary Runway ID	Taxiway Type	Taxiway Width (in feet)	Taxiway Surface Condition	Number of Taxiway Exits	Spacing between Exits	Taxiway Lighting	PAPI (which ends)	VASI (which ends)
Alexandria	Esler Regional	09/27	Parallel	75	Asphalt	5			No/No	Yes/No
Arcadia	Arcadia-Bienville Parish	14/32	None	50	Asphalt				No/No	No/No
Bastrop	Morehouse Memorial	16/34	Parallel	40	Asphalt	3		MITL	Yes/Yes	No/No
Bogalusa	George R. Carr Memorial Air Field	18/36	Turn-around	40	Asphalt-Good	2			Yes/Yes	No/No
Bunkie	Bunkie Municipal	18/36	Turn-around						Yes/Yes	No/No
Columbia	Columbia	01/19	Turn-around	50	Asphalt				Yes/Yes	No/No
Coushatta	The Red River	18/36	Turn-around	50	Asphalt	1			Yes/Yes	No/No
Covington	St. Tammany Regional	18/36	Turn-around	50	Asphalt				No/No	Yes/Yes
Crowley	Le Gros Memorial	04/22	Partial Parallel		Concrete-Good	2			Yes/Yes	No/No
De Quincy	De Quincy Industrial Airpark	16/34	Partial Parallel	35	Asphalt	4			Yes/Yes	No/No
De Ridder	Beauregard Regional	18/36	Parallel	75	Asphalt/Concrete-Good	5			Yes/Yes	No/No
Delhi	Delhi Municipal	18/36	Turn-around						No/No	No/No
Eunice	Eunice	16/34	Partial Parallel	40	Asphalt	3			Yes/Yes	No/No
Farmerville	Union Parish	16/34	Turn-around	54	Asphalt	2	700	MITL	Yes/Yes	No/No
Franklinton	Franklinton	13/31	Turn-around	50	Asphalt-Good	1		MITL	Yes/Yes	No/No
Galliano	South Lafourche Leonard Miller Jr.	18/36	Parallel	35	Asphalt	5	1,300		Yes/Yes	No/No
Gonzales	Louisiana Regional	17/35	Parallel	50	Asphalt-Good	4	1,370/2,730		Yes/Yes	No/No
Hammond	Hammond Northshore Regional	13/31	Parallel	50		4		MITL	Yes/Yes	No/No
Homer	Homer Municipal	12/30	None	40	Asphalt				Yes/Yes	No/No
Houma	Houma-Terrebonne	18/36	Parallel	60		10	200	MITL	Yes/Yes	No/No
Jeanerette	Le Maire Memorial	04/22	Turn-around	50	Asphalt	2	1,100		Yes/Yes	No/No

Appendix

Associated City	Airport	Primary Runway ID	Taxiway Type	Taxiway Width (in feet)	Taxiway Surface Condition	Number of Taxiway Exits	Spacing between Exits	Taxiway Lighting	PAPI (which ends)	VASI (which ends)
Jena	Jena	17/35	Partial Parallel	40	Asphalt				Yes/Yes	No/No
Jennings	Jennings	08/26	Partial Parallel	50					Yes/Yes	No/No
Jonesboro	Jonesboro	18/36	Turn-around	50	Asphalt				Yes/Yes	No/No
Jonesville	Jonesville	06/24	Turn-around						Yes/Yes	No/No
Lake Charles	Chennault International	15/33	Parallel	75	Concrete-Good	5		MITL	Yes/Yes	No/No
Lake Providence	Byerley	17/35	Partial Parallel	35	Asphalt				No/No	No/Yes
Leesville	Leesville	18/36	Turn-around	50	Asphalt				Yes/Yes	No/No
Mansfield	C.E. "Rusty" Williams	18/36	Parallel	40	Asphalt	5			Yes/Yes	No/No
Many	Hart	12/30	Turn-around	50		2	1,700		Yes/Yes	No/No
Marksville	Marksville Municipal	04/22	Parallel	40	Asphalt	4			Yes/Yes	No/No
Minden	Minden	01/19	Turn-around		Asphalt				Yes/Yes	No/No
Natchitoches	Natchitoches Regional	17/35	Parallel	40	Asphalt-Fair	4	Varies		Yes/Yes	No/No
New Iberia	Acadiana Regional	16/34	Parallel	75		5	2,000		Yes/Yes	No/No
New Roads	False River Regional	18/36	Parallel	40	Asphalt	6		MITL	Yes/Yes	No/No
Oak Grove	Kelly	18/36	Partial Parallel	35	Asphalt	1			Yes/Yes	No/No
Oakdale	Allen Parish	18/36	Parallel	35	Asphalt-Good	3	2,000	LED	Yes/Yes	No/No
Olla	Olla	03/21	Turn-around	50	Asphalt				No/No	No/No
Opelousas	St. Landry Parish-Ahart Field	18/36	Parallel	50	Asphalt-Good/Concrete-Fair	4			Yes/Yes	No/No
Patterson	Harry P. Williams Memorial	06/24	Parallel	50	Asphalt-Poor	6	Varies	MITL	Yes/Yes	No/No
Pineville	Pineville Municipal	18/36	Parallel	40	Asphalt	4	1,100		Yes/Yes	No/No
Pollock	Pollock Municipal	18/36	Partial Parallel	50	Asphalt	3			No/No	No/No
Rayville	John H. Hooks Jr. Memorial	18/36	Parallel	40	Asphalt	5			Yes/Yes	No/No

Appendix

Associated City	Airport	Primary Runway ID	Taxiway Type	Taxiway Width (in feet)	Taxiway Surface Condition	Number of Taxiway Exits	Spacing between Exits	Taxiway Lighting	PAPI (which ends)	VASI (which ends)
Reserve	St. John the Baptist Parish	17/35	Partial Parallel	50	Asphalt-Good	6			Yes/Yes	No/No
Ruston	Ruston Regional	18/36	Parallel	40	Asphalt	4			Yes/Yes	No/No
Springhill	Springhill	18/36	Parallel	40	Asphalt	3			Yes/Yes	No/No
St. Joseph	Tensas Parish	16/34	Turn-around	50	Asphalt				No/No	No/No
Sulphur	Southland Field	15/33	Parallel	35	Asphalt	5		MITL	Yes/Yes	No/No
Tallulah	Scott	18/36	Turn-around		Asphalt				No/No	No/No
Tallulah/Vicksburg, MS	Vicksburg Tallulah Regional	18/36	Parallel	40	Asphalt	5			Yes/Yes	No/No
Thibodaux	Thibodaux Municipal	08/26	Turn-around	50	Asphalt				No/No	No/No
Vidalia	Concordia Parish	14/32	Partial Parallel	40	Asphalt	2			Yes/Yes	No/No
Vivian	Vivian	09/27	Turn-around	50	Asphalt	1			Yes/No	No/No
Welsh	Welsh	07/25	Turn-around	50	Asphalt				No/No	No/No
Winnfield	David G. Joyce	09/27	None	40					Yes/Yes	No/No
Winnsboro	Winnsboro Municipal	18/36	None	50	Asphalt				Yes/Yes	No/No
Woodworth	Woodworth	01/19	Turn-around	21	Asphalt	2	180		No/No	Yes/Yes

Source: FAA 5010 Form and Airport Inventory & Data Survey

Table A-17: Primary Runway Characteristics

Associated City	Airport	Primary Runway ID	REIL (which ends)	ILS (which ends)	ALS (which ends)	DME (which ends)	Localizer (which ends)	VOR/TVOR (which ends)	GPS (which ends)	NDB (which ends)	Circling Approach	
<b>Primary Commercial - Medium Hub</b>												
New Orleans	Louis Armstrong New Orleans International	10/28	No/No	Yes/Yes	ALSF2/ MALSR	Yes/Yes	Yes/Yes	Yes/No	Yes/Yes	No/No	Yes/Yes	
<b>Primary Commercial - Small Hub</b>												
Baton Rouge	Baton Rouge Metropolitan, Ryan Field	04L/22R	No/No	No/Yes	/MALSR	No/Yes	No/Yes	Yes/Yes	Yes/Yes	No/No	Yes/Yes	
<b>Primary Commercial - Non-Hub</b>												
Alexandria	England Airpark/Alexandria International Airpark	14/32	No/Yes	Yes/No	SSALR/	Yes/No	Yes/No	Yes/Yes	Yes/Yes	No/No	No/No	
Lafayette	Lafayette Regional	04R/22L	Yes/No	Yes/Yes	/MALSR	Yes/No	Yes/Yes	No/No	Yes/Yes	No/No	Yes/Yes	
Lake Charles	Lake Charles Regional	15/33	No/No	Yes/No	MALSR/ MALSF	Yes/Yes	Yes/Yes	No/No	Yes/Yes	No/No	Yes/Yes	
Monroe	Monroe Regional	04/22	Yes/Yes	Yes/Yes	MALSR/ MALSR	Yes/Yes	Yes/Yes	Yes/Yes	Yes/Yes	No/No	Yes/Yes	
Shreveport	Shreveport Regional	14/32	No/No	Yes/Yes	ALSF2/ MALSR	Yes/No	Yes/Yes	No/No	Yes/Yes	No/No	Yes/Yes	
<b>Reliever</b>												
New Orleans	Lakefront	18R/36L	No/Yes	Yes/No	MALSF/	No/Yes	Yes/No	No/Yes	Yes/Yes	No/No	Yes/Yes	
Shreveport	Shreveport Downtown	14/32	Yes/Yes	No/No		Yes/No	Yes/No	Yes/No	Yes/No	No/No	Yes/Yes	
Slidell	Slidell	18/36	Yes/Yes	No/No		Yes/No	No/No	Yes/No	Yes/Yes	No/No	Yes/Yes	
<b>General Aviation</b>												
Abbeville	Abbeville Chris Crusta Memorial	16/34	Yes/Yes	No/No		No/No	Yes/No	No/No	Yes/Yes	No/No	Yes/Yes	
Alexandria	Esler Regional	09/27	Yes/No	No/Yes	/MALSR	No/Yes	No/Yes	No/No	Yes/Yes	No/Yes	Yes/Yes	
Arcadia	Arcadia-Bienville Parish	14/32	No/No	No/No		No/No	No/No	No/No	No/No	No/No	No/No	
Bastrop	Morehouse Memorial	16/34	Yes/Yes	No/No		No/No	No/No	No/No	Yes/Yes	No/Yes	Yes/Yes	
Bogalusa	George R. Carr Memorial Air Field	18/36	Yes/Yes	No/No		No/No	Yes/No	No/No	Yes/Yes	No/No	Yes/Yes	
Bunkie	Bunkie Municipal	18/36	Yes/Yes	No/No		No/No	No/No	No/No	Yes/Yes	No/Yes	Yes/Yes	
Columbia	Columbia	01/19	No/No	No/No		No/No	No/No	No/No	No/No	No/No	No/No	
Coushatta	The Red River	18/36	Yes/Yes	No/No		No/No	No/No	No/No	No/No	No/No	No/No	
Covington	St. Tammany Regional	18/36	No/No	No/No		No/No	No/No	No/No	No/No	No/No	No/No	
Crowley	Le Gros Memorial	04/22	Yes/Yes	No/No		No/No	No/No	No/No	No/No	No/No	No/No	
De Quincy	De Quincy Industrial Airpark	15/33	Yes/Yes	No/No		No/Yes	No/No	Yes/No	Yes/Yes	Yes/No	Yes/Yes	
De Ridder	Beauregard Regional	18/36	Yes/No	No/No	/ODALS	No/No	No/Yes	No/No	Yes/Yes	No/Yes	Yes/Yes	

Appendix

Associated City	Airport	Primary Runway ID	REIL (which ends)	ILS (which ends)	ALS (which ends)	DME (which ends)	Localizer (which ends)	VOR/TVOR (which ends)	GPS (which ends)	NDB (which ends)	Circling Approach
Delhi	Delhi Municipal	18/36	No/No	No/No		No/No	No/No	No/No	No/No	No/No	No/No
Eunice	Eunice	16/34	Yes/Yes	No/No		No/No	No/No	No/No	Yes/Yes	Yes/No	Yes/Yes
Farmerville	Union Parish	16/34	No/Yes	No/No		No/No	No/No	No/No	No/No	No/No	No/No
Franklinton	Franklinton	13/31	Yes/Yes	No/No		No/No	No/No	No/No	No/No	No/No	No/No
Galliano	South Lafourche Leonard Miller Jr.	18/36	Yes/No	No/No	/SSALR	No/Yes	No/Yes	No/No	Yes/Yes	No/No	Yes/Yes
Gonzales	Louisiana Regional	17/35	Yes/Yes	No/No		No/No	No/No	No/No	Yes/Yes	No/No	Yes/Yes
Hammond	Hammond Northshore Regional	13/31	Yes/Yes	Yes/No		No/No	No/No	No/Yes	No/Yes	No/No	Yes/Yes
Homer	Homer Municipal	12/30	Yes/Yes	No/No		No/No	No/No	No/No	No/No	No/No	No/No
Houma	Houma-Terrebonne	18/36	No/Yes	Yes/No	MALSR/	No/No	Yes/No	No/No	Yes/Yes	No/No	Yes/Yes
Jeanerette	Le Maire Memorial	04/22	Yes/Yes	No/No		No/No	No/No	No/No	No/No	No/No	No/No
Jena	Jena	17/35	Yes/Yes	No/No		No/No	No/No	No/No	No/No	No/No	No/No
Jennings	Jennings	08/26	Yes/Yes	No/No		Yes/No	No/No	Yes/No	Yes/No	No/No	Yes/Yes
Jonesboro	Jonesboro	18/36	Yes/Yes	No/No		No/No	No/No	No/No	Yes/Yes	No/No	Yes/Yes
Jonesville	Jonesville	06/24	No/No	No/No		No/No	No/No	No/No	No/No	No/No	No/No
Lake Charles	Chennault International	15/33	No/Yes	Yes/No	MALSR/	Yes/No	Yes/No	No/No	Yes/Yes	No/No	Yes/Yes
Lake Providence	Byerley	17/35	Yes/No	No/No		No/No	No/No	No/No	No/No	No/No	No/No
Leesville	Leesville	18/36	Yes/Yes	No/No		No/No	No/No	No/No	Yes/Yes	No/Yes	Yes/Yes
Mansfield	C.E. "Rusty" Williams	18/36	Yes/Yes	No/No		No/No	No/No	No/No	Yes/No	Yes/No	Yes/No
Many	Hart	12/30	Yes/Yes	No/No		No/No	No/No	No/No	Yes/Yes	No/No	Yes/Yes
Marksville	Marksville Municipal	04/22	Yes/Yes	No/No		No/No	No/No	No/No	Yes/No	Yes/No	Yes/Yes
Minden	Minden	01/19	Yes/Yes	No/No		No/No	No/No	No/No	Yes/Yes	No/No	Yes/Yes
Natchitoches	Natchitoches Regional	17/35	Yes/No	No/No	/ODALS	No/No	No/Yes	No/No	Yes/Yes	No/Yes	Yes/Yes
New Iberia	Acadiana Regional	16/34	No/No	No/Yes	ODALS/ MALSR	No/Yes	No/Yes	Yes/Yes	Yes/Yes	No/Yes	Yes/Yes
New Roads	False River Regional	18/36	Yes/No	No/No	/ODALS	No/No	No/Yes	No/No	Yes/Yes	No/Yes	Yes/Yes
Oak Grove	Kelly	18/36	Yes/Yes	No/No		No/No	No/No	No/No	No/No	No/No	No/No
Oakdale	Allen Parish	18/36	Yes/Yes	No/No		No/No	No/No	No/No	Yes/Yes	No/Yes	Yes/Yes
Olla	Olla	03/21	No/No	No/No		No/No	No/No	No/No	No/No	No/No	No/No
Opelousas	St. Landry Parish-Ahart Field	18/36	Yes/Yes	No/No		No/Yes	No/No	No/Yes	Yes/Yes	Yes/No	Yes/Yes
Patterson	Harry P. Williams Memorial	06/24	Yes/No	No/Yes	/MALSR	No/Yes	No/Yes	No/No	Yes/Yes	Yes/No	Yes/Yes
Pineville	Pineville Municipal	18/36	Yes/Yes	No/No		No/No	No/No	No/No	No/No	No/No	No/No
Pollock	Pollock Municipal	18/36	No/No	No/No		No/No	No/No	No/No	No/No	No/No	No/No

Appendix

Associated City	Airport	Primary Runway ID	REIL (which ends)	ILS (which ends)	ALS (which ends)	DME (which ends)	Localizer (which ends)	VOR/TVOR (which ends)	GPS (which ends)	NDB (which ends)	Circling Approach
Rayville	John H. Hooks Jr. Memorial	18/36	Yes/Yes	No/No		No/No	No/No	No/No	Yes/Yes	No/Yes	Yes/Yes
Reserve	St. John the Baptist Parish	17/35	Yes/Yes	No/No		No/No	No/No	No/Yes	Yes/Yes	No/No	Yes/Yes
Ruston	Ruston Regional	18/36	No/No	No/No		No/No	No/No	No/No	Yes/Yes	Yes/Yes	Yes/Yes
Springhill	Springhill	18/36	No/No	No/No		No/No	No/No	No/No	Yes/Yes	No/No	Yes/Yes
St. Joseph	Tensas Parish	16/34	No/No	No/No		No/No	No/No	No/No	No/No	No/No	No/No
Sulphur	Southland Field	15/33	Yes/Yes	No/No	ODALS/	No/No	Yes/No	No/No	Yes/Yes	No/No	Yes/Yes
Tallulah	Scott	18/36	No/No	No/No		No/No	No/No	No/No	No/No	No/No	No/No
Tallulah/Vicksburg, MS	Vicksburg Tallulah Regional	18/36	No/No	No/No		No/No	No/Yes	No/No	Yes/Yes	No/No	Yes/Yes
Thibodaux	Thibodaux Municipal	08/26	No/No	No/No		No/No	No/No	No/No	No/No	No/No	Yes/Yes
Vidalia	Concordia Parish	14/32	Yes/Yes	No/No		No/No	No/No	No/No	No/No	No/No	No/No
Vivian	Vivian	09/27	Yes/No	No/No		No/No	No/No	No/No	Yes/Yes	Yes/No	Yes/Yes
Welsh	Welsh	07/25	No/No	No/No		Yes/No	No/No	Yes/No	Yes/No	No/No	Yes/Yes
Winnfield	David G. Joyce	09/27	Yes/Yes	No/No		No/No	No/No	No/No	Yes/Yes	No/No	Yes/Yes
Winnsboro	Winnsboro Municipal	18/36	No/No	No/No		No/No	No/No	No/No	No/No	No/No	No/No
Woodworth	Woodworth	01/19	No/No	No/No		No/No	No/No	No/No	No/No	No/No	No/No

Source: FAA 5010 Form and Airport Inventory & Data Survey

**Table A-18: Primary Runway RNAV Approaches**

Associated City	Airport	Primary RW	RNAV	LPV	LNAV/VNAV	LNAV or LP
<b>Primary Commercial - Medium Hub</b>						
New Orleans	Louis Armstrong New Orleans International	10/28	Yes/Yes	Yes/Yes	Yes/Yes	Yes/Yes
<b>Primary Commercial - Small Hub</b>						
Baton Rouge	Baton Rouge Metropolitan, Ryan Field	04L/22R	Yes/Yes	Yes/Yes	Yes/Yes	Yes/Yes
<b>Primary Commercial - Non-Hub</b>						
Alexandria	England Airpark/Alexandria International Airpark	14/32	Yes/Yes	Yes/Yes	Yes/Yes	Yes/Yes
Lafayette	Lafayette Regional	04R/22L	Yes/Yes	Yes/Yes	Yes/Yes	Yes/Yes
Lake Charles	Lake Charles Regional	15/33	Yes/Yes	Yes/Yes	Yes/Yes	Yes/Yes
Monroe	Monroe Regional	04/22	Yes/Yes	Yes/Yes	Yes/Yes	Yes/Yes
Shreveport	Shreveport Regional	14/32	Yes/Yes	Yes/Yes	Yes/Yes	Yes/Yes
<b>Reliever</b>						
New Orleans	Lakefront	18R/36L	Yes/Yes	Yes/Yes	Yes/Yes	Yes/Yes

Appendix

Associated City	Airport	Primary RW	RNAV	LPV	LNAV/VNAV	LNAV or LP
Shreveport	Shreveport Downtown	14/32	Yes/No	Yes/No	Yes/No	Yes/No
Slidell	Slidell	18/36	Yes/Yes	No/No	No/No	Yes/Yes
<b>General Aviation</b>						
Abbeville	Abbeville Chris Crusta Memorial	16/34	Yes/Yes	Yes/Yes	Yes/Yes	Yes/Yes
Alexandria	Esler Regional	09/27	Yes/Yes	Yes/Yes	Yes/Yes	Yes/Yes
Arcadia	Arcadia-Bienville Parish	14/32	None	None	None	None
Bastrop	Morehouse Memorial	16/34	Yes/Yes	Yes/Yes	Yes/Yes	Yes/Yes
Bogalusa	George R. Carr Memorial Air Field	18/36	Yes/Yes	Yes/Yes	Yes/Yes	Yes/Yes
Bunkie	Bunkie Municipal	18/36	Yes/Yes	No/No	No/No	Yes/Yes
Columbia	Columbia	01/19	None	None	None	None
Coushatta	The Red River	18/36	None	None	None	None
Covington	St. Tammany Regional	18/36	None	None	None	None
Crowley	Le Gros Memorial	04/22	None	None	None	None
De Quincy	De Quincy Industrial Airpark	16/34	Yes/Yes	No/No	No/No	Yes/Yes
De Ridder	Beauregard Regional	18/36	Yes/Yes	No/No	No/Yes	Yes/Yes
Delhi	Delhi Municipal	18/36	None	None	None	None
Eunice	Eunice	16/34	Yes/Yes	No/No	No/No	Yes/Yes
Farmerville	Union Parish	16/34	None	None	None	None
Franklinton	Franklinton	13/31	None	None	None	None
Galliano	South Lafourche Leonard Miller Jr.	18/36	Yes/Yes	Yes/Yes	Yes/Yes	Yes/Yes
Gonzales	Louisiana Regional	17/35	Yes/Yes	Yes/No	Yes/No	Yes/Yes
Hammond	Hammond Northshore Regional	13/31	No/Yes	No/No	No/No	No/Yes
Homer	Homer Municipal	12/30	None	None	None	None
Houma	Houma-Terrebonne	18/36	Yes/Yes	Yes/Yes	Yes/Yes	Yes/Yes
Jeanerette	Le Maire Memorial	04/22	None	None	None	None
Jena	Jena	17/35	None	None	None	None
Jennings	Jennings	08/26	Yes/No	No/No	No/No	Yes/No
Jonesboro	Jonesboro	18/36	Yes/Yes	No/No	No/No	Yes/Yes
Jonesville	Jonesville	06/24	None	None	None	None
Lake Charles	Chennault International	15/33	Yes/Yes	Yes/Yes	Yes/Yes	Yes/Yes
Lake Providence	Byerley	17/35	None	None	None	None
Leesville	Leesville	18/36	Yes/Yes	Yes/No	Yes/No	Yes/Yes
Mansfield	C.E. "Rusty" Williams	18/36	No/Yes	No/No	No/No	No/Yes
Many	Hart	12/30	Yes/Yes	Yes/No	Yes/No	Yes/Yes

Appendix

Associated City	Airport	Primary RW	RNAV	LPV	LNAV/VNAV	LNAV or LP
Marksville	Marksville Municipal	04/22	No/Yes	No/No	No/No	No/Yes
Minden	Minden	01/19	Yes/Yes	No/No	No/No	Yes/Yes
Natchitoches	Natchitoches Regional	17/35	Yes/Yes	Yes/Yes	Yes/Yes	Yes/Yes
New Iberia	Acadiana Regional	16/34	Yes/Yes	Yes/Yes	Yes/Yes	Yes/Yes
New Roads	False River Regional	18/36	Yes/Yes	No/Yes	No/Yes	Yes/Yes
Oak Grove	Kelly	18/36	None	None	None	None
Oakdale	Allen Parish	18/36	Yes/Yes	Yes/Yes	Yes/Yes	Yes/Yes
Olla	Olla	03/21	None	None	None	None
Opelousas	St. Landry Parish-Ahart Field	18/36	Yes/Yes	Yes/Yes	Yes/Yes	Yes/Yes
Patterson	Harry P. Williams Memorial	06/24	Yes/Yes	No/Yes	No/Yes	Yes/Yes
Pineville	Pineville Municipal	18/36	None	None	None	None
Pollock	Pollock Municipal	18/36	None	None	None	None
Rayville	John H. Hooks Jr. Memorial	18/36	Yes/Yes	Yes/Yes	Yes/Yes	Yes/Yes
Reserve	St. John the Baptist Parish	17/35	Yes/Yes	No/Yes	No/Yes	Yes/Yes
Ruston	Ruston Regional	18/36	Yes/Yes	Yes/Yes	Yes/Yes	Yes/Yes
Springhill	Springhill	18/36	Yes/Yes	Yes/Yes	Yes/Yes	Yes/Yes
St. Joseph	Tensas Parish	16/34	None	None	None	None
Sulphur	Southland Field	15/33	Yes/Yes	Yes/Yes	Yes/Yes	Yes/Yes
Tallulah	Scott	18/36	None	None	None	None
Tallulah/Vicksburg, MS	Vicksburg Tallulah Regional	18/36	Yes/Yes	No/Yes	No/Yes	Yes/Yes
Thibodaux	Thibodaux Municipal	08/26	No/No	No/No	No/No	No/No
Vidalia	Concordia Parish	14/32	None	None	None	None
Vivian	Vivian	09/27	Yes/Yes	No/No	No/No	Yes/Yes
Welsh	Welsh	07/25	No/No	No/No	No/No	No/No
Winnfield	David G. Joyce	09/27	Yes/Yes	No/No	No/No	Yes/Yes
Winnsboro	Winnsboro Municipal	18/36	None	None	None	None
Woodworth	Woodworth	01/19	None	None	None	None

