

ENGLAND
INDUSTRIAL AIRPARK
& COMMUNITY

ALEXANDRIA
INTERNATIONAL
AIRPORT

**2009
Master Plan
Update**

**Chapter 2
Existing
Facilities
Inventory**



Chapter 2

Existing Facilities Inventory

In order to gain an accurate understanding of the various aspects of Alexandria International Airport (FAA Identifier AEX), the collection of a variety of airport related information is initially required. This essential information is the foundation upon which subsequent analysis for the remainder of the study is prepared. This chapter will provide an inventory of the following:

- Airport Characteristics,
- Airfield Environment,
- Airspace and Air Traffic Control,
- Landside Environment,
- Support Facilities,
- Environmental Overview, and
- Airpark Background.

The necessary inventory data has been obtained from a variety of sources, including:

- Interviews with England Authority and airport staff;
- Interviews with AEX users and tenants;
- Interviews with AEX Air Traffic Control Tower (ATCT) staff;
- Airport site visits;
- Correspondence with local, state and federal agencies;
- Research and review of previous airport planning analyses and studies;
- Review of aerial photography, mapping and airport and terminal plans; and,
- Review of AEX, State of Louisiana, and FAA statistical reports.

2.1 AIRPORT CHARACTERISTICS

2.1.1 Airport History

In 1939, officials in the Alexandria-Pineville area identified the need for an airport to serve the aviation needs of the community. Research was conducted to identify a suitable site within the area, and, after an extensive search, officials selected a site located due west of Alexandria known as the McNutt Plantation. The McNutt plantation was purchased along with two adjacent plantations forming a 1,339 acre site for airport development. On May 23, 1942, construction commenced and a year later the Alexandria Municipal Airport was completed.

On December 7, 1941, Japan attacked Pearl Harbor mandating U.S involvement in World War II. During this time, the airport was leased to the Army Air Corps. On October 16, 1942, the airport was officially named Alexandria Army Airbase. The air base initially served as an emergency airstrip for Esler field which is currently located 13.6 miles northeast. In early 1943,



the military extended three of the four existing runways to support heavy bomber operations. In June of the same year, the Alexandria Army Airbase served as a training facility for B-17 pilots and later served B-29 combat crews. In 1944, the airbase was renamed Alexandria Army Airfield. With the end of WWII, the base was placed on a standby status and was eventually turned over to the city for use as a municipal airport.

In 1950, the Korean Conflict prompted the reactivation of the airport as Alexandria Air Force Base. Later that same year, the facility was assigned to the Tactical Air Command for the purpose of training tactical fighting units. Alexandria Air Base was renamed England Air Force Base in 1955, for Lieutenant Colonel John England, a commander of the 389th Bomber Squadron at the base. From 1950 until 1986, the England Air Force Base was home to several wings including the 132nd, 366th, 834th, 401st, 4410th, and 4403rd. During this time, these wings flew a variety of aircraft including the T-33, F-80, T-84, F-86, F-100, and A-7. In 1972, the 23rd Tactical Fighter Wing (TFW) was transferred to England Air Force Base where it operated the A-10 thunderbolt until the base closure in 1992.

Base Closure

The end of the Cold War initiated the closure, elimination and realignment of significant US military infrastructure and assets. In 1990, Alexandria Mayor Edward G. Randolph appointed a task force named the “England 2000 Committee”. This committee developed two strategic plans known as “Plan A – Save the Base”, and “Plan B – Closure Contingency”. Despite efforts to save the base, on April 12, 1991, the Secretary of Defense, Richard Cheney, designated the England Air Force Base for closure. To facilitate the base closure, a new committee known as the England Transition Committee was formed.

Due to potential severe economic disruption to the Central Louisiana Region, The Louisiana State Legislature in 1991 initiated ACT 42. ACT 42 created the England Economic and Industrial Development District for the purpose of overseeing the maintenance and improvement of the England Air Force Base for civilian use. The District is governed by a 10-member board of Commissioners appointed by local government entities. By the close of 1992, all military aircraft were reassigned to alternate bases and the U.S. Air Force concluded their Environmental Impact Statement. In March of 1995, following an interim caretaker program and environmental cleanup effort by the military, the base was officially transferred to the England Economic and Industrial Development District.

Alexandria International Airport

After the base transfer, the airport continued operating as a general aviation airport from August 1993 through August 1996. In 1996, commercial air service at nearby Esler Regional Airport was transitioned to Alexandria Airport providing service to Houston, Dallas, Memphis and Atlanta. This mandated the name change from Alexandria Municipal to Alexandria International Airport (AEX).

Since the transfer, the England Economic and Industrial Development District has continued to market and develop the England Industrial Airpark & Community to its fullest potential. Over



the past several years, the England Authority has increased the overall airpark acreage to more than 3,000 acres and implemented several aesthetic improvements including a new brick paver entrance road, landscaping improvements and rehabilitation or reconstruction of vacated military facilities. During the past five years, the Authority has constructed a new 11,000 SF Air Rescue and Fire Fighting Station (ARFF) and renovated the 18-hole championship golf course including the construction of a new clubhouse. One of the most notable improvements was the construction of new first-class, multi-million commercial passenger terminal facility which accommodates four commercial airline carriers.

Because of the efforts of the England Authority, air traffic has doubled, approximately 2000 jobs were created, over 1 million square feet of commercial space has been leased and the England Authority is a self-sustaining operation. In conjunction with its commercial mission, the England Authority executed a commercial lease with the US Army providing an intermediate staging base (ISB) for the nation's Joint Readiness Training Center located at Fort Polk.

2.2 LOCAL PROFILE

AEX is located in Central Louisiana, six miles west/northwest of the City of Alexandria, in the Rapides Parrish. The airport is comprised of 2,284 acres and its field elevation is 89 ft above Mean Sea Level (MSL). **Exhibit 2-1** graphically depicts the relative location of Alexandria International Airport.

2.2.1 Climate

The field elevation at Alexandria International is 89 ft above mean sea level (MSL). Located in central Louisiana, AEX enjoys a mild, temperate climate throughout the year. The mean annual temperature is 66.9° Fahrenheit (F). During the summer months, the maximum mean temperature in the area is 91.9° F. During the summer months, the minimum mean temperature is 42.7° F. Annual rainfall for the area averages 61.44 inches (in) per year.

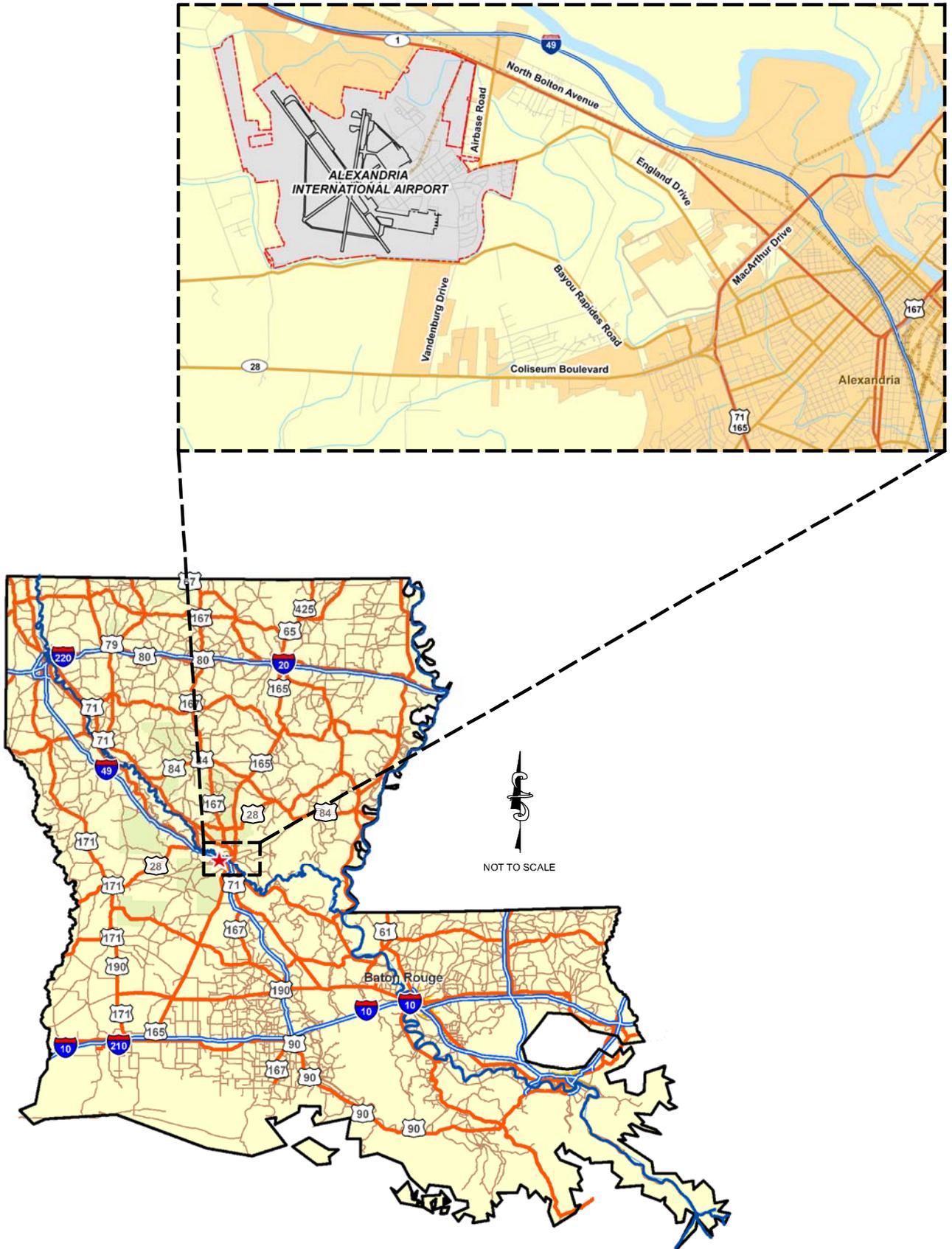
Weather Reporting Facilities

The weather reporting capability at AEX is comprised of an automated weather surface observation system (ASOS), located on the northwest side of Runway 14, near the glideslope, approximately 1,000 ft from the threshold. ASOS is a modern weather reporting system which measures the following meteorological data:

- Wind velocity and direction,
- Temperature and dew point,
- Visibility,
- Sky conditions,
- Altimeter setting, and
- Prevalent weather conditions (fog, thunderstorms, rain, snow).



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INDUSTRIAL AIRPARK & COMMUNITY

Alexandria International Airport
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Location Map

Exhibit

2-1



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Weather conditions at the airport are gathered and updated every minute, then automatically transcribed and broadcast via a designated radio frequency. The current conditions are also accessible via telephone and aviation weather website.

2.3 AIRPORT ACCESS, TRANSPORTATION, PARKING AND RENTAL CAR

2.3.1 Ground Access / Roadway network

As mentioned earlier, the Alexandria International Airport is located approximately 6 miles west/northwest of downtown Alexandria. Access to the airport can be achieved through the use of one of several state and Parish roads that intersect the City of Alexandria. In addition, Interstate 49, which runs in a northwest/southeast direction, passes within ½ mile of the airport’s northern boundary. From I-49, travelers can utilize exit 90 to access Airbase Road which leads directly into the airport entrance. Travelers entering from the south can utilize Vandenberg drive to access the airport via the rear entrance. **Exhibit 2-2** graphically depicts the various roadways that provide access to AEX.

2.3.2 Transportation Improvements

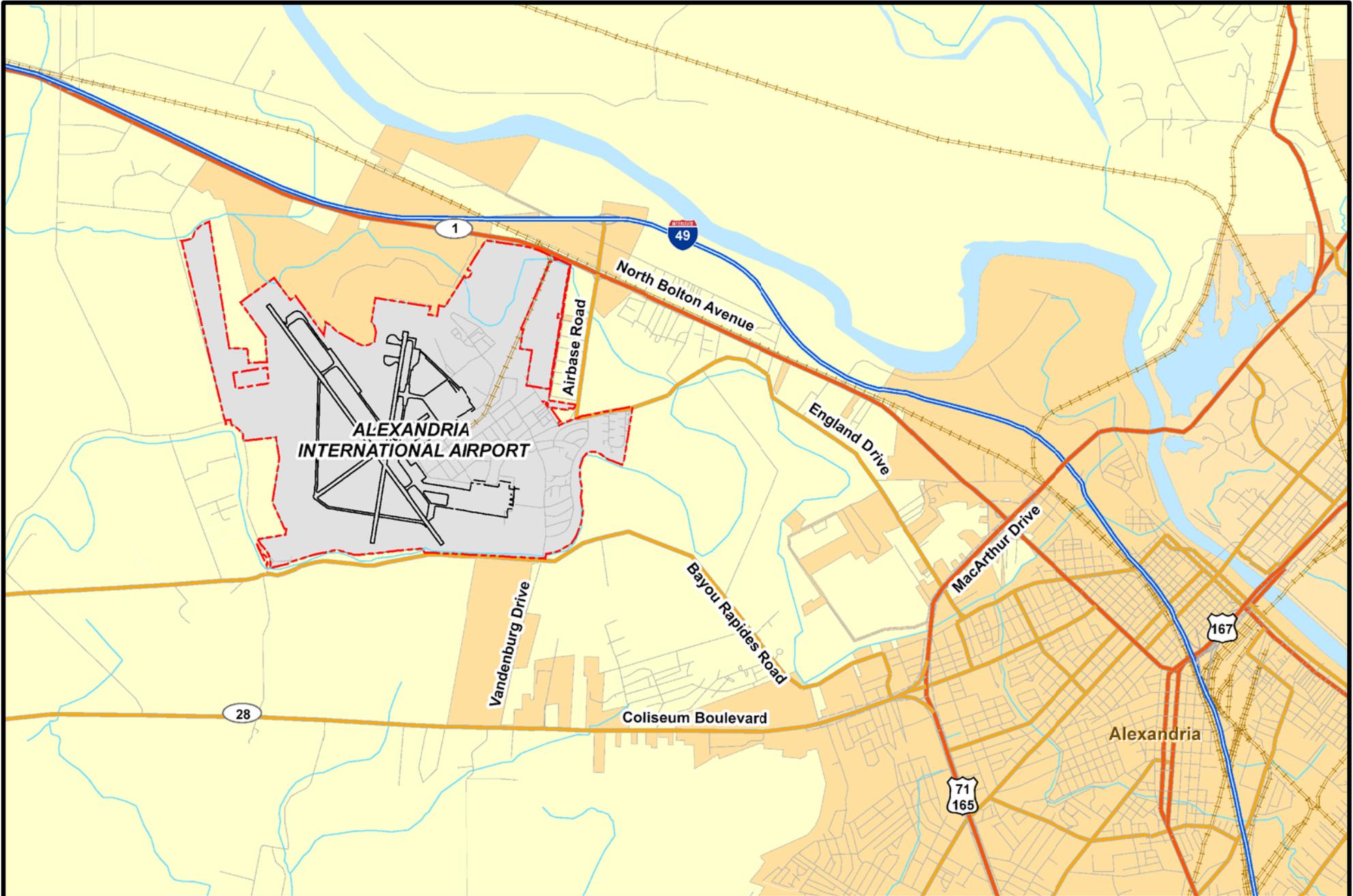
A review of the Louisiana Statewide Transportation Plan published in 2003 points out that there are many short and long-term improvements planned that will help increase ground access and reduce delay throughout the state of Louisiana. Some of these projects will affect access to and from the City of Alexandria, and ultimately to the airport itself. **Table 2-1** points out the various planned transportation improvement projects along with their respective priority, description, and estimated improvement costs.

Project ID	Priority	Project Description	Project Total Cost (Estimated)
	Underway	Widen US 167 from 2 lanes to 4 lanes From Alexandria to Arkansas State Line	\$722 million
LSTP-011	A	Widen LA 28 West from 2 lanes to 4 lanes from US 171 to Alexandria	\$80 million
LSTP-033	C	Widen LA28 East from 2 lanes to 4 lanes from Alexandria to Archie	\$85 million
LSTP-049	C	Widen McArthur Drive from I-49N to I-49S – upgrade to freeway	\$60 million
LSTP-021	D	Widen US 165 from 2 lanes to 4 lanes from I-10 to I-20	\$1 billion

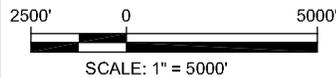
Sources: Louisiana State Transportation System Plan, December, 2003; LaDOTD Annual Report, 2005.



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Airport Access
Configuration

Exhibit

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2.3.3 Terminal Curbside

The terminal curbside is comprised of three lanes of traffic that travel to and from the passenger terminal building. Two lanes travel adjacent the terminal building and are protected by a covered roof to protect arriving and departing passengers from weather. These two lanes are primarily used for passenger pickup and dropoff; whereas, the third (outer) lane is uncovered and therefore used as a traffic bypass lane.

2.3.4 Commercial Transportation

There are presently no ground transportation operators that have a lease arrangement with the England Industrial Airpark. However, passengers are able to contact taxi, limo, and bus operators on their own to arrange ground transportation services. Various hotels in the airport vicinity also provide free shuttle service to and from the airport.

Auto Parking

The main passenger auto parking lot is located due north of the terminal and has a capacity of approximately 717 spaces. The daily fees for parking are as follows:

- There is no charge for the first hour.
- The cost for each hour of parking after the first hour is 50 cents with a maximum of \$6.00 per day
- A \$30.00 maximum is charged for a seven day period.

Users of the parking facility pay as they leave at one of the two parking lot exit toll booths. The parking booth operators accept VISA, MasterCard, Discover and American Express only. Additional area west of the passenger parking area is reserved for future parking capacity.

2.3.5 Overflow Parking

During peak travel periods, the main parking lot at AEX may become congested and sometimes full. In order to account for these peak periods, the airport has a designated overflow lot located across the street from the old terminal building. Patrons of the overflow parking area are shuttled back and forth from the overflow lot to the terminal. The overflow lot contains approximately 350 spaces.

2.3.6 Employee Parking

Employee parking was assigned to two lots located west of the old terminal. The first lot is located between the ARFF facility and the old terminal on Billy Mitchell Blvd. This lot is shared between ARFF personnel, Million Air employees, and terminal employees. The second lot is located directly across the street from the first lot and is dedicated solely to employee use. The northern lot contains between 50 and 60 spaces; whereas, the southern (ARFF) lot contains approximately 40 spaces.



2.3.7 Rental Car

The rental car ready lot is located due east of the main terminal facility. The main terminal parking lot has spaces along the first two rows (nearest the terminal) that are reserved for rental car returns. Rental cars are cleaned and serviced at various off-airport site locations. **Exhibit 2-3** denotes the various parking areas in the vicinity of the main terminal along with the location of the rental car ready and return lots at AEX. Currently, the England Authority has developed plans to expand the rental car ready and return capacity east of the existing ready lot.