Source: FAA 5010 Form and Airport Inventory & Data Survey

Table A-19: Airport NAVAIDS

	Associated City	Airport	Number of Wind Cones	Lighted Wind Cone	Segmented Circle	Weather Reporting
<b>Primary Commercial - Medium Hub</b>						
	New Orleans	Louis Armstrong New Orleans International	5	Yes	No	ASOS
<b>Primary Commercial - Small Hub</b>						
	Baton Rouge	Baton Rouge Metropolitan, Ryan Field	5	Yes	Yes	ASOS
<b>Primary Commercial - Non-Hub</b>						
	Alexandria	England Airpark/Alexandria International Airpark	3	Yes	Yes	ASOS
	Lafayette	Lafayette Regional	9	Yes	Yes	ASOS
	Lake Charles	Lake Charles Regional	3	Yes	Yes	ASOS
	Monroe	Monroe Regional	1	Yes	Yes	AWOS
	Shreveport	Shreveport Regional	4	Yes	No	ASOS
<b>Reliever</b>						
	New Orleans	Lakefront	3	Yes	Yes	ASOS
	Shreveport	Shreveport Downtown	2	Yes	No	ASOS
	Slidell	Slidell	2	Yes	No	ASOS
<b>General Aviation</b>						
	Abbeville	Abbeville Chris Crusta Memorial	1	Yes	No	AWOS III P-T
	Alexandria	Esler Regional	3	Yes	Yes	ASOS
	Arcadia	Arcadia-Bienville Parish	1	Yes	No	None
	Bastrop	Morehouse Memorial	1	Yes	No	AWOS III P-T
	Bogalusa	George R. Carr Memorial Air Field	1	Yes	No	AWOS III P-T
	Bunkie	Bunkie Municipal	1	Yes	No	None
	Columbia	Columbia	1	Yes	No	None
	Coushatta	The Red River	1	Yes	No	None
	Covington	St. Tammany Regional	1	Yes	No	None
	Crowley	Le Gros Memorial	1	Yes	No	None
	De Quincy	De Quincy Industrial Airpark	1	Yes	Yes	AWOS III P-T
	De Ridder	Beauregard Regional	1	Yes	No	AWOS III P-T
	Delhi	Delhi Municipal	1	Yes	Yes	None
	Eunice	Eunice	1	Yes	No	None
	Farmerville	Union Parish	1	Yes	No	None
	Franklinton	Franklinton	1	Yes	No	None
	Galliano	South Lafourche Leonard Miller Jr.	1	Yes	Yes	AWOS III P-T
	Gonzales	Louisiana Regional	1	Yes	Yes	AWOS III P-T
	Hammond	Hammond Northshore Regional	3	Yes	No	AWOS III P-T
	Homer	Homer Municipal	1	Yes	No	None
	Houma	Houma-Terrebonne	6	Yes	No	AWOS III P-T
	Jeanerette	Le Maire Memorial	1	Yes	No	None
	Jena	Jena	1	Yes	Yes	None
	Jennings	Jennings	1	Yes	No	AWOS III P-T
	Jonesboro	Jonesboro	1	Yes	Yes	None
	Jonesville	Jonesville	1	Yes	Yes	None

	Associated City	Airport	Number of Wind Cones	Lighted Wind Cone	Segmented Circle	Weather Reporting
	Lake Charles	Chennault International	2	Yes	Yes	AWOS III P-T
	Lake Providence	Byerley	1	No	No	None
	Leesville	Leesville	1	Yes	No	None
	Mansfield	C.E. "Rusty" Williams	1	Yes	Yes	AWOS III P-T
	Many	Hart	1	Yes	No	None
	Marksville	Marksville Municipal	1	Yes	Yes	None
	Minden	Minden	1	Yes	No	AWOS III P-T
	Natchitoches	Natchitoches Regional	1	Yes	No	AWOS III P-T
	New Iberia	Acadiana Regional	3	Yes	Yes	ASOS
	New Roads	False River Regional	1	Yes	No	AWOS III P-T
	Oak Grove	Kelly	1	Yes	Yes	None
	Oakdale	Allen Parish	1	Yes	No	AWOS III P-T
	Olla	Olla	1	No	No	None
	Opelousas	St. Landry Parish-Ahart Field	1	Yes	Yes	AWOS III P-T
	Patterson	Harry P. Williams Memorial	1	Yes	Yes	AWOS
	Pineville	Pineville Municipal	1	Yes	Yes	None
	Pollock	Pollock Municipal	1	Yes	No	None
	Rayville	John H. Hooks Jr. Memorial	1	Yes	No	None
	Reserve	St. John the Baptist Parish	1	Yes	Yes	AWOS-III P-T
	Ruston	Ruston Regional	1	Yes	Yes	AWOS III
	Springhill	Springhill	2	No	No	None
	St. Joseph	Tensas Parish	1	Yes	Yes	None
	Sulphur	Southland Field	1	Yes	Yes	AWOS III P-T
	Tallulah	Scott	1	No	No	None
	Tallulah/Vicksburg, MS	Vicksburg Tallulah Regional	1	Yes	Yes	ASOS
	Thibodaux	Thibodaux Municipal	1	Yes	No	None
	Vidalia	Concordia Parish	1	Yes	No	AWOS
	Vivian	Vivian	1	Yes	No	None
	Welsh	Welsh	1	Yes	No	None
	Winnfield	David G. Joyce	1	Yes	No	None
	Winnsboro	Winnsboro Municipal	1	Yes	No	None
	Woodworth	Woodworth	1	Yes	No	None

Source: FAA 5010 Form and Airport Inventory & Data Survey

Table A-20: Airport Airspace and Elevation

Associated City	Airport	Airspace	Airport Elevation	Surveyed (S) or Estimated (E)
<b>Primary Commercial - Medium Hub</b>				
New Orleans	Louis Armstrong New Orleans International	Class B	4	S
<b>Primary Commercial - Small Hub</b>				
Baton Rouge	Baton Rouge Metropolitan, Ryan Field	Class C	70	S
<b>Primary Commercial - Non-Hub</b>				
Alexandria	England Airpark/Alexandria International Airpark	Class D	89	S
Lafayette	Lafayette Regional	Class C	42	S
Lake Charles	Lake Charles Regional	Class D	15	S
Monroe	Monroe Regional	Class D	79	S
Shreveport	Shreveport Regional	Class C	258	S
<b>Reliever</b>				
New Orleans	Lakefront	Class D	7	S
Shreveport	Shreveport Downtown	Class D	179	S
Slidell	Slidell	Class E (700 ft.)	29	E
<b>General Aviation</b>				
Abbeville	Abbeville Chris Crusta Memorial	Class E (700 ft.)	15	S
Alexandria	Esler Regional	Class E (700 ft.)	112	S
Arcadia	Arcadia-Bienville Parish	Class E (1,200 ft.)	440	E
Bastrop	Morehouse Memorial	Class E (700 ft.)	167	S
Bogalusa	George R. Carr Memorial Air Field	Class E (700 ft.)	119	S
Bunkie	Bunkie Municipal	Class E (700 ft.)	62	S
Columbia	Columbia	Class E (1,200 ft.)	66	S
Coushatta	The Red River	Class E (1,200 ft.)	177	S
Covington	St. Tammany Regional	Class E (700 ft.)	39	S
Crowley	Le Gros Memorial	Class E (1,200 ft.)	17	S
De Quincy	De Quincy Industrial Airpark	Class E (700 ft.)	81	S
De Ridder	Beauregard Regional	Class E (700 ft.)	202	S
Delhi	Delhi Municipal	Class E (1,200 ft.)	91	S
Eunice	Eunice	Class E (700 ft.)	42	S
Farmerville	Union Parish	Class E (1,200 ft.)	121	S
Franklinton	Franklinton	Class E (1,200 ft.)	175	E
Galliano	South Lafourche Leonard Miller Jr.	Class E (700 ft.)	1	S
Gonzales	Louisiana Regional	Class E (700 ft.)	14	S
Hammond	Hammond Northshore Regional	Class E (700 ft.)	47	E
Homer	Homer Municipal	Class E (700 ft.)	244	S
Houma	Houma-Terrebonne	Class D	9	S
Jeanerette	Le Maire Memorial	Class E (1,200 ft.)	14	E
Jena	Jena	Class E (1,200 ft.)	212	S
Jennings	Jennings	Class E (700 ft.)	23	S
Jonesboro	Jonesboro	Class E (700 ft.)	256	S
Jonesville	Jonesville	Class E (1,200 ft.)	56	S
Lake Charles	Chennault International	Class D	17	S
Lake Providence	Byerley	Class E (700 ft.)	106	S
Leesville	Leesville	Class E (700 ft.)	282	S

	Associated City	Airport	Airspace	Airport Elevation	Surveyed (S) or Estimated (E)
	Mansfield	C.E. "Rusty" Williams	Class E (700 ft.)	324	S
	Many	Hart	Class E (700 ft.)	319	S
	Marksville	Marksville Municipal	Class E (700 ft.)	79	S
	Minden	Minden	Class E (700 ft.)	278	S
	Natchitoches	Natchitoches Regional	Class E (700 ft.)	121	S
	New Iberia	Acadiana Regional	Class D	24	S
	New Roads	False River Regional	Class E (700 ft.)	40	S
	Oak Grove	Kelly	Class E (1,200 ft.)	112	S
	Oakdale	Allen Parish	Class E (700 ft.)	107	S
	Olla	Olla	Class E (1,200 ft.)	130	E
	Opelousas	St. Landry Parish-Ahart Field	Class E (700 ft.)	75	S
	Patterson	Harry P. Williams Memorial	Class E (700 ft.)	9	S
	Pineville	Pineville Municipal	Class E (700 ft.)	100	E
	Pollock	Pollock Municipal	Class E (700 ft.)	213	E
	Rayville	John H. Hooks Jr. Memorial	Class E (700 ft.)	83	S
	Reserve	St. John the Baptist Parish	Class E (700 ft.)	7	S
	Ruston	Ruston Regional	Class E (700 ft.)	311	E
	Springhill	Springhill	Class E (700 ft.)	218	S
	St. Joseph	Tensas Parish	Class E (1,200 ft.)	74	S
	Sulphur	Southland Field	Class E (700 ft.)	10	E
	Tallulah	Scott	Class E (1,200 ft.)	84	S
	Tallulah/Vicksburg, MS	Vicksburg Tallulah Regional	Class E (700 ft.)	86	E
	Thibodaux	Thibodaux Municipal	Class E (700 ft.)	9	S
	Vidalia	Concordia Parish	Class E (1,200 ft.)	55	S
	Vivian	Vivian	Class E (700 ft.)	260	S
	Welsh	Welsh	Class E (700 ft.)	18	S
	Winnfield	David G. Joyce	Class E (700 ft.)	146	S
	Winnsboro	Winnsboro Municipal	Class E (1,200 ft.)	76	S
	Woodworth	Woodworth	Class E (700 ft.)	140	E

Source: FAA 5010 Form and Airport Inventory & Data Survey

Table A-21: Airport Landside Facilities

Associated City	Airport	Air Carrier Terminal Area (sq. ft.)	General Aviation Terminal Area (sq. ft.)	Admin Building Area (sq. ft.)	Number of Gates	Number of Paved Tie-Downs	Number of Unpaved Tie-Downs	Foreign Trade Zone
<b>Primary Commercial - Medium Hub</b>								
New Orleans	Louis Armstrong New Orleans International	1,055,662	16,011	-	42	-	-	Yes
<b>Primary Commercial - Small Hub</b>								
Baton Rouge	Baton Rouge Metropolitan, Ryan Field	140,000	-	-	10	210	78	Yes
<b>Primary Commercial - Non-Hub</b>								
Alexandria	England Airpark/Alexandria International Airpark	89,000	10,000	13,000	4	20	-	Yes
Lafayette	Lafayette Regional	59,170	13,848	8,131	4	242	-	No
Lake Charles	Lake Charles Regional	45,000	1,200	1,800	4	-	-	No
Monroe	Monroe Regional	60,000	3,500	-	6	-	-	No
Shreveport	Shreveport Regional	66,000	25,000	13,000	8	40	-	Yes
<b>Reliever</b>								
New Orleans	Lakefront	-	5,000	42,554	-	-	-	No
Shreveport	Shreveport Downtown	-	-	13,240	-	65	-	No
Slidell	Slidell	-	2,000	2,000	-	75	34	No
<b>General Aviation</b>								
Abbeville	Abbeville Chris Crusta Memorial	-	-	1,008	-	-	-	No
Alexandria	Esler Regional	-	-	20,000	-	8	-	No
Arcadia	Arcadia-Bienville Parish	-	-	300	-	-	-	No
Bastrop	Morehouse Memorial	-	-	1,600	-	-	-	No
Bogalusa	George R. Carr Memorial Air Field	-	3,000	2,000	-	20	-	No
Bunkie	Bunkie Municipal	-	-	-	-	8	-	No
Columbia	Columbia	-	1,000	500	-	-	-	No
Coushatta	The Red River	-	400	-	-	4	-	No
Covington	St. Tammany Regional	-	-	3,600	-	-	8	No
Crowley	Le Gros Memorial	-	1,200	1,300	-	10	-	No
De Quincy	De Quincy Industrial Airpark	-	-	640	-	40	-	No
De Ridder	Beauregard Regional	-	-	-	-	200	-	No
Delhi	Delhi Municipal	-	-	-	-	4	-	No
Eunice	Eunice	-	-	1,260	-	6	-	No
Farmerville	Union Parish	-	-	-	-	4	-	No
Franklinton	Franklinton	-	-	-	-	10	-	No
Galliano	South Lafourche Leonard Miller Jr.	-	1,200	1,200	-	18	-	No
Gonzales	Louisiana Regional	-	2,000	250	-	42	-	No
Hammond	Hammond Northshore Regional	-	-	2,400	-	-	8	No

Appendix

Associated City	Airport	Air Carrier Terminal Area (sq. ft.)	General Aviation Terminal Area (sq. ft.)	Admin Building Area (sq. ft.)	Number of Gates	Number of Paved Tie-Downs	Number of Unpaved Tie-Downs	Foreign Trade Zone
Homer	Homer Municipal	-	100	700	-	-	-	No
Houma	Houma-Terrebonne	-	7,000	3,500	-	60	-	Yes
Jeannerette	Le Maire Memorial	-	-	-	-	4	-	No
Jena	Jena	-	-	600	-	-	-	No
Jennings	Jennings	-	3,000	600	-	38	100	No
Jonesboro	Jonesboro	-	288	-	-	8	-	No
Jonesville	Jonesville	-	-	-	-	-	-	No
Lake Charles	Chennault International	-	6,800	6,000	-	6	-	Yes
Lake Providence	Byerley	-	-	500	-	-	-	No
Leesville	Leesville	-	-	1,000	-	18	-	No
Mansfield	C.E. "Rusty" Williams	-	-	400	-	-	-	No
Many	Hart	-	1,500	1,500	-	16	-	No
Marksville	Marksville Municipal	-	-	180	-	-	-	No
Minden	Minden	-	1,000	-	-	12	-	No
Natchitoches	Natchitoches Regional	-	3,000	8,000	-	48	-	No
New Iberia	Acadiana Regional	-	2,000	22,000	-	100	100	No
New Roads	False River Regional	-	-	1,700	-	15	-	No
Oak Grove	Kelly	-	800	-	-	11	-	No
Oakdale	Allen Parish	-	900	280	-	11	-	No
Olla	Olla	-	-	600	-	-	-	No
Opelousas	St. Landry Parish-Ahart Field	-	-	2,500	-	15	-	No
Patterson	Harry P. Williams Memorial	-	2,500	-	-	20	-	No
Pineville	Pineville Municipal	-	-	1,600	-	8	2	No
Pollock	Pollock Municipal	-	-	-	-	-	-	No
Rayville	John H. Hooks Jr. Memorial	-	-	396	-	-	-	No
Reserve	St. John the Baptist Parish	-	-	1,350	-	54	-	No
Ruston	Ruston Regional	-	3,600	4,800	-	66	-	No
Springhill	Springhill	-	840	1,000	-	6	-	No
St. Joseph	Tensas Parish	-	-	400	-	4	2	No
Sulphur	Southland Field	-	4,020	4,020	-	40	-	No
Tallulah	Scott	-	600	-	-	5	-	No
Tallulah/Vicksburg, MS	Vicksburg Tallulah Regional	-	-	3,100	-	36	-	No
Thibodaux	Thibodaux Municipal	-	-	750	-	-	8	No
Vidalia	Concordia Parish	-	-	2,300	-	20	-	No
Vivian	Vivian	-	-	2,000	-	7	-	No
Welsh	Welsh	-	-	-	-	2	-	No

Associated City	Airport	Air Carrier Terminal Area (sq. ft.)	General Aviation Terminal Area (sq. ft.)	Admin Building Area (sq. ft.)	Number of Gates	Number of Paved Tie-Downs	Number of Unpaved Tie-Downs	Foreign Trade Zone
Winnfield	David G. Joyce	-	288	-	-	-	-	No
Winnsboro	Winnsboro Municipal	-	-	2,300	-	7	-	No
Woodworth	Woodworth	-	-	-	-	4	-	No

Source: Airport Inventory & Data Survey

Table A-22: Airport Hangars

Associated City	Airport	T-Hangar Units	Conventional Hangar Area	Portable Hangar Units	Waiting List	Number on Waiting List
<b>Primary Commercial - Medium Hub</b>						
New Orleans	Louis Armstrong New Orleans International	-	88,250	-	No	0
<b>Primary Commercial - Small Hub</b>						
Baton Rouge	Baton Rouge Metropolitan, Ryan Field	36	226,000	-	Yes	20
<b>Primary Commercial - Non-Hub</b>						
Alexandria	England Airpark/Alexandria International Airpark	10	82,000	-	Yes	4
Lafayette	Lafayette Regional	42	239,477	-	Yes	10
Lake Charles	Lake Charles Regional	28	98,000	2	Yes	9
Monroe	Monroe Regional	-	172,500	-	No	0
Shreveport	Shreveport Regional	-	243,000	-	No	0
<b>Reliever</b>						
New Orleans	Lakefront	48	54,000	-	No	0
Shreveport	Shreveport Downtown	52	170,000	10	Yes	49
Slidell	Slidell	32	90,000	-	Yes	4
<b>General Aviation</b>						
Abbeville	Abbeville Chris Crusta Memorial	33	22,410	-	No	0
Alexandria	Esler Regional	-	65,000	-	No	0
Arcadia	Arcadia-Bienville Parish	4	3,000	-	No	0
Bastrop	Morehouse Memorial	-	20,200	-	No	0
Bogalusa	George R. Carr Memorial Air Field	-	12,800	2	Yes	3
Bunkie	Bunkie Municipal	9	-	-	Yes	2
Columbia	Columbia	-	10,250	-	No	0
Coushatta	The Red River	-	6,125	1,600	No	0
Covington	St. Tammany Regional	10	6,375	-	Yes	10
Crowley	Le Gros Memorial	9	23,100	9	Yes	2
De Quincy	De Quincy Industrial Airpark	8	8,400	-	No	0
De Ridder	Beauregard Regional	6	32,000	-	No	0
Delhi	Delhi Municipal	-	-	-	No	0
Eunice	Eunice	17	9,670	-	Yes	1
Farmerville	Union Parish	11	16,120	-	Yes	5
Franklinton	Franklinton	-	7,650	-	Yes	3
Galliano	South Lafourche Leonard Miller Jr.	4	60,000	-	Yes	4
Gonzales	Louisiana Regional	32	56,160	-	Yes	19
Hammond	Hammond Northshore Regional	10	330,000	-	Yes	6
Homer	Homer Municipal	-	10,520	-	No	0
Houma	Houma-Terrebonne	10	125,000	-	No	0
Jeanerette	Le Maire Memorial	4	3,016	-	No	0
Jena	Jena	-	37,580	-	No	0
Jennings	Jennings	30	34,800	-	Yes	12
Jonesboro	Jonesboro	-	2,400	792	Yes	2

	Associated City	Airport	T-Hangar Units	Conventional Hangar Area	Portable Hangar Units	Waiting List	Number on Waiting List
	Jonesville	Jonesville	10	6,000	-	No	0
	Lake Charles	Chennault International	10	1,290,000	108,000	Yes	10
	Lake Providence	Byerley	5	6,240	-	No	0
	Leesville	Leesville	6	8,200	-	Yes	7
	Mansfield	C.E. "Rusty" Williams	1	9,600	-	No	0
	Many	Hart	5	1,408	-	No	0
	Marksville	Marksville Municipal	15	-	-	No	0
	Minden	Minden	-	22,500	-	Yes	18
	Natchitoches	Natchitoches Regional	11	16,000	9	Yes	6
	New Iberia	Acadiana Regional	10	252,500	-	No	0
	New Roads	False River Regional	21	22,084	-	Yes	13
	Oak Grove	Kelly	7	-	-	Yes	5
	Oakdale	Allen Parish	-	5,000	-	Yes	4
	Olla	Olla	-	3,500	-	No	0
	Opelousas	St. Landry Parish-Ahart Field	3	28,125	-	Yes	11
	Patterson	Harry P. Williams Memorial	6	32,500	-	No	0
	Pineville	Pineville Municipal	13	4,635	-	Yes	11
	Pollock	Pollock Municipal	1	10,585	-	No	0
	Rayville	John H. Hooks Jr. Memorial	10	10,325	-	No	0
	Reserve	St. John the Baptist Parish	19	12,800	4	Yes	12
	Ruston	Ruston Regional	-	34,400	-	Yes	3
	Springhill	Springhill	4	-	-	Yes	9
	St. Joseph	Tensas Parish	-	8,560	-	No	0
	Sulphur	Southland Field	14	30,400	-	Yes	3
	Tallulah	Scott	6	10,000	-	No	0
	Tallulah/Vicksburg, MS	Vicksburg Tallulah Regional	11	47,250	-	Yes	6
	Thibodaux	Thibodaux Municipal	-	4,000	-	No	0
	Vidalia	Concordia Parish	8	14,368	-	Yes	15
	Vivian	Vivian	6	33,400	-	Yes	2
	Welsh	Welsh	-	33,550	-	No	0
	Winnfield	David G. Joyce	8	-	-	Yes	2
	Winnsboro	Winnsboro Municipal	-	13,800	-	Yes	3
	Woodworth	Woodworth	-	8,788	-	Yes	3

Source: Airport Inventory & Data Survey

**Table A-23: Airport Automobile Parking Spaces**

Associated City	Airport	Air Carrier Patrons	General Aviation Patrons	Rental Cars	Employees
<b>Primary Commercial - Medium Hub</b>					
New Orleans	Louis Armstrong New Orleans International	4,974	200	-	1,160
<b>Primary Commercial - Small Hub</b>					
Baton Rouge	Baton Rouge Metropolitan, Ryan Field	1,333	500	222	200
<b>Primary Commercial - Non-Hub</b>					
Alexandria	England Airpark/Alexandria International Airpark	717	150	60	75
Lafayette	Lafayette Regional	770	335	73	128
Lake Charles	Lake Charles Regional	500	50	150	100
Monroe	Monroe Regional	528	50	191	25
Shreveport	Shreveport Regional	1,000	200	180	180
<b>Reliever</b>					
New Orleans	Lakefront	-	334	-	-
Shreveport	Shreveport Downtown	-	48	-	60
Slidell	Slidell	-	70	-	-
<b>General Aviation</b>					
Abbeville	Abbeville Chris Crusta Memorial	-	-	-	-
Alexandria	Esler Regional	-	-	-	-
Arcadia	Arcadia-Bienville Parish	-	50	-	-
Bastrop	Morehouse Memorial	-	-	-	-
Bogalusa	George R. Carr Memorial Air Field	-	14	-	3
Bunkie	Bunkie Municipal	-	6	-	-
Columbia	Columbia	-	4	-	2
Coushatta	The Red River	-	-	-	-
Covington	St. Tammany Regional	-	25	-	-
Crowley	Le Gros Memorial	-	10	-	-
De Quincy	De Quincy Industrial Airpark	-	10	-	-
De Ridder	Beauregard Regional	-	25	-	5
Delhi	Delhi Municipal	-	-	-	-
Eunice	Eunice	-	11	-	1
Farmerville	Union Parish	-	10	-	-
Franklinton	Franklinton	-	10	-	-
Galliano	South Lafourche Leonard Miller Jr.	-	719	-	-
Gonzales	Louisiana Regional	-	78	-	-
Hammond	Hammond Northshore Regional	-	25	-	2
Homer	Homer Municipal	-	7	-	-
Houma	Houma-Terrebonne	-	1,570	3	25
Jeanerette	Le Maire Memorial	-	10	-	-
Jena	Jena	-	-	-	-
Jennings	Jennings	-	20	2	6
Jonesboro	Jonesboro	-	5	-	-
Jonesville	Jonesville	-	-	-	-
Lake Charles	Chennault International	-	50	10	25
Lake Providence	Byerley	-	-	-	-
Leesville	Leesville	-	15	-	-
Mansfield	C.E. "Rusty" Williams	-	32	-	-

Associated City	Airport	Air Carrier Patrons	General Aviation Patrons	Rental Cars	Employees
Many	Hart	-	11	-	1
Marksville	Marksville Municipal	-	12	-	-
Minden	Minden	-	10	-	-
Natchitoches	Natchitoches Regional	-	43	4	2
New Iberia	Acadiana Regional	-	300	-	-
New Roads	False River Regional	-	9	-	1
Oak Grove	Kelly	-	10	-	1
Oakdale	Allen Parish	-	30	-	-
Olla	Olla	-	-	-	-
Opelousas	St. Landry Parish-Ahart Field	-	20	-	-
Patterson	Harry P. Williams Memorial	-	100	-	10
Pineville	Pineville Municipal	-	8	-	-
Pollock	Pollock Municipal	-	-	-	-
Rayville	John H. Hooks Jr. Memorial	-	16	-	-
Reserve	St. John the Baptist Parish	-	24	-	1
Ruston	Ruston Regional	-	80	-	-
Springhill	Springhill	-	6	-	-
St. Joseph	Tensas Parish	-	6	-	-
Sulphur	Southland Field	-	38	-	-
Tallulah	Scott	-	10	-	-
Tallulah/Vicksburg, MS	Vicksburg Tallulah Regional	-	33	-	-
Thibodaux	Thibodaux Municipal	-	8	-	-
Vidalia	Concordia Parish	-	10	-	-
Vivian	Vivian	-	13	-	-
Welsh	Welsh	-	8	-	-
Winnfield	David G. Joyce	-	10	-	2
Winnsboro	Winnsboro Municipal	-	10	-	-
Woodworth	Woodworth	-	-	-	6

Source: Airport Inventory & Data Survey

**Table A-24: Airport Fuel Volumes Sold (in gallons)**

Associated City	Airport	AvGas	Jet A	MoGas	Total Fuel Dispensed
<b>Primary Commercial - Medium Hub</b>					
New Orleans	Louis Armstrong New Orleans International	29,108	3,164,957	6,015	3,200,080
<b>Primary Commercial - Small Hub</b>					
Baton Rouge	Baton Rouge Metropolitan, Ryan Field	190,000	6,296,800	6,000	6,492,800
<b>Primary Commercial - Non-Hub</b>					
Alexandria	England Airpark/Alexandria International Airpark	No response	4,107,035	No response	4,107,035
Lafayette	Lafayette Regional	104,000	3,960,000	-	4,064,000
Lake Charles	Lake Charles Regional	50,000	260,000	-	310,000
Monroe	Monroe Regional	No response	No response	No response	No response
Shreveport	Shreveport Regional	No response	No response	No response	No response
<b>Reliever</b>					
New Orleans	Lakefront	No response	No response	No response	No response
Shreveport	Shreveport Downtown	185,132	185,228	-	370,360
Slidell	Slidell	75,225*	83,418	-	158,643
<b>General Aviation</b>					
Abbeville	Abbeville Chris Crusta Memorial	No response	No response	No response	No response
Alexandria	Esler Regional	600	147,811	-	148,411
Arcadia	Arcadia-Bienville Parish	No fuel	No fuel	No fuel	No fuel
Bastrop	Morehouse Memorial	No response*	No response	No response	No response
Bogalusa	George R. Carr Memorial Air Field	14,000*	15,000	-	29,000
Bunkie	Bunkie Municipal	10,000	-	-	10,000
Columbia	Columbia	No fuel	No fuel	No fuel	No fuel
Coushatta	The Red River	No fuel	No fuel	No fuel	No fuel
Covington	St. Tammany Regional	No response*	No response	No response	No response
Crowley	Le Gros Memorial	No response	No response	No response	No response
De Quincy	De Quincy Industrial Airpark	No response*	No fuel	No fuel	No response
De Ridder	Beauregard Regional	22,990*	26,322	-	49,312
Delhi	Delhi Municipal	No fuel	No fuel	No fuel	No fuel
Eunice	Eunice	No response	No response	No response	No response
Farmerville	Union Parish	6,000*	-	-	6,000
Franklinton	Franklinton	No fuel	No fuel	No fuel	No fuel
Galliano	South Lafourche Leonard Miller Jr.	103,052*	498,126	-	601,178
Gonzales	Louisiana Regional	51,000*	16,000	-	67,000
Hammond	Hammond Northshore Regional	No response*	No response	No response	868,080
Homer	Homer Municipal	No fuel	No fuel	No fuel	No fuel
Houma	Houma-Terrebonne	150,000*	4,769,789	8,000	4,927,789

\* 100LL (avgas) available 24 hours self-service with credit card

Associated City	Airport	AvGas	Jet A	MoGas	Total Fuel Dispensed
Jeanerette	Le Maire Memorial	No response*	No fuel	No fuel	No response
Jena	Jena	No fuel	No fuel	No fuel	No fuel
Jennings	Jennings	26,464*	92,123	-	118,587
Jonesboro	Jonesboro	No fuel	No fuel	No fuel	No fuel
Jonesville	Jonesville	No response*	No fuel	No fuel	No response
Lake Charles	Chennault International	22,934	2,483,233	-	2,506,167
Lake Providence	Byerley	No fuel	No fuel	No fuel	No fuel
Leesville	Leesville	17,000*	39,000	-	56,000
Mansfield	C.E. "Rusty" Williams	No response*	No fuel	No fuel	No response
Many	Hart	No response	No response	No response	No response
Marksville	Marksville Municipal	No response*	No response	No response	No response
Minden	Minden	33,133	30,570	-	63,703
Natchitoches	Natchitoches Regional	31,106*	70,304	-	101,410
New Iberia	Acadiana Regional	No response	No response	No response	No response
New Roads	False River Regional	22,000*	-	-	22,000
Oak Grove	Kelly	No response*	No fuel	No fuel	No response
Oakdale	Allen Parish	20,000*	35,000	-	55,000
Olla	Olla	No fuel	No fuel	No fuel	No fuel
Opelousas	St. Landry Parish-Ahart Field	66,920*	50,625	-	117,545
Patterson	Harry P. Williams Memorial	No response	No response	No response	No response
Pineville	Pineville Municipal	No response*	No response	No response	No response
Pollock	Pollock Municipal	No fuel	No fuel	No fuel	No fuel
Rayville	John H. Hooks Jr. Memorial	No response	No response	No response	No response
Reserve	St. John the Baptist Parish	10,800*	-	-	10,800
Ruston	Ruston Regional	74,000	164,000	-	238,000
Springhill	Springhill	No response*	No fuel	No fuel	No response
St. Joseph	Tensas Parish	2,000	-	-	2,000
Sulphur	Southland Field	55,953	26,256	-	82,209
Tallulah	Scott	No fuel	No fuel	No fuel	No fuel
Tallulah/Vicksburg, MS	Vicksburg Tallulah Regional	45,403	91,116	-	136,519
Thibodaux	Thibodaux Municipal	15,000	-	-	15,000
Vidalia	Concordia Parish	12,527*	-	-	12,527
Vivian	Vivian	3,500*	-	-	3,500
Welsh	Welsh	6,000	57,600	-	63,600
Winnfield	David G. Joyce	4,000	-	-	4,000
Winnsboro	Winnsboro Municipal	4,000*	62,000	-	66,000
Woodworth	Woodworth	No fuel	No fuel	No fuel	No fuel

\* 100LL (avgas) available 24 hours self-service with credit card.

Source: Airport Inventory & Data Survey

Table A-25: Airport Fuel Storage Facilities

Associated City	Airport	Fuel Type	Number of Tanks	Above or Below Ground	Capacity (gal.)	Distribution
<b>Primary Commercial - Medium Hub</b>						
New Orleans	Louis Armstrong New Orleans International	Jet A	2	Above	420,000	-
		AvGas	2	Above	25,000	-
		MoGas	2	Above	14,000	-
<b>Primary Commercial - Small Hub</b>						
Baton Rouge	Baton Rouge Metropolitan, Ryan Field	Jet A	5	Below/Above	120,000	3 pumps/2 trucks
		AvGas	5	Below/Above	32,000	1 pump/4 trucks
		MoGas	1	Below	12,000	1 pump
<b>Primary Commercial - Non-Hub</b>						
Alexandria	England Airpark/Alexandria International Airpark	Jet A	2	Above	800,000	Truck
		AvGas	1	Above	30,086	Truck
		MoGas	1	Above	1,000	Truck
Lafayette	Lafayette Regional	Jet A	8	7 Above/1 Below	80,000	5/15,000
		AvGas	2	Above	32,000	2/2,400
		MoGas	-	-	-	-
Lake Charles	Lake Charles Regional	Jet A	1	Above	20,000	Truck
		AvGas	1	Above	10,000	Truck
		MoGas	1	Above	500	Pump
Monroe	Monroe Regional	Jet A	-	-	-	-
		AvGas	-	-	-	-
		MoGas	-	-	-	-
Shreveport	Shreveport Regional	Jet A	3	Above	100,000	Truck
		AvGas	1	Above	20,000	Truck
		MoGas	1	Above	2,000	Pump
<b>Reliever</b>						
New Orleans	Lakefront	Jet A	3	Above	300,000	Trucks
		AvGas	3	Above	30,000	Trucks
		MoGas	-	-	-	-
Shreveport	Shreveport Downtown	Jet A	2	Above	22,000	Truck
		AvGas	1	Below	22,000	Pump/Truck
		MoGas	-	-	-	-
Slidell	Slidell	Jet A	1	Below	10,000	Pump
		AvGas	1	Below	12,000	Pump/Truck
		MoGas	-	-	-	-
<b>General Aviation</b>						
Abbeville	Abbeville Chris Crusta Memorial	Jet A	-	-	15,000	-
		AvGas	-	Above	10,000	-
		MoGas	-	-	-	-
Alexandria	Esler Regional	Jet A	1	Above	28,000	Truck
		AvGas	1	Above	8,000	Truck
		MoGas	-	-	-	-

Associated City	Airport	Fuel Type	Number of Tanks	Above or Below Ground	Capacity (gal.)	Distribution
Arcadia	Arcadia-Bienville Parish	Jet A	-	-	-	-
		AvGas	-	-	-	-
		MoGas	-	-	-	-
Bastrop	Morehouse Memorial	Jet A	1	Below	10,000	-
		AvGas	1	Below	12,000	Pump
		MoGas	-	-	-	-
Bogalusa	George R. Carr Memorial Air Field	Jet A	1	Above	10,000	-
		AvGas	1	Above	10,000	Pump
		MoGas	-	-	-	-
Bunkie	Bunkie Municipal	Jet A	-	-	-	-
		AvGas	1	-	2,000	Pump
		MoGas	-	-	-	-
Columbia	Columbia	Jet A	-	-	-	-
		AvGas	-	-	-	-
		MoGas	-	-	-	-
Coushatta	The Red River	Jet A	-	-	-	-
		AvGas	-	-	-	-
		MoGas	-	-	-	-
Covington	St. Tammany Regional	Jet A	-	-	-	-
		AvGas	2	Below	6,000	Pump
		MoGas	-	-	-	-
Crowley	Le Gros Memorial	Jet A	-	-	-	-
		AvGas	1	Above	6,000	-
		MoGas	-	-	-	-
De Quincy	De Quincy Industrial Airpark	Jet A	-	-	-	-
		AvGas	1	Above	-	Pump
		MoGas	-	-	-	-
De Ridder	Beauregard Regional	Jet A	1	Above	10,000	Truck
		AvGas	1	Above	10,000	Pump
		MoGas	-	-	-	-
Delhi	Delhi Municipal	Jet A	-	-	-	-
		AvGas	-	-	-	-
		MoGas	-	-	-	-
Eunice	Eunice	Jet A	1	Below	10,000	Pump
		AvGas	1	Below	6,000	Pump
		MoGas	1	Above	1,000	-
Farmerville	Union Parish	Jet A	-	-	-	-
		AvGas	1	Above	3,000	Pump
		MoGas	-	-	-	-
Franklinton	Franklinton	Jet A	-	-	-	-
		AvGas	-	-	-	-
		MoGas	-	-	-	-
Galliano	South Lafourche Leonard Miller Jr.	Jet A	5	Above	50,000	4 pumps/1 truck
		AvGas	1	Above	10,000	Pump/Truck
		MoGas	-	-	-	-

Associated City	Airport	Fuel Type	Number of Tanks	Above or Below Ground	Capacity (gal.)	Distribution
Gonzales	Louisiana Regional	Jet A	1	Above	10,000	Truck
		AvGas	1	Above	10,000	Pump
		MoGas	-	-	-	-
Hammond	Hammond Northshore Regional	Jet A	5	Above	95,000	
		AvGas	3	Above	30,500	Pump/Truck
		MoGas	-	-	-	-
Homer	Homer Municipal	Jet A	-	-	-	-
		AvGas	-	-	-	-
		MoGas	-	-	-	-
Houma	Houma-Terrebonne	Jet A	3	1 Above/2 Below	20,000	PUMP
		AvGas	4	1 Above/3 Below	50,000	PUMP
		MoGas	-	-	-	-
Jeanerette	Le Maire Memorial	Jet A	-	-	-	-
		AvGas	1	Above	2,000	Pump
		MoGas	-	-	-	-
Jena	Jena	Jet A	-	-	-	-
		AvGas	-	-	-	-
		MoGas	-	-	-	-
Jennings	Jennings	Jet A	1	Above	15,000	Pump
		AvGas	1	Above	15,000	Pump
		MoGas	-	-	-	-
Jonesboro	Jonesboro	Jet A	-	-	-	-
		AvGas	-	-	-	-
		MoGas	-	-	-	-
Jonesville	Jonesville	Jet A	-	-	-	-
		AvGas	-	-	-	-
		MoGas	-	-	-	-
Lake Charles	Chennault International	Jet A	12	Above	445,000	-
		AvGas	1	Above	12,500	-
		MoGas	-	-	-	-
Lake Providence	Byerley	Jet A	-	-	-	-
		AvGas	-	Above	500	-
		MoGas	-	-	-	-
Leesville	Leesville	Jet A	1	Below	12,000	Pump
		AvGas	1	Below	12,000	Pump
		MoGas	-	-	-	-
Mansfield	C.E. "Rusty" Williams	Jet A	1	Below	10,000	-
		AvGas	1	Below	10,000	Pump
		MoGas	-	-	-	-
Many	Hart	Jet A	-	-	-	-
		AvGas	1	Above	4,000	-
		MoGas	-	-	-	-
Marksville	Marksville Municipal	Jet A	-	-	-	-
		AvGas	1	Above	4,000	Pump
		MoGas	-	-	-	-

Associated City	Airport	Fuel Type	Number of Tanks	Above or Below Ground	Capacity (gal.)	Distribution
Minden	Minden	Jet A	1	Below	10,000	Pump
		AvGas	1	Below	10,000	Truck
		MoGas	-	-	-	-
Natchitoches	Natchitoches Regional	Jet A	1	Below	10,000	Pump/Truck
		AvGas	1	Below	10,000	Pump
		MoGas	-	-	-	-
New Iberia	Acadiana Regional	Jet A	3	Above	36,000	
		AvGas	1	Above	10,000	
		MoGas	-	-	-	-
New Roads	False River Regional	Jet A	-	-	-	-
		AvGas	1	Below	15,000	Pump
		MoGas	-	-	-	-
Oak Grove	Kelly	Jet A	1	Above	5,000	Pump
		AvGas	1	Above	5,000	Pump
		MoGas	-	-	-	-
Oakdale	Allen Parish	Jet A	1	Above	10,000	Pump
		AvGas	1	Above	10,000	Pump
		MoGas	-	-	-	-
Olla	Olla	Jet A	-	-	-	-
		AvGas	-	-	-	-
		MoGas	-	-	-	-
Opelousas	St. Landry Parish-Ahart Field	Jet A	1	Above	10,000	Pump
		AvGas	1	Above	10,000	Pump
		MoGas	-	-	-	-
Patterson	Harry P. Williams Memorial	Jet A	2	Above	20,000	Truck
		AvGas	1	Above	8,000	Truck
		MoGas	-	-	-	-
Pineville	Pineville Municipal	Jet A	-	-	-	-
		AvGas	2	Above	8,000	Pump
		MoGas	1	Above	2,000	Pump
Pollock	Pollock Municipal	Jet A	-	-	-	-
		AvGas	2	Below	9,000	-
		MoGas	-	-	-	-
Rayville	John H. Hooks Jr. Memorial	Jet A	-	-	-	-
		AvGas	2	Below	-	-
		MoGas	-	-	-	-
Reserve	St. John the Baptist Parish	Jet A	-	-	-	-
		AvGas	1	Below	8,000	Self Serve Pump
		MoGas	-	-	-	-
Ruston	Ruston Regional	Jet A	1	Below	20,000	Truck
		AvGas	1	Below	20,000	Truck
		MoGas	-	-	-	-
Springhill	Springhill	Jet A	-	-	-	-
		AvGas	1	Above	3,000	Pump
		MoGas	-	-	-	-

Associated City	Airport	Fuel Type	Number of Tanks	Above or Below Ground	Capacity (gal.)	Distribution
St. Joseph	Tensas Parish	Jet A	-	-	-	-
		AvGas	1	Above	10,000	-
		MoGas	-	-	-	-
Sulphur	Southland Field	Jet A	1	Above	10,000	Truck
		AvGas	1	Above	10,000	Truck
		MoGas	-	-	-	-
Tallulah	Scott	Jet A	-	-	-	-
		AvGas	-	-	-	-
		MoGas	-	-	-	-
Tallulah/Vicksburg, MS	Vicksburg Tallulah Regional	Jet A	1	Above	12,000	-
		AvGas	1	Above	12,000	-
		MoGas	-	-	-	-
Thibodaux	Thibodaux Municipal	Jet A	-	-	-	-
		AvGas	1	Above	12,500	Pump
		MoGas	-	-	-	-
Vidalia	Concordia Parish	Jet A	-	-	-	-
		AvGas	1	Above	4,000	Pump
		MoGas	-	-	-	-
Vivian	Vivian	Jet A	-	-	-	-
		AvGas	-	-	-	Portable
		MoGas	-	-	-	-
Welsh	Welsh	Jet A	1	Below	12,000	Pump (private use)
		AvGas	1	Below	10,000	Pump
		MoGas	-	-	-	-
Winnfield	David G. Joyce	Jet A	-	-	-	-
		AvGas	1	Above	10,000	Pump
		MoGas	-	-	-	-
Winnsboro	Winnsboro Municipal	Jet A	-	-	-	-
		AvGas	1	Below	10,000	Pump
		MoGas	-	-	-	-
Woodworth	Woodworth	Jet A	-	-	-	-
		AvGas	-	-	-	-
		MoGas	-	-	-	-

Source: Airport Inventory & Data Survey

Table A-26: Airport Aprons

Associated City	Airport	Apron Size (sq. ft.)	Pavement Type/Condition
<b>Primary Commercial - Medium Hub</b>			
New Orleans	Louis Armstrong New Orleans International	5,795,523	Concrete - good/fair
<b>Primary Commercial - Small Hub</b>			
Baton Rouge	Baton Rouge Metropolitan, Ryan Field	9,729,000	Asphalt
<b>Primary Commercial - Non-Hub</b>			
Alexandria	England Airpark/Alexandria International Airpark	5,667,489	Concrete - good/new
Lafayette	Lafayette Regional	387,414	Asphalt - poor and concrete - excellent/good
Lake Charles	Lake Charles Regional	788,400	Concrete - good
Monroe	Monroe Regional	2,014,200	Concrete
Shreveport	Shreveport Regional	904,500	Concrete - good
<b>Reliever</b>			
New Orleans	Lakefront	936,000	Asphalt - good
Shreveport	Shreveport Downtown	250,200	Asphalt - poor
Slidell	Slidell	315,000	Asphalt
<b>General Aviation</b>			
Abbeville	Abbeville Chris Crusta Memorial	315,126	
Alexandria	Esler Regional	873,000	Asphalt
Arcadia	Arcadia-Bienville Parish	29,700	Asphalt
Bastrop	Morehouse Memorial	164,313	
Bogalusa	George R. Carr Memorial Air Field	225,000	Asphalt
Bunkie	Bunkie Municipal	63,000	Asphalt
Columbia	Columbia	33,930	
Coushatta	The Red River	45,000	Asphalt
Covington	St. Tammany Regional	35,100	Asphalt
Crowley	Le Gros Memorial	585,000	Asphalt
De Quincy	De Quincy Industrial Airpark	133,722	
De Ridder	Beauregard Regional	720,000	Concrete
Delhi	Delhi Municipal	52,650	Asphalt
Eunice	Eunice	81,000	Asphalt
Farmerville	Union Parish	29,700	Asphalt
Franklinton	Franklinton	29,700	Asphalt
Galliano	South Lafourche Leonard Miller Jr.	80,100	Asphalt - Excellent
Gonzales	Louisiana Regional	92,700	Asphalt
Hammond	Hammond Northshore Regional	8,757,225	Good/fair
Homer	Homer Municipal	46,800	Asphalt
Houma	Houma-Terrebonne	4,815,000	Good
Jeanerette	Le Maire Memorial	67,500	Asphalt
Jena	Jena	73,800	Asphalt
Jennings	Jennings	132,696	Asphalt - good
Jonesboro	Jonesboro	54,900	Asphalt
Jonesville	Jonesville	65,745	Asphalt
Lake Charles	Chennault International	9,961,200	Concrete
Lake Providence	Byerley	48,150	
Leesville	Leesville	90,000	Asphalt

	Associated City	Airport	Apron Size (sq. ft.)	Pavement Type/Condition
	Mansfield	C.E. "Rusty" Williams	110,970	
	Many	Hart	110,250	Asphalt - poor/good
	Marksville	Marksville Municipal	117,000	
	Minden	Minden	81,900	Asphalt
	Natchitoches	Natchitoches Regional	263,628	Asphalt - good/avg./poor
	New Iberia	Acadiana Regional	1,321,200	Concrete - excellent
	New Roads	False River Regional	72,900	Asphalt
	Oak Grove	Kelly	225,000	Asphalt
	Oakdale	Allen Parish	183,600	Asphalt - fair/good
	Olla	Olla	31,635	
	Opelousas	St. Landry Parish-Ahart Field	75,600	Concrete - fair
	Patterson	Harry P. Williams Memorial	313,758	Concrete
	Pineville	Pineville Municipal	29,700	Asphalt
	Pollock	Pollock Municipal	539,100	Concrete
	Rayville	John H. Hooks Jr. Memorial	88,920	
	Reserve	St. John the Baptist Parish	199,971	Blacktop - excellent
	Ruston	Ruston Regional	335,700	Concrete
	Springhill	Springhill	70,200	Asphalt
	St. Joseph	Tensas Parish	39,600	Asphalt
	Sulphur	Southland Field	164,700	Asphalt - good
	Tallulah	Scott	63,630	
	Tallulah/Vicksburg, MS	Vicksburg Tallulah Regional	327,105	Asphalt
	Thibodaux	Thibodaux Municipal	29,700	Asphalt
	Vidalia	Concordia Parish	168,300	Asphalt and concrete
	Vivian	Vivian	25,200	Asphalt
	Welsh	Welsh	52,200	Asphalt
	Winnfield	David G. Joyce	104,400	Asphalt
	Winnsboro	Winnsboro Municipal	50,400	Asphalt - good
	Woodworth	Woodworth	36,900	Asphalt

Source: Airport Inventory & Data Survey

Table A-27: Airport Aviation Services - Part I

Associated City	Airport	Scheduled Air Carrier	Commuter Air Service	Charter Services	Air Taxi	Hangar Rental	Tie-Downs	Aircraft Rental	Aircraft Sales	Flight Instruction
<b>Primary Commercial - Medium Hub</b>										
New Orleans	Louis Armstrong New Orleans International	Yes	Yes	Yes	No	Yes	No	No	No	No
<b>Primary Commercial - Small Hub</b>										
Baton Rouge	Baton Rouge Metropolitan, Ryan Field	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes
<b>Primary Commercial - Non-Hub</b>										
Alexandria	England Airpark/Alexandria International Airpark	Yes	No	Yes	No	Yes	Yes	Yes	Yes	Yes
Lafayette	Lafayette Regional	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Lake Charles	Lake Charles Regional	Yes	No	Yes	No	Yes	Yes	Yes	No	Yes
Monroe	Monroe Regional	Yes	No	Yes	Yes	Yes	Yes	No	No	Yes
Shreveport	Shreveport Regional	Yes	Yes	Yes	Yes	Yes	Yes	No	No	No
<b>Reliever</b>										
New Orleans	Lakefront	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Shreveport	Shreveport Downtown	No	No	Yes	No	Yes	Yes	Yes	Yes	Yes
Slidell	Slidell	No	No	No	No	Yes	Yes	Yes	No	Yes
<b>General Aviation</b>										
Abbeville	Abbeville Chris Crusta Memorial	No	No	No	No	Yes	Yes	Yes	No	Yes
Alexandria	Esler Regional	No	No	No	No	Yes	Yes	No	No	No
Arcadia	Arcadia-Bienville Parish	No	No	No	No	Yes	Yes	No	No	No
Bastrop	Morehouse Memorial	No	No	No	No	Yes	Yes	No	No	No
Bogalusa	George R. Carr Memorial Air Field	No	No	No	No	Yes	Yes	No	Yes	Yes
Bunkie	Bunkie Municipal	No	No	No	No	Yes	Yes	No	No	No
Columbia	Columbia	No	No	No	No	No	No	No	No	No
Coushatta	The Red River	No	No	No	No	No	Yes	No	No	No
Covington	St. Tammany Regional	No	No	No	No	Yes	Yes	No	No	No
Crowley	Le Gros Memorial	No	No	No	No	Yes	Yes	Yes	No	Yes
De Quincy	De Quincy Industrial Airpark	No	No	No	No	Yes	Yes	No	No	No
De Ridder	Beauregard Regional	No	No	No	No	Yes	Yes	Yes	No	Yes
Delhi	Delhi Municipal	No	No	No	No	Yes	Yes	No	No	No
Eunice	Eunice	No	No	No	No	Yes	Yes	Yes	No	Yes
Farmerville	Union Parish	No	No	No	No	Yes	Yes	No	No	Yes
Franklinton	Franklinton	No	No	No	No	Yes	Yes	No	No	No
Galliano	South Lafourche Leonard Miller Jr.	No	No	No	Yes	Yes	Yes	Yes	No	Yes
Gonzales	Louisiana Regional	No	No	No	No	Yes	Yes	Yes	No	Yes
Hammond	Hammond Northshore Regional	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Homer	Homer Municipal	No	No	No	No	Yes	Yes	No	No	No