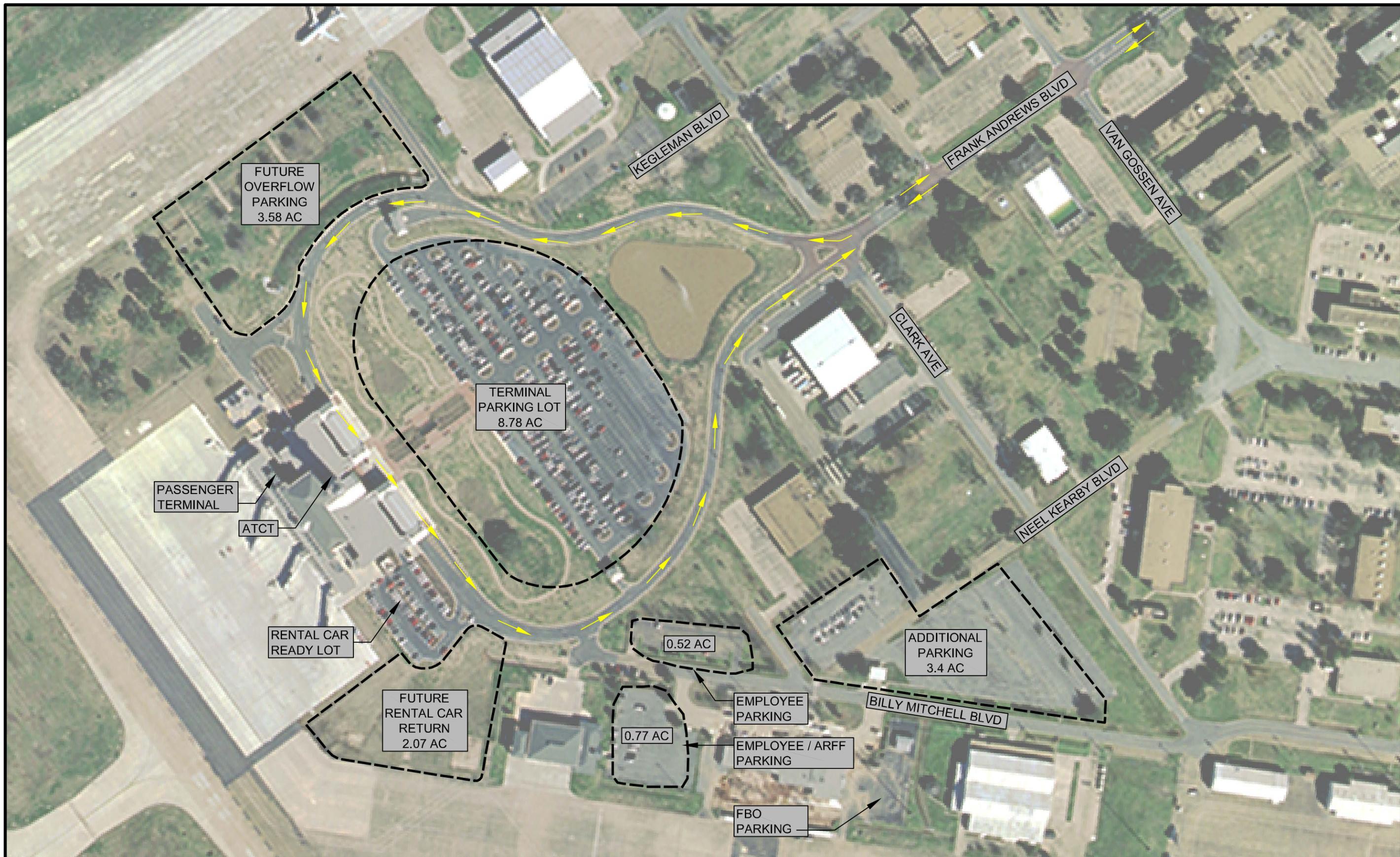
2.4 WIND ANALYSIS

Historical wind conditions were evaluated to determine the percentage of wind coverage at AEX. This element is important since aircraft takeoff and land into the wind. The FAA recommends that sufficient runways be provided to achieve 95% wind coverage. The 95% wind coverage is computed based on the crosswind not exceeding 10.5 knots (kts) (12 miles per hour (mph)) for the smallest aircraft designed for airport reference codes (ARC) of A-I and B-I; 13 kts (15 mph) for ARCs A-II and B-II; 16 kts (18 mph) for ARCs A-III, B-III, C-I through D-III; and 20 kts (23 mph) for ARCs A-IV through D-VI. If 95% wind coverage is not provided at an airport for the maximum crosswind component of the critical aircraft, then the addition of a crosswind runway should be considered.

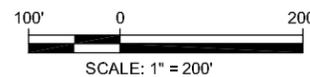
FAA Advisory Circular (AC) 150/5300-13, *Airport Design*, requires that a period of at least 10 consecutive years of onsite wind data should be examined when evaluating airfield wind coverage. Wind data was obtained through the National Oceanic and Atmosphere Administration's National Climatic Data Center. Wind coverage percentages take into account the weather minima associated with the approved approaches for each runway. Therefore, all weather conditions and instrument flight rules (IFR) conditions have been analyzed.

Using the FAA's computer application ***Airport Design*** (Version 4.2D), an analysis of all weather, VFR and IFR wind coverage percentages was conducted. Wind coverage is only included for the crosswind speed that corresponds to the approach category and airplane design group that would utilize that runway. In the case of AEX, 10.5 kts, 13 kts, 16 kts, and 20 kts crosswind components were analyzed. After evaluating AEX's wind data for the past Ten years, it was determined that the airport could achieve 95% wind coverage by using either of its two active runways. The All Weather and IFR windroses and associated wind coverages are depicted in **Exhibit 2-4**.

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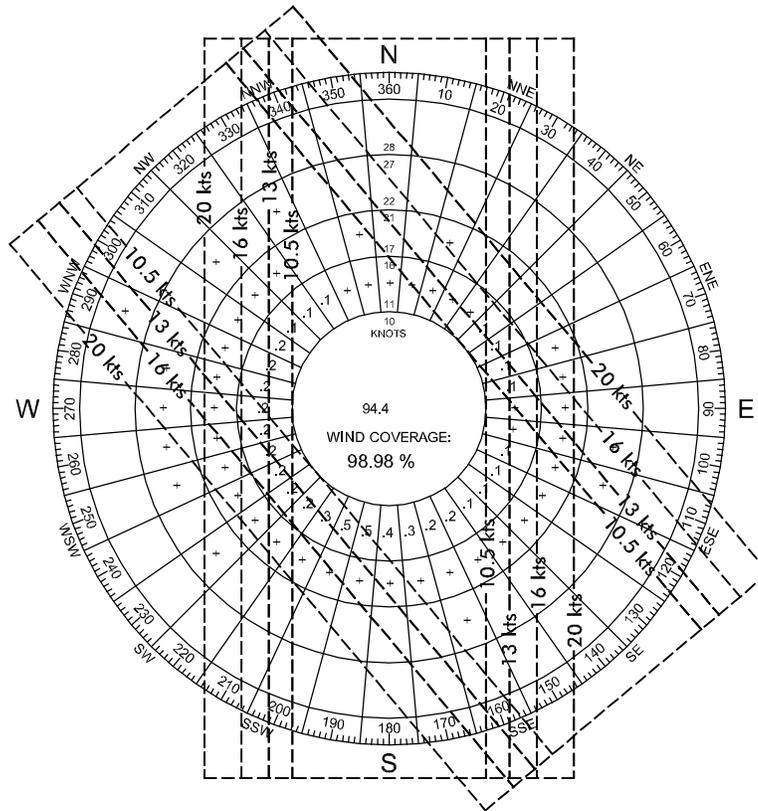
Airport Parking
Configuration

Exhibit

2-3



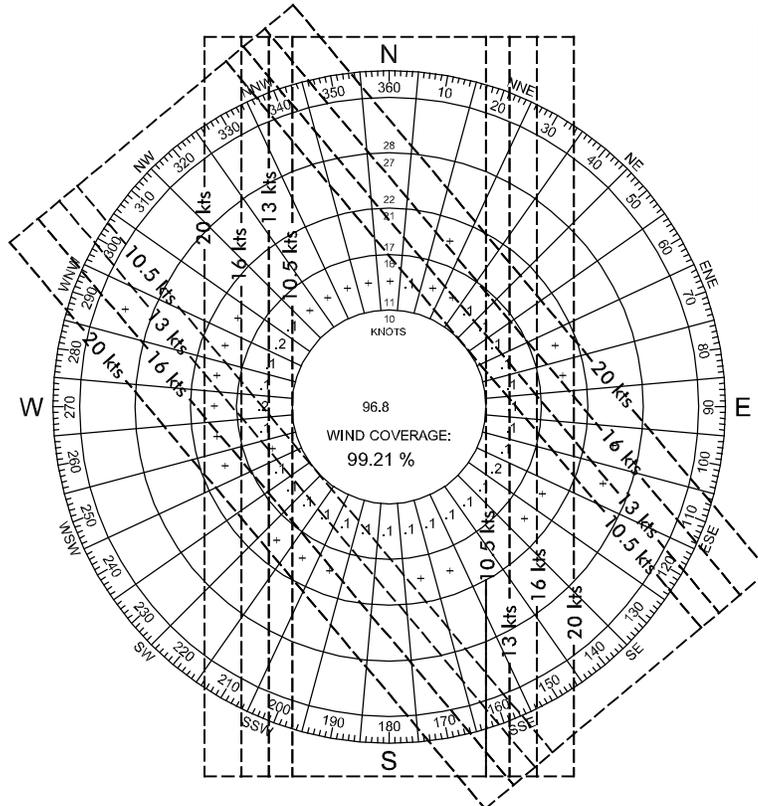
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ALL WEATHER WIND ROSE

Crosswind Component (kts)	All Weather Wind Coverage %		
	Runway 14-32	Runway 18-36	Combined
10.5	97.44	97.98	98.98
13	98.85	98.99	99.65
16	99.84	99.82	99.95
20	99.98	99.97	100.00

Wind Data Source:
National Climatic Data Center
Station 72248 - Alexandria, Louisiana
Years (1997 - 2006)
70,108 All Weather Observations



IFR WIND ROSE

Crosswind Component (kts)	IFR Wind Coverage %		
	Runway 14-32	Runway 18-36	Combined
10.5	98.65	98.23	99.21
13	99.33	99.06	99.71
16	99.86	99.76	99.93
20	99.99	99.93	100.00

Wind Data Source:
National Climatic Data Center
Station 72248 - Alexandria, Louisiana
Years (1997 - 2006)
7,427 IFR Observations





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2.5 OPERATIONAL CHARACTERISTICS

All three types of aviation (commercial, general, and military) conduct operations at Alexandria International Airport. In 2007, a total of 50,618 operations were conducted by a variety of aircraft types. A breakdown of operational activity revealed that 43% of all operations were itinerant (21,896), and the remaining 57% were comprised of local operations (28,722). A review of the most recent records revealed that AEX has 46 based aircraft which are comprised of 28 single-engine, 3 multi-engine, 8 turbine, 6 jet, and 1 helicopter. The following sections further detail the types of activities that occur at AEX. Additional discussions of operational and based aircraft are discussed in detail in the following chapter.

2.5.1 Commercial Service

AEX presently accommodates four commercial airline carriers, American Eagle, Continental Express, Delta Connection, and Northwest Airlines. Service is provided to each of the airlines' hub airports, on a mixture of turboprop and regional jet aircraft. With exception of Continental Express, each of the airlines conducts three daily flights. However, Continental Express is the most active carrier with six daily flights. A total of 264,992 arriving and departing passengers were collectively processed by airline and charter operators in 2006. **Table 2-2** denotes the various airlines along with the type of aircraft and the frequency of service provided by each carrier.

Air Carrier	Destination	Frequency	Aircraft
American Eagle	Dallas-Fort Worth	3	SF3
Continental Express	Houston	6	3 SF3 2 CRJ 1 ERJ
Delta Connection	Atlanta	3	CRJ
Northwest	Memphis	3	SF3

Source: Official Airline Guide, November 2007.

Notes: SF3 – Saab 340 Turboprop, CRJ - Canadair Regional Jet, ERJ – Embraer Regional Jet

2.5.2 General Aviation

General aviation activity is generally categorized as aviation activity performed by owners and operators that use their personal aircraft for transportation or for sport. The fleet of general aviation aircraft is typically comprised of single-engine or multi-engine aircraft within the A-I to B-II aircraft design group. General aviation activity at AEX has historically comprised 50% of all operational activity and includes approximately 70% of the total based aircraft at the airport.



2.5.3 Military Operations

Approximately 20% of all activity at AEX has historically been comprised of Military activity. Military operations are aircraft operations, which are conducted by an official branch of the U.S. military services. At AEX, activities of this nature are comprised primarily of training activity and troop movement. By commercial lease, the US Army recently constructed a troop processing facility and the Fixed Wing Aircraft Parking and Hazardous Cargo Loading Aprons. The arrival/departure passenger processing facility is located northeast and adjacent to the Military/Cargo Apron. This facility is used to out-process troops for deployment or to in-process for those returning from military duty assignments. Most military loading and unloading activities occur in the vicinity of the newly constructed Military/Cargo apron area which is located adjacent the northern end of the North Apron. In addition to troop processing, AEX is used as a main training facility for the Joint Readiness Training Command (JRTC). The JRTC operates in conjunction with nearby Fort Polk and Camp Beauregard to perform simulated war and troop logistics maneuvers. Under their commercial lease the JRTC utilizes several facilities within the military area which located north of Oliver Drive for troop training and storage of equipment.

2.5.4 Justice Prisoner and Alien Transportation System (JPATS)

JPATS is operated by the United States Marshals Service at AEX. It is one of the largest transporters of prisoners and aliens in the world. Hundreds of requests are handled on a daily basis to move prisoners and aliens between judicial districts, correctional institutions, deportation hearings, and foreign countries. According to the US Marshals Service website, JPATS averages approximately 270,000 prisoner and alien transports a year nationally. In 2007, JPATS conducted 1,506 operations using Boeing 737 and MD-80 aircraft. By commercial lease, the JPATS loading and unloading activities occur in the North Apron ramp area and within Building 525.

2.6 FAA CERTIFICATION AND CLASSIFICATION

Alexandria International Airport is owned and operated by the England Authority. Operational characteristics that dictate future developmental needs at AEX are based upon FAA regulations for airport and aircraft operations. The following sections review the FAA certification requirements and classification systems.

2.6.1 FAR Part 139 Certification

The FAA provides certification of airports for commercial operations under Federal Aviation Regulations (FAR) Part 139, *Certification of Airports*. This regulation was revised in early 2004 to expand the number of airports required to obtain a FAR Part 139 Airport Operating Certificate (AOC). This certification is required for any airport having activity by air carrier aircraft capable of carrying nine or more passengers (which includes charter or air taxi operations), and requires that all such airports prepare an Airport Certification Manual and establish appropriate safety and security procedures, in compliance with FAA standards. The updated FAR Part 139 certification categorizes airports into four classes, based on the type of air carrier operations experienced at



the facility, as shown in **Table 2-3**. AEX has been categorized as a Class I airport and is required to undergo annual FAA inspections in order to retain their FAR Part 139 AOC.

TABLE 2-3 FAR PART 139 AIRPORT CLASSIFICATION SYSTEM				
Type of Air Carrier Operations	Class I	Class II	Class III	Class IV
Scheduled Large Air Carrier Aircraft (30+ seats)	X			
Unscheduled Large Air Carrier Aircraft (30+ seats)	X	X		X
Scheduled Small Air Carrier Aircraft (10-30 seats)	X	X	X	

Source: FAR Part 139, 2006

2.6.2 FAA Service Level Classification

AEX operates as a publicly owned, public-use facility, offering scheduled commercial airline service. The airport also serves the needs of general aviation users, including business and corporate users. In the US, there are over 19,500 airports, of which 5,280 are open to the public. Of those airports, AEX and 3,344 others have been determined by the FAA to be of particular interest to the nation’s air transportation system, known as the National Airspace System, and are included in the FAA’s National Plan of Integrated Airport Systems (NPIAS), published by the US Department of Transportation. Airports listed in the NPIAS are eligible for federal funding under the FAA’s Airport Improvement Program (AIP). Additionally, the NPIAS defines the role of each airport by one of four basic service levels. These levels, listed in **Table 2-4**, describe the type of service that the airport currently serves and is expected to serve the community throughout the NPIAS five-year planning period. It also represents the AIP funding category which assists in airport development.

TABLE 2-4 FAA NPIAS AIRPORT SERVICE LEVEL CLASSIFICATION	
Classification	Definition
Commercial Service Primary	Public-use commercial airports enplaning more than 10,000 passengers annually
Commercial Service Non-primary	Public-use commercial airports enplaning between 2,500 and 10,000 passengers annually
General Aviation Reliever	A general aviation airport that serves to relieve operational congestion at a nearby commercial service airport. Must have at least 100 based aircraft or 25,000 itinerant operations
General Aviation	Other airports with fewer than 2,500 annual enplanements or that does not receive scheduled service

Source: FAA Order 5090.3C, Field Formulation of the NPIAS, 2000.



Based on current and short-term projected passenger enplanements, AEX is designated as a primary commercial service airport for the FAA’s 2007-2011 planning period. Alexandria International is one of seven commercial service airports in Louisiana.

The FAA further classifies primary commercial service airports into categories that compare each airport’s total passenger enplanements to the annual passenger enplanements on a national level. Based on the criteria listed in **Table 2-5**, the FAA designates a facility as a large, medium, small or non-hub facility. The FAA’s use of the term ‘hub’ is used to describe service levels, as opposed to the airline usage of the term, which typically refers to the ‘hub and spoke’ routing network. In 2006, AEX’s enplanements comprised less than 0.05% of the national enplanements, but more than 10,000; hence, AEX is designated a non-hub facility.

According to the Houston North Aeronautical Chart, there are several special use airspaces within the vicinity of AEX. Special use airspaces require that pilots remain outside of a designated area or that they contact the appropriate controlling agency to request permission prior to entering such airspaces. **Table 2-6** denotes the many types of airspaces in the vicinity of Alexandria along with their altitudes, hours of use, and controlling agency.

Term	Definition
Large Hub	Airports that enplane at least 1% of total US passengers annually
Medium Hub	Airports that enplane between 0.25% and 1% of total US passengers annually
Small Hub	Airports that enplane between 0.05% to 0.25% of total US passengers annually
Non-Hub	Airports that enplane less than 0.05% of US passengers, but more than 10,000, annually

Source: FAA, Aviation Capacity Enhancement Plan, 2004.



**TABLE 2-6
SPECIAL USE AIRSPACE**

Special Use Airspace / Military Operations Areas	Location (from AEX)	Altitude	Hours in Use (local time, Monday – Friday)	Controlling Agency
Warrior 1 Low	West; Southwest	100 ft AGL – 9,999 ft MSL	4:00 am – 7:00 pm	Houston Center
Warrior 1 High		10,000 ft AGL – 17,999 ft MSL	4:00 am – 7:00 pm	Houston Center
Warrior 2 Low	South	100 ft AGL – 9,999 ft MSL	4:00 am – 7:00 pm	Houston Center
Warrior 2 High		10,000 ft AGL – 17,999 ft MSL	4:00 am – 7:00 pm	Houston Center
Warrior 3 Low	Southwest	100 ft AGL – 9,999 ft MSL	4:00 am – 7:00 pm	Houston Center
Warrior 3 High		10,000 ft AGL – 17,999 ft MSL	4:00 am – 7:00 pm	Houston Center
Jena 1	North	100 ft AGL – 5,000 ft MSL	8:00 am – 10:00 pm	Houston Center
Hackett	Northwest	7,000 ft AGL – 17,999 ft MSL	7:30 am – 10:00 pm	Forth Worth Center
Claiborne	East	100 ft AGL – 9,999 ft MSL	7:30 am – 10:00 pm	Fort Polk Approach
Restricted Areas				
R-3801A	East	Ground level to 9,999 ft MSL	8:00 am – 10:00 pm	Fort Polk Approach
R-3801B		10,000 ft AGL – 17,999 ft MSL	8:00 am – 10:00 pm	Fort Polk Approach

Source: Houston Sectional Aeronautical Chart, Federal Aviation Administration, September 2007.

2.6.3 Airports in the Vicinity

There are seven public-use general aviation airports within a 30-nautical mile radius of Alexandria. Of the airports within the vicinity, AEX has the longest runway (9,352') within a 74nm radius. The next longest runway in the vicinity resides at Esler Regional (5,999 feet), and the third longest is located at Pollock (4,500 feet). A list of the various publicly-owned civilian airports and their respective facilities are presented in **Table 2-7**.

There are also many privately-owned airports located within the vicinity of AEX. These, however, are typically not for public use and thus require prior permission but may be used in emergency cases. Some of these private airports include Grassroots, Colfax, Summerville, Cheneyville, and Roland airports. There are no known airspace interferences among any area airports and Alexandria International.



**TABLE 2-7
AIRPORTS IN THE AREA**

Airport (FAA Identifier)	Airport Facilities			
	Distance from AEX	Direction from AEX	Runways	Approaches
Esler Regional (ESF)	14 nm	Northeast	5999 ft x 150 ft 5601 ft x 150 ft	ILS RNAV (GPS)
Pineville (2L0)	6 nm	East	3000 x 75 ft.	Visual
Pollock (L66) ¹	10 nm	Northeast	4500 x 75 ft	Visual
Woodworth (1R4)	12 nm	South	3100 x 75 ft.	Visual
Marksville (MKV)	28 nm	Southeast	3802 ft x 75 ft	RNAV (GPS); VOR/DME-A; NDB
Jena (1R1)	28 nm	Northeast	3805 x 75 ft	Visual
Bunkie (2R6)	28 nm	Southeast	3005 ft x 75 ft.	VOR/DME or GPS-A; NDB

Note 1: The local community is working to close this airport.

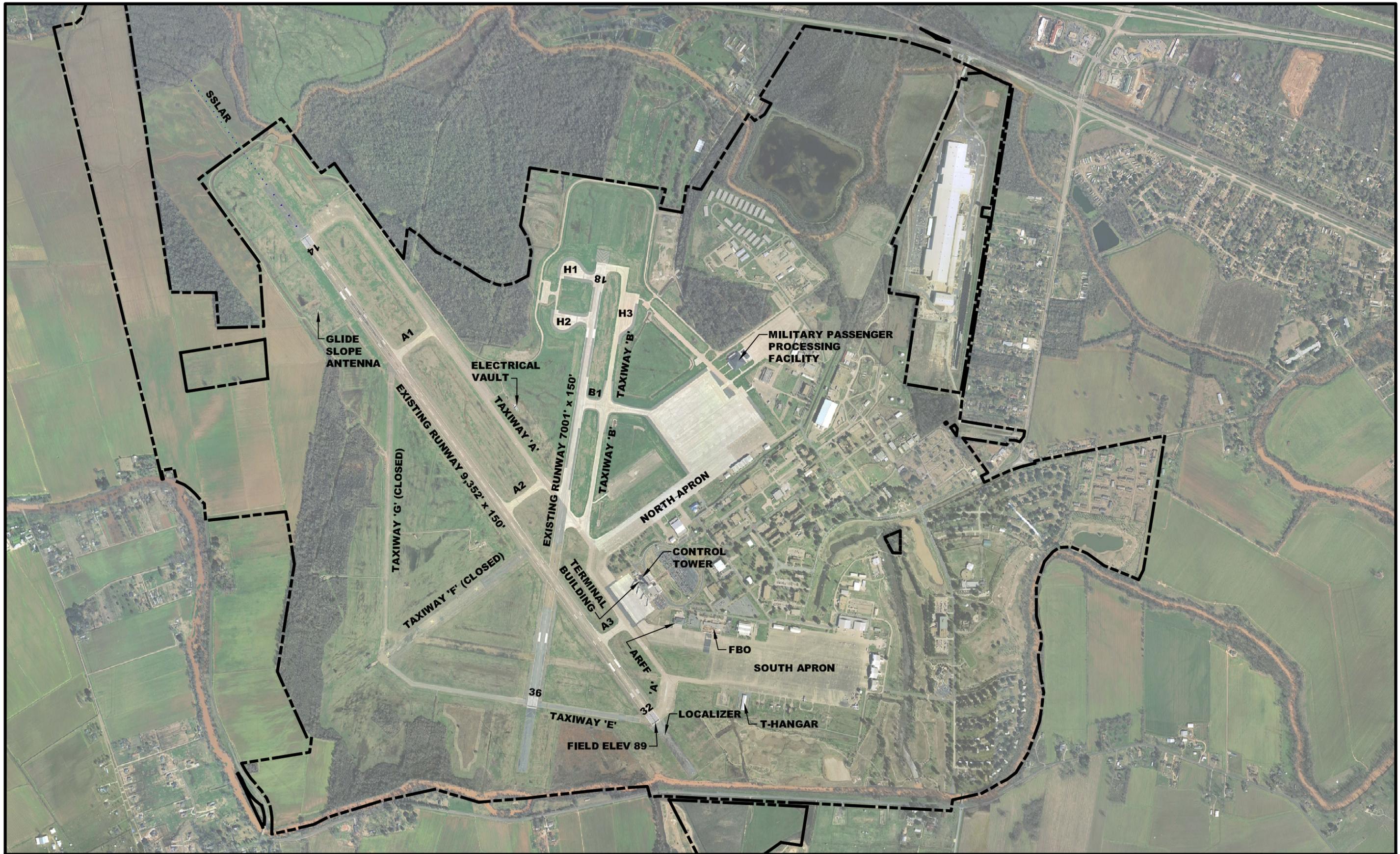
Sources: FAA Airport/Facility Directory, South Central US, December 2007; FAA Sectional Aeronautical Chart, Houston, Effective September 2007.

2.7 AIRFIELD ENVIRONMENT

The following section presents an overview of existing airside facilities at AEX. The following catalog of facilities provides a basis for determining airfield demand/capacity and the identification of facility requirements. The term “airside” generally comprises those facilities necessary to support the movement and operation of aircraft including: runways, taxiways, instrumentation/navaids, airfield lighting, pavement markings, visual aids, and airfield signage. A graphic illustrating the existing airside facilities at the Airport, including taxiway or taxilane designations, is depicted in **Exhibit 2-5**.

2.7.1 Runway 14-32

Runway 14-32 is the primary runway with a length of 9,352 ft and a width of 150 ft. It is constructed of grooved concrete that is in fair condition and is rated for 81,000 lbs single wheel landing gear and 180,000 lbs dual wheel landing gear. The England Authority currently has plans within their CIP to rehabilitate the runway within the next few years. The Runway 32 blast pad is 400 ft long and 150 ft wide and includes an additional 600’ of asphalt pavement for aircraft overruns. The blast pad of Runway 14 is also 150’ wide and 400’ long and is also supplemented with 600’ of asphalt for aircraft overruns.





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2.7.2 Runway 18-36

Runway 18-36 is a secondary primary runway oriented in a north-south direction and is 7,001 long and 150 ft wide. The center portion of runway is constructed of grooved concrete; whereas the outer portions are constructed of asphalt. The military recently renovated the runway up to the intersection with Taxiway A. The runway is rated for 75,000 lbs single wheel landing gear and 130,000 lbs dual wheel landing gear and is considered to be in very good condition. The renovated portion of pavement can accommodate loads associated with C-5 aircraft. The blast pad for Runway 18 is 400 ft long and 200 ft wide; whereas, the blast pad for Runway 36 is 150 feet wide and 400 foot long and includes 1,000 ft of asphalt pavement for overruns. This pavement is in poor condition.

2.7.3 Taxiway A

Taxiway A is a full-length parallel taxiway that provides access to Runway 14-32. It includes three taxiway connectors that help improve runway capacity by creating adequate exit locations for arriving aircraft. The pavement is considered to be in good condition as portions of the taxiway were recently repaired during a 2006 rehabilitation project. The taxiway is constructed of concrete and is considered to be good condition. The northernmost and southernmost ends of the taxiway include engine run-up areas with bypass taxilanes which allows aircraft to maneuver around static aircraft that are performing run-up checks or that may be waiting for IFR clearances.

2.7.4 Taxiway B

Taxiway B is a concrete partial parallel taxiway that supports aircraft movements to and from the north half of Runway 18-36. The taxiway was constructed in conjunction with the Military/Cargo apron development in 2006 and is therefore considered to be in very good condition.

2.7.5 Taxiway E

Taxiway E is located on the southernmost portion of the airfield and spans from the end of Runway 32 to the end of Runway 36 and then continues northwest where it connects to Taxiway F. Although the taxiway has a total length of roughly 4,100 ft., only 1,795 ft. is currently active - the portion connects the ends of Runways 32 and 36. This section is currently not useable. Although the current taxiway is in poor condition, reconstruction of the taxiway portion between the two runway ends is underway and is to be completed by the end of the 2nd quarter of 2009.



2.7.6 Taxiway F

Taxiway F is located southwest of Runway 14-32 and intersects perpendicularly into the runway approximately 3,300 ft. from the end of Runway 32. The taxiway is constructed of concrete that is currently in poor condition. Due to its condition and due to a lack of development on the south side of the airfield, this taxiway is only used on occasion during emergency situations and is therefore considered inactive.

2.7.7 Taxiway G

Taxiway G connects the southernmost portion of Taxiway F and westernmost portion of Taxiway E to Runway 14-32, approximately 2,500 ft. from the end of Runway 14. The taxiway is constructed of concrete and is in very poor condition. This taxiway is not used and is therefore considered to be inactive.

2.7.8 Hot Pads / Ammunitions Storage Area

Near the approach end of Runway 18, there are three concrete apron areas (hot pads) that are utilized for military ordinance unloading and loading. The remote location of these pads protects personnel in the event of an accidental detonation, should one occur. Hot pads H1 and H2 are located due west of the Runway 18 end; whereas, H3 is located east of Runway 18 end near the northern end and adjacent to Taxiway B. These pads were constructed by the military in conjunction with the recent Military/Cargo apron improvements and are therefore considered to be in very good condition. The Clear Zone for Runway 18 extends 4,000 ft from the end the runway just north of H1.

In addition to hot pads H1, H2, and H3, there is a concrete ammunition holding area located west of hot pads H1 & H2 that is used as a staging area for ordinance deliveries. The ammunition storage area is supplemented with a lightning protection system that consists of eight high-mast poles; four located to the west and four to the east of the apron area. The four poles are attached at the top with lightning suppression cabling that captures and diverts any lightning strikes into the ground thereby preventing any accidental ordinance detonations.

Protective offsets are placed around the hot pads designated as the “Inhabited Building Distance (IBD) and “Glass Break” zone. The Inhabited Building Distance is defined as the minimum distance permitted between an inhabited building and an ammunition or explosives location. The Glass Break Zone refers to area where the potential for glass breakage is present potentially associated with the detonation of ordinance. As a result, no building development is located within these protective offsets. However, portions of the hot pad offsets extend off airport property. Therefore, property acquisition or easement of the associated property should be considered to prevent future incompatible development.

In addition to the three hot pad areas located near Runway 18, there is an additional undesignated hot pad area located adjacent Taxiway A near the A-1 connector. This area functions similarly to the previously discussed H pads except that the undesignated area supports military ordinance



loading and unloading for operations that occur on Runway 14-32. The undesignated hot pad pavement is considered to be in good condition.

**TABLE 2-8
EXISTING AIRFIELD FACILITIES**

Runway	Length	Width	Strength ^{1,3}	VGSI ²	Approach	Markings	Lighting
Runway 14	9,352 ft	150 ft	81,000 – S	PAPI	ILS/DME VOR	Precision	HIRL REILs
Runway 32			180,000 – D				
Runway 18	7,001 ft	150 ft	330,000-DT	PAPI	GPS	Non Precision	
Runway 36			850,000- DDT				
			75,000 – S				
			130,000 – D				
			191,000-DT				
			502,000 - DDT				

Sources: FAA Airport/Facility Directory, South Central US, October 2007. THE LPA GROUP INCORPORATED, 2008;

Notes

¹ Landing gear configurations are: S – Single-wheel; D – Dual-wheel; DT – Dual-tandem; DDT – Double-Dual-Tandem

² VGSI – Visual Glide Slope Indicator

³ The portion of Runway 18-36 north of Taxiway A was reconstructed in 2006/2007 and has the pavement strength necessary to accommodate C-5 aircraft activity.

2.7.9 North Apron

The North Apron is centrally located on the airfield and travels in a southwest-northeast direction adjacent and to the east of the Military/Cargo Apron area. This apron is made of concrete and includes approximately 22.6 acres of land. The primary function of the north apron is to provide aircraft parking and equipment storage area for the various facilities located near the north apron area. The area is sized to accommodate Boeing 747-200/400 and C-17 aircraft. There are two notable activities that occur within the north apron area – JPATS and JRTC training activities. A taxilane runs along the western portion of the entire North Apron. This taxilane is used to facilitate aircraft movements to and from the North apron as well as to the Military/Cargo apron area.

2.7.10 South Apron

The South Apron is located in the southeast portion of the airfield in the vicinity of the FBO, t-hangar, and commercial hangar facilities. The apron is comprised of 55.7 acres of concrete that is considered to be in overall good condition. The apron is sized to accommodate aircraft equivalent in size to the Boeing 747 and is used in conjunction with the Military/Cargo Apron to meet a maximum on ground (MOG) requirement of 24 C-5/B747 type aircraft. The eastern portion of the South Apron has had various crack seal and slab replacements to preserve its condition. However, a small portion of apron between the commercial apron and the new FBO terminal (former passenger terminal building) (southwest apron area) is currently in need of



repair and/or rehabilitation. The England Authority plans to rehabilitate the southwest apron area in the future.

2.7.11 Military/Cargo Apron

The Military/Cargo Apron is located between the end of Runway 18 and the North Apron area. The concrete apron was recently constructed by the military in late 2006 / early 2007. This apron is used primarily by the military to load and offload military personnel, cargo, equipment, and supplies. The Military/Cargo apron includes approximately 33.1 acres of concrete apron that is in very good condition.

2.7.12 Helicopter Parking Area

A large concrete pad located within the central portion of the airfield east of Runway 18-36 and west of the North Apron is also part of the airfield environment and therefore worthy of discussion. This area was previously part of the old concrete runway system but now acts as parking and fixed area refueling point (FARP) for helicopter activities. The helicopter parking area contains approximately 3.2 acres of pavement that is in poor condition.

2.7.13 Airfield Lighting

Airfield lighting is necessary at all airports that intend to accommodate operational activity during nighttime hours and/or during inclement weather conditions. It allows pilots to identify the airport from the air and also helps them maneuver safely on the ground during lowered visibility conditions. All airfield lighting electrical requirements at AEX are provided from one main electrical vault that is supplemented with backup generators. The vault and generators are located in an open area between Runways 14-32 and 18-36. This section details the various airfield lighting components that currently exist at AEX.

Identification Lighting

A rotating beacon universally indicates the presence and location of an airport at night or during low visibility conditions. The rotating beacon at AEX is located on the ATCT on the central east side of the airfield. The beacon is equipped with an optical rotating beacon system that projects two beams of sequenced flashing lights, one green and one white, 180 degrees apart, which designated a civil land airport. The beacon, which is in good condition, is continuously operated during nighttime hours and when the airfield is under instrument conditions.

Runway Lighting

Runway lights allow pilots to identify the edges of the runway and assist them in determining the runway length remaining during periods of darkness and restricted visibility. These lighting systems are classified according to their intensity, or brightness. Both Runways 14-32 and 18-36 are equipped with High Intensity Runway Lights (HIRL).



2.7.14 Runway Approach Lighting

Runway End Identifier Lights (REIL)

Runway End Identifier Lights (REILs) are installed at many airports to provide positive identification of the approach end of a runway. The system is composed of a synchronized pair of flashing white lights which are situated laterally about the runway centerline on each side of the threshold. Runways 32, 18, and 36 are equipped with REILs at the runway thresholds. These lights are functional and are in good condition.

Simplified Short Approach Lighting System (SSALR)

The Simplified Short Approach Lighting System with Runway Alignment Indicator Lights (SSALR) consists of a series of steady-burning approach lights that are supplemented with a row of sequential flashing strobes (Runway Alignment Indicator Lighting – RAIL) that guide pilots toward the runway end. This approach lighting system is typically used in Category I approach applications; however, this lighting system can be modified/upgraded to accommodate a Category II approach. The SSALR is currently functional and is considered to be in good operating condition.

2.7.15 Taxiway / Apron Lighting

All of the major taxiways at AEX are equipped with Light Emitting Diode (LED) Medium Intensity Taxiway Lights (MITL). Within the last 12 months the England Industrial Airpark staff performed an in-house upgrade to LED lighting. Similar to runway lighting, the taxiway lighting systems have all been constructed with light cans and conduit and are considered to be in good condition. Apron and taxilane lighting is provided by high wattage metal halide or by high pressure sodium fixtures that are mounted on high mast poles or onto the rooftops of existing facilities. There is currently no taxiway or taxilane centerline lighting installed at AEX. However, all taxiways are equipped with centerline reflectors. With the exception of Taxiway B, poor cabling needs to be replaced in other taxiway areas.

2.7.16 Apron Lighting

Apron lighting is used to illuminate apron and ramp areas for the purposes of safety and security. Clusters of high wattage sodium and/or metal halide lamps are currently situated atop high mast light poles to provide lighting for both the North and South Apron areas. A total of 31 of these “ball park” style lights are in place at AEX.

2.7.17 Airfield Signage

AEX has a number of illuminated airfield signs to display instruction and guidance information to aircraft, as stipulated in AC 150/5340-18D. Standard airfield signage is used to indicate an intersection of or an entrance to a runway, taxiway or other critical movement area. In addition to standard signage, both Runways 14-32 and 18-36 are also equipped with runway distance remaining signs, which are characterized by single, double-sided white numerical inscriptions that are used by pilots as a reference to indicate the remaining distance of runway available in thousands of feet. Other signage includes mandatory instruction signs, which are identified by a



red background and white inscription, and directional signage indicated by a yellow background and black inscriptions. Most of these signs consist of taxiway directional signs with arrows to an exit or entry to a taxiway. These signs are typically multi-modular with an accompanying location sign identified by a black background and yellow inscriptions of the taxiway designator.