Appendix

	Associated City	Airport	Scheduled Air Carrier	Commuter Air Service	Charter Services	Air Taxi	Hangar Rental	Tie-Downs	Aircraft Rental	Aircraft Sales	Flight Instruction
	Houma	Houma-Terrebonne	No	No	Yes	Yes	Yes	Yes	Yes	No	Yes
	Jeanerette	Le Maire Memorial	No	No	No	No	Yes	Yes	No	No	No
	Jena	Jena	No	No	No	No	No	No	No	No	No
	Jennings	Jennings	No	No	No	No	Yes	Yes	No	No	No
	Jonesboro	Jonesboro	No	No	No	No	No	No	No	No	No
	Jonesville	Jonesville	No	No	No	No	No	No	No	No	No
	Lake Charles	Chennault International	No	No	Yes	Yes	Yes	Yes	No	No	No
	Lake Providence	Byerley	No	No	No	No	No	No	No	No	No
	Leesville	Leesville	No	No	No	No	Yes	Yes	No	No	Yes
	Mansfield	C.E. "Rusty" Williams	No	No	No	No	No	No	No	No	No
	Many	Hart	No	No	No	No	No	Yes	Yes	No	Yes
	Marksville	Marksville Municipal	No	No	No	No	Yes	Yes	No	No	No
	Minden	Minden	No	No	No	No	Yes	Yes	No	No	Yes
	Natchitoches	Natchitoches Regional	No	No	Yes	No	Yes	Yes	No	No	Yes
	New Iberia	Acadiana Regional	No	No	Yes	Yes	Yes	Yes	Yes	No	Yes
	New Roads	False River Regional	No	No	Yes	No	Yes	Yes	Yes	No	Yes
	Oak Grove	Kelly	No	No	No	No	No	Yes	No	No	No
	Oakdale	Allen Parish	No	No	No	No	Yes	Yes	No	No	Yes
	Olla	Olla	No	No	No	No	No	No	No	No	No
	Opelousas	St. Landry Parish-Ahart Field	No	No	No	No	Yes	Yes	No	No	No
	Patterson	Harry P. Williams Memorial	No	No	No	Yes	Yes	Yes	Yes	No	Yes
	Pineville	Pineville Municipal	No	No	Yes	No	Yes	Yes	Yes	No	Yes
	Pollock	Pollock Municipal	No	No	No	No	No	No	No	No	No
	Rayville	John H. Hooks Jr. Memorial	No	No	No	No	Yes	Yes	No	No	Yes
	Reserve	St. John the Baptist Parish	No	No	No	No	No	Yes	Yes	Yes	Yes
	Ruston	Ruston Regional	No	No	Yes	No	Yes	Yes	Yes	Yes	Yes
	Springhill	Springhill	No	No	No	No	No	Yes	No	No	No
	St. Joseph	Tensas Parish	No	No	No	No	No	Yes	No	No	No
	Sulphur	Southland Field	No	No	No	No	Yes	Yes	No	No	Yes
	Tallulah	Scott	No	No	No	No	No	Yes	No	No	No
	Tallulah/Vicksburg, MS	Vicksburg Tallulah Regional	No	No	Yes	No	No	Yes	Yes	Yes	Yes
	Thibodaux	Thibodaux Municipal	No	No	No	No	No	No	No	No	No
	Vidalia	Concordia Parish	No	No	Yes	No	Yes	Yes	Yes	No	Yes
	Vivian	Vivian	No	No	No	No	Yes	Yes	No	No	Yes
	Welsh	Welsh	No	No	No	No	Yes	Yes	Yes	No	Yes
	Winnfield	David G. Joyce	No	No	No	No	No	Yes	No	No	No

Appendix

Associated City	Airport	Scheduled Air Carrier	Commuter Air Service	Charter Services	Air Taxi	Hangar Rental	Tie-Downs	Aircraft Rental	Aircraft Sales	Flight Instruction
Winnsboro	Winnsboro Municipal	No	No	No	No	Yes	Yes	No	Yes	Yes
Woodworth	Woodworth	No	No	No	No	Yes	Yes	No	No	No

Source: Airport Inventory & Data Survey

**Table A-28: Airport Aviation Services – Part II**

Associated City	Airport	Jet Fuel	AvGas	Aircraft Repair	Avionics Repair	Avionics Sales	US Customs	Public Phone	Industrial Park	
<b>Primary Commercial - Medium Hub</b>										
New Orleans	Louis Armstrong New Orleans International	Yes	Yes	No	No	No	Yes	Yes	No	
<b>Primary Commercial - Small Hub</b>										
Baton Rouge	Baton Rouge Metropolitan, Ryan Field	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	
<b>Primary Commercial - Non-Hub</b>										
Alexandria	England Airpark/Alexandria International Airpark	Yes	Yes	Yes	No	No	Yes	Yes	Yes	
Lafayette	Lafayette Regional	Yes	Yes	Yes	Yes	Yes	No	Yes	No	
Lake Charles	Lake Charles Regional	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	
Monroe	Monroe Regional	Yes	Yes	Yes	Yes	Yes	No	Yes	No	
Shreveport	Shreveport Regional	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
<b>Reliever</b>										
New Orleans	Lakefront	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
Shreveport	Shreveport Downtown	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
Slidell	Slidell	Yes	Yes	Yes	No	No	No	Yes	No	
<b>General Aviation</b>										
Abbeville	Abbeville Chris Crusta Memorial	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	
Alexandria	Esler Regional	Yes	Yes	No	No	No	No	No	No	
Arcadia	Arcadia-Bienville Parish	No	No	No	No	No	No	No	No	
Bastrop	Morehouse Memorial	No	Yes	Yes	No	No	No	No	No	
Bogalusa	George R. Carr Memorial Air Field	Yes	Yes	Yes	No	No	No	Yes	Yes	
Bunkie	Bunkie Municipal	No	Yes	No	No	No	No	No	No	
Columbia	Columbia	No	No	No	No	No	No	No	No	
Coushatta	The Red River	No	No	No	No	No	No	No	No	
Covington	St. Tammany Regional	No	Yes	No	No	No	No	Yes	No	
Crowley	Le Gros Memorial	No	Yes	Yes	No	No	No	Yes	No	
De Quincy	De Quincy Industrial Airpark	No	No	No	No	No	No	No	No	
De Ridder	Beauregard Regional	Yes	Yes	Yes	No	No	No	Yes	No	

Appendix

	Associated City	Airport	Jet Fuel	AvGas	Aircraft Repair	Avionics Repair	Avionics Sales	US Customs	Public Phone	Industrial Park
	Delhi	Delhi Municipal	No	No	Yes	No	No	No	Yes	No
	Eunice	Eunice	Yes	Yes	No	No	No	No	Yes	No
	Farmerville	Union Parish	No	Yes	Yes	No	No	No	No	No
	Franklinton	Franklinton	No	No	Yes	No	No	No	No	No
	Galliano	South Lafourche Leonard Miller Jr.	Yes	Yes	No	No	No	Yes	Yes	Yes
	Gonzales	Louisiana Regional	Yes	Yes	Yes	No	No	No	Yes	No
	Hammond	Hammond Northshore Regional	Yes	Yes	Yes	No	No	Yes	Yes	No
	Homer	Homer Municipal	No	No	No	No	No	No	Yes	No
	Houma	Houma-Terrebonne	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
	Jeanerette	Le Maire Memorial	No	No	No	No	No	No	No	No
	Jena	Jena	No	No	No	No	No	No	No	No
	Jennings	Jennings	Yes	Yes	No	No	No	No	Yes	No
	Jonesboro	Jonesboro	No	No	No	No	No	No	No	No
	Jonesville	Jonesville	No	No	No	No	No	No	No	No
	Lake Charles	Chennault International	Yes	Yes	Yes	No	No	Yes	No	Yes
	Lake Providence	Byerley	No	No	No	No	No	No	No	No
	Leesville	Leesville	Yes	Yes	No	No	No	No	Yes	No
	Mansfield	C.E. "Rusty" Williams	No	No	No	No	No	No	No	No
	Many	Hart	No	Yes	No	No	No	No	Yes	No
	Marksville	Marksville Municipal	No	Yes	No	No	No	No	No	No
	Minden	Minden	Yes	Yes	Yes	No	No	No	Yes	No
	Natchitoches	Natchitoches Regional	Yes	Yes	Yes	No	No	No	Yes	Yes
	New Iberia	Acadiana Regional	Yes	Yes	Yes	Yes	No	Yes	No	Yes
	New Roads	False River Regional	No	Yes	No	No	No	No	Yes	No
	Oak Grove	Kelly	No	No	No	No	No	No	No	Yes
	Oakdale	Allen Parish	Yes	Yes	No	No	No	No	Yes	No
	Olla	Olla	No	No	No	No	No	No	No	No
	Opelousas	St. Landry Parish-Ahart Field	Yes	Yes	No	No	No	No	No	No
	Patterson	Harry P. Williams Memorial	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes
	Pineville	Pineville Municipal	No	Yes	Yes	No	No	No	Yes	No
	Pollock	Pollock Municipal	No	No	No	No	No	No	No	No
	Rayville	John H. Hooks Jr. Memorial	No	Yes	No	No	No	No	No	No
	Reserve	St. John the Baptist Parish	No	Yes	No	No	No	No	Yes	Yes
	Ruston	Ruston Regional	Yes	Yes	Yes	No	No	No	No	No
	Springhill	Springhill	No	No	No	No	No	No	Yes	No
	St. Joseph	Tensas Parish	No	Yes	No	No	No	No	Yes	No

Appendix

	Associated City	Airport	Jet Fuel	AvGas	Aircraft Repair	Avionics Repair	Avionics Sales	US Customs	Public Phone	Industrial Park
	Sulphur	Southland Field	Yes	Yes	Yes	No	No	No	Yes	No
	Tallulah	Scott	No	No	No	No	No	No	No	No
	Tallulah/Vicksburg, MS	Vicksburg Tallulah Regional	Yes	Yes	Yes	No	No	No	Yes	No
	Thibodaux	Thibodaux Municipal	No	Yes	No	No	No	No	No	No
	Vidalia	Concordia Parish	No	Yes	No	No	No	No	No	No
	Vivian	Vivian	No	No	Yes	No	No	No	No	No
	Welsh	Welsh	No	Yes	Yes	No	No	No	No	No
	Winnfield	David G. Joyce	No	Yes	No	No	No	No	No	No
	Winnsboro	Winnsboro Municipal	No	Yes	Yes	No	No	No	Yes	No
	Woodworth	Woodworth	No	No	No	No	No	No	No	No

Source: Airport Inventory & Data Survey

**Table A-29: Airport Aviation Services – Part III**

	Associated City	Airport	Restaurants	Vending	Car Rental	Sky Diving	Foreign Trade Zone	FAA Written Test Center	Loaner Car
<b>Primary Commercial - Medium Hub</b>									
	New Orleans	Louis Armstrong New Orleans International	Yes	Yes	Yes	No	No	No	No
<b>Primary Commercial - Small Hub</b>									
	Baton Rouge	Baton Rouge Metropolitan, Ryan Field	Yes	Yes	Yes	Yes	Yes	Yes	Yes
<b>Primary Commercial - Non-Hub</b>									
	Alexandria	England Airpark/Alexandria International Airpark	Yes	Yes	Yes	No	Yes	No	Yes
	Lafayette	Lafayette Regional	Yes	Yes	Yes	No	Yes	No	No
	Lake Charles	Lake Charles Regional	Yes	Yes	Yes	No	Yes	No	No
	Monroe	Monroe Regional	Yes	Yes	Yes	No	No	No	No
	Shreveport	Shreveport Regional	Yes	Yes	Yes	No	Yes	No	No
<b>Reliever</b>									
	New Orleans	Lakefront	Yes	Yes	Yes	No	No	Yes	Yes
	Shreveport	Shreveport Downtown	Yes	Yes	Yes	No	No	Yes	Yes
	Slidell	Slidell	No	Yes	Yes	Yes	No	No	Yes
<b>General Aviation</b>									
	Abbeville	Abbeville Chris Crusta Memorial	No	Yes	No	No	No	No	Yes
	Alexandria	Esler Regional	Yes	Yes	No	No	No	No	No
	Arcadia	Arcadia-Bienville Parish	No	No	No	No	No	No	No

Appendix

	Associated City	Airport	Restaurants	Vending	Car Rental	Sky Diving	Foreign Trade Zone	FAA Written Test Center	Loaner Car
	Bastrop	Morehouse Memorial	No	No	No	No	No	No	Yes
	Bogalusa	George R. Carr Memorial Air Field	No	Yes	No	No	No	No	Yes
	Bunkie	Bunkie Municipal	No	No	No	No	No	No	No
	Columbia	Columbia	No	No	No	No	No	No	No
	Coushatta	The Red River	No	No	No	No	No	No	No
	Covington	St. Tammany Regional	No	No	No	No	No	No	No
	Crowley	Le Gros Memorial	No	No	Yes	No	No	Yes	No
	De Quincy	De Quincy Industrial Airpark	No	No	No	No	Yes	No	No
	De Ridder	Beauregard Regional	No	Yes	No	No	No	No	Yes
	Delhi	Delhi Municipal	No	No	No	No	No	No	No
	Eunice	Eunice	No	Yes	Yes	No	No	No	No
	Farmerville	Union Parish	No	No	No	No	No	No	No
	Franklinton	Franklinton	No	No	No	No	No	No	No
	Galliano	South Lafourche Leonard Miller Jr.	No	Yes	Yes	No	No	No	No
	Gonzales	Louisiana Regional	No	Yes	No	No	No	No	Yes
	Hammond	Hammond Northshore Regional	No	Yes	Yes	No	No	Yes	Yes
	Homer	Homer Municipal	No	No	No	No	No	No	No
	Houma	Houma-Terrebonne	Yes	Yes	Yes	Yes	Yes	Yes	Yes
	Jeanerette	Le Maire Memorial	No	No	No	Yes	No	No	No
	Jena	Jena	No	No	No	No	No	No	No
	Jennings	Jennings	No	Yes	Yes	No	No	No	No
	Jonesboro	Jonesboro	No	No	No	No	No	No	No
	Jonesville	Jonesville	No	No	No	No	No	No	No
	Lake Charles	Chennault International	Yes	Yes	Yes	No	Yes	No	Yes
	Lake Providence	Byerley	No	No	No	No	No	No	No
	Leesville	Leesville	No	Yes	No	No	No	No	Yes
	Mansfield	C.E. "Rusty" Williams	No	No	No	No	No	No	No
	Many	Hart	No	Yes	No	No	No	No	No
	Marksville	Marksville Municipal	No	No	No	No	No	No	No
	Minden	Minden	No	Yes	Yes	No	No	No	Yes
	Natchitoches	Natchitoches Regional	No	Yes	Yes	No	No	No	Yes
	New Iberia	Acadiana Regional	Yes	Yes	Yes	No	No	No	Yes
	New Roads	False River Regional	No	Yes	No	No	No	No	No
	Oak Grove	Kelly	No	No	No	No	No	No	Yes
	Oakdale	Allen Parish	No	No	No	No	No	No	Yes
	Olla	Olla	No	No	No	No	No	No	No

Appendix

	Associated City	Airport	Restaurants	Vending	Car Rental	Sky Diving	Foreign Trade Zone	FAA Written Test Center	Loaner Car
	Opelousas	St. Landry Parish-Ahart Field	No	Yes	Yes	No	No	No	Yes
	Patterson	Harry P. Williams Memorial	No	Yes	No	No	No	No	Yes
	Pineville	Pineville Municipal	No	Yes	Yes	No	No	Yes	No
	Pollock	Pollock Municipal	No	No	No	No	No	No	No
	Rayville	John H. Hooks Jr. Memorial	No	Yes	No	No	No	No	No
	Reserve	St. John the Baptist Parish	No	Yes	Yes	No	No	Yes	No
	Ruston	Ruston Regional	No	Yes	Yes	No	No	No	Yes
	Springhill	Springhill	No	Yes	Yes	No	No	No	No
	St. Joseph	Tensas Parish	No	No	No	No	No	No	No
	Sulphur	Southland Field	Yes	Yes	No	No	No	No	Yes
	Tallulah	Scott	No	No	No	No	No	No	No
	Tallulah/Vicksburg, MS	Vicksburg Tallulah Regional	No	No	Yes	No	No	Yes	Yes
	Thibodaux	Thibodaux Municipal	No	No	No	No	No	No	No
	Vidalia	Concordia Parish	No	No	No	No	No	No	Yes
	Vivian	Vivian	No	No	No	Yes	No	No	Yes
	Welsh	Welsh	No	Yes	No	No	No	No	Yes
	Winnfield	David G. Joyce	No	No	No	No	No	No	No
	Winnsboro	Winnsboro Municipal	No	Yes	Yes	No	No	No	Yes
	Woodworth	Woodworth	No	No	No	No	No	No	No

Source: Airport Inventory & Data Survey

**Table A-30: Airport Aviation Activities – Part I**

	Associated City	Airport	Recreational Flying	Agricultural Spraying	Corporate/Business Activities	Aerial Inspections (pipeline, electric, etc.)	Shipping of just-in-time perishables	Gateway for resort visitors	Staging Area for community events
<b>Primary Commercial - Medium Hub</b>									
	New Orleans	Louis Armstrong New Orleans International	Low	None	Medium	None	Low	Low	None
<b>Primary Commercial - Small Hub</b>									
	Baton Rouge	Baton Rouge Metropolitan, Ryan Field	Medium	Low	High	High	Low	Low	Low
<b>Primary Commercial - Non-Hub</b>									
	Alexandria	England Airpark/Alexandria International Airpark	Medium	Low	High	Low	Low	Low	Medium
	Lafayette	Lafayette Regional	Medium	Low	High	Low	Medium	Low	Low
	Lake Charles	Lake Charles Regional	High	Low	Medium	High	None	Low	Low
	Monroe	Monroe Regional	High	None	Medium	None	None	Low	None
	Shreveport	Shreveport Regional	Medium	Low	High	None	High	Medium	Medium

Appendix

Associated City	Airport	Recreational Flying	Agricultural Spraying	Corporate/Business Activities	Aerial Inspections (pipeline, electric, etc.)	Shipping of just-in-time perishables	Gateway for resort visitors	Staging Area for community events
<b>Reliever</b>								
New Orleans	Lakefront	High	Medium	High	None	None	None	None
Shreveport	Shreveport Downtown	High	None	Medium	Low	Low	Low	Low
Slidell	Slidell	High	Low	High	Medium	Low	Low	Medium
<b>General Aviation</b>								
Abbeville	Abbeville Chris Crusta Memorial	Medium	Low	High	None	None	None	None
Alexandria	Esler Regional	Medium	None	High	Low	None	None	None
Arcadia	Arcadia-Bienville Parish	Low	Low	Low	Low	None	None	None
Bastrop	Morehouse Memorial	None	None	None	None	None	None	None
Bogalusa	George R. Carr Memorial Air Field	High	Medium	High	Medium	Low	Low	Low
Bunkie	Bunkie Municipal	Low	Low	Low	Low	None	None	None
Columbia	Columbia	Low	High	Low	None	None	None	None
Coushatta	The Red River	High	High	Low	None	None	None	None
Covington	St. Tammany Regional	High	Low	Low	None	None	None	Low
Crowley	Le Gros Memorial	Medium	High	Medium	High	None	None	Medium
De Quincy	De Quincy Industrial Airpark	Medium	Medium	Low	Low	None	None	None
De Ridder	Beauregard Regional	High	Medium	Medium	Low	None	None	Low
Delhi	Delhi Municipal	Medium	High	Medium	Low	None	None	None
Eunice	Eunice	Medium	Medium	Medium	Low	None	None	None
Farmerville	Union Parish	Medium	High	Low	Low	None	None	None
Franklinton	Franklinton	Medium	Low	Low	Low	None	None	None
Galliano	South Lafourche Leonard Miller Jr.	Medium	Low	High	High	Low	Low	Low
Gonzales	Louisiana Regional	High	Low	Medium	High	None	None	Low
Hammond	Hammond Northshore Regional	Medium	Low	Medium	Low	None	None	None
Homer	Homer Municipal	Medium	Medium	Medium	Medium	Low	Low	Low
Houma	Houma-Terrebonne	High	Low	High	Low	Low	Low	Low
Jeanerette	Le Maire Memorial	Medium	High	None	None	None	None	None
Jena	Jena	Medium	High	High	Low	None	Low	None
Jennings	Jennings	Medium	High	Low	Low	None	None	None
Jonesboro	Jonesboro	High	Medium	Low	Low	Low	Low	Low
Jonesville	Jonesville	None	None	None	None	None	None	None
Lake Charles	Chennault International	Medium	Medium	Medium	Medium	Low	Low	Low
Lake Providence	Byerley	None	None	None	None	None	None	None
Leesville	Leesville	Medium	Low	Medium	Low	None	None	None
Mansfield	C.E. "Rusty" Williams	None	None	None	None	None	None	None

Appendix

Associated City	Airport	Recreational Flying	Agricultural Spraying	Corporate/ Business Activities	Aerial Inspections (pipeline, electric, etc.)	Shipping of just-in-time perishables	Gateway for resort visitors	Staging Area for community events
Many	Hart	Medium	High	Low	Low	None	High	None
Marksville	Marksville Municipal	Medium	Medium	Low	None	None	Low	Low
Minden	Minden	Medium	Low	Medium	Medium	None	None	None
Natchitoches	Natchitoches Regional	Medium	Medium	Medium	Low	None	Low	None
New Iberia	Acadiana Regional	Medium	Low	Medium	Low	None	None	None
New Roads	False River Regional	High	High	Medium	High	Low	Low	Low
Oak Grove	Kelly	Medium	High	Medium	Low	None	None	None
Oakdale	Allen Parish	Medium	Medium	Low	Low	Low	High	Medium
Olla	Olla	None	None	None	None	None	None	None
Opelousas	St. Landry Parish-Ahart Field	Medium	Medium	Low	Medium	None	None	None
Patterson	Harry P. Williams Memorial	Medium	Medium	High	Medium	None	Medium	Medium
Pineville	Pineville Municipal	High	Low	Medium	High	None	None	None
Pollock	Pollock Municipal	None	None	None	None	None	None	None
Rayville	John H. Hooks Jr. Memorial	Low	High	Low	None	None	None	None
Reserve	St. John the Baptist Parish	Medium	Low	Medium	High	Low	None	None
Ruston	Ruston Regional	Medium	Low	High	Medium	Low	Low	Low
Springhill	Springhill	Medium	Low	Low	Medium	None	None	None
St. Joseph	Tensas Parish	High	High	Medium	Medium	Low	Low	Low
Sulphur	Southland Field	Low	Low	High	Medium	None	Low	None
Tallulah	Scott	Low	High	Low	None	None	None	None
Tallulah/Vicksburg, MS	Vicksburg Tallulah Regional	Medium	Low	High	Low	Low	Low	Low
Thibodaux	Thibodaux Municipal	Low	High	None	None	None	None	None
Vidalia	Concordia Parish	High	Medium	Medium	Low	Low	Medium	Low
Vivian	Vivian	High	Low	Medium	None	None	None	None
Welsh	Welsh	Low	High	None	None	None	None	None
Winnfield	David G. Joyce	Medium	Medium	Medium	None	None	None	None
Winnsboro	Winnsboro Municipal	Medium	High	Medium	Low	None	None	Low
Woodworth	Woodworth	Low	Low	None	None	None	None	None

Source: Airport Inventory & Data Survey

Table A-31: Airport Aviation Activities – Part II

Associated City	Airport	Police/Law Enforcement	Prisoner Transport	Location for Community Facilities (parks, fire station, etc.)	Career Training/Education	Search & Rescue/Civil Air Patrol	Environmental Patrol	Emergency Medical Evacuation	Medical Shipments/Patient Transfer	
<b>Primary Commercial - Medium Hub</b>										
New Orleans	Louis Armstrong New Orleans International	Low	Low	None	None	Low	None	Low	Low	
<b>Primary Commercial - Small Hub</b>										
Baton Rouge	Baton Rouge Metropolitan, Ryan Field	High	High	High	Low	High	Low	Low	Low	
<b>Primary Commercial - Non-Hub</b>										
Alexandria	England Airpark/Alexandria International Airpark	Medium	High	High	High	High	Low	Medium	Medium	
Lafayette	Lafayette Regional	Low	Low	Low	Medium	Low	Low	High	High	
Lake Charles	Lake Charles Regional	High	Low	Medium	Low	High	Medium	High	None	
Monroe	Monroe Regional	None	None	None	High	None	None	Medium	Medium	
Shreveport	Shreveport Regional	Medium	Low	Medium	Low	Low	None	Low	Low	
<b>Reliever</b>										
New Orleans	Lakefront	None	None	None	None	Medium	None	None	High	
Shreveport	Shreveport Downtown	Low	None	Low	Medium	Medium	Low	Medium	Medium	
Slidell	Slidell	Low	Low	Low	Low	Medium	Low	Medium	Medium	
<b>General Aviation</b>										
Abbeville	Abbeville Chris Crusta Memorial	None	None	None	None	None	None	Low	None	
Alexandria	Esler Regional	None	None	None	None	None	None	None	None	
Arcadia	Arcadia-Bienville Parish	Low	None	None	None	None	Low	None	None	
Bastrop	Morehouse Memorial	None	None	None	None	None	None	None	None	
Bogalusa	George R. Carr Memorial Air Field	Low	Low	Medium	Low	Low	Low	Low	Low	
Bunkie	Bunkie Municipal	Low	None	None	None	None	None	None	None	
Columbia	Columbia	None	None	None	None	None	None	None	None	
Coushatta	The Red River	Low	None	None	None	Low	None	None	None	
Covington	St. Tammany Regional	None	None	None	None	None	None	None	None	
Crowley	Le Gros Memorial	Medium	None	None	None	None	None	None	None	
De Quincy	De Quincy Industrial Airpark	None	None	None	None	None	None	None	None	
De Ridder	Beauregard Regional	Low	Low	None	None	None	None	Low	Low	
Delhi	Delhi Municipal	None	None	None	None	None	None	Low	None	
Eunice	Eunice	Low	None	None	Low	None	None	Low	Low	
Farmerville	Union Parish	None	None	None	None	None	None	None	None	
Franklinton	Franklinton	None	None	None	None	None	None	None	None	
Galliano	South Lafourche Leonard Miller Jr.	Medium	Low	Low	Low	Medium	Low	Low	Low	
Gonzales	Louisiana Regional	Low	None	None	Low	High	None	Low	None	