2.7.18 Navigation Aids

In addition to the navigational systems and markings previously discussed, runways are generally equipped with other navigational devices (NAVAIDS) to aid pilots in takeoff and landing procedures. Some give indications of weather conditions, while others give either visual or instrument course guidance. It should be noted that most of these systems are owned and operated by the FAA. The following section summarizes the various navigational aids that are currently in use at AEX.

Instrument Landing System (ILS)

Alexandria International Airport is equipped with an ILS precision instrument approach to Runway 14. The capture-effect ILS is comprised of a localizer antenna, glide slope antenna, approach lighting system, and markers. The localizer provides horizontal electronic course guidance, while the glide slope provides vertical electronic course guidance, enabling a pilot to align the aircraft with the runway centerline and descend along a path clear of obstacles to the runway threshold. The Simplified Short Approach Lighting System with Runway Alignment Indicator Lights (SSALR) provides a pilot with transition from aircraft instruments to the visual runway environment. The outer and middle markers emit audible signals in the cockpit, indicating distance information from the runway. The current published approach minimums provide guidance to 285 ft MSL (200 ft AGL) in ½ statute mile visibility.

Very High Frequency Omni-directional Range (VOR)

The Alexandria VOR station, designated AEX, is located approximately four nm southeast of the airfield. The VOR station provides aircraft instruments with horizontal course information, to or from the station. It operates by emitting a steady 360 degree signal, as well as producing a rotating signal which compares aircraft position information with the steady signal in order to transmit course information back to the aircraft. Its high altitude standard service volume has a range between 40 and 130 nm up to 60,000 ft MSL. The AEX VOR provides non-precision instrument approaches to Runway 14 and Runway 32 at Alexandria Regional. Current approach minimums for Runway 14 are 460 ft MSL (375 ft AGL) in ½ statute mile visibility. Approach minimums for Runway 32 are 520 ft MSL (431 ft AGL) in one statute mile visibility.

DME is co-located with the AEX VOR and transmits on the same frequency. The DME ground station receives signals from aircraft transmitters, converts the information into distance and ground speed data, then transmits back to the aircraft. DME is limited to providing slant-range, or line-of-sight, distance information. It provides additional distance information for both VOR instrument approaches to AEX.



Global Positioning Satellite (GPS) Navigation

The GPS is a space-based navigation system comprised of satellites, ground stations, and user receivers. An aircraft GPS receiver can track the position of the aircraft by calculating and comparing signal distance from several satellites. The system is reliable in all terrain and all weather conditions and is typically accurate within 100 ft. AEX is currently served by GPS approaches to Runways 114, 32, 18, and 36. Published approach minimums are as follows:

Runway 14 - 460 ft MSL (375 ft AGL) in ½ statute mile visibility;
Runway 32 - 520 ft MSL (431 ft AGL) in one statute mile visibility;
Runway 18 - 520 ft MSL (436 ft AGL) in one statute mile visibility; and
Runway 36 - 500 ft MSL (413 ft AGL) in one statute mile visibility.

Wide Area Augmentation System (WAAS)

WAAS is a GPS-based navigation system which augments the existing GPS signals to provide the user highly accurate position and tracking information. Localizer Precision with Vertical Guidance (LPV) is an instrument approach procedure utilizing WAAS technology to provide both vertical and horizontal guidance to aircraft. Like basic GPS navigation, WAAS and LPV approaches are available in all weather terrain conditions. AEX has LPV instrument approaches published for Runways 32, 18, and 36. Approach minimums are as follows:

Runway 32 - 340 ft MSL (251 ft AGL) in one statute mile visibility;
Runway 18 - 395 ft MSL (311 ft AGL) in one statute mile visibility; and
Runway 36 - 391 ft MSL (304 ft AGL) in one statute mile visibility.

Precision Approach Radar (PAR)

During the course of this study a Precision Approach Radar (PAR) approach was installed south and west of Runway 14-32. The PAR “is a type of radar guidance system designed to provide lateral and vertical guidance to an aircraft pilot for landing, until the missed approach point is reached. Controllers monitoring the PAR displays observe each aircraft’s position and issue instructions to the pilot that keep the aircraft on course during final approach. It is similar to an ILS but requires control instructions. A type of PAR instrument approach includes a ground controlled approach (GCA). Precision approach radars are most frequently used at military air traffic control facilities, and radars can provide precision guidance to a distance of 10 to 20 miles.”¹

¹ Wikipedia Free Encyclopedia, Precision Approach Radar.



2.7.19 Visual Aids

Precision Approach Path Indicator (PAPI)

A Precision Approach Path Indicator (PAPI) lighting system provides aircraft with a visual descent reference during approach. These lights are typically visible from five miles during the day and up to 20 miles or more at night. PAPIs use a light bar unit which contains white and red lights that are installed in a single row perpendicular to the runway edge. Depending on the aircraft angle in relation to these lights, the pilot will receive a combination that indicates his position relative to the desired glide slope. A white indication notifies pilots that their approach is too high; whereas, a red light indication alerts pilots that they their approach is too low. An indication of two white and two red lights reveals to pilots that they are on the correct approach slope. To aid in a visual approach to landing, all runways at AEX are equipped with a 3° glide path, 4-light precision approach path indicator (PAPI) on the left side of each runway threshold. The Authority maintains all PAPIs at AEX.

Windcones

Alexandria International currently has five lighted wind cones located on the airfield. Each runway is equipped with a windcone positioned near its end an additional windcone is located in the midfield between the ends of Runways 18 and 14.

2.8 AIRPORT / AIRSIDE SECURITY

Physical and operational security requirements for commercial service airports (designated under 14 CFR Part 139, Certification of Airports) are provided in Transportation Security Administration, Recommended Security Guidelines for Airport Planning, Design and Construction, June 2006, and TSA 49 USC 1542, Airport Security, which replaces FAR Part 107, Airport Security. The level of security enhancements required beyond those outline in USC 1542 may be determined through the use of a vulnerability assessment. A vulnerability assessment is a tool used to evaluate the airport's level of short and long-term threat and seeks to balance security with ease of movement for passengers and employees.

The purpose of security protection is not only to provide physical protection to aircraft operators and personnel but to limit criminal acts which may endanger airport facilities and its users. Any area requiring control for security and/or safety purposes must have an identifiable boundary to prevent or deter access to a specific area. Boundaries do not always include physical barriers, such as fencing, walls, etc., but may include painted lines, lines marked and monitored by electronic signals, grass, pavement edges, and or natural boundaries.

2.8.1 Airside Security

The airport airside includes all movement areas, adjacent terrain and buildings or portions thereof where access is controlled. This area includes runways, taxiways, aprons, aircraft parking and staging areas as well as aircraft support facilities, such as fuel and aircraft rescue and



fire fighting facilities. Security areas on the airside of an airport include: the Aircraft Operations Area (AOA), and other sterile areas.

A key requirement of the Part 139 Certificate is to have the appropriate airport security fencing as required by federal regulation. Security assessments conducted during site visits revealed that the entire airfield was amply enclosed with 6 ft. high fencing supplemented with three-strand barb wire. Authorized personnel can use magnetic access cards to open various airfield gates positioned throughout the airfield or they can use wireless remotes located within Authority vehicles equipped with such.

2.8.2 Terminal Security

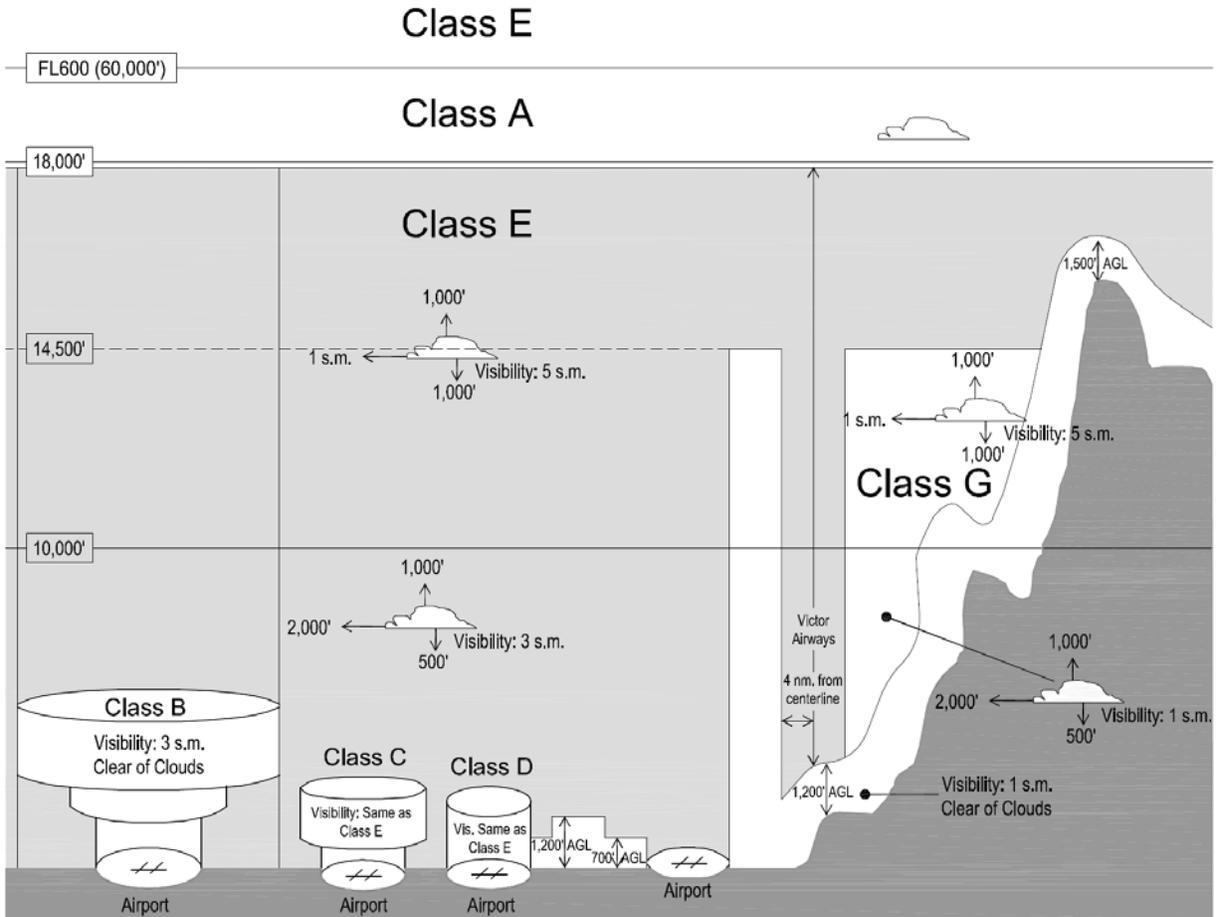
Terminal security transitions passengers from the landside to the airside and consists of three specific areas: public, non-public and sterile. Public areas include terminal lobby areas, concessions, restrooms, public emergency exits, etc. Non-public areas include: airport and tenant administrative/personnel offices; law enforcement and public safety areas, building maintenance areas, security operations center, loading dock and delivery areas, etc. The sterile area is typically defined as the area beyond the passenger screening checkpoint, which may include passenger hold rooms, concessions and restroom facilities. Terminals should be designed to limit locations for concealment for either an object or a person as well as prevent through the use of physical or electronic deterrents public access to non-public or sterile facilities.

Access to secure areas within AEX's passenger terminal can only be obtained by individuals that possess the appropriately authorized magnetic access card or if they are accompanied by the appropriately authorized individual(s).

2.9 AIRSPACE AND AIR TRAFFIC CONTROL

AEX is surrounded by Class D airspace within a four nm radius, extending from the surface up to 2,600 ft above mean sea level (MSL). Class E airspace also surrounds the airport within a 14 nm radius, extending from 700 ft above ground level (AGL) up to, 17,999 ft MSL. Esler Regional Airport is 13 nm northeast of AEX. The Esler Class E airspace extends from the surface up to 17,999 ft MSL, and is adjacent along the northeastern to eastern boundary of the Alexandria airspace. Both Class D and E airspace are classified as controlled airspace, with specific requirements governing VFR and IFR operations. **Exhibit 2-6** illustrates a chart of the various airspace classes as defined by the FAA.

EXHIBIT 2-6 – CLASSES OF AIRSPACE



2.9.1 Victor Airways

Victor Airways, also called Federal Airways, are preferred VFR routes between VORs. They are published on sectional charts as a blue shaded line identified by a 'V' and airway number. These airways are Class E airspace and are eight nm wide. They extend from 1,200 ft AGL up to, but not including 18,000 ft MSL. Victor Airways in the vicinity of AEX are as follows:

- V 114-566 – from AEX, heading 299°, to Gregg County (GGG), 134 nm;
- V 212 – from AEX, heading 265°, to Lufkin (LFK), 114 nm;
- V 245-570 – from AEX, heading 067° to Natchez (HAH), 65 nm;
- V 212 – from AEX, heading 085° to McComb (MCB), 115 nm; and
- V 114 – from AEX, heading 123°, to Baton Rouge (BTR), 78 nm.

2.9.2 IFR Routes

IFR routes are classified as low and high altitude. These routes provide for uniform and efficient IFR air traffic management and are published on IFR enroute low and high altitude charts. Low altitude routes are for use up to, but not including, 18,000 ft MSL, but have minimum and



maximum altitudes designated for individual route segments. Victor Airways are often used for low altitude IFR routing, as is the case in the vicinity of AEX.

High altitude routes, also called jet routes, are for use at and above 18,000 ft MSL, and sometimes operate in only one direction, due to volume. High altitude routes in the vicinity of Alexandria International are as follows:

- J 50 – from AEX, heading 085°, to MCB, 115 nm;
- J 58 – from CTY, heading 119°, to HRV, 154 nm; and
- Q 40 (RNAV route), from AEX, heading 059, to DOOMS intersection, 78 nm.

2.9.3 Special Use Airspace

Fort Polk Army base is located approximately 40 miles southwest of Alexandria. Several special use airspace areas are in the vicinity of AEX, including Military Operations Areas (MOAs), alert areas, and restricted areas. High speed military aircraft and weapons exercises often occur within MOAs and restricted areas. Alert areas can include high volume or unusual flight operations. VFR flight is not restricted within MOAs or alert areas, although pilots are advised to contact the controlling agency prior to flight through these areas. VFR flight operations within restricted areas require permission by the controlling agency. IFR flight operations are always routed by air traffic controllers and may transition these airspace areas as allowed. **Exhibit 2-7** is portion of Houston North Aeronautical chart which shows the various types of airspaces, routes, and obstructions located in the vicinity of AEX.

2.9.4 Air Traffic Control

The ATCT is co-located with the commercial service terminal on the southeast side of the airfield. It is operational 24 hours per day and staffed by the DOD and the Louisiana Air National Guard 259th Air Traffic Control Squadron, through a joint agreement with the FAA. Typical staffing protocol for AEX is comprised of two controllers on duty between the hours of 6:00 am and 8:00 pm, with one controller on duty between 8:00 pm and 6:00 am. Fort Polk Approach Control, located at nearby Fort Polk Army Base, provides local approach and departure air traffic services.



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ENGLAND
INDUSTRIAL AIRPARK & COMMUNITY

Alexandria International Airport
Master Plan Update 2009

Aeronautical
Chart

Exhibit

2-7



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The ATCT manage aircraft flying within the controlled airspace near AEX, as well as vehicles and aircraft operating on the ground within the defined movement area of the airfield. Vehicle and aircraft operators must maintain contact with ATCT personnel in both of these areas, whether on the ground or in the air. The purpose of the ATCT personnel is to ensure that all movements are coordinated in a safe manner according to FAA requirements.

2.9.5 FAR Part 77 / Obstructions

Federal Aviation Regulations (FAR) Part 77, *Objects Affecting Navigable Airspace*, defines imaginary surfaces surrounding an airport which must be kept clear of natural and man-made structures which affect the safety of approaching or departing aircraft. **Table 2-9** illustrates the standard dimension for civilian imaginary surfaces; whereas, **Table 2-10** denotes the actual Part 77 surface dimensions at AEX. **Exhibit 2-8** graphically depicts the various FAR Part 77 surfaces. A detailed analysis of structures in the vicinity of the airport will be conducted in Chapter 5, *Airport Alternatives*.

TABLE 2-9 – FAR PART 77 IMAGINARY SURFACE DIMENSIONS							
DIM	ITEM	Dimensional Standards (Feet)					Precision Instrument Runway
		Visual Runway		Non-Precision Inst. Runway		Precision Instrument Runway	
		A	B	A	B		
				C	D		
A	Width of primary surface and approach surface width at inner end	250	500	500	500	1000	1000
B	Radius of Horizontal Surface	5000	5000	5000	10000	10000	10000
		Visual Runway		Non-Precision Inst. Runway		Precision Instrument Runway	
		A	B	A	B		
					C	D	
C	Approach Surface width at end	1250	1500	2000	3500	4000	16000
D	Approach Surface length	5000	5000	5000	10000	10000	-
E	Approach Slope	20:1	20:1	20:1	34:1	34:1	-

A – Utility runways

B – Runways larger than utility

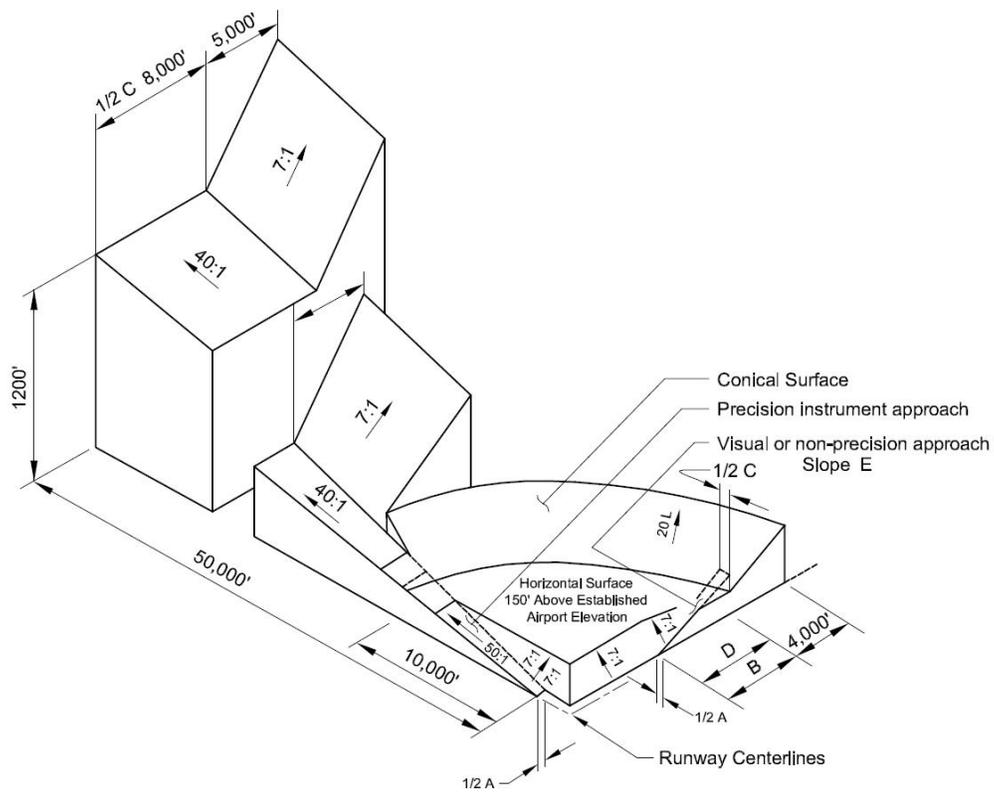
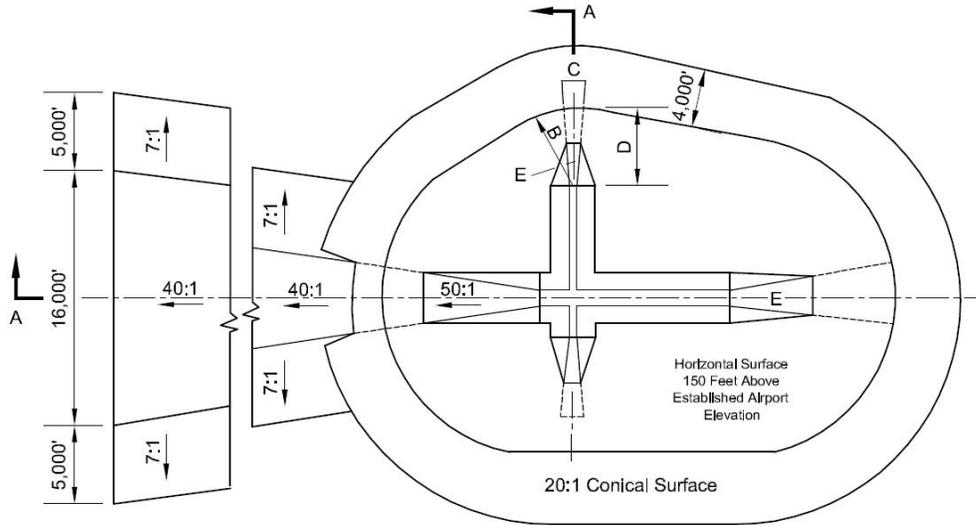
C – Visibility minimums greater than ¾ mile

Source: *Federal Aviation Regulations, Part 77*

D – Visibility minimums as low as ¾ mile

E – Precision instrument approach slope is 50:1 for inner 10,000 feet and 40:1 for an additional 40,000 feet.

EXHIBIT 2-8 TYPICAL CIVILIAN AIRPORT IMAGINARY SURFACES



Isometric View of Section A-A

TABLE 2-10 FAR PART 77 IMAGINARY SURFACE DIMENSION REQUIREMENTS				
	Runway Approach End			
	Runway 14	Runway 32	Runway 18	Runway 36
Approach Type	Precision	Non-precision	Non-precision	Non-precision
Primary Surface Width	1,000 ft	1,000 ft	500 ft	500 ft
Horizontal Surface Radius	10,000 ft	10,000 ft	10,000 ft	10,000 ft
Approach Surface Width at End	16,000 ft	4,000 ft	3,500 ft	3,500 ft
Approach Surface Length	10,000 ft; 40,000 ft	10,000 ft	10,000 ft	10,000 ft
Approach Slope	50:1; 40:1	34:1	34:1	34:1

Sources: Federal Aviation Regulations Part 77; FAA Airport/Facility Directory

2.9.6 Runway Protection Zones (RPZs)

The function of RPZs, as defined by FAA Advisory Circular (AC) 150/5300, *Airport Design*, is “to enhance the protection of people and property on the ground.” Typically, the RPZ begins 200 ft beyond the runway end, and extends out in a trapezoidal shape. The inner and outer widths are dependent upon the aircraft approach category and approach visibility minimums of each runway end. It is highly desirable for the airport to have fee simple ownership of the land within the RPZ and have it cleared of all incompatible objects and activities. Currently, RPZ dimensions for all runways are based on aircraft approach category D, which are aircraft with approach speeds of at least 141 knots or more but less than 166 knots. AEX meets the existing RPZ dimensional requirements presented in **Table 2-11**.

TABLE 2-11 RUNWAY PROTECTION ZONES DIMENSIONS				
Runway	Existing Dimensional Requirements			
	Approach Visibility Minimums	Length	Inner Width	Outer Width
Runway 14	½ sm	2,500	1,000	1,750
Runway 32	1 sm	1,700	500	1,010
Runway 18	1 sm	1,700	500	1,010
Runway 36	1 sm	1,700	500	1,010

Source: FAA AC 150/5300, *Airport Design*



2.10 Terminal Environment

The landside terminal area at AEX consists of the various elements essential for commercial air service including: concessions, rental car counters, baggage claim and bag makeup, ticket counters, airline offices, holdrooms, public restrooms, circulation areas, and utility areas such as mechanical, electrical and communication areas. This section presents an inventory of these areas and identifies potential constraints and opportunities that are further discussed in subsequent chapters of this document.

In December of 2006, many citizens of Alexandria witnessed the grand opening of the new passenger terminal facility at Alexandria International Airport. The terminal is comprised of three levels with a total of 107,187 square feet of space. Approximately 80,000 square feet is air conditioned and 35,000 square feet is comprised of covered open space in the lower level bag makeup area. The terminal is equipped with all the amenities required of a commercial service terminal including an integrated Air Traffic Control Tower (ATCT).

2.10.1 Terminal - Level 1

The southern portion of the first level is dedicated to passenger arrivals with baggage claim area and rental car counters; whereas the northern portion is dedicated to passenger departures (ticketing). The terminal's central corridor contains an aesthetic water feature along with escalators on both sides which lead to and from the second level. Restrooms are located on south side of the water feature and an elevator bank is located on the north side which leads to levels 2 and 3 and also up to level 5 of the 10-floor Air Traffic Control Tower (ATCT).

Ticketing

Approximately 3,700 square feet of space on the north side of the terminal is dedicated to passenger ticketing and queuing. Each of the four airline operators occupies four counters each for a total of 16 positions. In addition to the ticket counters, continental express provides two self check-in kiosks for passenger convenience. There are also three e-ticket kiosks located on near the northernmost portion of the lower level. The ticket corridor provides ample room for passenger queuing and circulation and includes seating areas along the western terminal perimeter.

Baggage Claim

As mentioned earlier, the southern portion of the terminal is dedicated to rental car and baggage claim functions. The baggage claim portion encompasses approximately 4,396 square foot of public space. Presently, there is only one baggage claim device at AEX. However, there is ample space to the south for an additional device in the future. At present, this area is occupied by couches and individual seating for passenger convenience.



Rental Car

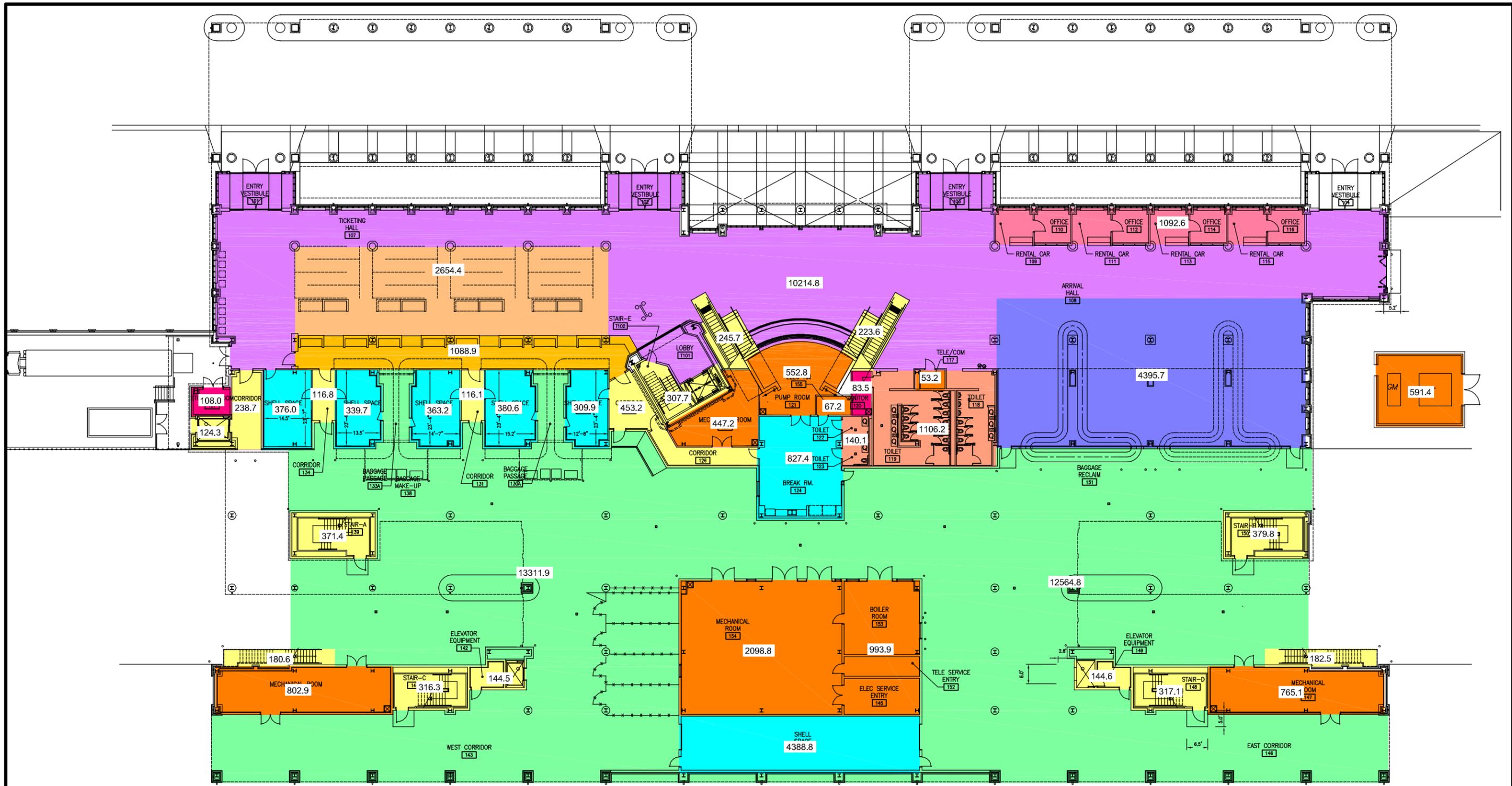
The rental car counters and offices are situated adjacent the baggage claim area in the south western portion of the terminal. Together, these counters and offices comprise approximately 1,093 square feet of space. There are presently four rental car companies that operate at AEX: Avis, Budget, Hertz, and National. A small parking lot located due south of the terminal is allocated for rental car pickup; whereas, returns are parked along the first two rows of the passenger parking lot. **Table 2-12** below illustrates a detailed breakdown of space within the terminal’s first level and **Exhibit 2-9** graphically depicts the various spaces and uses thereof.

Area Description	Area (s.f.)
Mechanical/Electrical/Comm	6,372
Public Circulation	10,215
Circulation	3,863
Storage	191
Airline / Office	3,911
Restrooms	1,246
Ticket Counter	1,089
Ticket Queuing	2,654
Baggage Claim	4,396
Rental Car Counter / Offices	1,093
Baggage Make-up (Covered)	25,875
Total - Level 1	60,905



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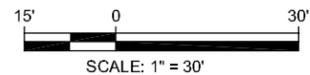
\\Tpa-data1\tempo\Planning\AEX - Alexandria\Figures\Ch. 2\Exh 2-9 terminal-level1.dwg January 08 2009-15:08



LEGEND			
	Rental Car Offices / Counter		Airline Office / Shell Space
	Restrooms		Storage
	Bag Makeup / Area Under Cover		Public / Circulation
	Ticket Queuing		Bag Claim
	Mech / Elec / HVAC / Comm.		Circulation
	Ticket Counter		



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Terminal - Level 1
Space Breakdown

Exhibit

2-9



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2.10.2 Terminal - Level 2

The primary function of level 2 is to provide space for departing and arriving passengers and/or for relatives waiting for departing or arriving passengers. The entire level is composed of approximately 35,900 square feet of space for the accommodation of these functions. The following sections detail the various areas and uses on the terminal's second level.

Food court / Seating / Waiting Area

The waiting area is comprised of two distinct sections, a food court section that is tiled and located adjacent the deli/restaurant area for their customers and a second carpeted area with several chairs and couches for use by individuals waiting for arriving passengers or for departing passengers that are waiting to pass through the Transportation Security Association screening. In addition to the restaurant and seating amenities, there are vending machines, public telephones, automatic teller machines, elevators, and restrooms located on the second level for passenger convenience.

Transportation Security Administration (TSA)

The TSA screening area is centrally located on the backside of the terminal between the waiting area and the holdroom areas. In addition to the screening areas, there are two adjacent rooms located to the east of the screening area. The northernmost room is used as office for TSA administrative functions; whereas, the southern room is used for passenger searches and interviews. The entire TSA function on level 2 includes approximately 881 square feet of space. The screening area typically remains locked with roll down fencing until a flight is nearing its departure time. After which the fencing is removed and the station is manned by TSA personnel. Passengers typically pass through one of two queuing lines for baggage x-ray and through metal detectors prior to reaching the secure holdroom areas.

Holdrooms / Gates / Counter

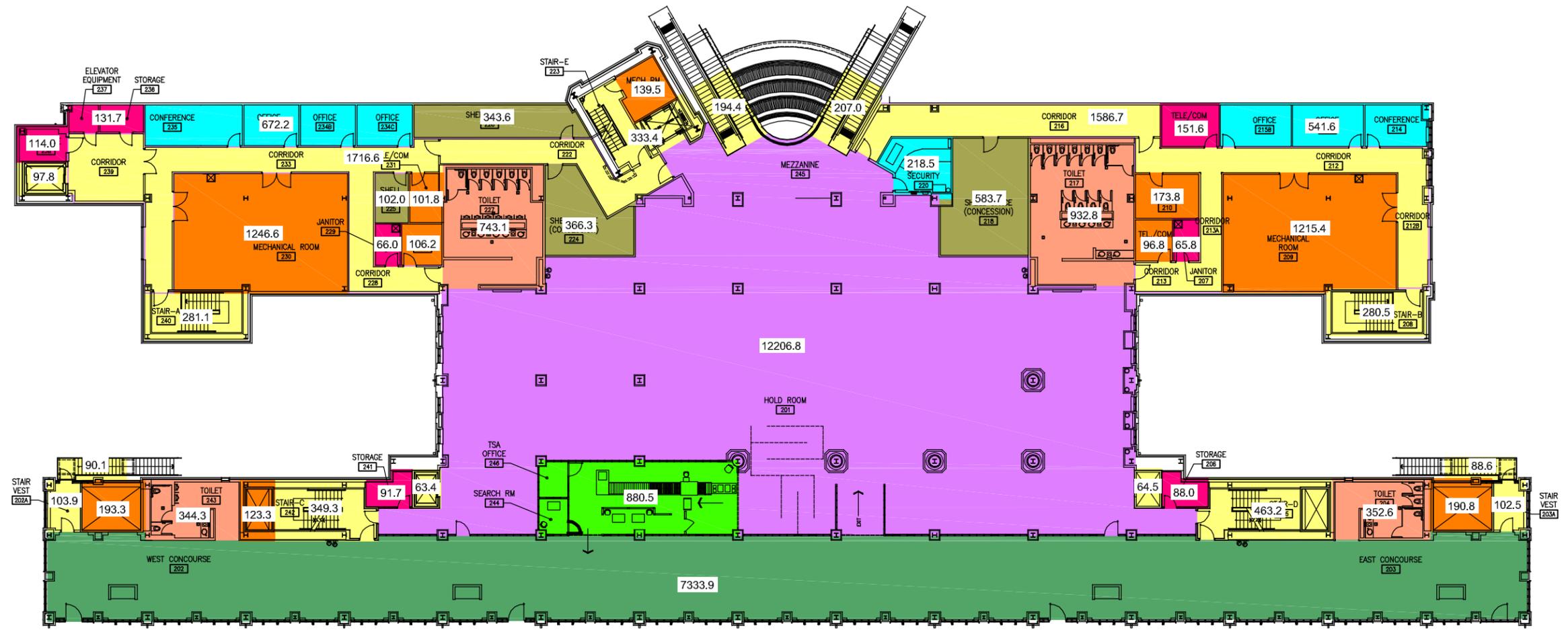
After passengers pass through the TSA into the sterile area, they enter a long corridor that comprises the holdroom and gate areas. In total, the secure holdroom and gate areas include approximately 8,020 square foot of space. The secure area is broken into four distinct uses, airline counter, seating, circulation, and restroom areas. There are two restrooms located at opposing ends of the secure corridor. The women's restroom is located on the south side; whereas, the men's restroom is located on the north side. There are currently four gates in operation at AEX, one is operated by each carrier and has a counter located adjacent the passenger boarding bridge entrance. There are approximately 40 seats designated for each holdroom / gate area for a total of 160 seats. A detailed breakdown of the various areas within the terminal's second level is shown in **Table 2-13** and **Exhibit 2-10** graphically depicts the various spaces and uses within the second level.

TABLE 2-13 TERMINAL – LEVEL 2 SPACE BREAKDOWN	
Area Description	Area (s.f.)
Mechanical/Electrical/Comm	3,588
Public Circulation	12,207
Circulation	6,023
Storage	709
Office / Conference Room	1,432
Concession / Shell Space	1,396
Restrooms	2,373
TSA	881
Holdroom	7,334
Total - Level 2	35,943

2.10.3 Terminal - Level 3

The third level of the terminal is basically segregated into two distinct areas: balcony seating and conference room. The balcony includes seating and tables positioned along the outer perimeter window areas to create a view to the apron area below. The interior of the balcony seating is open to level 2 below thereby creating a clear story view to the passenger waiting area. The entire third level comprises approximately 10,300 square feet of space with approximately 2,560 square feet dedicated to the conference room. The 48 ft. x 50 ft. conference room is equipped with meeting tables and chairs, audio visual equipment, and a bar for serving food and/or drinks. **Table 2-14** illustrates a detailed breakdown of the terminal’s third level and **Exhibit 2-11** graphically depicts the many spaces and uses within.