Appendix

Associated City	Airport	Police/Law Enforcement	Prisoner Transport	Location for Community Facilities (parks, fire station, etc.)	Career Training/Education	Search & Rescue/Civil Air Patrol	Environmental Patrol	Emergency Medical Evacuation	Medical Shipments/Patient Transfer
Hammond	Hammond Northshore Regional	High	None	None	None	Low	None	Low	Low
Homer	Homer Municipal	Low	Low	Low	Low	Low	Low	Low	Low
Houma	Houma-Terrebonne	Low	Low	High	Low	Low	Low	Medium	Medium
Jeanerette	Le Maire Memorial	None	None	None	None	None	None	None	None
Jena	Jena	None	None	Medium	None	None	None	Low	None
Jennings	Jennings	None	None	None	None	Low	None	None	None
Jonesboro	Jonesboro	Low	Medium	Low	Low	Low	Low	Low	Low
Jonesville	Jonesville	None	None	None	None	None	None	None	None
Lake Charles	Chennault International	Low	Low	Low	High	Low	Medium	Low	Medium
Lake Providence	Byerley	None	None	None	None	None	None	None	None
Leesville	Leesville	None	None	None	None	None	None	Low	None
Mansfield	C.E. "Rusty" Williams	None	None	None	None	None	None	None	None
Many	Hart	None	None	None	None	None	None	None	None
Marksville	Marksville Municipal	Low	None	None	None	None	None	None	None
Minden	Minden	Low	None	None	None	None	None	None	Low
Natchitoches	Natchitoches Regional	Low	None	None	Medium	None	None	Low	Low
New Iberia	Acadiana Regional	None	None	Low	Medium	Low	None	Low	Low
New Roads	False River Regional	High	Low	Medium	None	Low	None	Low	Low
Oak Grove	Kelly	Low	None	High	None	None	None	Low	Low
Oakdale	Allen Parish	Medium	Medium	Low	None	None	None	Medium	None
Olla	Olla	None	None	None	None	None	None	None	None
Opelousas	St. Landry Parish-Ahart Field	None	Low	None	None	None	None	Low	Low
Patterson	Harry P. Williams Memorial	Medium	Low	None	None	High	Medium	Low	Medium
Pineville	Pineville Municipal	None	None	None	High	High	None	None	None
Pollock	Pollock Municipal	None	None	None	None	None	None	None	None
Rayville	John H. Hooks Jr. Memorial	None	None	None	None	None	None	None	None
Reserve	St. John the Baptist Parish	Low	Low	None	High	Low	Low	None	Low
Ruston	Ruston Regional	High	Low	Low	None	Low	Low	High	High
Springhill	Springhill	Low	None	None	None	None	None	None	None
St. Joseph	Tensas Parish	Low	Low	Low	Low	Low	Low	Low	Low
Sulphur	Southland Field	High	None	None	None	High	None	Low	None
Tallulah	Scott	Medium	None	None	None	None	None	None	None
Tallulah/Vicksburg, MS	Vicksburg Tallulah Regional	Medium	None	None	None	Low	None	Low	None
Thibodaux	Thibodaux Municipal	None	None	None	None	None	None	None	None

Associated City	Airport	Police/Law Enforcement	Prisoner Transport	Location for Community Facilities (parks, fire station, etc.)	Career Training/Education	Search & Rescue/Civil Air Patrol	Environmental Patrol	Emergency Medical Evacuation	Medical Shipments/Patient Transfer
Vidalia	Concordia Parish	Medium	Low	Low	Low	Low	Low	Low	Low
Vivian	Vivian	None	None	None	High	None	None	None	Low
Welsh	Welsh	None	None	None	None	None	None	None	None
Winnfield	David G. Joyce	High	None	None	None	None	None	None	None
Winnsboro	Winnsboro Municipal	Low	None	None	None	None	None	Low	None
Woodworth	Woodworth	None	None	None	None	None	High	High	None

Source: Airport Inventory & Data Survey

**Table A-32: Airport Aviation Activities – Part III**

Associated City	Airport	Forest Fire Fighting	Aerial Photography/Surveying	Real Estate Tours	Aerial Advertising/Banner Towing	Traffic/News	Air Shows
<b>Primary Commercial - Medium Hub</b>							
New Orleans	Louis Armstrong New Orleans International	None	None	None	None	None	None
<b>Primary Commercial - Small Hub</b>							
Baton Rouge	Baton Rouge Metropolitan, Ryan Field	None	Medium	None	Medium	None	Low
<b>Primary Commercial - Non-Hub</b>							
Alexandria	England Airpark/Alexandria International Airpark	Medium	Medium	Medium	Low	Low	Low
Lafayette	Lafayette Regional	Low	Low	Low	Low	Low	Low
Lake Charles	Lake Charles Regional	Medium	Medium	Low	Low	Low	Low
Monroe	Monroe Regional	None	None	None	None	None	None
Shreveport	Shreveport Regional	None	Low	None	None	None	None
<b>Reliever</b>							
New Orleans	Lakefront	None	Low	None	Medium	Medium	None
Shreveport	Shreveport Downtown	Low	Low	Medium	None	None	Low
Slidell	Slidell	None	Low	None	Low	None	None
<b>General Aviation</b>							
Abbeville	Abbeville Chris Crusta Memorial	None	Low	None	Low	None	None
Alexandria	Esler Regional	None	None	None	None	None	None
Arcadia	Arcadia-Bienville Parish	None	None	None	None	None	None
Bastrop	Morehouse Memorial	None	None	None	None	None	None
Bogalusa	George R. Carr Memorial Air Field	Low	Low	Low	Low	None	None
Bunkie	Bunkie Municipal	None	None	None	None	None	None

Appendix

Associated City	Airport	Forest Fire Fighting	Aerial Photography/Surveying	Real Estate Tours	Aerial Advertising/Banner Towing	Traffic/News	Air Shows
Columbia	Columbia	None	None	None	None	None	None
Coushatta	The Red River	Low	Low	None	None	None	Low
Covington	St. Tammany Regional	None	None	None	None	None	None
Crowley	Le Gros Memorial	None	None	None	None	None	None
De Quincy	De Quincy Industrial Airpark	None	Low	None	None	None	None
De Ridder	Beauregard Regional	Medium	Low	None	None	None	None
Delhi	Delhi Municipal	None	None	None	None	None	None
Eunice	Eunice	None	Low	None	None	None	None
Farmerville	Union Parish	None	None	None	None	None	None
Franklinton	Franklinton	None	None	None	None	None	None
Galliano	South Lafourche Leonard Miller Jr.	Low	Low	Low	Low	Low	Low
Gonzales	Louisiana Regional	None	Medium	Low	Low	None	None
Hammond	Hammond Northshore Regional	Low	Low	None	None	None	None
Homer	Homer Municipal	Low	Low	Low	None	None	None
Houma	Houma-Terrebonne	Low	Low	Low	Low	Low	Low
Jeanerette	Le Maire Memorial	None	None	None	None	None	None
Jena	Jena	Low	None	None	None	None	None
Jennings	Jennings	None	None	None	None	None	Low
Jonesboro	Jonesboro	Low	Low	Low	Low	Low	Low
Jonesville	Jonesville	None	None	None	None	None	None
Lake Charles	Chennault International	Low	Low	None	None	None	None
Lake Providence	Byerley	None	None	None	None	None	None
Leesville	Leesville	Low	None	None	None	None	None
Mansfield	C.E. "Rusty" Williams	None	None	None	None	None	None
Many	Hart	None	None	None	None	None	None
Marksville	Marksville Municipal	None	Low	None	None	None	None
Minden	Minden	High	Low	None	None	None	None
Natchitoches	Natchitoches Regional	Medium	Low	None	None	None	Low
New Iberia	Acadiana Regional	None	Low	None	None	None	Low
New Roads	False River Regional	Low	Low	Low	Low	Low	Low
Oak Grove	Kelly	None	None	None	None	None	None
Oakdale	Allen Parish	High	None	None	None	None	None
Olla	Olla	None	None	None	None	None	None
Opelousas	St. Landry Parish-Ahart Field	None	None	None	None	None	None
Patterson	Harry P. Williams Memorial	None	Medium	Low	Low	None	Low
Pineville	Pineville Municipal	None	Medium	None	None	None	None

Appendix

	Associated City	Airport	Forest Fire Fighting	Aerial Photography/Surveying	Real Estate Tours	Aerial Advertising/Banner Towing	Traffic/News	Air Shows
	Pollock	Pollock Municipal	None	None	None	None	None	None
	Rayville	John H. Hooks Jr. Memorial	None	None	None	None	None	None
	Reserve	St. John the Baptist Parish	Low	Low	Low	Low	None	None
	Ruston	Ruston Regional	High	Medium	Low	Low	Low	Low
	Springhill	Springhill	None	None	None	None	None	Low
	St. Joseph	Tensas Parish	Low	Medium	Low	Low	Low	Low
	Sulphur	Southland Field	Low	Low	None	Low	None	None
	Tallulah	Scott	None	Low	None	None	None	None
	Tallulah/Vicksburg, MS	Vicksburg Tallulah Regional	None	Low	None	None	None	Low
	Thibodaux	Thibodaux Municipal	None	None	None	None	None	None
	Vidalia	Concordia Parish	Low	Medium	Low	Low	Low	Low
	Vivian	Vivian	None	None	None	None	None	None
	Welsh	Welsh	None	None	None	None	None	None
	Winnfield	David G. Joyce	Low	None	None	None	None	None
	Winnsboro	Winnsboro Municipal	None	None	None	None	None	None
	Woodworth	Woodworth	High	None	None	None	None	None

Source: Airport Inventory & Data Survey

**Table A-33: Airport Funding**

	Associated City	Airport	Does the airport receive monies from local sponsor?*	Is there an annual allotment for operations?	Annual allotment	Does the airport receive monies from local sponsor for capital projects?	How much was allocated to the airport last year?
<b>Primary Commercial - Medium Hub</b>							
	New Orleans	Louis Armstrong New Orleans International	No	No	\$ 0	No	\$ 0
<b>Primary Commercial - Small Hub</b>							
	Baton Rouge	Baton Rouge Metropolitan, Ryan Field	No	No	\$ 0	No	\$ 0
<b>Primary Commercial - Non-Hub</b>							
	Alexandria	England Airpark/Alexandria International Airpark	Yes	Yes	No response	Yes	\$5,660,000
	Lafayette	Lafayette Regional	Yes	Yes	\$2,711,513	No	\$ 0
	Lake Charles	Lake Charles Regional	Yes	Yes	\$280,000	Yes	\$600,000
	Monroe	Monroe Regional	No	No	\$ 0	Yes	\$10,000
	Shreveport	Shreveport Regional	No response	No response	No response	No response	No response
<b>Reliever</b>							
	New Orleans	Lakefront	Yes	No response	\$300,000	Yes	\$300,000

Appendix

Associated City	Airport	Does the airport receive monies from local sponsor?*	Is there an annual allotment for operations?	Annual allotment	Does the airport receive monies from local sponsor for capital projects?	How much was allocated to the airport last year?
Shreveport	Shreveport Downtown	No	No	\$ 0	No	\$ 0
Slidell	Slidell	Yes	Yes	\$65,000	Yes	\$10,000
<b>General Aviation</b>						
Abbeville	Abbeville Chris Crusta Memorial	No	No	\$ 0	No	\$ 0
Alexandria	Esler Regional	No	No	\$ 0	No	\$ 0
Arcadia	Arcadia-Bienville Parish	No response	No response	No response	No response	No response
Bastrop	Morehouse Memorial	No	No	\$ 0	No	\$ 0
Bogalusa	George R. Carr Memorial Air Field	Yes	Yes	\$60,000	Yes	\$20,000
Bunkie	Bunkie Municipal	Yes	Yes	\$25,000	Yes	\$5,000
Columbia	Columbia	Yes	No	\$8,000	No	\$ 0
Coushatta	The Red River	No response	No response	No response	No response	No response
Covington	St. Tammany Regional	Yes	Yes	\$65,317	No	\$ 0
Crowley	Le Gros Memorial	Yes	Yes	\$100,000	Yes	\$65,000
De Quincy	De Quincy Industrial Airpark	Yes	Yes	\$5,000	No	\$ 0
De Ridder	Beauregard Regional	No	No	\$ 0	No	\$ 0
Delhi	Delhi Municipal	No	No	\$ 0	No	\$ 0
Eunice	Eunice	Yes	Yes	No response	Yes	No response
Farmerville	Union Parish	Yes	Yes	\$1,700	No response	No response
Franklinton	Franklinton	Yes	No	\$1,500	No	\$ 0
Galliano	South Lafourche Leonard Miller Jr.	No	No	\$ 0	Yes	\$620,093
Gonzales	Louisiana Regional	No	Yes	No response	No	\$ 0
Hammond	Hammond Northshore Regional	Yes	Yes	\$330,000	Yes	\$10,000
Homer	Homer Municipal	Yes	No response	\$2,000	Yes	\$2,000
Houma	Houma-Terrebonne	No	No	\$ 0	No	\$ 0
Jeanerette	Le Maire Memorial	No response	No response	No response	No response	No response
Jena	Jena	Yes	Yes	\$12,000	No	\$ 0
Jennings	Jennings	Yes	No response	No response	No response	No response
Jonesboro	Jonesboro	Yes	Yes	\$5,000	Yes	\$20,000
Jonesville	Jonesville	No	No	\$ 0	No	\$ 0
Lake Charles	Chennault International	No	No	\$ 0	No	\$ 0
Lake Providence	Byerley	No	No	\$ 0	No	\$ 0
Leesville	Leesville	Yes	Yes	No response	No	\$ 0
Mansfield	C.E. "Rusty" Williams	No	No	\$ 0	No	\$ 0
Many	Hart	Yes	Yes	\$50,000	Yes	\$50,000
Marksville	Marksville Municipal	Yes	Yes	\$1,800	No	\$ 0
Minden	Minden	Yes	Yes	No response	Yes	\$200,000

Appendix

Associated City	Airport	Does the airport receive monies from local sponsor?*	Is there an annual allotment for operations?	Annual allotment	Does the airport receive monies from local sponsor for capital projects?	How much was allocated to the airport last year?
Natchitoches	Natchitoches Regional	Yes	Yes	\$50,000	Yes	\$125,000
New Iberia	Acadiana Regional	No	No response	\$ 0	Yes	\$150,000
New Roads	False River Regional	Yes	No response	\$75,000	No	\$ 0
Oak Grove	Kelly	No response	Yes	No response	No response	No response
Oakdale	Allen Parish	Yes	No	\$42,000	Yes	\$30,000
Olla	Olla	No	No	\$ 0	No	\$ 0
Opelousas	St. Landry Parish-Ahart Field	Yes	Yes	No response	No	\$ 0
Patterson	Harry P. Williams Memorial	Yes	Yes	\$25,000	Yes	\$20,000
Pineville	Pineville Municipal	Yes	No response	No response	Yes	No response
Pollock	Pollock Municipal	No	No	\$ 0	No	\$ 0
Rayville	John H. Hooks Jr. Memorial	Yes	Yes	\$7,750	Yes	\$ 0
Reserve	St. John the Baptist Parish	Yes	Yes	No response	Yes	\$50,000
Ruston	Ruston Regional	Yes	Yes	\$20,000	Yes	\$20,000
Springhill	Springhill	No	Yes	No response	No	\$36,500
St. Joseph	Tensas Parish	Yes	No	Varies	Yes	\$7,000
Sulphur	Southland Field	Yes	Yes	\$200,000	Yes	\$250,000
Tallulah	Scott	No	No	\$ 0	No	\$ 0
Tallulah/Vicksburg, MS	Vicksburg Tallulah Regional	Yes	Yes	\$120,000	Yes	\$ 0
Thibodaux	Thibodaux Municipal	No response	No response	No response	No response	No response
Vidalia	Concordia Parish	Yes	Yes	\$13,500	No	\$ 0
Vivian	Vivian	Yes	Yes	\$5,000	Yes	Varies
Welsh	Welsh	No	No	\$ 0	No	\$ 0
Winnfield	David G. Joyce	Yes	Yes	No response	No response	No response
Winnsboro	Winnsboro Municipal	Yes	No	No response	Yes	No response
Woodworth	Woodworth	No response	No response	No response	No response	No response

\* DOTD Aviation's priority program gives a higher priority score to local sponsors that financially support projects.

Source: Airport Inventory & Data Survey

**Table A-34: Louisiana Airports Ranked by Total Role Analysis Score**

Associated City	Airport	Total Role Analysis Score
Baton Rouge	Baton Rouge Metropolitan, Ryan Field	95
Lafayette	Lafayette Regional	94
Alexandria	England Airpark/Alexandria International Airpark	89
Lake Charles	Lake Charles Regional	88
Shreveport	Shreveport Regional	87
Monroe	Monroe Regional	85
New Orleans	Louis Armstrong New Orleans International	84
New Orleans	Lakefront	71
Hammond	Hammond Northshore Regional	69
Lake Charles	Chennault International	68
Shreveport	Shreveport Downtown	67
Houma	Houma-Terrebonne	66
New Iberia	Acadiana Regional	64
Slidell	Slidell	59
Jennings	Jennings	56
New Roads	False River Regional	56
Patterson	Harry P. Williams Memorial	56
Gonzales	Louisiana Regional	55
Ruston	Ruston Regional	55
Galliano	South Lafourche Leonard Miller Jr.	53
Natchitoches	Natchitoches Regional	53
Abbeville	Abbeville Chris Crusta Memorial	52
Bogalusa	George R. Carr Memorial Air Field	51
De Ridder	Beauregard Regional	51
Alexandria	Esler Regional	50
Opelousas	St. Landry Parish-Ahart Field	50
Sulphur	Southland Field	50
Minden	Minden	47
Reserve	St. John the Baptist Parish	47
Tallulah/Vicksburg, MS	Vicksburg Tallulah Regional	47
Vidalia	Concordia Parish	47
Eunice	Eunice	46
Leesville	Leesville	46
Oakdale	Allen Parish	46
Crowley	Le Gros Memorial	45
Winnsboro	Winnsboro Municipal	44
Many	Hart	43
Covington	St. Tammany Regional	42
Springhill	Springhill	42
Bastrop	Morehouse Memorial	41
De Quincy	De Quincy Industrial Airpark	41
Farmerville	Union Parish	41
Rayville	John H. Hooks Jr. Memorial	41
Vivian	Vivian	39

Associated City	Airport	Total Role Analysis Score
Marksville	Marksville Municipal	38
Oak Grove	Kelly	38
Thibodaux	Thibodaux Municipal	38
Pineville	Pineville Municipal	37
Jonesboro	Jonesboro	36
Jena	Jena	35
Mansfield	C.E. "Rusty" Williams	34
Coushatta	The Red River	32
Homer	Homer Municipal	31
Jeanerette	Le Maire Memorial	31
Winnfield	David G. Joyce	31
Jonesville	Jonesville	30
St. Joseph	Tensas Parish	29
Welsh	Welsh	27
Bunkie	Bunkie Municipal	26
Delhi	Delhi Municipal	26
Lake Providence	Byerley	26
Tallulah	Scott	26
Woodworth	Woodworth	25
Columbia	Columbia	21
Franklinton	Franklinton	21
Arcadia	Arcadia-Bienville Parish	19
Pollock	Pollock Municipal	16
Olla	Olla	14

Source: CDM Smith

**Table A-35: Louisiana Airport Roles**

Associated City	Airport
<b>Commercial Service Airports</b>	
Alexandria	England Airpark/Alexandria International Airpark
Baton Rouge	Baton Rouge Metropolitan, Ryan Field
Lafayette	Lafayette Regional
Lake Charles	Lake Charles Regional
Monroe	Monroe Regional
New Orleans	Louis Armstrong New Orleans International
Shreveport	Shreveport Regional
<b>Level 1 Airports</b>	
Hammond	Hammond Northshore Regional
Houma	Houma-Terrebonne
Lake Charles	Chennault International
New Iberia	Acadiana Regional
New Orleans	Lakefront
Shreveport	Shreveport Downtown
<b>Level 2 Airports</b>	
Abbeville	Abbeville Chris Crusta Memorial
Alexandria	Esler Regional

Associated City	Airport
Bogalusa	George R. Carr Memorial Air Field
De Ridder	Beauregard Regional
Galliano	South Lafourche Leonard Miller Jr.
Gonzales	Louisiana Regional
Jennings	Jennings
Minden	Minden
Natchitoches	Natchitoches Regional
New Roads	False River Regional
Opelousas	St. Landry Parish-Ahart Field
Patterson	Harry P. Williams Memorial
Reserve	St. John the Baptist Parish
Ruston	Ruston Regional
Slidell	Slidell
Sulphur	Southland Field
Tallulah/Vicksburg, MS	Vicksburg Tallulah Regional
Vidalia	Concordia Parish
<b>Level 3 Airports</b>	
Bastrop	Morehouse Memorial
Coushatta	The Red River
Covington	St. Tammany Regional
Crowley	Le Gros Memorial
De Quincy	De Quincy Industrial Airpark
Eunice	Eunice
Farmerville	Union Parish
Jena	Jena
Jonesboro	Jonesboro
Leesville	Leesville
Mansfield	C.E. "Rusty" Williams
Many	Hart
Marksville	Marksville Municipal
Oak Grove	Kelly
Oakdale	Allen Parish
Pineville	Pineville Municipal
Rayville	John H. Hooks Jr. Memorial
Springhill	Springhill
Thibodaux	Thibodaux Municipal
Vivian	Vivian
Winnsboro	Winnsboro Municipal
<b>Level 4 Airports</b>	
Arcadia	Arcadia-Bienville Parish
Bunkie	Bunkie Municipal
Columbia	Columbia
Delhi	Delhi Municipal
Franklinton	Franklinton
Homer	Homer Municipal
Jeanerette	Le Maire Memorial
Jonesville	Jonesville

Associated City	Airport
Lake Providence	Byerley
Olla	Olla
Pollock	Pollock Municipal
St. Joseph	Tensas Parish
Tallulah	Scott
Welsh	Welsh
Winnfield	David G. Joyce
Woodworth	Woodworth

Source: CDM Smith

**Table A-36: Alexandria International Airport Historic and Projected Enplanements**

Historic	Enplanements	% Growth
2001	128,947	
2002	103,839	-19.5%
2003	98,006	-5.6%
2004	123,038	25.5%
2005	128,220	4.2%
2006	122,440	-4.5%
2007	133,607	9.1%
2008	124,127	-7.1%
2009	134,932	8.7%
2010	140,911	4.4%
2011	154,342	9.5%
<b>AAGR 2001-2011</b>		<b>1.8%</b>
Projected	Enplanements	% Growth
2011	154,342	
2018	165,484	7.2%
2023	178,023	7.6%
2033	206,789	16.2%
2043	240,391	16.2%
<b>AAGR 2011-2043</b>		<b>1.4%</b>

Source: FAA Terminal Area Forecast, CDM Smith

**Table A-37: Baton Rouge Metropolitan Airport Historic and Projected Enplanements**

Year	Enplanements	% Growth
2001	388,845	
2002	349,899	-10.0%
2003	360,795	3.1%
2004	363,191	0.7%
2005	431,630	18.8%
2006	586,986	36.0%
2007	479,082	-18.4%
2008	435,617	-9.1%
2009	354,024	-18.7%
2010	367,335	3.8%
2011	397,321	8.2%
<b>AAGR 2001-2011</b>		<b>0.2%</b>
Projected	Enplanements	% Growth
2011	397,321	
2018	426,005	7.2%
2023	458,283	7.6%
2033	532,335	16.2%
2043	618,836	16.2%
<b>AAGR 2011-2043</b>		<b>1.4%</b>

Source: FAA Terminal Area Forecast, CDM Smith

**Table A-38: Lafayette Regional Airport Historic and Projected Enplanements**

Year	Enplanements	% Growth
2001	180,026	
2002	154,951	-13.9%
2003	150,856	-2.6%
2004	162,283	7.6%
2005	167,535	3.2%
2006	205,140	22.4%
2007	214,872	4.7%
2008	212,314	-1.2%
2009	203,785	-4.0%
2010	216,092	6.0%
2011	221,035	2.3%
<b>AAGR 2001-2011</b>		<b>2.1%</b>
Projected	Enplanements	% Growth
2011	221,035	
2018	236,992	7.2%
2023	254,949	7.6%
2033	296,145	16.2%
2043	344,267	16.2%
<b>AAGR 2011-2043</b>		<b>1.4%</b>

Source: FAA Terminal Area Forecast, CDM Smith

**Table A-39: Lake Charles Regional Airport Historic and Projected Enplanements**

Year	Enplanements	% Growth
2001	48,847	
2002	43,730	-10.5%
2003	41,889	-4.2%
2004	42,598	1.7%
2005	49,291	15.7%
2006	50,781	3.0%
2007	53,690	5.7%
2008	48,596	-9.5%
2009	50,593	4.1%
2010	62,727	24.0%
2011	63,987	2.0%
<b>AAGR 2001-2011</b>		<b>2.7%</b>
Projected	Enplanements	% Growth
2011	63,987	
2018	68,606	7.2%
2023	73,805	7.6%
2033	85,730	16.2%
2043	99,661	16.2%
<b>AAGR 2011-2043</b>		<b>1.4%</b>

Source: FAA Terminal Area Forecast, CDM Smith

**Table A-40: Monroe Regional Airport Historic and Projected Enplanements**

Year	Enplanements	% Growth
2001	104,362	
2002	88,656	-15.0%
2003	100,425	13.3%
2004	114,370	13.9%
2005	112,694	-1.5%
2006	110,902	-1.6%
2007	110,162	-0.7%
2008	93,106	-15.5%
2009	86,496	-7.1%
2010	94,708	9.5%
2011	106,544	12.5%
<b>AAGR 2001-2011</b>		<b>0.2%</b>
Projected	Enplanements	% Growth
2011	106,544	
2018	114,236	7.2%
2023	122,891	7.6%
2033	142,749	16.2%
2043	165,945	16.2%
<b>AAGR 2011-2043</b>		<b>1.4%</b>

Source: FAA Terminal Area Forecast, CDM Smith

**Table A-41: Louis Armstrong New Orleans International Airport Historic and Projected Enplanements**

Year	Enplanements	% Growth
2001	4,952,820	
2002	4,562,315	-7.9%
2003	4,593,475	0.7%
2004	4,785,475	4.2%
2005	4,741,333	-0.9%
2006	2,663,723	-43.8%
2007	3,671,647	37.8%
2008	3,996,066	8.8%
2009	3,879,231	-2.9%
2010	4,000,710	3.1%
2011	4,218,110	5.4%
<b>AAGR 2001-2011</b>		<b>-1.6%</b>
Projected	Enplanements	% Growth
2011	4,218,110	
2018	4,522,625	7.2%
2023	4,865,307	7.6%
2033	5,651,470	16.2%
2043	6,569,799	16.2%
<b>AAGR 2011-2043</b>		<b>1.4%</b>

Source: FAA Terminal Area Forecast, CDM Smith

**Table A-42: Shreveport Regional Airport Historic and Projected Enplanements**

Year	Enplanements	% Growth
2001	331,338	
2002	282,098	-14.9%
2003	289,869	2.8%
2004	300,763	3.8%
2005	315,971	5.1%
2006	309,605	-2.0%
2007	305,018	-1.5%
2008	295,942	-3.0%
2009	251,703	-14.9%
2010	231,786	-7.9%
2011	254,815	9.9%
<b>AAGR 2001-2011</b>	<b>-2.6%</b>	
Projected	Enplanements	% Growth
2011	254,815	
2018	273,211	7.2%
2023	293,912	7.6%
2033	341,404	16.2%
2043	396,880	16.2%
<b>AAGR 2011-2043</b>		<b>1.4%</b>

Source: FAA Terminal Area Forecast, CDM Smith

**Table A-43: Comparison of Historic & Projected Enplanements by Airport**

Historic	AEX	BTR	LCH	LFT	MLU	MSY	SHV
2001	128,947	388,845	48,847	180,026	104,362	4,952,820	331,338
2002	103,839	349,899	43,730	154,951	88,656	4,562,315	282,098
2003	98,006	360,795	41,889	150,856	100,425	4,593,475	289,869
2004	123,038	363,191	42,598	162,283	114,370	4,785,475	300,763
2005	128,220	431,630	49,291	167,535	112,694	4,741,333	315,971
2006	122,440	586,986	50,781	205,140	110,902	2,663,723	309,605
2007	133,607	479,082	53,690	214,872	110,162	3,671,647	305,018
2008	124,127	435,617	48,596	212,314	93,106	3,996,066	295,942
2009	134,932	354,024	50,593	203,785	86,496	3,879,231	251,703
2010	140,911	367,335	62,727	216,092	94,708	4,000,710	231,786
2011	154,342	397,321	63,987	221,035	106,544	4,218,110	254,815
<b>AAGR 2001-2011</b>	<b>1.8%</b>	<b>0.2%</b>	<b>2.7%</b>	<b>2.1%</b>	<b>0.2%</b>	<b>-1.6%</b>	<b>-2.6%</b>
Projected	AEX	BTR	LCH	LFT	MLU	MSY	SHV
2011	154,342	397,321	63,987	221,035	106,544	4,218,110	254,815
2018	165,484	426,005	68,606	236,992	114,236	4,522,625	273,211
2023	178,023	458,283	73,805	254,949	122,891	4,865,307	293,912
2033	206,789	532,335	85,730	296,145	142,749	5,651,470	341,404
2043	240,391	618,836	99,661	344,267	165,945	6,569,799	396,880
<b>AAGR 2011-2043</b>	<b>1.4%</b>	<b>1.4%</b>	<b>1.4%</b>	<b>1.4%</b>	<b>1.4%</b>	<b>1.4%</b>	<b>1.4%</b>

Source: FAA Terminal Area Forecast, CDM Smith

**Table A-44: Total Statewide Enplanements by Year**

Historic	Enplanements	% Growth
2001	6,135,185	
2002	5,585,488	-9.0%
2003	5,635,315	0.9%
2004	5,891,718	4.5%
2005	5,946,674	0.9%
2006	4,049,577	-31.9%
2007	4,968,078	22.7%
2008	5,205,768	4.8%
2009	4,960,764	-4.7%
2010	5,114,269	3.1%
2011	5,416,154	5.9%
<b>AAGR 2001-2011</b>		<b>-1.2%</b>
Projected	Enplanements	% Growth
2011	5,416,154	
2018	5,807,159	7.2%
2023	6,247,170	7.6%
2033	7,256,622	16.2%
2043	8,435,779	16.2%
<b>AAGR 2011-2043</b>		<b>1.4%</b>

Source: FAA Terminal Area Forecast, CDM Smith

Table A-45: General Aviation Based Aircraft Projection Bottom-Up Methodology

Associated City	Airport Name	2001 BA	2011 BA	Historic AAGR	Statewide AAGR 1991-2011	Forecast AAGR	2011	2018	2023	2033	2043
Abbeville	Abbeville Chris Crusta Memorial	67	59	-0.63%	1.03%	0.00%	59	59	59	59	59
Alexandria	Alexandria International	41	49	0.90%	1.03%	0.46%	49	51	52	54	57
Alexandria	Esler Regional	27	34	1.16%	1.03%	0.92%	34	36	38	42	46
Arcadia	Arcadia-Bienville Parish	4	5	1.12%	1.03%	0.92%	5	5	6	6	7
Bastrop	Morehouse Memorial	32	16	-3.41%	1.03%	0.00%	16	16	16	16	16
Baton Rouge	Baton Rouge Metropolitan, Ryan Field	155	159	0.13%	1.03%	0.46%	159	164	168	176	184
Bogalusa	George R. Carr Memorial Air Field	36	22	-2.43%	1.03%	0.00%	22	22	22	22	22
Bunkie	Bunkie Municipal	11	12	0.44%	1.03%	0.46%	12	12	13	13	14
Columbia	Columbia	12	12	0.00%	1.03%	0.00%	12	12	12	12	12
Coushatta	The Red River	4	4	0.00%	1.03%	0.00%	4	4	4	4	4
Covington	St. Tammany Regional	14	17	0.98%	1.03%	0.46%	17	18	18	19	20
Crowley	Le Gros Memorial	4	10	4.69%	1.03%	1.49%	10	11	12	14	16
De Quincy	De Quincy Industrial Airpark	14	16	0.67%	1.03%	0.46%	16	17	17	18	19
De Ridder	Beauregard Regional	21	23	0.46%	1.03%	0.46%	23	24	24	25	27
Delhi	Delhi Municipal	2	3	2.05%	1.03%	1.49%	3	3	4	4	5
Eunice	Eunice	21	20	-0.24%	1.03%	0.00%	20	20	20	20	20
Farmerville	Union Parish	19	19	0.00%	1.03%	0.00%	19	19	19	19	19
Franklinton	Franklinton	3	4	1.45%	1.03%	0.92%	4	4	4	5	5
Galliano	South Lafourche Leonard Miller Jr.	7	31	7.72%	1.03%	2.05%	31	36	40	48	59
Gonzales	Louisiana Regional	57	108	3.25%	1.03%	1.49%	108	120	129	150	173
Hammond	Hammond Northshore Regional	86	137	2.36%	1.03%	1.49%	137	152	164	190	220
Homer	Homer Municipal	4	4	0.00%	1.03%	0.00%	4	4	4	4	4
Houma	Houma-Terrebonne	82	136	2.56%	1.03%	1.49%	136	151	162	188	218
Jeanerette	Le Maire Memorial	5	6	0.92%	1.03%	0.46%	6	6	6	7	7
Jena	Jena	4	8	3.53%	1.03%	1.49%	8	9	10	11	13
Jennings	Jennings	36	41	0.65%	1.03%	0.46%	41	42	43	45	48
Jonesboro	Jonesboro	1	9	11.61%	1.03%	2.05%	9	10	11	14	17
Jonesville	Jonesville	11	7	-2.23%	1.03%	0.00%	7	7	7	7	7
Lafayette	Lafayette Regional	146	143	-0.10%	1.03%	0.00%	143	143	143	143	143
Lake Charles	Chennault International	55	29	-3.15%	1.03%	0.00%	29	29	29	29	29
Lake Charles	Lake Charles Regional	86	234	5.13%	1.03%	2.05%	234	270	299	366	449
Lake Providence	Byerley	8	4	-3.41%	1.03%	0.00%	4	4	4	4	4
Leesville	Leesville	24	18	-1.43%	1.03%	0.00%	18	18	18	18	18
Mansfield	C.E. "Rusty" Williams	9	10	0.53%	1.03%	0.46%	10	10	11	11	12
Many	Hart	10	3	-5.84%	1.03%	0.00%	3	3	3	3	3
Marksville	Marksville Municipal	10	10	0.00%	1.03%	0.00%	10	10	10	10	10

Appendix

Associated City	Airport Name	2001 BA	2011 BA	Historic AAGR	Statewide AAGR 1991-2011	Forecast AAGR	2011	2018	2023	2033	2043
Minden	Minden	12	16	1.45%	1.03%	0.92%	16	17	18	20	21
Monroe	Monroe Regional	97	93	-0.21%	1.03%	0.00%	93	93	93	93	93
Natchitoches	Natchitoches Regional	28	39	1.67%	1.03%	0.92%	39	42	44	48	52
New Iberia	Acadiana Regional	36	46	1.23%	1.03%	0.92%	46	49	51	56	62
New Orleans	Louis Armstrong New Orleans International	27	18	-2.01%	1.03%	0.00%	18	18	18	18	18
New Orleans	Lakefront	251	110	-4.04%	1.03%	0.00%	110	110	110	110	110
New Roads	False River Regional	25	34	1.55%	1.03%	0.92%	34	36	38	42	46
Oak Grove	Kelly	2	6	5.65%	1.03%	2.05%	6	7	8	9	12
Oakdale	Allen Parish	3	10	6.20%	1.03%	2.05%	10	12	13	16	19
Olla	Olla	1	1	0.00%	1.03%	0.00%	1	1	1	1	1
Opelousas	St Landry Parish-Ahart Field	42	33	-1.20%	1.03%	0.00%	33	33	33	33	33
Patterson	Harry P. Williams Memorial	90	39	-4.10%	1.03%	0.00%	39	39	39	39	39
Pineville	Pineville Municipal	31	32	0.16%	1.03%	0.46%	32	33	34	35	37
Pollock	Pollock Municipal	0	0		1.03%	0.00%	0	0	0	0	0
Rayville	John H. Hooks Jr. Memorial	21	27	1.26%	1.03%	0.92%	27	29	30	33	36
Reserve	St. John the Baptist Parish	27	77	5.38%	1.03%	2.05%	77	89	98	120	148
Ruston	Ruston Regional	58	55	-0.27%	1.03%	0.00%	55	55	55	55	55
Shreveport	Shreveport Downtown	198	246	1.09%	1.03%	0.92%	246	262	275	301	330
Shreveport	Shreveport Regional	72	64	-0.59%	1.03%	0.00%	64	64	64	64	64
Slidell	Slidell	100	103	0.15%	1.03%	0.46%	103	106	109	114	119
Springhill	Springhill	6	7	0.77%	1.03%	0.46%	7	7	7	8	8
St. Joseph	Tensas Parish	6	6	0.00%	1.03%	0.00%	6	6	6	6	6
Sulphur	Southland Field	34	30	-0.62%	1.03%	0.00%	30	30	30	30	30
Tallulah	Scott	24	24	0.00%	1.03%	0.00%	24	24	24	24	24
Tallulah/Vicksburg, MS	Vicksburg Tallulah Regional	21	24	0.67%	1.03%	0.46%	24	25	25	27	28
Thibodaux	Thibodaux Municipal	4	8	3.53%	1.03%	1.49%	8	9	10	11	13
Vidalia	Concordia Parish	10	33	6.15%	1.03%	2.05%	33	38	42	52	63
Vivian	Vivian	9	13	1.86%	1.03%	0.92%	13	14	15	16	17
Welsh	Welsh	20	20	0.00%	1.03%	0.00%	20	20	20	20	20
Winnfield	David G. Joyce	3	4	1.45%	1.03%	0.92%	4	4	4	5	5
Winnsboro	Winnsboro Municipal	24	29	0.95%	1.03%	0.46%	29	30	31	32	34
Woodworth	Woodworth	6	7	0.77%	1.03%	0.46%	7	7	7	8	8
<b>LOUISIANA TOTAL</b>		<b>2,416</b>	<b>2,676</b>	<b>1.03%</b>	<b>Projected Total AAGR</b>	<b>0.87%</b>	<b>2,676</b>	<b>2,830</b>	<b>2,953</b>	<b>3,222</b>	<b>3,537</b>

Source: FAA Terminal Area Forecast, CDM Smith

**Table A-46: General Aviation Based Aircraft Projection Top-Down Methodology**

Associated City	Airport Name	LA TAF AAGR 2011- 2040	2011	2018	2023	2033	2043
Abbeville	Abbeville Chris Crusta Memorial	0.57%	59	61	63	67	71
Alexandria	Alexandria International	0.57%	49	51	52	56	59
Alexandria	Esler Regional	0.57%	34	35	36	39	41
Arcadia	Arcadia-Bienville Parish	0.57%	5	5	5	6	6
Bastrop	Morehouse Memorial	0.57%	16	17	17	18	19
Baton Rouge	Baton Rouge Metropolitan, Ryan Field	0.57%	159	165	170	180	191
Bogalusa	George R. Carr Memorial Air Field	0.57%	22	23	24	25	26
Bunkie	Bunkie Municipal	0.57%	12	12	13	14	14
Columbia	Columbia	0.57%	12	12	13	14	14
Coushatta	The Red River	0.57%	4	4	4	5	5
Covington	St. Tammany Regional	0.57%	17	18	18	19	20
Crowley	Le Gros Memorial	0.57%	10	10	11	11	12
De Quincy	De Quincy Industrial Airpark	0.57%	16	17	17	18	19
De Ridder	Beauregard Regional	0.57%	23	24	25	26	28
Delhi	Delhi Municipal	0.57%	3	3	3	3	4
Eunice	Eunice	0.57%	20	21	21	23	24
Farmerville	Union Parish	0.57%	19	20	20	22	23
Franklinton	Franklinton	0.57%	4	4	4	5	5
Galliano	South Lafourche Leonard Miller Jr.	0.57%	31	32	33	35	37
Gonzales	Louisiana Regional	0.57%	108	112	116	122	130
Hammond	Hammond Northshore Regional	0.57%	137	143	147	155	164
Homer	Homer Municipal	0.57%	4	4	4	5	5
Houma	Houma-Terrebonne	0.57%	136	142	146	154	163
Jeanerette	Le Maire Memorial	0.57%	6	6	6	7	7
Jena	Jena	0.57%	8	8	9	9	10
Jennings	Jennings	0.57%	41	43	44	46	49
Jonesboro	Jonesboro	0.57%	9	9	10	10	11
Jonesville	Jonesville	0.57%	7	7	7	8	8
Lafayette	Lafayette Regional	0.57%	143	149	153	162	172
Lake Charles	Chennault International	0.57%	29	30	31	33	35
Lake Charles	Lake Charles Regional	0.57%	234	244	251	265	281
Lake Providence	Byerley	0.57%	4	4	4	5	5
Leesville	Leesville	0.57%	18	19	19	20	22
Mansfield	C.E. "Rusty" Williams	0.57%	10	10	11	11	12
Many	Hart	0.57%	3	3	3	3	4
Marksville	Marksville Municipal	0.57%	10	10	11	11	12
Minden	Minden	0.57%	16	17	17	18	19
Monroe	Monroe Regional	0.57%	93	97	100	105	112
Natchitoches	Natchitoches Regional	0.57%	39	41	42	44	47
New Iberia	Acadiana Regional	0.57%	46	48	49	52	55
New Orleans	Louis Armstrong New Orleans International	0.57%	18	19	19	20	22
New Orleans	Lakefront	0.57%	110	114	118	125	132
New Roads	False River Regional	0.57%	34	35	36	39	41
Oak Grove	Kelly	0.57%	6	6	6	7	7
Oakdale	Allen Parish	0.57%	10	10	11	11	12
Olla	Olla	0.57%	1	1	1	1	1
Opelousas	St Landry Parish-Ahart Field	0.57%	33	34	35	37	40
Patterson	Harry P. Williams Memorial	0.57%	39	41	42	44	47
Pineville	Pineville Municipal	0.57%	32	33	34	36	38
Pollock	Pollock Municipal	0.57%	0	1	2	2	2

Associated City	Airport Name	LA TAF AAGR 2011- 2040	2011	2018	2023	2033	2043
Rayville	John H. Hooks Jr. Memorial	0.57%	27	28	29	31	32
Reserve	St. John the Baptist Parish	0.57%	77	80	82	87	92
Ruston	Ruston Regional	0.57%	55	57	59	62	66
Shreveport	Shreveport Downtown	0.57%	246	256	263	279	295
Shreveport	Shreveport Regional	0.57%	64	67	69	73	77
Slidell	Slidell	0.57%	103	107	110	117	124
Springhill	Springhill	0.57%	7	7	7	8	8
St. Joseph	Tensas Parish	0.57%	6	6	6	7	7
Sulphur	Southland Field	0.57%	30	31	32	34	36
Tallulah	Scott	0.57%	24	25	26	27	29
Tallulah/Vicksburg, MS	Vicksburg Tallulah Regional	0.57%	24	25	26	27	29
Thibodaux	Thibodaux Municipal	0.57%	8	8	9	9	10
Vidalia	Concordia Parish	0.57%	33	34	35	37	40
Vivian	Vivian	0.57%	13	14	14	15	16
Welsh	Welsh	0.57%	20	21	21	23	24
Winnfield	David G. Joyce	0.57%	4	4	4	5	5
Winnsboro	Winnsboro Municipal	0.57%	29	30	31	33	35
Woodworth	Woodworth	0.57%	7	7	7	8	8
<b>LOUISIANA TOTAL</b>		<b>0.57%</b>	<b>2,676</b>	<b>2,780</b>	<b>2,861</b>	<b>3,033</b>	<b>3,214</b>

Source: FAA Terminal Area Forecast, CDM Smith

**Table A-47: General Aviation Based Aircraft Projection Socioeconomic - Population**

Associated City	Airport Name	Parish	AAGR 2011-2040	2011	2018	2023	2033	2043
Abbeville	Abbeville Chris Crusta Memorial	Vermilion	0.51%	59	61	63	66	69
Alexandria	Alexandria International	Rapides	0.36%	49	50	51	53	55
Alexandria	Esler Regional	Rapides	0.36%	34	35	36	37	38
Arcadia	Arcadia-Bienville Parish	Bienville	0.38%	5	5	5	5	6
Bastrop	Morehouse Memorial	Morehouse	-0.08%	16	16	16	16	16
Baton Rouge	Baton Rouge Metropolitan, Ryan Field	East Baton Rouge	1.09%	159	171	181	202	225
Bogalusa	George R. Carr Memorial Air Field	Washington	0.15%	22	22	22	23	23
Bunkie	Bunkie Municipal	Avoyelles	0.09%	12	12	12	12	12
Columbia	Columbia	Caldwell	0.30%	12	12	12	13	13
Coushatta	The Red River	Red River	0.09%	4	4	4	4	4
Covington	St. Tammany Regional	St. Tammany	1.70%	17	19	21	25	29
Crowley	Le Gros Memorial	Acadia	0.49%	10	10	11	11	12
De Quincy	De Quincy Industrial Airpark	Calcasieu	0.57%	16	17	17	18	19
De Ridder	Beauregard Regional	Beauregard	0.66%	23	24	25	27	28
Delhi	Delhi Municipal	Richland	-0.01%	3	3	3	3	3
Eunice	Eunice	Acadia	0.49%	20	21	21	22	23
Farmerville	Union Parish	Union	0.64%	19	20	21	22	23
Franklinton	Franklinton	Washington	0.15%	4	4	4	4	4
Galliano	South Lafourche Leonard Miller Jr.	Lafourche	0.49%	31	32	33	35	36
Gonzales	Louisiana Regional	Ascension	2.09%	108	125	138	170	209
Hammond	Hammond Northshore Regional	Tangipahoa	1.40%	137	151	162	186	213
Homer	Homer Municipal	Claiborne	0.20%	4	4	4	4	4
Houma	Houma-Terrebonne	Terrebonne	0.41%	136	140	143	149	155
Jeanerette	Le Maire Memorial	Iberia	0.82%	6	6	7	7	8
Jena	Jena	La Salle	0.21%	8	8	8	8	9
Jennings	Jennings	Jefferson Davis	0.23%	41	42	42	43	44
Jonesboro	Jonesboro	Jackson	0.15%	9	9	9	9	9
Jonesville	Jonesville	Catahoula	-0.18%	7	7	7	7	7
Lafayette	Lafayette Regional	Lafayette	1.19%	143	155	165	186	209
Lake Charles	Chennault International	Calcasieu	0.57%	29	30	31	33	35
Lake Charles	Lake Charles Regional	Calcasieu	0.57%	234	244	251	265	281
Lake Providence	Byerley	East Carroll	-0.51%	4	4	4	4	3
Leesville	Leesville	Vernon	0.33%	18	18	19	19	20
Mansfield	C.E. "Rusty" Williams	DeSoto	0.41%	10	10	11	11	11
Many	Hart	Sabine	0.36%	3	3	3	3	3
Marksville	Marksville Municipal	Avoyelles	0.09%	10	10	10	10	10

Appendix

Associated City	Airport Name	Parish	AAGR 2011-2040	2011	2018	2023	2033	2043
Minden	Minden	Webster	0.12%	16	16	16	16	17
Monroe	Monroe Regional	Ouachita	0.36%	93	95	97	101	104
Natchitoches	Natchitoches Regional	Natchitoches	0.32%	39	40	41	42	43
New Iberia	Acadiana Regional	Iberia	0.82%	46	49	51	55	60
New Orleans	Louis Armstrong New Orleans International	Jefferson	0.65%	18	19	19	21	22
New Orleans	Lakefront	Orleans	0.34%	110	113	115	118	122
New Roads	False River Regional	Pointe Coupee	0.09%	34	34	34	35	35
Oak Grove	Kelly	West Carroll	-0.09%	6	6	6	6	6
Oakdale	Allen Parish	Allen	0.45%	10	10	11	11	12
Olla	Olla	La Salle	0.21%	1	1	1	1	1
Opelousas	St Landry Parish-Ahart Field	St. Landry	0.43%	33	34	35	36	38
Patterson	Harry P. Williams Memorial	St. Mary	0.00%	39	39	39	39	39
Pineville	Pineville Municipal	Rapides	0.36%	32	33	33	35	36
Pollock	Pollock Municipal	Grant	1.05%	0	-	-	-	-
Rayville	John H. Hooks Jr. Memorial	Richland	-0.01%	27	27	27	27	27
Reserve	St. John the Baptist Parish	St. John The Baptist	0.48%	77	80	82	86	90
Ruston	Ruston Regional	Lincoln	0.47%	55	57	58	61	64
Shreveport	Shreveport Downtown	Bossier	1.33%	246	270	288	329	375
Shreveport	Shreveport Regional	Caddo	0.26%	64	65	66	68	70
Slidell	Slidell	St. Tammany	1.70%	103	116	126	149	177
Springhill	Springhill	Webster	0.12%	7	7	7	7	7
St. Joseph	Tensas Parish	Tensas	-0.22%	6	6	6	6	6
Sulphur	Southland Field	Calcasieu	0.57%	30	31	32	34	36
Tallulah	Scott	Madison	-0.35%	24	23	23	22	21
Tallulah/Vicksburg, MS	Vicksburg Tallulah Regional	Madison	-0.35%	24	23	23	22	21
Thibodaux	Thibodaux Municipal	Lafourche	0.49%	8	8	8	9	9
Vidalia	Concordia Parish	Concordia	-0.24%	33	32	32	31	31
Vivian	Vivian	Caddo	0.26%	13	13	13	14	14
Welsh	Welsh	Jefferson Davis	0.23%	20	20	21	21	22
Winnfield	David G. Joyce	Winn	0.17%	4	4	4	4	4
Winnsboro	Winnsboro Municipal	Franklin	-0.16%	29	29	28	28	28
Woodworth	Woodworth	Rapides	0.36%	7	7	7	8	8
<b>LOUISIANA TOTAL</b>			<b>0.76%</b>	<b>2,676</b>	<b>2,811</b>	<b>2,921</b>	<b>3,154</b>	<b>3,413</b>