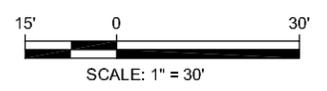
TABLE 2-14 TERMINAL – LEVEL 3 SPACE BREAKDOWN	
Area Description	Area (s.f.)
Mechanical/Electrical/Comm	829
Public Circulation	0
Circulation	1,257
Storage	542
Office / Conference Room	2,564
Restrooms	578
Balcony / Balcony Corridor	4,570
Total - Level 3	10,340



LEGEND		
 Concession / Shell Space	 Office / Conference Room	 Restrooms
 Holdrooms	 Public / Circulation	 Storage
 Mech / Elec / HVAC / Comm.	 Circulation	 TSA



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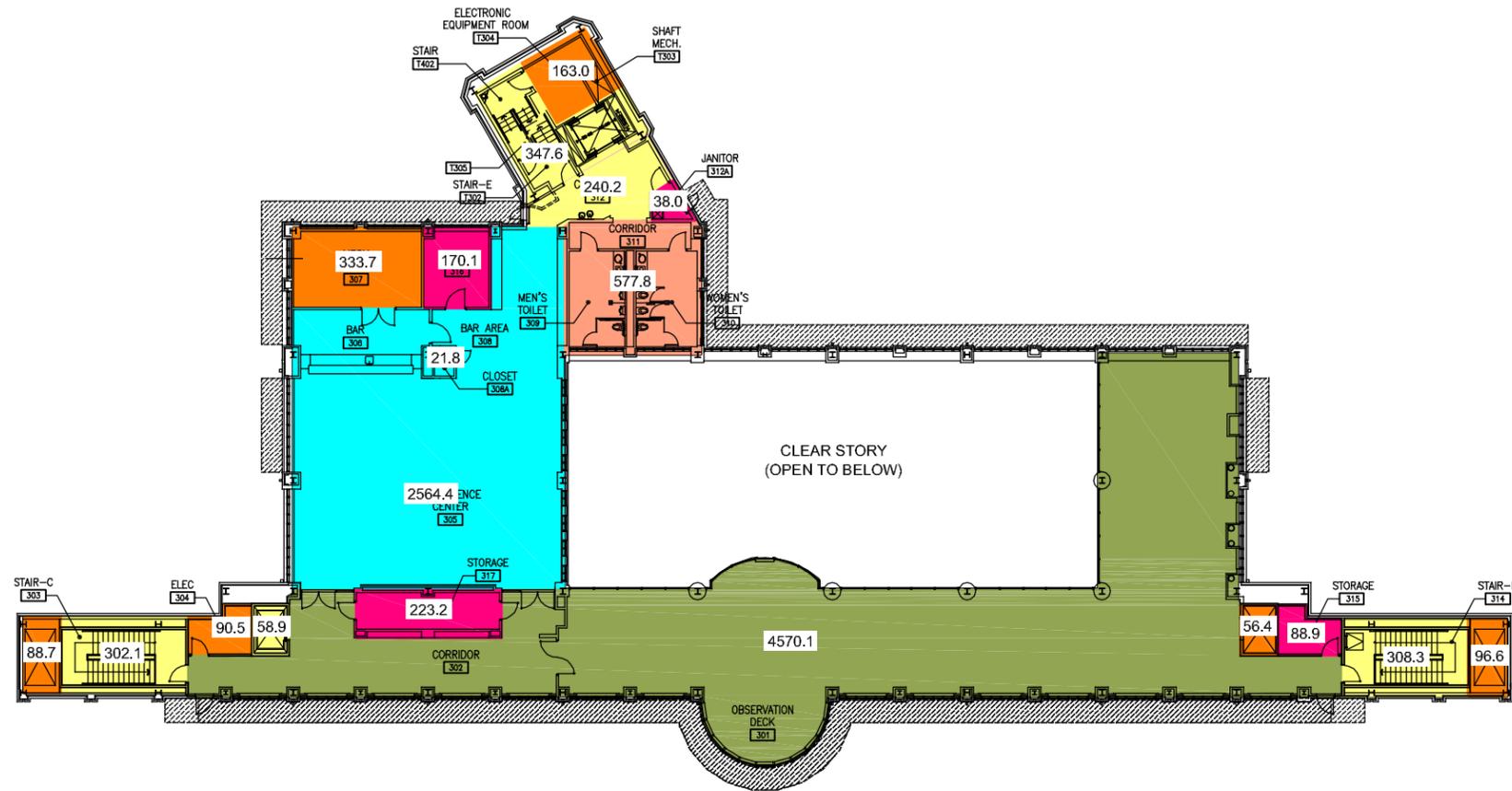
Terminal - Level 2
Space Breakdown

Exhibit

2-10



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LEGEND			
	Office / Conference Room		Mech / Elec / HVAC / Comm.
	Public / Circulation		Circulation
	Restrooms		Balcony / Corridor
	Storage		





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2.11 AVIATION RELATED FACILITIES

There are currently hundreds of facilities that reside within the Airpark boundaries and are therefore under the control of the England Authority. Although a majority of these structures are comprised of non-aviation related landside facilities, there are a significant amount of aviation related facilities. Airside facilities consist primarily of structures that are located adjacent the airfield or that have direct airfield access. These facilities include workshops, hangars, storage areas, and other structures that lend themselves to aviation or aviation-related activity. In total, there is approximately 324,138 square feet of airside facilities at AEX. **Table 2-15** denotes the various types of airside facilities that currently exist along with the facilities current uses and square footages. **Exhibit 2-12** points out the location of the various airside facilities at AEX. The following sections briefly outline the various airside structures that are under the control of the England Authority.

Bldg. #	Description	S.F.	Use	Note
525	US Marshals Service	41,087	Hangar	~33,389 s.f. of hangar
814	Maintenance	34,176	Shop	
816	Shop / Storage	4,800	Shop / Storage	
820	National Guard ATCT Offices	8,443	Office	
834	Maintenance Shop	5,472	Shop	
1707	Vehicle Maintenance Shop	29,433	Shop	
1708	Offices	4,631	Offices	
2102	Jet Engine Maintenance Shop	37,000	Shop / Storage	288 s.f. of storage
2106	FBO Terminal	18,000	FBO	
2107	Shop / Storage	13,963	Shop / Storage	
2108	Shop / Storage	9,695	Shop / Storage	
2502	Maintenance Hangar	51,704	Hangar/FBO	39,027 s.f. of hangar space (2 hangars) 12,677 sf. of FBO
2503	Maintenance Hangar	10,137	Hangar	
2504	Maintenance Hangar	16,766	Hangar	
2505	Maintenance Hangar	17,355	Hangar	
2528	SHP Non-Destr. Insp.	3,983	Shop / Storage	
2614	T-Hangar	14,000	Hangar	
2618	Jet Engine Test Cell	3,493	Shop	

Source: England Air Force Base Building Inventory, Greiner Inc. 1992
Interview with Charlie Elliot (Million Air) 2/2008



2.12 FIXED BASE OPERATOR (FBO)

Million Air of Alexandria is currently the FBO that serves the aviation community at AEX. The main office and terminal reside within the old passenger terminal building located just east of the ARFF station. Arriving aircraft pilots can easily access the FBO by using Taxiway A to reach the south apron and FBO terminal area. Million Air is a full-service FBO that provides a variety of services for both civilian, military and based and transient aircraft operators. These services include 100LL and Jet A fueling, pilot lounge with weather and flight planning computer access, flight training, lavatory service, potable water, catering, hangar space, aircraft towing and emergency service, tie downs, sleep room, rental car, conference rooms, courtesy cars, complimentary coffee, snacks, and soda, vending machines, air-to-ground radio, and pilot supplies. Million Air’s primary business is Jet A fuel sales, due to the daily commercial operations and a contract to provide fuel to transient military aircraft. Million Air is open 24 hours a day, seven days a week and has 20 full-time and 5 part-time employees.

2.12.1 Fuel Storage / Fuel Farm / Fuel Trucks

The primary fuel bulk storage area is located in the northeast quadrant of the airport in an area referred to as the fuel farm. The fuel farm is comprised of several large-volume fuel storage tanks – some of which are currently not usable due to their condition. In addition to the fuel farm area, additional fuel waste tanks are located in the vicinity of the South Apron area. The following **Table 2-16** lists the various types and uses of the storage tanks within the fuel farm and south apron areas.

TABLE 2-16 FUEL STORAGE INVENTORY		
Type of Fuel Storage	Capacity / Type	Comments
Jet-A	430,000	Only 230,000 gallons of usable storage due to condition.
AVGAS	30,000 Gallon Tank	
MOGAS	500 Gallon Tank	
Diesel	500 Gallon Tank	
Waste Fuel	250 Gallon Jet-A Tank 250 Gallon AVGAS Tank	
Waste Fuel (ramp)	1700 Gallon Jet-A Tank 250 Gallon AVGAS tank	
Waste Oil (ramp)	250 Gallon tank	

Source: Million Air, 2008



The fuel farm related above is geographically separated from the airfield by public access roads and occupied buildings. The current location of this facility poses a safety hazard, security risk, and is an aesthetic shortcoming that constrains future development opportunities at England Airpark.

Fuel is transported to and from the fuel farm area to aircraft via a variety of fuel delivery trucks that are leased and operated by Million Air. The trucks are not registered for transport on public roadways; however, this scenario is currently unavoidable due to the remote location of the fuel farm area in relation to the secure apron areas. As such, fuel trucks are required to briefly travel on roads accessed by the public to and from the fuel farm until they reach North Apron Drive. North Apron Drive leads into the north entrance of the north apron and allows access into the secure airfield. The total distance from the fuel tanks to the north apron is approximately .36 miles. After the fuel delivery trucks enter the north apron, they are driven south across the north apron past the terminal apron area and then east to the South Apron area. The trucks are then staged within a concrete paved area located in the northeast corner of the south apron area. This arrangement presents a security concern as it is an isolated area not under visual control. The fuel truck staging area was previously designated as an aircraft wash rack but is currently not capable of wash functions due to required maintenance and equipment upgrades. The airport may desire to reactivate the wash rack in the near future. If this occurs, an alternate fuel truck staging area will have to be designated. **Table 2-17** denotes the various fuel delivery truck sizes along with the fuel storage capabilities of each.

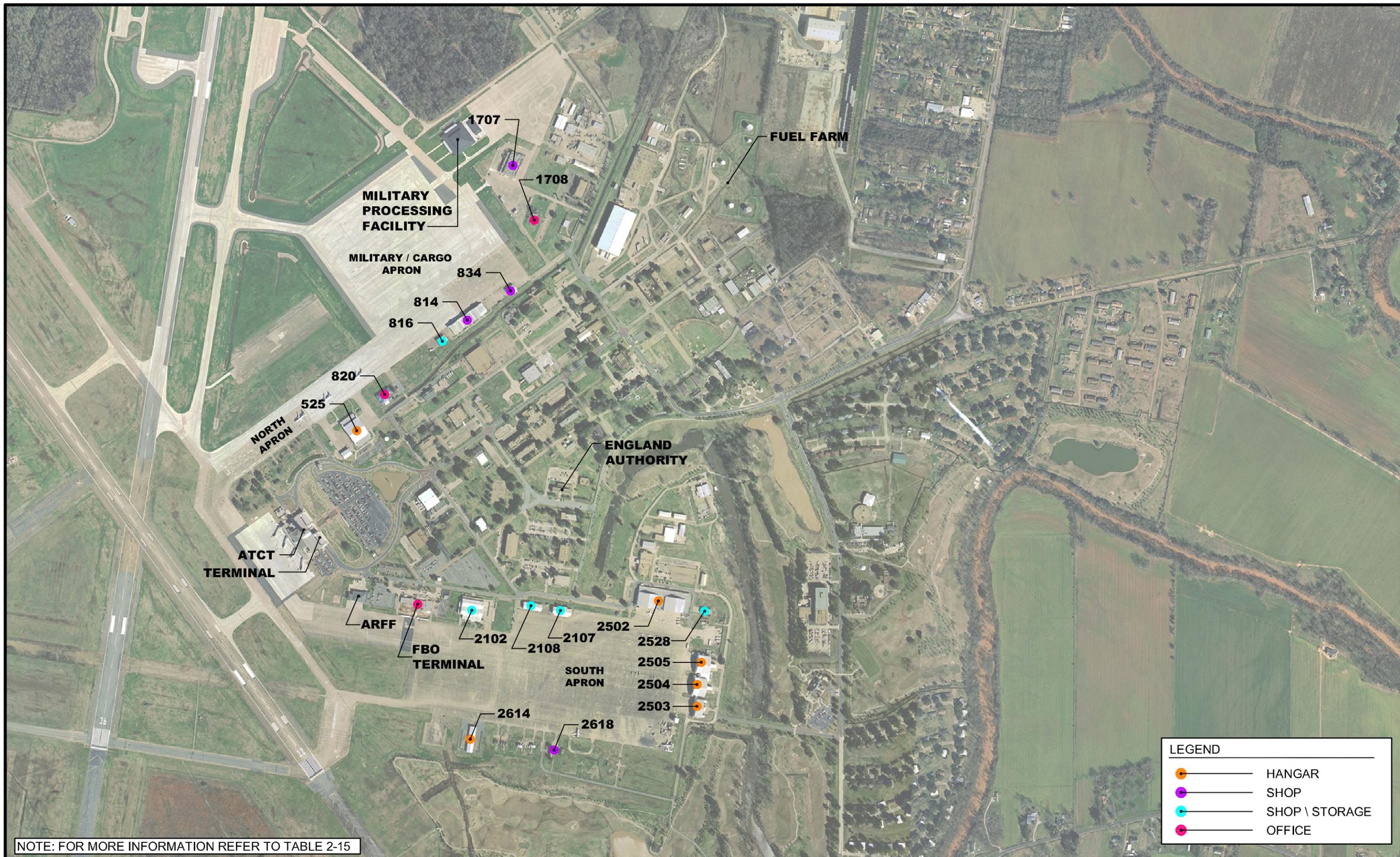
The total required fuel truck travel distance from the fuel farm to the staging area is approximately 2 miles. The normal operation of transporting fuel to and from the remote fuel farm area to the staging area is lengthy and cumbersome and potentially poses hazards to the public. For these reasons, the potential relocation and identification of alternate fuel farm facilities will be addressed later in this master plan document.

TABLE 2-17 FUEL DELIVERY TRUCKS		
Description	Capacity	Quantity
Jet-A Fuel Truck	5,000 Gallon	4
Jet-A Fuel Truck	10,000 Gallon	4
AVGAS Fuel Truck	1,200 Gallon	1

Source: Million Air, 2008



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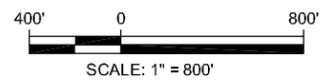


NOTE: FOR MORE INFORMATION REFER TO TABLE 2-15

LEGEND	
	HANGAR
	SHOP
	SHOP \ STORAGE
	OFFICE



Alexandria International Airport
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Existing Airside Facilities

Exhibit

2-12



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2.13 AVIATION SUPPORT FACILITIES

Several additional facilities are important to keeping the airport operational and for provision of key capabilities at AEX. These include the air traffic control tower, air rescue and fire fighting (ARFF) facilities. It is important to identify any needed improvements in these facilities over the planning period. This section identifies these needs for these existing facilities as well as any other new support facilities required as determined by the projected aviation activity.

2.13.1 Air Traffic Control Tower (ATCT)

The Air Traffic Control Tower facility is located atop the passenger terminal and is accessible from either the terminal first floor elevator or via the stairwell which is located north of the escalators. The elevator terminates on the 7th floor; therefore, employees and visitors must utilize the stairwell to access upper levels including the cab level on the 9th floor. The ATCT structure is equipped with an electrical and utility room on floors four through eight, a break room and locker room on floor seven, and a restroom on floor eight. Administrative ATCT offices reside in a separate building that is located on Floyd Rodgers Boulevard adjacent the North Apron. The ATCT is 212 ft AMSL (approximately 137 ft AGL) and includes nine floors and an attic area. The ATCT is staffed by two controllers and is operational 24 hours a day and 7 days a week. Back-up generators are provided for this facility.

2.13.2 Air Rescue and Fire Fighting (ARFF)

ARFF (Aircraft Rescue and Fire Fighting) Facility: FAR Part 139 sets forth minimum safety standards for emergency response personnel and equipment requirements for commercial service airports. ARFF departments provide emergency response and fire fighting training activities. The minimum personnel, equipment, and aqueous film forming foam (AFFF) agent is based upon the longest commercial passenger aircraft having an average of five or more daily operations. The categories with the aircraft length requirements are given below:

- Index A includes aircraft less than 90 feet in length;
- Index B includes aircraft at least 90 feet, but less than 126 feet in length;
- Index C includes aircraft at least 126 feet, but less than 159 feet in length;
- Index D includes aircraft at least 159 feet, but less than 200 feet in length; and,
- Index E includes aircraft at least 200 feet in length.

Based on the current level of scheduled air service, AEX is rated as an ARFF Index D. This index level requires the department to have a minimum of three vehicles that combined can carry enough water to produce at least 4,000 gallons of Aqueous Film Forming Foam agent (AFFF). In addition, at least one of the abovementioned vehicles must contain either 450 pounds of sodium-based dry chemical, halon 1211, or clean agent or 450 pounds of potassium-based dry chemical and water with a commensurate quantity of AFFF to total 100 gallons for simultaneous dry chemical and AFFF application.



The ARFF facility at AEX is operational 24 hours a day and 7 days a week. Two 24-hour shifts with 6 firefighters and 1 captain are available at all times. In addition, the fire chief is also on staff during Monday through Friday of each week. During the development of this report, the ARFF employed 16 full-time employees and 5 part-time employees.

The single-story ARFF building was constructed in 2004 and is positioned along Billy Mitchell Boulevard adjacent the airfield south apron. The facility includes approximately 11,000 square feet of space and provides direct access to the airfield south apron. Approximately 5,000 square feet is utilized by vehicle storage and includes four vehicle and equipment bays and the remaining 6,000 square feet is reserved for interior operations, administration, storage, and crew quarters. The AEX ARFF operates equipment in compliance with Index D FAR Part 139 requirements, which includes five fire trucks that are equipped with water, foam, and dry chemical agents. Four additional vehicles supplement the fire-fighting vehicles and assist with general emergency response. **Table 2-18** delineates these vehicles, their fire-fighting capacities, as well as their operational roles.

Vehicle Identifier	Year of Vehicle	Water Capacity (gallons)	Foam Capacity (gallons)	Dry Chemical (lbs)	Role
E-1 Crash Vehicle	1995	3000	400	450	ARFF
E-1 Crash Vehicle (with penetrating snozzle)	2000	3000	400	450	ARFF
Oshkosh	1975	1500	180	0	ARFF
Structural Engine (pumper)	1995	1000	0	0	ARFF
Ford F-450 Rapid Intervention Vehicle	2003	0	0	750	Rescue
Ford Excursion – Command Vehicle	2003	0	0	0	Fire Chief Command Vehicle
Ford F250 Sprint Truck	2004	0	0	0	Small Rescue Truck
Oshkosh	2010	3000	400	500pkw/460Halo	ARFF
International (by Pierce)	2011	500	60	500pkw	Fire / Rapid Intervention Vehicle

Source: AEX ARFF interview, February 2008

2.14 EXISTING UTILITIES AND INFRASTRUCTURE

It is important to document the locations and providers of utility services at the airport, as the proposed development and facility upgrades recommended in this study will be dependent upon



the ability of the airport to provide necessary utilities to service the area, such as electric, sewer, and water. Providers of utilities to Alexandria International are listed in **Table 2-19**.