Source: FAA Terminal Area Forecast, Woods & Poole Economics, CDM Smith

**Table A-48: General Aviation Based Aircraft Projection Socioeconomic – Parish Employment Growth**

Associated City	Airport Name	Parish	AAGR 2011-2040	2011	2018	2023	2033	2043
Abbeville	Abbeville Chris Crusta Memorial	Vermilion	0.96%	59	63	66	73	80
Alexandria	Alexandria International	Rapides	1.03%	49	53	55	61	68
Alexandria	Esler Regional	Rapides	1.03%	34	37	38	43	47
Arcadia	Arcadia-Bienville Parish	Bienville	1.16%	5	5	6	6	7
Bastrop	Morehouse Memorial	Morehouse	0.62%	16	17	17	18	20
Baton Rouge	Baton Rouge Metropolitan, Ryan Field	East Baton Rouge	1.35%	159	175	187	213	244
Bogalusa	George R. Carr Memorial Air Field	Washington	0.52%	22	23	23	25	26
Bunkie	Bunkie Municipal	Avoyelles	1.00%	12	13	14	15	16
Columbia	Columbia	Caldwell	0.97%	12	13	13	15	16
Coushatta	The Red River	Red River	1.01%	4	4	5	5	6
Covington	St. Tammany Regional	St. Tammany	1.88%	17	19	21	26	31
Crowley	Le Gros Memorial	Acadia	1.15%	10	11	11	13	14
De Quincy	De Quincy Industrial Airpark	Calcasieu	1.20%	16	17	18	21	23
De Ridder	Beauregard Regional	Beauregard	1.24%	23	25	27	30	34
Delhi	Delhi Municipal	Richland	1.04%	3	3	3	4	4
Eunice	Eunice	Acadia	1.15%	20	22	23	26	29
Farmerville	Union Parish	Union	0.81%	19	20	21	23	25
Franklinton	Franklinton	Washington	0.52%	4	4	4	4	5
Galliano	South Lafourche Leonard Miller Jr.	Lafourche	1.60%	31	35	37	44	51
Gonzales	Louisiana Regional	Ascension	2.20%	108	126	140	174	217
Hammond	Hammond Northshore Regional	Tangipahoa	1.59%	137	153	166	194	227
Homer	Homer Municipal	Claiborne	0.82%	4	4	4	5	5
Houma	Houma-Terrebonne	Terrebonne	0.79%	136	144	149	162	175
Jeanerette	Le Maire Memorial	Iberia	1.67%	6	7	7	9	10
Jena	Jena	La Salle	1.17%	8	9	9	10	12
Jennings	Jennings	Jefferson Davis	1.40%	41	45	48	56	64
Jonesboro	Jonesboro	Jackson	0.24%	9	9	9	9	10
Jonesville	Jonesville	Catahoula	0.60%	7	7	8	8	8
Lafayette	Lafayette Regional	Lafayette	1.22%	143	156	165	187	211
Lake Charles	Chennault International	Calcasieu	1.20%	29	32	33	38	43
Lake Charles	Lake Charles Regional	Calcasieu	1.20%	234	254	270	304	343
Lake Providence	Byerley	East Carroll	0.91%	4	4	4	5	5
Leesville	Leesville	Vernon	1.60%	18	20	22	26	30
Mansfield	C.E. "Rusty" Williams	DeSoto	0.82%	10	11	11	12	13
Many	Hart	Sabine	0.72%	3	3	3	4	4
Marksville	Marksville Municipal	Avoyelles	1.00%	10	11	11	12	14

Appendix

Associated City	Airport Name	Parish	AAGR 2011-2040	2011	2018	2023	2033	2043
Minden	Minden	Webster	0.94%	16	17	18	20	22
Monroe	Monroe Regional	Ouachita	1.08%	93	100	106	118	131
Natchitoches	Natchitoches Regional	Natchitoches	0.90%	39	42	43	48	52
New Iberia	Acadiana Regional	Iberia	1.67%	46	52	56	66	78
New Orleans	Louis Armstrong New Orleans International	Jefferson	0.93%	18	19	20	22	24
New Orleans	Lakefront	Orleans	0.59%	110	115	118	125	133
New Roads	False River Regional	Pointe Coupee	1.40%	34	37	40	46	53
Oak Grove	Kelly	West Carroll	0.70%	6	6	7	7	8
Oakdale	Allen Parish	Allen	1.08%	10	11	11	13	14
Olla	Olla	La Salle	1.17%	1	1	1	1	1
Opelousas	St Landry Parish-Ahart Field	St. Landry	1.12%	33	36	38	42	47
Patterson	Harry P. Williams Memorial	St. Mary	1.08%	39	42	44	49	55
Pineville	Pineville Municipal	Rapides	1.03%	32	34	36	40	44
Pollock	Pollock Municipal	Grant	1.59%	0	-	-	-	-
Rayville	John H. Hooks Jr. Memorial	Richland	1.04%	27	29	31	34	38
Reserve	St. John the Baptist Parish	St. John The Baptist	0.65%	77	81	83	89	95
Ruston	Ruston Regional	Lincoln	1.19%	55	60	63	71	80
Shreveport	Shreveport Downtown	Bossier	1.52%	246	273	295	343	399
Shreveport	Shreveport Regional	Caddo	0.74%	64	67	70	75	81
Slidell	Slidell	St. Tammany	1.88%	103	117	129	155	187
Springhill	Springhill	Webster	0.94%	7	7	8	9	9
St. Joseph	Tensas Parish	Tensas	0.85%	6	6	7	7	8
Sulphur	Southland Field	Calcasieu	1.20%	30	33	35	39	44
Tallulah	Scott	Madison	0.76%	24	25	26	28	31
Tallulah/Vicksburg, MS	Vicksburg Tallulah Regional	Madison	0.76%	24	25	26	28	31
Thibodaux	Thibodaux Municipal	Lafourche	1.60%	8	9	10	11	13
Vidalia	Concordia Parish	Concordia	0.97%	33	35	37	41	45
Vivian	Vivian	Caddo	0.74%	13	14	14	15	16
Welsh	Welsh	Jefferson Davis	1.40%	20	22	24	27	31
Winnfield	David G. Joyce	Winn	0.43%	4	4	4	4	5
Winnsboro	Winnsboro Municipal	Franklin	0.93%	29	31	32	36	39
Woodworth	Woodworth	Rapides	1.03%	7	8	8	9	10
<b>LOUISIANA TOTAL</b>			<b>1.23%</b>	<b>2,676</b>	<b>2,912</b>	<b>3,088</b>	<b>3,498</b>	<b>3,961</b>

Source: FAA Terminal Area Forecast, Woods & Poole Economics, CDM Smith

**Table A-49: General Aviation Based Aircraft Projection Socioeconomic – Per Capita Income Growth**

Associated City	Airport Name	Parish	AAGR 2011-2043	2011	2018	2023	2033	2043
Abbeville	Abbeville Chris Crusta Memorial	Vermilion	1.33%	59	65	69	79	90
Alexandria	Alexandria International	Rapides	1.61%	49	55	59	70	82
Alexandria	Esler Regional	Rapides	1.61%	34	38	41	48	57
Arcadia	Arcadia-Bienville Parish	Bienville	1.79%	5	6	6	7	9
Bastrop	Morehouse Memorial	Morehouse	1.44%	16	18	19	22	25
Baton Rouge	Baton Rouge Metropolitan, Ryan Field	East Baton Rouge	1.45%	159	176	189	218	252
Bogalusa	George R. Carr Memorial Air Field	Washington	1.91%	22	25	28	33	40
Bunkie	Bunkie Municipal	Avoyelles	1.43%	12	13	14	16	19
Columbia	Columbia	Caldwell	1.62%	12	13	15	17	20
Coushatta	The Red River	Red River	1.90%	4	5	5	6	7
Covington	St. Tammany Regional	St. Tammany	1.35%	17	19	20	23	26
Crowley	Le Gros Memorial	Acadia	1.56%	10	11	12	14	16
De Quincy	De Quincy Industrial Airpark	Calcasieu	1.48%	16	18	19	22	26
De Ridder	Beauregard Regional	Beauregard	1.54%	23	26	28	32	37
Delhi	Delhi Municipal	Richland	1.83%	3	3	4	4	5
Eunice	Eunice	Acadia	1.56%	20	22	24	28	33
Farmerville	Union Parish	Union	1.21%	19	21	22	25	28
Franklinton	Franklinton	Washington	1.91%	4	5	5	6	7
Galliano	South Lafourche Leonard Miller Jr.	Lafourche	1.54%	31	34	37	43	51
Gonzales	Louisiana Regional	Ascension	1.42%	108	119	128	147	169
Hammond	Hammond Northshore Regional	Tangipahoa	1.19%	137	149	158	178	200
Homer	Homer Municipal	Claiborne	1.71%	4	5	5	6	7
Houma	Houma-Terrebonne	Terrebonne	1.46%	136	150	162	187	216
Jeanerette	Le Maire Memorial	Iberia	1.87%	6	7	7	9	11
Jena	Jena	La Salle	1.84%	8	9	10	12	14
Jennings	Jennings	Jefferson Davis	2.06%	41	47	52	64	79
Jonesboro	Jonesboro	Jackson	1.02%	9	10	10	11	12
Jonesville	Jonesville	Catahoula	1.50%	7	8	8	10	11
Lafayette	Lafayette Regional	Lafayette	1.32%	143	157	167	191	218
Lake Charles	Chennault International	Calcasieu	1.48%	29	32	35	40	46
Lake Charles	Lake Charles Regional	Calcasieu	1.48%	234	259	279	323	374
Lake Providence	Byerley	East Carroll	1.99%	4	5	5	6	8
Leesville	Leesville	Vernon	2.17%	18	21	23	29	36
Mansfield	C.E. "Rusty" Williams	DeSoto	1.82%	10	11	12	15	18
Many	Hart	Sabine	1.34%	3	3	4	4	5
Marksville	Marksville Municipal	Avoyelles	1.43%	10	11	12	14	16

Appendix

Associated City	Airport Name	Parish	AAGR 2011-2043	2011	2018	2023	2033	2043
Minden	Minden	Webster	1.71%	16	18	20	23	28
Monroe	Monroe Regional	Ouachita	1.63%	93	104	113	133	156
Natchitoches	Natchitoches Regional	Natchitoches	1.59%	39	44	47	55	65
New Iberia	Acadiana Regional	Iberia	1.87%	46	52	57	69	83
New Orleans	Louis Armstrong New Orleans International	Jefferson	1.47%	18	20	21	25	29
New Orleans	Lakefront	Orleans	0.66%	110	115	119	127	136
New Roads	False River Regional	Pointe Coupee	1.97%	34	39	43	52	63
Oak Grove	Kelly	West Carroll	1.63%	6	7	7	9	10
Oakdale	Allen Parish	Allen	1.50%	10	11	12	14	16
Olla	Olla	La Salle	1.84%	1	1	1	1	2
Opelousas	St Landry Parish-Ahart Field	St. Landry	1.59%	33	37	40	47	55
Patterson	Harry P. Williams Memorial	St. Mary	1.81%	39	44	48	58	69
Pineville	Pineville Municipal	Rapides	1.61%	32	36	39	45	53
Pollock	Pollock Municipal	Grant	1.32%	0	-	-	-	-
Rayville	John H. Hooks Jr. Memorial	Richland	1.83%	27	31	34	40	48
Reserve	St. John the Baptist Parish	St. John The Baptist	1.37%	77	85	91	104	119
Ruston	Ruston Regional	Lincoln	1.75%	55	62	68	81	96
Shreveport	Shreveport Downtown	Bossier	1.25%	246	268	285	323	366
Shreveport	Shreveport Regional	Caddo	1.68%	64	72	78	92	109
Slidell	Slidell	St. Tammany	1.35%	103	113	121	138	158
Springhill	Springhill	Webster	1.71%	7	8	9	10	12
St. Joseph	Tensas Parish	Tensas	1.78%	6	7	7	9	11
Sulphur	Southland Field	Calcasieu	1.48%	30	33	36	41	48
Tallulah	Scott	Madison	1.83%	24	27	30	36	43
Tallulah/Vicksburg, MS	Vicksburg Tallulah Regional	Madison	1.83%	24	27	30	36	43
Thibodaux	Thibodaux Municipal	Lafourche	1.54%	8	9	10	11	13
Vidalia	Concordia Parish	Concordia	1.89%	33	38	41	50	60
Vivian	Vivian	Caddo	1.68%	13	15	16	19	22
Welsh	Welsh	Jefferson Davis	2.06%	20	23	26	31	38
Winnfield	David G. Joyce	Winn	1.45%	4	4	5	5	6
Winnsboro	Winnsboro Municipal	Franklin	1.68%	29	33	35	42	49
Woodworth	Woodworth	Rapides	1.61%	7	8	8	10	12
<b>LOUISIANA TOTAL</b>			<b>1.48%</b>	<b>2,676</b>	<b>2,967</b>	<b>3,190</b>	<b>3,695</b>	<b>4,288</b>

Source: FAA Terminal Area Forecast, Woods & Poole Economics, CDM Smith

**Table A-50: General Aviation Operations Projection FAA Hours Flown Methodology**

Associated City	Airport Name	FAA Hours Flown AAGR 2011-2032	2011	2018	2023	2033	2043
Abbeville	Abbeville Chris Crusta Memorial	1.70%	91,520	102,982	112,039	132,610	156,959
Alexandria	Alexandria International	1.70%	29,324	32,997	35,898	42,490	50,291
Alexandria	Esler Regional	1.70%	6,350	7,145	7,774	9,201	10,890
Arcadia	Arcadia-Bienville Parish	1.70%	8,400	9,452	10,283	12,171	14,406
Bastrop	Morehouse Memorial	1.70%	30,000	33,757	36,726	43,469	51,451
Baton Rouge	Baton Rouge Metropolitan, Ryan Field	1.70%	65,173	73,336	79,785	94,434	111,773
Bogalusa	George R. Carr Memorial Air Field	1.70%	24,000	27,006	29,381	34,775	41,161
Bunkie	Bunkie Municipal	1.70%	6,500	7,314	7,957	9,418	11,148
Columbia	Columbia	1.70%	13,750	15,472	16,833	19,923	23,582
Coushatta	The Red River	1.70%	4,000	4,501	4,897	5,796	6,860
Covington	St. Tammany Regional	1.70%	25,500	28,694	31,217	36,949	43,733
Crowley	Le Gros Memorial	1.70%	7,000	7,877	8,569	10,143	12,005
De Quincy	De Quincy Industrial Airpark	1.70%	7,500	8,439	9,181	10,867	12,863
De Ridder	Beauregard Regional	1.70%	13,400	15,078	16,404	19,416	22,981
Delhi	Delhi Municipal	1.70%	8,000	9,002	9,794	11,592	13,720
Eunice	Eunice	1.70%	15,000	16,879	18,363	21,735	25,725
Farmerville	Union Parish	1.70%	15,500	17,441	18,975	22,459	26,583
Franklinton	Franklinton	1.70%	1,360	1,530	1,665	1,971	2,332
Galliano	South Lafourche Leonard Miller Jr.	1.70%	13,510	15,202	16,539	19,576	23,170
Gonzales	Louisiana Regional	1.70%	70,000	78,767	85,694	101,428	120,052
Hammond	Hammond Northshore Regional	1.70%	64,850	72,972	79,389	93,966	111,219
Homer	Homer Municipal	1.70%	1,200	1,350	1,469	1,739	2,058
Houma	Houma-Terrebonne	1.70%	88,236	99,287	108,018	127,852	151,327
Jeanerette	Le Maire Memorial	1.70%	13,500	15,191	16,527	19,561	23,153
Jena	Jena	1.70%	15,000	16,879	18,363	21,735	25,725
Jennings	Jennings	1.70%	50,480	56,802	61,797	73,144	86,574
Jonesboro	Jonesboro	1.70%	24,500	27,568	29,993	35,500	42,018
Jonesville	Jonesville	1.70%	45,000	50,636	55,089	65,204	77,176
Lafayette	Lafayette Regional	1.70%	64,999	73,140	79,572	94,182	111,475
Lake Charles	Chennault International	1.70%	7,273	8,184	8,904	10,538	12,473
Lake Charles	Lake Charles Regional	1.70%	42,194	47,479	51,654	61,138	72,364
Lake Providence	Byerley	1.70%	7,000	7,877	8,569	10,143	12,005
Leesville	Leesville	1.70%	12,600	14,178	15,425	18,257	21,609
Mansfield	C.E. "Rusty" Williams	1.70%	9,000	10,127	11,018	13,041	15,435
Many	Hart	1.70%	5,000	5,626	6,121	7,245	8,575
Marksville	Marksville Municipal	1.70%	7,000	7,877	8,569	10,143	12,005
Minden	Minden	1.70%	12,900	14,516	15,792	18,692	22,124
Monroe	Monroe Regional	1.70%	29,053	32,692	35,567	42,097	49,827
Natchitoches	Natchitoches Regional	1.70%	15,995	17,998	19,581	23,176	27,432
New Iberia	Acadiana Regional	1.70%	6,284	7,071	7,693	9,105	10,777
New Orleans	Louis Armstrong New Orleans International	1.70%	31,618	35,578	38,707	45,814	54,226

Associated City	Airport Name	FAA Hours Flown AAGR 2011-2032	2011	2018	2023	2033	2043
New Orleans	Lakefront	1.70%	63,497	71,450	77,733	92,006	108,899
New Roads	False River Regional	1.70%	50,000	56,262	61,210	72,449	85,751
Oak Grove	Kelly	1.70%	8,000	9,002	9,794	11,592	13,720
Oakdale	Allen Parish	1.70%	16,000	18,004	19,587	23,184	27,440
Olla	Olla	1.70%	3,700	4,163	4,530	5,361	6,346
Opelousas	St Landry Parish-Ahart Field	1.70%	18,000	20,254	22,036	26,082	30,870
Patterson	Harry P. Williams Memorial	1.70%	101,000	113,650	123,644	146,346	173,218
Pineville	Pineville Municipal	1.70%	26,500	29,819	32,441	38,398	45,448
Pollock	Pollock Municipal	1.70%	8,500	9,565	10,406	12,316	14,578
Rayville	John H. Hooks Jr. Memorial	1.70%	18,000	20,254	22,036	26,082	30,870
Reserve	St. John the Baptist Parish	1.70%	7,500	8,439	9,181	10,867	12,863
Ruston	Ruston Regional	1.70%	86,000	96,771	105,281	124,612	147,492
Shreveport	Shreveport Downtown	1.70%	60,415	67,982	73,960	87,540	103,613
Shreveport	Shreveport Regional	1.70%	41,527	46,728	50,837	60,172	71,220
Slidell	Slidell	1.70%	108,000	121,526	132,213	156,489	185,223
Springhill	Springhill	1.70%	5,000	5,626	6,121	7,245	8,575
St. Joseph	Tensas Parish	1.70%	15,000	16,879	18,363	21,735	25,725
Sulphur	Southland Field	1.70%	20,750	23,349	25,402	30,066	35,587
Tallulah	Scott	1.70%	30,000	33,757	36,726	43,469	51,451
Tallulah/Vicksburg, MS	Vicksburg Tallulah Regional	1.70%	7,300	8,214	8,937	10,578	12,520
Thibodaux	Thibodaux Municipal	1.70%	6,000	6,751	7,345	8,694	10,290
Vidalia	Concordia Parish	1.70%	9,000	10,127	11,018	13,041	15,435
Vivian	Vivian	1.70%	10,500	11,815	12,854	15,214	18,008
Welsh	Welsh	1.70%	15,000	16,879	18,363	21,735	25,725
Winnfield	David G. Joyce	1.70%	4,500	5,064	5,509	6,520	7,718
Winnsboro	Winnsboro Municipal	1.70%	27,000	30,382	33,053	39,122	46,306
Woodworth	Woodworth	1.70%	18,000	20,254	22,036	26,082	30,870
<b>LOUISIANA TOTAL</b>		<b>1.70%</b>	<b>1,794,158</b>	<b>2,018,865</b>	<b>2,196,407</b>	<b>2,599,692</b>	<b>3,077,023</b>

Source: FAA Terminal Area Forecast, CDM Smith

**Table A-51: Per Capita Pilot Population Among US States in 2012**

State	Pilots	Population	Pilots per 100,000 Population
AK	7,614	731,449	1,041
AL	7,248	4,822,023	150
AR	4,762	2,949,131	161
AZ	18,833	6,553,255	287
CA	59,162	38,041,430	156
CO	15,788	5,187,582	304
CT	5,069	3,590,347	141
DC	555	632,323	88
DE	1,302	917,092	142
FL	50,249	19,317,568	260
GA	16,379	9,919,945	165
HI	2,803	1,392,313	201
IA	5,164	3,074,186	168
ID	4,568	1,595,728	286
IL	16,358	12,875,255	127
IN	9,482	6,537,334	145
KS	6,797	2,885,905	236
KY	5,352	4,380,415	122
LA	5,585	4,601,893	121
MA	7,618	6,646,144	115
MD	7,343	5,884,563	125
ME	2,389	1,329,192	180
MI	13,858	9,883,360	140
MN	11,818	5,379,139	220
MO	8,818	6,021,988	146
MS	4,022	2,984,926	135
MT	3,677	1,005,141	366
NC	12,990	9,752,073	133
ND	3,088	699,628	441
NE	3,403	1,855,525	183
NH	3,243	1,320,718	246
NJ	8,811	8,864,590	99
NM	4,505	2,085,538	216
NV	6,268	2,758,931	227
NY	16,322	19,570,261	83
OH	15,069	11,544,225	131
OK	7,838	3,814,820	205
OR	8,773	3,899,353	225
PA	14,984	12,763,536	117
RI	972	1,050,292	93
SC	6,036	4,723,723	128
SD	2,102	833,354	252
TN	10,849	6,456,243	168
TX	45,545	26,059,203	175
UT	7,499	2,855,287	263
VA	13,448	8,185,867	164
VT	1,195	626,011	191
WA	18,230	6,897,012	264
WI	8,950	5,726,398	156
WV	1,742	1,855,413	94
WY	1,770	576,412	307
Total	526,245	313,914,040	168

**Table A-52: Recommended System Improvements by Airport**

	Associated City	Airport	Recommended Improvements
<b>Primary Commercial - Medium Hub</b>			
	New Orleans	Louis Armstrong New Orleans International	No recommended system projects
<b>Primary Commercial - Small Hub</b>			
	Baton Rouge	Baton Rouge Metropolitan, Ryan Field	Construct hangars
<b>Primary Commercial - Non-Hub</b>			
	Alexandria	England Airpark/Alexandria International Airpark	Construct hangars
	Lafayette	Lafayette Regional	Construct hangars
	Lake Charles	Lake Charles Regional	Construct hangars
	Monroe	Monroe Regional	No recommended system projects
	Shreveport	Shreveport Regional	No recommended system projects
<b>Reliever</b>			
	New Orleans	Lakefront	No recommended system projects
	Shreveport	Shreveport Downtown	Extend runway at least 1,482 feet
	Slidell	Slidell	Construct hangars
<b>General Aviation</b>			
	Abbeville	Abbeville Chris Crusta Memorial	No recommended system projects
	Alexandria	Esler Regional	No recommended system projects
	Arcadia	Arcadia-Bienville Parish	No recommended system projects
	Bastrop	Morehouse Memorial	No recommended system projects
	Bogalusa	George R. Carr Memorial Air Field	Construct partial parallel taxiway Construct hangars
	Bunkie	Bunkie Municipal	Construct hangars
	Columbia	Columbia	No recommended system projects
	Coushatta	The Red River	Widen runway 1 foot Install avgas fuel farm Construct terminal building
	Covington	St. Tammany Regional	Extend runway at least 1,001 feet Install PAPI Construct terminal building Construct hangars
	Crowley	Le Gros Memorial	Construct terminal building Construct hangars
	De Quincy	De Quincy Industrial Airpark	Install avgas fuel farm
	De Ridder	Beauregard Regional	No recommended system projects
	Delhi	Delhi Municipal	No recommended system projects
	Eunice	Eunice	Construct hangars
	Farmerville	Union Parish	Extend runway at least 1,003 feet Install PAPI Construct terminal building Construct hangars
	Franklinton	Franklinton	Construct hangars
	Galliano	South Lafourche Leonard Miller Jr.	Construct hangars
	Gonzales	Louisiana Regional	Extend runway at least 1,002 feet Widen runway at least 1 foot Construct hangars
	Hammond	Hammond Northshore Regional	Construct hangars
	Homer	Homer Municipal	No recommended system projects
	Houma	Houma-Terrebonne	No recommended system projects