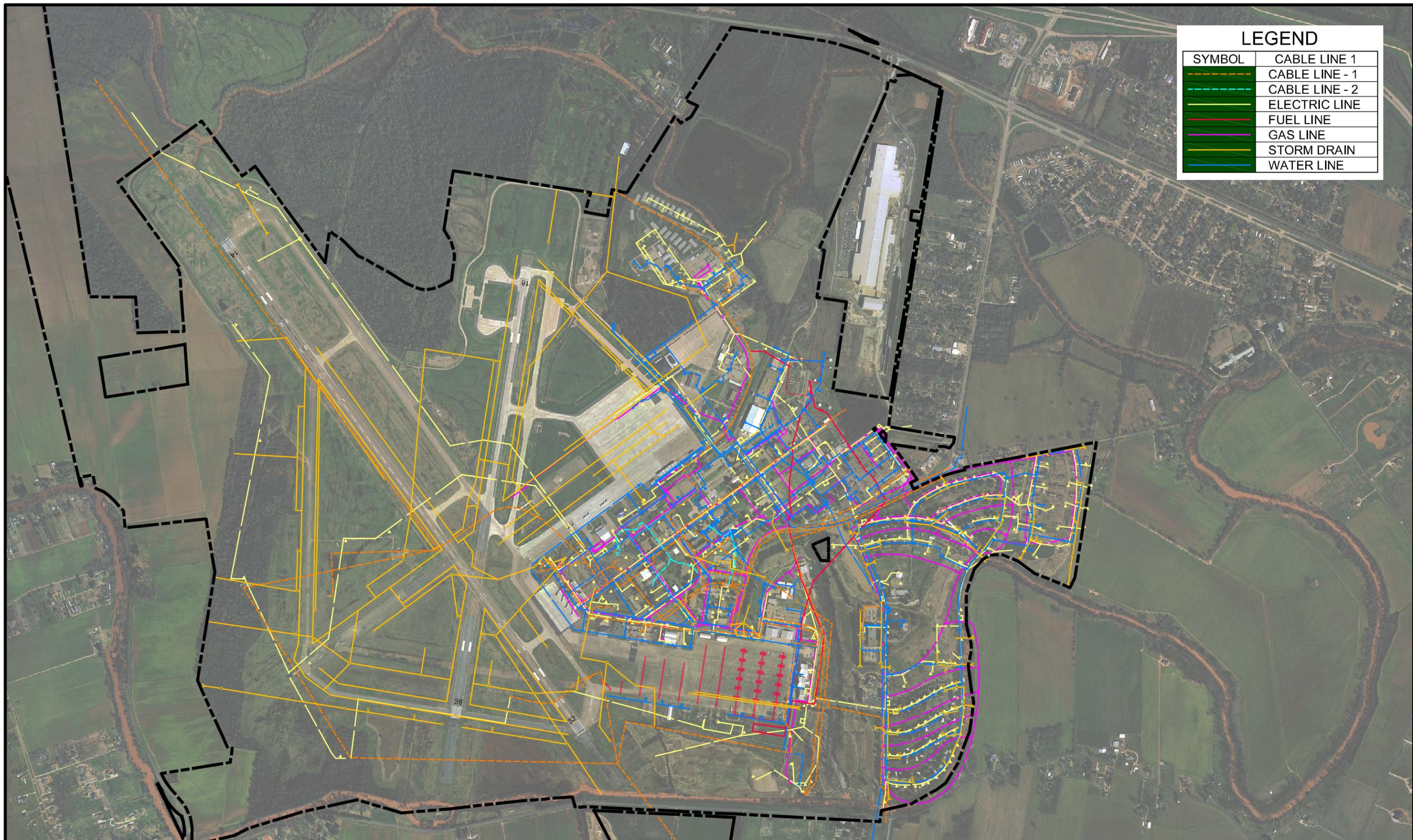
TABLE 2-19 AEX SERVICE PROVIDERS	
Service	Provider
Cable	Suddenlink Communications
Electricity	Cleco Corporation
Fire Protection	England Authority
Gas	City of Alexandria
Police Protection	England Authority
Sanitary Sewer	City of Alexandria
Telephone	AT&T
Trash Removal	Tenant Choice
Water	City of Alexandria

Source: England Authority, 2008.

Readily available drawings and information obtained from the England Economic District were used to determine the location of the current utilities on or near the airport property. **Exhibit 2-13** illustrates the various utility locations in the vicinity of the Alexandria International Airport. A review of this graphic demonstrates that all required services including electrical, drainage, sanitary sewer, and water lines are presently located in the area. This plan also shows that many areas adjacent to the airport property are currently supplied with the utility services necessary to support future development. This information will be used as a consideration in subsequent chapters while planning the development of future facilities.



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LEGEND	
SYMBOL	
	CABLE LINE 1
	CABLE LINE - 1
	CABLE LINE - 2
	ELECTRIC LINE
	FUEL LINE
	GAS LINE
	STORM DRAIN
	WATER LINE

NOTE: HISTORIC UTILITY DATA MAY NOT BE VALID; RECOMMEND VALIDATION USING GIS

SOURCE: MULTIPLE SOURCES, US AIR FORCE RECORDS



Alexandria International Airport
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Existing Utilities

Exhibit

2-13



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2.15 ENGLAND AIRPARK LANDSIDE INVENTORY

The purpose of this inventory is to highlight previous planning efforts for England Airpark and the Rapides Parish region, to identify major opportunities and challenges among the Airpark’s current facilities and adjacent land uses, and to develop an overall profile of existing socio-economic conditions and trends influencing landside development prospects. Inventory findings will frame the examination of landside development alternatives during subsequent phases of the Master Plan Update process.

2.16 LAND USE OVERVIEW

As a result of the 1991 Base Realignment and Closure process, the Department of Defense (DoD) closed England Air Force Base, triggering the site’s transition from active military operations to primarily civilian uses. The state-established England Economic and Industrial Development District (England Authority) is charged with developing and leasing Airpark property and facilities to generate a self-sustaining revenue stream.

After a decade and a half of reuse efforts, the DoD recognizes England Airpark as one the most successful base conversions in the country. The 3,100-acre mixed use community is a major driver of economic activity in the Central Louisiana region. A strong supporter of women- and minority-owned investors, the Authority received the Federal Aviation Administration’s Disadvantaged Business Enterprise award in 2007.

The Airpark consists of three major land use components: the airside facilities dominated by the Alexandria International Airport; the “Old Town,” a 900-acre fine-grain mix of existing institutional, office, educational, recreational, and light industrial uses along an established roadway network; and “New Town,” the greenfield acreage along the Airpark’s western boundary.

2.16.1 Land Uses and Major Tenants

England Airpark is a predominantly low-density mixed use complex with industrial, residential, commercial, and recreational elements. Most active businesses are aviation-related and offer services ranging from commercial air travel and car rentals to aircraft services, cargo transport service, and flight instruction. The Authority has elevated its commercial aviation presence with the opening of an award-winning passenger terminal in December 2006. The former terminal has recently been renovated for Million Air Alexandria to support premier Fixed Base Operator services for general aviation pilots and passengers.

The Airpark also has 14 vacant buildings available for lease. Many of these buildings are in small to medium sized configurations and are designed for industrial or office purposes.



Industrial Uses

The Airpark hosts about 50 industrial tenants. Its major industrial employers include:

- Union Tank Car, one of the nation's leading rail car manufacturers; the new assembly-line facility at the Airpark has the capacity to produce up to 70 tank cars per week and to support as many as 850 jobs;
- Integrated Packaging Corporation, the nation's largest minority-owned manufacturer of corrugated cardboard packaging;
- Delta Beverage, the regional distributor for PepsiAmericas, which delivers products throughout a 150 mile radius of Alexandria; and
- JM Test Systems, one of the largest calibration and test equipment labs in the Southeast with over 85 employees specializing in equipment repair, sales, and design, software design, and training and consulting.

Commercial and Recreational Uses or Open Space

The Airpark has several high quality commercial and recreational amenities that cater to visitors and travelers, including restaurants, accommodations, and golf. The emerging hospitality focus of the Airpark revolves around the acclaimed boutique hotel, Parc England, and the adjacent upscale Bistro on the Bayou restaurant.

Designed by Jim Lipe, a current Jack Nicklaus Group architect, the public OakWing Golf Club is a member of Louisiana's Audubon Golf Trail and part of the Audubon Cooperative Sanctuary for Golf Courses. The course reflects the Audubon philosophy of protecting the natural environment and preserving the local landscape. Trees, lakes, and a bayou system that wind throughout the golf course frame exceptional views from surrounding property and establish a distinctive Louisiana identity.

The signature open space at the Airpark is Heritage Park, which celebrates the long history of England Air Force Base and its famous military unit, the "Flying Tigers" of the 23rd Fighter Wing. The Airpark has various recreational amenities, such as a bowling center, and community meeting facilities used by the broader public. The Innes Benevolent Society also maintains a privately held cemetery adjacent to the golf course.

Institutional Uses

England Airpark's institutional anchors include the American Red Cross; the LSU Health Sciences Center, Huey P. Long Hospital, Outpatient Center; the pre-K through eighth grade St. Rita Catholic School; the National Guard; and the Justice Prisoner and Alien Transportation System (JPATS) operated by the United States Marshals Service. The Learning Center for Rapides Parish represents a major educational and workforce training asset for England Airpark. The expanding center is the state's largest consortium of colleges and universities, offering 24 academic programs, as well as non-credit, professional development programs.

The Airpark still maintains a military link, functioning as an Intermediate Staging Base for the Joint Readiness Training Center at nearby Fort Polk. To support the critical deployment and



power projection capabilities of Fort Polk, the Army added two major facilities to England Airpark: the recently completed Military/Cargo Apron and Hazardous Cargo Loading Aprons (hot pads) and the newly-opened Arrival/Departure Passenger Processing Facility for military personnel.

Residential Uses

Rounding out the mixed use character of the complex are its residential uses. The 182-unit England Oaks is a gated senior, independent living community with rental duplex homes and associated amenities. The Airpark has additional quality rental units as part of England Estates in the southern portion of the site. Formerly military accommodations, these 120 1950s-era houses stand along tree-lined streets and have convenient access to adjacent green space. A pocket of marginal and partially vacant “England Village” multi-family housing lies adjacent to the golf course in the far eastern corner of the Airpark.

Completed and Planned Projects

In addition to enhancing its airside operations through commercial terminal expansion and new military-related facilities, the Authority is improving available industrial and educational facilities. The Airpark has completed an 80,000 square foot warehouse, added rental car parking, and renovated the Learning Center for Rapides Parish and now plans to establish additional warehouse and heavy industrial manufacturing space in proximity to the Union Tank Car Company. Two major industrial tenants at the Airpark—Union Tank Car Company and Integrated Packaging Co—have also upgraded their manufacturing capacities.

Existing Opportunities and Challenges

Many of the uses described above are likely to remain in the foreseeable future due to revenue generating potential, long-term lease agreements, or historic character. These uses will form the building blocks of continued growth on the site. The Airpark, however, has strong landside development opportunities in the form of infill activity in the “Old Town” and larger scale master planning of the “New Town” acreage to the west. Refer to **Exhibit 2-14**, Existing Opportunities and Challenges for a graphic depiction of the uses and conditions described in this section.



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- LEGEND**
- Potential Greenway
 - - - Frank Andrews Blvd.
 - - - Primary Collector Road
 - Old Town
 - Community Open Space/ Recreation
 - Institutional
 - Multi-Family Residential
 - Industrial
 - Commercial
 - ★ Public Gathering Space
 - ⚡ Visual Barrier
 - Vehicular Gateway
- | | |
|---|---|
| 1 Union Pacific Rail Road Connection | 16 Existing YMCA |
| 2 St. Rita School Campus | 17 Infill Opportunity |
| 3 Huey P. Long Hospital | 18 Existing Tech Office Building |
| 4 Oakwing Golf Club | 19 Existing Industrial Site |
| 5 FAA Radar Facility | 20 Proposed Commercial Office Park |
| 6 Infill Opportunity | 21 Union Tank Car Industrial Complex |
| 7 England Oaks Senior Community | 22 Screen Unsightly Off-Site Development |
| 8 Enhance Existing Industrial Complex | 23 Proposed 28 Acre Industrial Expansion Site |
| 9 Infill Opportunity | 24 Preserved Wetland Open Space |
| 10 Expand Existing Higher Education Campus | 25 National Guard Office |
| 11 Delta Beverage | 26 Sewage Treatment and Disposal Pond |
| 12 Potential Commercial Use | 27 Remove/Relocate Unsightly Tank Farm |
| 13 Potential Commercial Use | 28 Redevelopment Opportunity |
| 14 Parc England Hotel and Bistro Restaurant | 29 Cemetery |
| 15 Green Space Opportunity at Heritage Park | |





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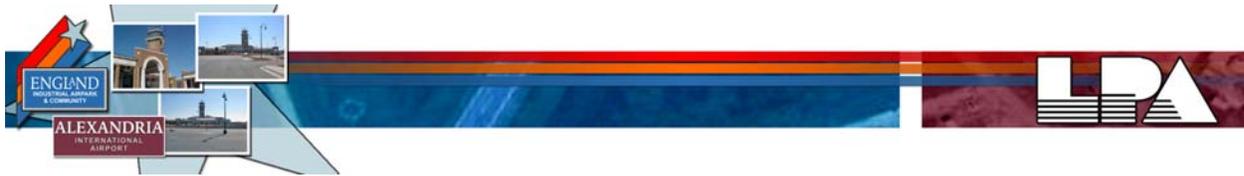
Within its built-out core, the Airpark has the grid of connected streets and linear green spaces to support pedestrian-scale traditional town and neighborhood development. Frank Andrews Boulevard in particular acts as the spine of the Airpark, linking with the new passenger terminal and creating a highly visible corridor space. While the Airpark has some trails and sidewalks in place, future housing and commercial space will likely require more pedestrian infrastructure and additional local streets to create permeable and walkable blocks. A campus-wide network of such links is critical for connecting separate land use elements in such a large scale setting. Adding secondary roadway access into the Airpark may also reduce the risk of truck and vehicular and pedestrian conflicts as industry continues to operate in proximity to future residential and commercial uses.

Sprawling, mostly one-story buildings, and sporadic vacant parcels and large, irregularly shaped industrial lots can disrupt the Airpark's overall land use character, giving it an uneven and sometimes disorienting feel. Some sites in the Airpark have an established or emerging identity, such as the two educational campuses, the neighborhoods, and the PARC England Hotel and Bistro on the Bayou Restaurant. Other blocks are clearly in transition and will require the addition of complementary uses or stronger building forms to create a coherent look and distinct function.

While existing gaps in the built form are a challenge, they also suggest development opportunities, particularly when vacant or underused sites are adjacent to the Airpark's prominent corridors, bayou, golf course, and other excellent green spaces. It should be noted that current fencing around the golf course obscures views, thus indicating the need for less opaque borders.

In an effort to promote a more consistent and complementary character, the Authority has established architectural precedents with its classically designed brick passenger terminal, golf club house and fire station and a palette of decorative lighting, landscaping, signs, and banners. Unifying design themes for the complex can also draw from existing physical and natural elements, including water features, Crepe Myrtle and Live Oak trees, and lush understory and other native vegetation.

The Airpark has three distinct vehicular gateways that can act as focal points and anchor future development sites: the Air Base Road/England Drive or "front gate" to the north; the England Drive/Vandenburg Drive intersection; and the "backgate" at the intersection of Vandenburg Drive and Bayou Rapides Parish Road. Unsightly conditions west of Air Base Road detract from the northern entry experience and pose the first of the Airpark's major visual screening challenges. Access from the south along Vandenburg Drive is less of an aesthetic issue, but the lack of convenient north-south routes in the area funnels considerable traffic to this corridor. Increased vehicular volumes along Vandenburg Drive as LA Highway 28 develops may warrant traffic calming and other mitigation techniques inside the Airpark, particularly for intersections such as England Drive/Vandenburg Drive.



Within the Airpark, several current land uses constrain development opportunities, including the fuel tank farm site in the central portion of “Old Town.” The site poses both a safety hazard and an aesthetic shortcoming affecting nearby sites. In general, this adjacency of sporadic industrial operations to existing or future residential and commercial activities creates the second major visual challenge for the Airpark and will require effective screening to minimize unsightly views and design standards to better blend industrial facades with other buildings.

To the west, other development challenges include the sewage treatment and disposal pond and wetlands just to the north of the pond site adjacent to LA Highway 1. To the northwest, the Authority has a designated restrictive safety area and a protected tree preserve and wetlands area. Adjacent airside operations also pose some development restrictions in the form of no-build blast zones that surround “hot pads” used for ordnance transfer, runway protection zones, safety areas, obstruction free areas, and noise zones associated with aircraft use of the main runway. After the removal of secondary runways, the Authority has significant greenfield acreage west of the main runway available for future industrial purposes.

2.17 PREVIOUS PLANNING EFFORTS

2.17.1 England Air Force Base Reuse Plan

The 1993 England Air Force Base (EAFB) Reuse Plan outlined the history and background of the air base and the potential economic impact of its closure. To offset the anticipated job and tax revenue loss, the England Authority focused on redeveloping the Airpark into an engine for local and regional growth.

Community Vision

To facilitate conversion from a working military base into a functional civilian community, the plan envisioned a redeveloped EAFB as a key regional center for Central Louisiana focused on commercial, general aviation, military and industrial uses.

Land Use/Development Concepts

The reuse study documented existing land uses and laid out a future land use plan to indicate possible redevelopment opportunities for current facilities at the Airpark. While industrial and institutional activities dominated, the plan stressed a transition to office, industrial, and institutional uses that could attract new tenants and generate needed revenue.

Overall, the Reuse Plan recommended the long-range development of a regional transportation and industrial park facility that accommodates commercial, general and military aviation. The plan includes aviation, aviation-related and non-aviation commercial, industrial and public tenants that can sustain the community with jobs and income.

The Future Land Use Plan developed as part of the reuse process identifies an airport operating area that includes major airside facilities. Adjacent to the east of airside facilities are aviation-related commercial and industrial uses. The plan designates land west of the runways as a future expansion area. The core of the Airpark has institutional uses, surrounded by light industrial and



office space and transportation and warehousing. The eastern sites of the Airpark would transition from existing housing to light industrial and office uses. The plan, however, would preserve the hospital and school/day care campus sites. Military uses would continue in the northern portion of the Airpark.

2.17.2 Other Plans/Concepts

In addition to the 1993 Reuse Plan, the Authority has continued to explore specific development alternatives within the Airpark. Additional ideas such as a commercial/residential town center concept for the former manufactured housing site northeast of England Drive and Vandenberg Drive. Housing and retail would cluster around a central green space and focus element, creating a pedestrian friendly environment. Adjacent to the town center, the concept shows enhanced green space at Heritage Park and a revitalized block of recreational facilities. To the east along England Drive, the diagram proposes approximately 300 redeveloped multi-family housing units adjacent to the golf course. Common open space, pedestrian trails, and passive gathering spots would link the residential buildings.

The Airpark also has a landscape master plan that calls for intersection plantings of annuals, an oak alley along Frank Andrews Boulevard, street lighting, and evergreen screening around the new passenger terminal. The 2003 Signage Development Package specifies sign types and brand identity upgrades. Additional initial concepts exist for the expansion of the educational campus around the Learning Center and a 28-acre potential industrial site to the west of the Union Tank Car facility.