	Associated City	Airport	Recommended Improvements
	Jeanerette	Le Maire Memorial	No recommended system projects
	Jena	Jena	Extend runway at least 195 feet Install airport beacon Install avgas fuel farm Construct terminal building
	Jennings	Jennings	Widen runway 25 feet Install AWOS Construct hangars
	Jonesboro	Jonesboro	Extend runway at least 797 feet Install avgas fuel farm Construct hangars
	Jonesville	Jonesville	No recommended system projects
	Lake Charles	Chennault International	Construct hangars
	Lake Providence	Byerley	No recommended system projects
	Leesville	Leesville	Extend runway at least 193 feet Construct hangars
	Mansfield	C.E. "Rusty" Williams	Install avgas fuel farm
	Many	Hart	No recommended system projects
	Marksville	Marksville Municipal	Extend runway at least 201 feet
	Minden	Minden	Construct partial parallel taxiway Construct hangars
	Natchitoches	Natchitoches Regional	Construct hangars
	New Iberia	Acadiana Regional	No recommended system projects
	New Roads	False River Regional	Install Jet-A fuel farm Construct hangars
	Oak Grove	Kelly	Extend runway at least 1,000 feet Install avgas fuel farm Construct hangars
	Oakdale	Allen Parish	Construct hangars
	Olla	Olla	No recommended system projects
	Opelousas	St. Landry Parish-Ahart Field	Construct hangars
	Patterson	Harry P. Williams Memorial	No recommended system projects
	Pineville	Pineville Municipal	Extend runway at least 1,000 feet Construct hangars
	Pollock	Pollock Municipal	No recommended system projects
	Rayville	John H. Hooks Jr. Memorial	Construct terminal building
	Reserve	St. John the Baptist Parish	Extend runway at least 1,001 feet Install AWOS Install Jet-A fuel farm Construct hangars
	Ruston	Ruston Regional	Construct hangars
	Springhill	Springhill	Install avgas fuel farm Construct hangars
	St. Joseph	Tensas Parish	No recommended system projects
	Sulphur	Southland Field	Construct hangars
	Tallulah	Scott	No recommended system projects
	Tallulah/Vicksburg, MS	Vicksburg Tallulah Regional	Construct hangars

	Associated City	Airport	Recommended Improvements
	Thibodaux	Thibodaux Municipal	Extend runway at least 1,001 feet Install PAPI Construct terminal building
	Vidalia	Concordia Parish	Extend runway at least 1,299 feet Install AWOS Install Jet-A fuel farm Construct hangars
	Vivian	Vivian	Extend runway at least 1,002 feet Install avgas fuel farm Construct terminal building Construct hangars
	Welsh	Welsh	Widen runway 10 feet
	Winnfield	David G. Joyce	Construct hangars
	Winnsboro	Winnsboro Municipal	Extend runway at least 1,000 feet Construct taxiway turnarounds Install PAPI Construct hangars
	Woodworth	Woodworth	Construct hangars

Source: Airport Inventory & Data Survey, CDM Smith

**Table A-53: Estimated Costs For Airports to Meet System Performance Benchmarks, Part I**

	Associated City	Airport	Runway Extensions	Runway Width Improvements	Taxiway Improvements	Visual Aids	Airport Beacons
<b>Primary Commercial - Medium Hub</b>							
	New Orleans	Louis Armstrong New Orleans International					
<b>Primary Commercial - Small Hub</b>							
	Baton Rouge	Baton Rouge Metropolitan, Ryan Field					
<b>Primary Commercial - Non-Hub</b>							
	Alexandria	England Airpark/Alexandria International Airpark					
	Lafayette	Lafayette Regional					
	Lake Charles	Lake Charles Regional					
	Monroe	Monroe Regional					
	Shreveport	Shreveport Regional					
<b>Reliever</b>							
	New Orleans	Lakefront					
	Shreveport	Shreveport Downtown	\$3,806,000				
	Slidell	Slidell					
<b>General Aviation</b>							
	Abbeville	Abbeville Chris Crusta Memorial					
	Alexandria	Esler Regional					

Associated City	Airport	Runway Extensions	Runway Width Improvements	Taxiway Improvements	Visual Aids	Airport Beacons
Arcadia	Arcadia-Bienville Parish					
Bastrop	Morehouse Memorial					
Bogalusa	George R. Carr Memorial Air Field			\$1,488,000		
Bunkie	Bunkie Municipal					
Columbia	Columbia					
Coushatta	The Red River		\$80,000			
Covington	St. Tammany Regional	\$1,212,000			\$87,000	
Crowley	Le Gros Memorial					
De Quincy	De Quincy Industrial Airpark					
De Ridder	Beauregard Regional					
Delhi	Delhi Municipal					
Eunice	Eunice					
Farmerville	Union Parish	\$1,134,000			\$87,000	
Franklinton	Franklinton					
Galliano	South Lafourche Leonard Miller Jr.					
Gonzales	Louisiana Regional	\$1,714,000	\$68,000			
Hammond	Hammond Northshore Regional					
Homer	Homer Municipal					
Houma	Houma-Terrebonne					
Jeanerette	Le Maire Memorial					
Jena	Jena	\$236,000				\$39,000
Jennings	Jennings		\$2,126,000			
Jonesboro	Jonesboro	\$965,000				
Jonesville	Jonesville					
Lake Charles	Chennault International					
Lake Providence	Byerley					
Leesville	Leesville	\$234,000				
Mansfield	C.E. "Rusty" Williams					
Many	Hart					
Marksville	Marksville Municipal	\$243,000				
Minden	Minden			\$1,489,000		
Natchitoches	Natchitoches Regional					
New Iberia	Acadiana Regional					
New Roads	False River Regional					

	Associated City	Airport	Runway Extensions	Runway Width Improvements	Taxiway Improvements	Visual Aids	Airport Beacons
	Oak Grove	Kelly	\$971,000				
	Oakdale	Allen Parish					
	Olla	Olla					
	Opelousas	St. Landry Parish-Ahart Field					
	Patterson	Harry P. Williams Memorial					
	Pineville	Pineville Municipal	\$1,211,000				
	Pollock	Pollock Municipal					
	Rayville	John H. Hooks Jr. Memorial					
	Reserve	St. John the Baptist Parish	\$1,287,000				
	Ruston	Ruston Regional					
	Springhill	Springhill					
	St. Joseph	Tensas Parish					
	Sulphur	Southland Field					
	Tallulah	Scott					
	Tallulah/Vicksburg, MS	Vicksburg Tallulah Regional					
	Thibodaux	Thibodaux Municipal	\$1,212,000			\$87,000	
	Vidalia	Concordia Parish	\$1,671,000				
	Vivian	Vivian	\$1,213,000				
	Welsh	Welsh		\$432,000			
	Winnfield	David G. Joyce					
	Winnsboro	Winnsboro Municipal	\$1,211,000		\$144,000	\$87,000	
	Woodworth	Woodworth					
<b>Total Costs</b>			<b>\$18,320,000</b>	<b>\$2,706,000</b>	<b>\$3,121,000</b>	<b>\$348,000</b>	<b>\$39,000</b>

Source: Airport Inventory & Data Survey, CDM Smith

**Table A-54: Estimated Costs For Airports to Meet System Performance Benchmarks, Part II**

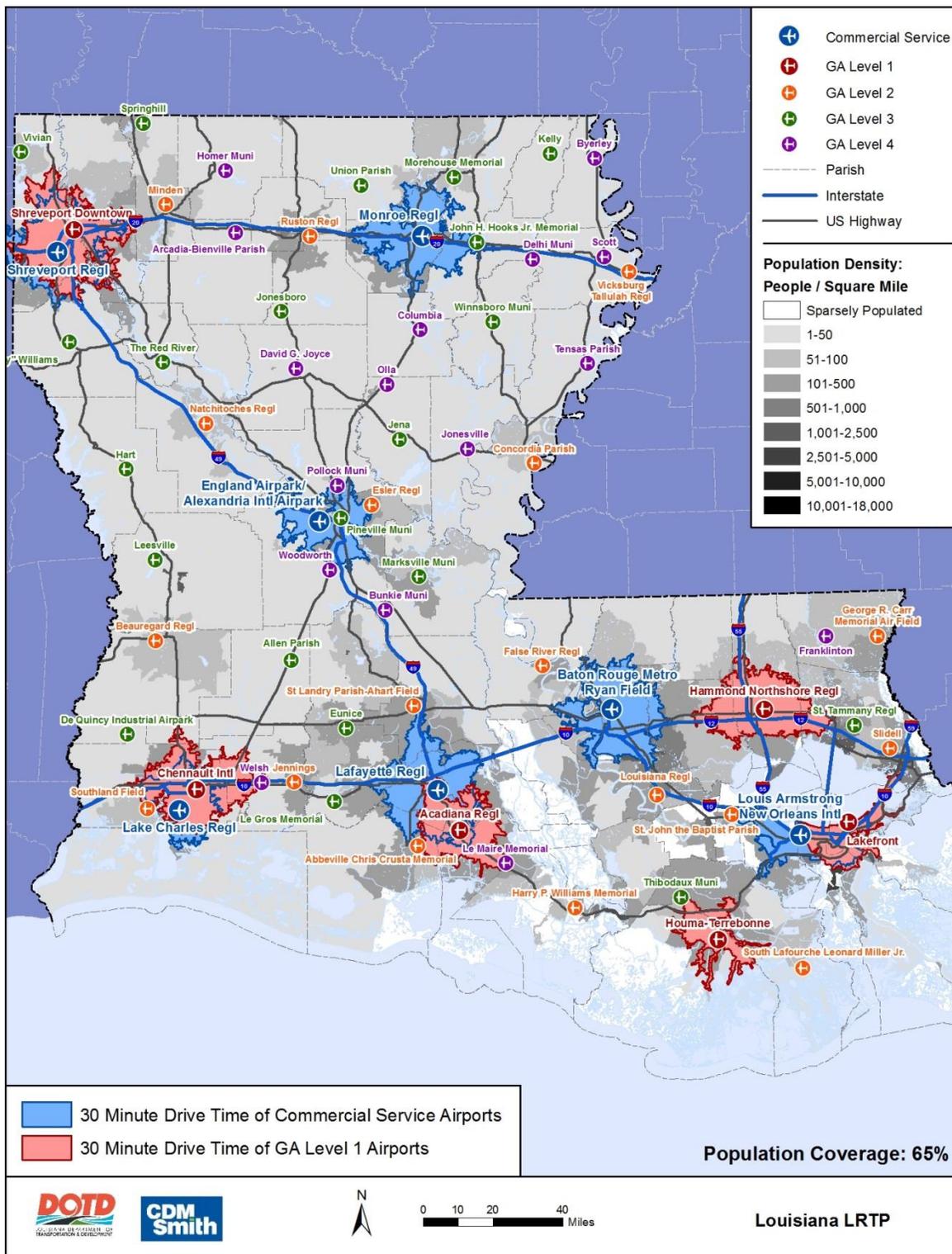
	Associated City	Airport	Weather Reporting Equipment	Fuel Farms	Terminal Buildings	Hangars	Total Costs
<b>Primary Commercial - Medium Hub</b>							
	New Orleans	Louis Armstrong New Orleans International					\$0
<b>Primary Commercial - Small Hub</b>							
	Baton Rouge	Baton Rouge Metropolitan, Ryan Field				\$3,180,000	\$3,180,000
<b>Primary Commercial - Non-Hub</b>							
	Alexandria	England Airpark/Alexandria International Airpark				\$636,000	\$636,000
	Lafayette	Lafayette Regional				\$1,590,000	\$1,590,000

	Associated City	Airport	Weather Reporting Equipment	Fuel Farms	Terminal Buildings	Hangars	Total Costs
	Lake Charles	Lake Charles Regional				\$1,431,000	\$1,431,000
	Monroe	Monroe Regional					\$0
	Shreveport	Shreveport Regional					\$0
	<b>Reliever</b>						
	New Orleans	Lakefront					\$0
	Shreveport	Shreveport Downtown				\$7,791,000	\$11,597,000
	Slidell	Slidell				\$636,000	\$636,000
	<b>General Aviation</b>						
	Abbeville	Abbeville Chris Crusta Memorial					\$0
	Alexandria	Esler Regional					\$0
	Arcadia	Arcadia-Bienville Parish					\$0
	Bastrop	Morehouse Memorial					\$0
	Bogalusa	George R. Carr Memorial Air Field				\$477,000	\$1,965,000
	Bunkie	Bunkie Municipal				\$318,000	\$318,000
	Columbia	Columbia					\$0
	Coushatta	The Red River		\$250,000	\$750,000		\$1,080,000
	Covington	St. Tammany Regional			\$750,000	\$1,590,000	\$3,639,000
	Crowley	Le Gros Memorial			\$750,000	\$318,000	\$1,068,000
	De Quincy	De Quincy Industrial Airpark		\$250,000			\$250,000
	De Ridder	Beauregard Regional					\$0
	Delhi	Delhi Municipal					\$0
	Eunice	Eunice				\$159,000	\$159,000
	Farmerville	Union Parish			\$750,000	\$795,000	\$2,766,000
	Franklinton	Franklinton				\$477,000	\$477,000
	Galliano	South Lafourche Leonard Miller Jr.				\$636,000	\$636,000
	Gonzales	Louisiana Regional				\$3,021,000	\$4,803,000
	Hammond	Hammond Northshore Regional				\$954,000	\$954,000
	Homer	Homer Municipal					\$0
	Houma	Houma-Terrebonne					\$0
	Jeanerette	Le Maire Memorial					\$0
	Jena	Jena		\$250,000	\$750,000		\$1,275,000
	Jennings	Jennings	\$200,000			\$1,908,000	\$4,234,000
	Jonesboro	Jonesboro		\$250,000		\$318,000	\$1,533,000
	Jonesville	Jonesville					\$0
	Lake Charles	Chennault International				\$1,590,000	\$1,590,000

	Associated City	Airport	Weather Reporting Equipment	Fuel Farms	Terminal Buildings	Hangars	Total Costs
	Lake Providence	Byerley					\$0
	Leesville	Leesville				\$1,113,000	\$1,347,000
	Mansfield	C.E. "Rusty" Williams		\$250,000			\$250,000
	Many	Hart					\$0
	Marksville	Marksville Municipal					\$243,000
	Minden	Minden				\$2,862,000	\$4,351,000
	Natchitoches	Natchitoches Regional				\$954,000	\$954,000
	New Iberia	Acadiana Regional					\$0
	New Roads	False River Regional		\$250,000		\$2,067,000	\$2,317,000
	Oak Grove	Kelly		\$250,000		\$795,000	\$2,016,000
	Oakdale	Allen Parish				\$636,000	\$636,000
	Olla	Olla					\$0
	Opelousas	St. Landry Parish-Ahart Field				\$1,749,000	\$1,749,000
	Patterson	Harry P. Williams Memorial					\$0
	Pineville	Pineville Municipal				\$1,749,000	\$2,960,000
	Pollock	Pollock Municipal					\$0
	Rayville	John H. Hooks Jr. Memorial			\$750,000		\$750,000
	Reserve	St. John the Baptist Parish	\$200,000	\$250,000		\$1,908,000	\$3,645,000
	Ruston	Ruston Regional				\$477,000	\$477,000
	Springhill	Springhill		\$250,000		\$1,431,000	\$1,681,000
	St. Joseph	Tensas Parish					\$0
	Sulphur	Southland Field				\$477,000	\$477,000
	Tallulah	Scott					\$0
	Tallulah/Vicksburg, MS	Vicksburg Tallulah Regional				\$954,000	\$954,000
	Thibodaux	Thibodaux Municipal			\$750,000		\$2,049,000
	Vidalia	Concordia Parish	\$200,000	\$250,000		\$2,385,000	\$4,506,000
	Vivian	Vivian		\$250,000	\$750,000	\$318,000	\$2,531,000
	Welsh	Welsh					\$432,000
	Winnfield	David G. Joyce				\$318,000	\$318,000
	Winnsboro	Winnsboro Municipal				\$477,000	\$1,919,000
	Woodworth	Woodworth				\$477,000	\$477,000
<b>Total Costs</b>			<b>\$600,000</b>	<b>\$2,750,000</b>	<b>\$6,000,000</b>	<b>\$48,972,000</b>	<b>\$82,424,000</b>

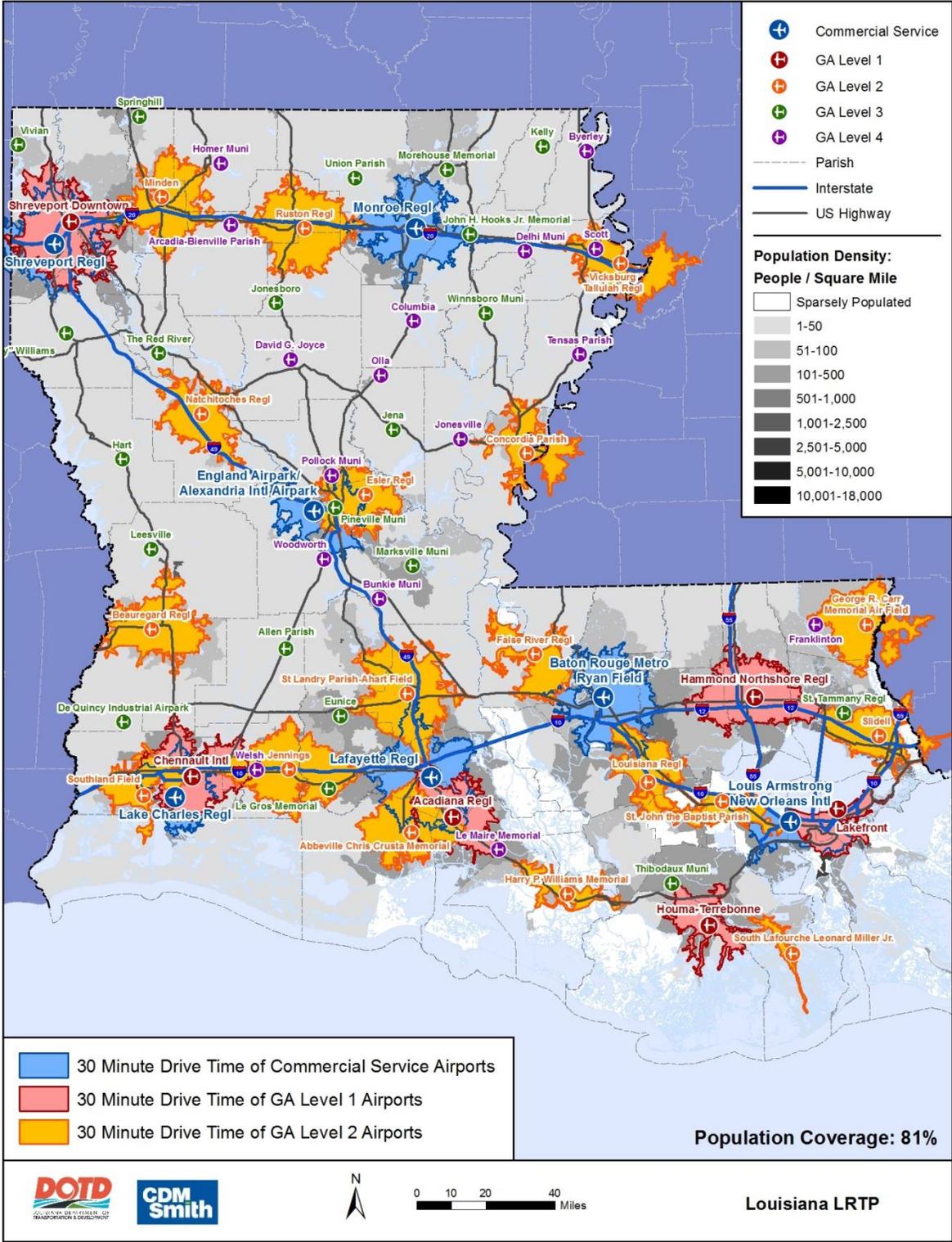
Source: Airport Inventory & Data Survey, CDM Smith

Figure A-1: Louisiana Commercial Service and Level 1 Airports with 30-Minute Drive Times



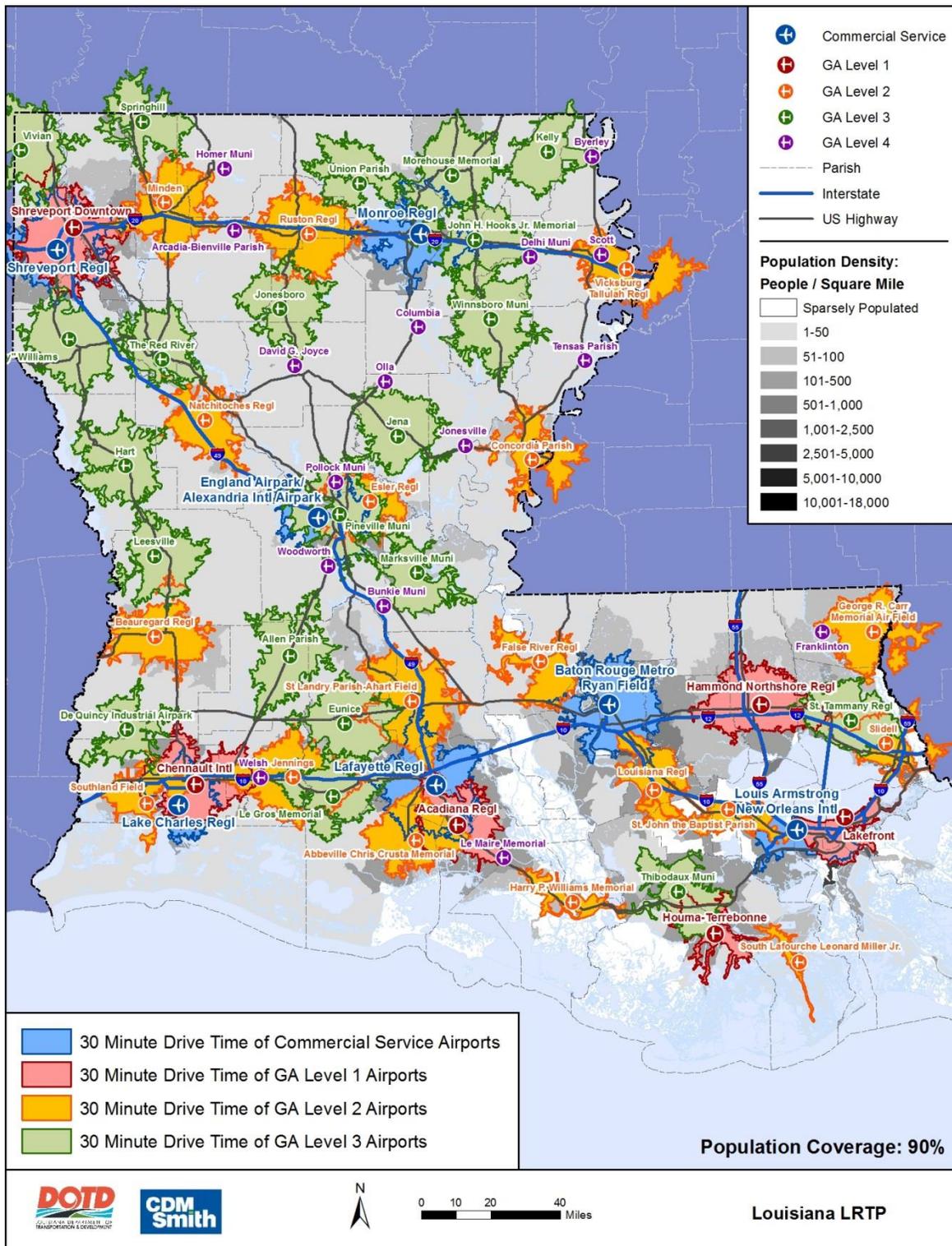
**Figure A-1** represents the coverage provided by the airports currently classified as General Aviation – Level 1 (denoted in pink) and Commercial Service. As illustrated, most of these facilities are clustered along I-10 and US 90 in southern Louisiana, particularly in the New Orleans area. The exception to this is Shreveport Downtown Airport in the northwest corner of the state. As referenced on Figure A-1, approximately 2,992,025 persons or 66 percent of the State’s total population resides within 30 minutes driving time of the airports identified as General Aviation – Level 1 and Commercial Service.

Figure A-2: Louisiana Level 2, Level 1, and Commercial Service Airports with 30-Minute Drive Times



**Figure A-2** provides the coverage by the airports currently classified as General Aviation – Level 2 (denoted in gold), General Aviation – Level 1 and Commercial Service. Generally, General Aviation – Level 2 airports are well distributed throughout Louisiana, but they are clearly clustered along both of the State’s major east – west corridors, being I-10 and I-20 as well as I-49. They are more densely clustered along I-10 in southern Louisiana as most of the state’s population is concentrated there. Most of the population is served by this airport classification except for population centers north of Lake Pontchartrain. Quantitatively, Figure A-2 indicates that approximately 3,672,000 persons or 81 percent of the State’s total population resides within 30 minutes driving time of the airports identified as General Aviation – Level 2, General Aviation – Level 1 and Commercial Service.

Figure A-3: Louisiana Level 3, Level 2, Level 1, and Commercial Service Airports with 30-Minute Drive Times



**Figure A-3** displays the coverage provided by the airports currently classified as General Aviation – Level 3 (denoted in green), General Aviation – Level 2, General Aviation – Level 1 and Commercial Service. As portrayed, General Aviation – Level 3 airports are evenly distributed throughout the State, although there are exceptions to note. Several gaps exist but are associated with sparsely populated regions such as the Atchafalaya Basin between Baton Rouge and Lafayette, and the areas north of Lake Pontchartrain. Significant overlaps can be observed in northeastern Louisiana. Quantitatively, Figure A-3 indicates that approximately 4,080,034 persons or 90 percent of the State’s total population resides within 30 minutes driving time of the airports identified as General Aviation – Level 3, General Aviation – Level 2, General Aviation – Level 1 and Commercial Service.