2.18 ADJACENT LAND USES AND OWNERSHIP PATTERNS

Land to the north of the Airpark between the Authority boundary and LA Highway 1 consists of a primarily rural mix of encumbered lands, private property, and institutional uses, such as St. Mary's Training School. Land along Air Base Road on the eastern boundary is in small lot private residential use. As noted earlier conditions in this area detract from the physical character of the Airpark's northern entry. Farther east, long-held family agricultural and pasture lands form excellent open space views for the existing multi-family site on England Drive. Bayou Rapides and its vegetative buffer effectively separate the residential uses and golf course from primarily rural adjacent lands. Land to the south of the Airpark along LA Highway 496 is also mostly in large lot private ownership with an institutional presence from the State of Louisiana and the City of Alexandria Sports Complex. Farther south LA Highway 28 continues to evolve toward a denser pattern of residential subdivisions and supporting commercial activities. New uses such as the Wal-Mart Super Center and the upscale Lakes District subdivision are solidifying this highway as a major mixed use corridor. The eventual extension of Versailles Boulevard through the Lakes District should accelerate this growth. Land on the Airpark's west boundary along Jimmy Brown Road is in much less of a state of flux. Property is predominantly in large lot holdings with agricultural uses.

Relatively few land use controls affect the private lands surrounding England Airpark. The Reuse Plan and other airport-related studies promote land use compatibility on property adjacent



to aviation facilities. Compatibility guidelines, for example, discourage the placement of residential uses at the end of a runway due to accident risk or in high noise exposure areas. The Rapides Parish Police Jury, the parish legislative body, has adopted the Airbase Landing District Ordinance regulating land uses near airside operations. Despite the presence of controls, increasing development pressure, particularly along LA Highway 28, has led to new residential subdivisions within higher noise areas south of the Airpark.

2.19 LOCAL AND REGIONAL DEMOGRAPHICS

The sections that follow give an overview of socioeconomic, demographic, labor trends, and economic development strategies, as well as quality of life factors that affect Rapides Parish, the larger eight-parish region of Central Louisiana, and the State of Louisiana.

2.19.1 Area Socioeconomic and Demographic Data

Table 2-20 gives a demographic snapshot of Rapides Parish. Overall, the parish saw modest population growth between 2000 and 2006. Levels of educational attainment increased as did income levels and participation in the labor force. Occupations reflect the national trend toward more service based jobs, including the arts, entertainment, recreation, accommodation and food services. In a reversal of national trends, however, the parish gained in manufacturing jobs during the first half of the decade.

TABLE 2-20 RAPIDES PARISH DEMOGRAPHIC PROFILE				
Rapides Parish, Louisiana	Census 2000		ACS 2006 Estimate	
Total Population	126,337		130,201	
Total Households	47,120		48,171	
Average Household Size	2.56		2.60	
Housing Units	52,038		55,266	
INCOME IN 1999	Number	Percent	Number	Percent
Households	47,161	100	48,171	100
Less than \$10,000	7,625	16.2	5,881	12.2%
\$10,000 to \$14,999	4,580	9.7	5,128	10.6%
\$15,000 to \$24,999	7,866	16.7	7,383	15.3%
\$25,000 to \$34,999	6,583	14	5,719	11.9%
\$35,000 to \$49,999	7,356	15.6	6,801	14.1%
\$50,000 to \$74,999	7,298	15.5	8,372	17.4%
\$75,000 to \$99,999	2,805	5.9	4,201	8.7%
\$100,000 to \$149,999	1,950	4.1	2,960	6.1%
\$150,000 to \$199,999	396	0.8	922	1.9%



**TABLE 2-20
RAPIDES PARISH DEMOGRAPHIC PROFILE**

Rapides Parish, Louisiana	Census 2000		ACS 2006 Estimate	
\$200,000 or more	702	1.5	804	1.7%
Median household income (dollars)	29,856	(X)	34,965	
EDUCATIONAL ATTAINMENT	Number	Percent	Number	Percent
Population 25 years and over	79,811	100	83,304	100
Less than 9th grade	7,286	9.1	4,551	5.5%
9th to 12th grade, no diploma	12,975	16.3	11,904	14.3%
High school graduate (includes equivalency)	26,938	33.8	28,657	34.4%
Some college, no degree	16,486	20.7	17,375	20.9%
Associate degree	2,921	3.7	5,820	7.0%
Bachelor's degree	8,475	10.6	9,436	11.3%
Graduate or professional degree	4,730	5.9	5,561	6.7%
Percent high school graduate or higher	74.6	(X)	80	
Percent bachelor's degree or higher	16.5	(X)	18	
Employment Status	Number	Percent	Number	Percent
Population 16 years and over	96,383		100,408	
In labor force	54,697	56.7	61,872	61.6%
Civilian labor force	54,428	56.5	61,709	61.5%
Employed	50,576	52.5	57,527	57.3%
Unemployed	3,852	4.0	4,182	4.2%
Percent of civilian labor force	7.1	(X)	NO DATA	
Armed Forces	269	0.3	163	0.2%
Not in labor force	41,686	43.3	38,536	38.4%
Employed civilian population 16 years and over	Number	Percent	Number	Percent
OCCUPATION				
Management, professional, and related occupations	15,877	31.4	17,837	31.0%
Service occupations	9,393	18.6	12,304	21.4%
Sales and office occupations	13,401	26.5	14,424	25.1%
Farming, fishing, and forestry occupations	596	1.2	589	1.0%
Construction, extraction, and maintenance occupations	5,602	11.1	6,176	10.7%
Production, transportation, and material moving occupations	5,707	11.3	6,197	10.8%
INDUSTRY	Number	Percent	Number	Percent
Agriculture, forestry, fishing and hunting, and mining	1,768	3.5	1,592	2.8%
Construction	3,614	7.1	4,178	7.3%
Manufacturing	3,239	6.4	4,570	7.9%



**TABLE 2-20
RAPIDES PARISH DEMOGRAPHIC PROFILE**

Rapides Parish, Louisiana	Census 2000		ACS 2006 Estimate	
Wholesale trade	1,733	3.4	1,636	2.8%
Retail trade	6,554	13.0	7,716	13.4%
Transportation and warehousing, and utilities	2,585	5.1	2,371	4.1%
Information	1,049	2.1	941	1.6%
Finance, insurance, real estate, and rental and leasing	2,609	5.2	2,779	4.8%
Professional, scientific, management, administrative, and waste management services	3,159	6.2	4,003	7.0%
Educational, health and social services	14,617	28.9	15,367	26.7%
Arts, entertainment, recreation, accommodation and food services	3,516	7.0	4,849	8.4%
Other services (except public administration)	2,565	5.1	2,660	4.6%
Public administration	3,568	7.1	4,865	8.5%

Source: U.S. Census Bureau and American Community Survey Demographic and Housing Estimates: 2006

Table 2-21 summarizes demographic data for the larger metropolitan statistical area (MSA) of Alexandria. The MSA reflects many of the same trends of rising income levels, higher rates of educational attainment, and labor force participation.

**TABLE 2-21
ALEXANDRIA MSA DEMOGRAPHIC PROFILE**

Alexandria MSA, Louisiana	Census 2000		ACS 2006 Estimate	
Total Population	126,337		150,827	
Total Households	47,120		55,546	
Average Household Size	2.56		3	
Housing Units	52,038		63,782	
INCOME IN 1999	Number	Percent	Number	Percent
Households	47,161	100	55,546	
Less than \$10,000	7,625	16.2	6,556	11.8%
\$10,000 to \$14,999	4,580	9.7	5,684	10.2%
\$15,000 to \$24,999	7,866	16.7	8,539	15.4%
\$25,000 to \$34,999	6,583	14	7,020	12.6%
\$35,000 to \$49,999	7,356	15.6	7,742	13.9%
\$50,000 to \$74,999	7,298	15.5	9,827	17.7%
\$75,000 to \$99,999	2,805	5.9	4,963	8.9%
\$100,000 to \$149,999	1,950	4.1	3,330	6.0%
\$150,000 to \$199,999	396	0.8	1029	1.9%
\$200,000 or more	702	1.5	856	1.5%



**TABLE 2-21
ALEXANDRIA MSA DEMOGRAPHIC PROFILE**

Alexandria MSA, Louisiana	Census 2000		ACS 2006 Estimate	
Median household income (dollars)	29,856	(X)	34,966	
EDUCATIONAL ATTAINMENT	Number	Percent	Number	Percent
Population 25 years and over	79,811	100	96,805	
Less than 9th grade	7,286	9.1	5,139	5.3%
9th to 12th grade, no diploma	12,975	16.3	14,323	14.8%
High school graduate (includes equivalency)	26,938	33.8	34,014	35.1%
Some college, no degree	16,486	20.7	20,104	20.8%
Associate degree	2,921	3.7	6,564	6.8%
Bachelor's degree	8,475	10.6	10,644	11.0%
Graduate or professional degree	4,730	5.9	6,017	6.2%
Percent high school graduate or higher	74.6	(X)	79.90%	
Percent bachelor's degree or higher	16.5	(X)	17.20%	
Employment Status	Number	Percent	Number	Percent
Population 16 years and over	96,383		116,233	
In labor force	54,697	56.7	70,146	60.3%
Civilian labor force	54,428	56.5	69,944	60.2%
Employed	50,576	52.5	65,419	56.3%
Unemployed	3,852	4.0	4,525	3.9%
Percent of civilian labor force	7.1	(X)	NO DATA	
Armed Forces	269	0.3	202	0.2%
Not in labor force	41,686	43.3	48,087	41.4%
	2000		2006	
Employed civilian population 16 years and over	Number	Percent	Number	Percent
OCCUPATION				
Management, professional, and related occupations	15,877	31.4	19,620	30.0%
Service occupations	9,393	18.6	13,356	20.4%
Sales and office occupations	13,401	26.5	16,676	25.5%
Farming, fishing, and forestry occupations	596	1.2	640	1.0%
Construction, extraction, and maintenance occupations	5,602	11.1	7,298	11.2%
Production, transportation, and material moving occupations	5,707	11.3	7,829	12.0%
INDUSTRY				
Agriculture, forestry, fishing and hunting, and mining	1,768	3.5	2,034	3.1%
Construction	3,614	7.1	4,803	7.3%



**TABLE 2-21
ALEXANDRIA MSA DEMOGRAPHIC PROFILE**

Alexandria MSA, Louisiana	Census 2000		ACS 2006 Estimate	
Manufacturing	3,239	6.4	5,346	8.2%
Wholesale trade	1,733	3.4	1,865	2.9%
Retail trade	6,554	13.0	8,490	13.0%
Transportation and warehousing, and utilities	2,585	5.1	3,303	5.0%
Information	1,049	2.1	1,045	1.6%
Finance, insurance, real estate, and rental and leasing	2,609	5.2	3,036	4.6%
Professional, scientific, management, administrative, and waste management services	3,159	6.2	4,389	6.7%
Educational, health and social services	14,617	28.9	17,643	27.0%
Arts, entertainment, recreation, accommodation and food services	3,516	7	5,075	7.8%
Other services (except public administration)	2,565	5.1	2,902	4.4%
Public administration	3,568	7.1	5,488	8.4%

Source: U.S. Census Bureau and American Community Survey Demographic and Housing Estimates: 2006

2.19.2 Vision 2020

The Louisiana Economic Development Council developed the Vision 2020 Report as a working guide to improve the state’s labor pool and to remain competitive in the global economy.

The 2003 update uses three goals as a basis for guiding implementation strategies. The first goal, Lifelong Learning, focuses on the value of a quality school system and ways to expand continuing learning opportunities for workers. The second goal, Culture of Innovation, emphasizes the role of technology in developing a successful and growing economy. The last goal, A Top Ten State, examines opportunities for Louisiana to become a national leader in key standard of living indicators.

Goal One – Lifelong Learning

For Louisiana to remain competitive, the state is seeking to become a “learning enterprise,” allowing residents to acquire knowledge and skills on a continuous basis. Strategies range from developing aggressive educational programs for school children to providing training in the latest technologies for individuals already in the workforce.

Goal Two – The Culture of Innovation

This second goal looks towards diversifying and expanding industries, particularly in advanced technology sectors to ensure that the state’s communities capture emerging growth opportunities. Stimulating research and development within companies and research universities can help to support the contributions of local entrepreneurs and to retain in-state talent and skilled employees.

The Vision 2020 plan identified 15 existing and emerging clusters ranging from tourism to energy technology to health care. The eight “traditional industries” are: oil, gas, and energy technologies; petrochemicals; shipbuilding and other durable goods; tourism; transportation and



logistics; health care; agriculture and food products; and wood, lumber, and paper. The seven emerging clusters include: information technologies; life sciences; environmental technologies; food technologies; advanced materials; micro and nano-technologies; and entertainment. As indicated in Vision 2020, these emerging clusters will help to broaden the existing economy, attracting workers with skill sets and higher income levels.

Goal Three – A Top Ten State

This last goal examines the challenges Louisiana faces in maintaining and improving quality of life within the state. Livability revolves around attaining higher incomes and better jobs, reducing poverty, improving the school system and ongoing training opportunities for workers, providing access to adequate health care, and expanding the base of tourist-related and recreational amenities.

For Louisiana to emerge as a quality of life leader, the state must support local communities in sustaining continuing education among knowledge workers and strengthening the market competitiveness of its small and medium-sized companies through business innovation and better access to information technology and financial services.

The Action Plan for 2006 focuses on the following strategies:

- Improve investor confidence through marketing;
- Make workforce training programs and funds responsive to the needs of companies and the skills needs of emerging technology companies;
- Make life-learning more accessible;
- Increase access to postsecondary education programs;
- Fund infrastructure needed for technology-based economic development;
- Increase the supply of quality housing and quality communities;
- Support and fund activities to increase new foreign direct investment and increase Louisiana companies' exports to foreign markets;
- Position Louisiana as a globally competitive transportation hub; and
- Explore emerging technologies associated with bio-fuels (converting biomass into liquid fuels for transportation), bio-products (converting biomass into chemicals for making products typically made from petroleum), and genetically modified plants and animals that can yield better foods and drugs.

2.20 REGIONAL LOCATIONAL ASSETS

The Wadley-Donovan Report² on, “Locational Assessment for Central Louisiana” evaluates the existing labor market, accessibility, utilities, real estate, and the business climate and operating environment for the eight-parish region. This section gives an overview of regional conditions, including challenges and assets and summarizes major findings for Rapides Parish.

² Wadley-Donovan Group, “Locational Assessment for Central Louisiana”, October 2007



2.20.1 Description of Eight-Parish Region

The eight-parish Central Louisiana region consists of Allen, Avoyelles, Evangeline, Grant, LaSalle, Rapides, Vernon, and Winn Parishes with Alexandria and Pineville as the major municipal centers. Goods and services can move easily throughout the region on an extensive roadway network that includes access to I-49 extending north to Shreveport at I-20 and south to Lafayette at I-10.

As of July 2006, a total of 330,777 residents lived in the region. The most populous parishes were Rapides, Vernon, Avoyelles, and Evangeline. The Cities of Alexandria and Pineville have a combined 60,548 residents or 46% of Rapides Parish's population. Between 2000 and July 2005, the region saw a population decline with a loss of 2,830 residents (approximately 0.9%). Following Hurricane Katrina, the region added residents from September 2005 to July 2006. Rapides Parish saw the largest increase as a result of relocation. The region overall has a stable population base with slight population loss projected. Claritas has projected a 1,412 decrease in net population over the next 5 years within the eight-parish region. The population under 54 will also decline, affecting labor availability.

Dominant industry sectors in the eight-parish region are: health care/social assistance, retail trade, educational services, public administration, and construction. These five sectors employ more than half of the region's workforce, yet generate average earnings 24% below state levels. The unemployment rate in the region was 5.5% in 2000, but dropped to 3.8% in 2006.

Some of the challenges the region faces parallel issues critical to the state economy, including the limited ability to recruit new professionals, lower educational attainment, underutilization of educational resources and programs, moderate quality of life, limited roadway network accessibility for east-west travel, and limited availability of industrial, warehouse, and commercial buildings and little new construction.

The region, however, also enjoys assets in workforce availability, accessibility, affordability, and education. While the population under 54 will decline in the years ahead, the region currently has a significant percentage of young residents. Lower household incomes and labor force participation are opportunities to increase earnings for local workers and draw more jobs to the area. The region's two-year and four-year educational institutions, including the Learning Center for Rapides Parish, Louisiana Technical College, Louisiana State University at Alexandria, Louisiana College, and Northwestern State University of Louisiana are major contributors in efforts to grow the workforce and economy. England Airpark is home to the Learning Center for Rapides Parish. This consortium of 10 universities and colleges offers academic and certificate/training programs for residents in fields such as health care, information technology, education, business and public administration.

Other regional assets include: low labor costs; moderate cost of living; a roadway network that provides access to larger labor sheds and places the region as a major distribution and logistics hub; transit availability within the Cities of Alexandria and Pineville; and a large number of sites ready for development in Rapides Parish.



2.20.2 Labor Market

Rapides Parish had an estimated population of 130,201 in 2006 according to the US Census. Claritas population forecasts for the parish indicate limited growth in the near term, similar to Central Louisiana as a whole. The labor force for Rapides Parish was 60,037 in 2006, representing a 7.9% increase over 2000. Labor participation in Rapides Parish was 57.2%, the highest level in the Central Louisiana region.

Overall, the labor market is strong relative to other similarly sized workforces in the south-central U.S. Results of surveys conducted in the Wadley-Donovan Report indicate that general business and office employers have adequate access to labor, while management and information systems workers are in shorter supply. Labor costs in the region are lower than US and Louisiana state averages.

Important sources of labor supply for the region include its post-secondary institutions such as Louisiana Technical College and the Learning Center for Rapides Parish. Also the military installations contribute workers in the form of early military retirees and military spouses. Like much of the nation, the major demographic shift associated with the retirement of Baby Boomers will affect Central Louisiana's workforce.

The report analyzed data from the Bureau of Labor Statistics to determine areas of imbalance between labor supply and demand. Current imbalances (i.e. lack of qualified labor) exist in the production, maintenance, and distribution occupations and projections indicate that these imbalances will grow in the short term. Select individual occupations will experience labor shortages, such as electricians, pipe fitters/pipe welders, boilermakers, forklift operators, and hand pickers and packagers.

Major educational institutions in Rapides Parish include Louisiana Technical College, Alexandria Campus, Learning Center for Rapides Parish, Louisiana State University at Alexandria, and Louisiana College. Employers make occasional use of training programs, internships and coops from LSUA, Louisiana College, and LTC-Alexandria Campus. Employers participating in the report survey gave good quality ratings to Louisiana College and average quality ratings to LSUA and LTC – Alexandria. Of Rapides Parish's nine high schools, six have met their No Child Left Behind targets, and the parish's schools have a graduation rate of 69%, below average for the region.

2.20.3 Accessibility

With water, air, rail, and interstate access, the Alexandria region is developing the infrastructure to support a multimodal distribution and logistics center. I-49 provides primary vehicular access to the region, reaching to Shreveport and I-20 in the north and Lafayette and I-10 in the south. US and state routes complement this interstate access. Major cities within one day's drive include New Orleans, Dallas, Houston, and Memphis. Employers rated trucking service and cost as average.



The Kansas City Southern and Union Pacific mainline railroads also serve the Alexandria region. Rail spurs are available at Alexandria Regional Port and England Airpark. Employers rated rail service as satisfactory but costs as somewhat high.

Alexandria International Airport provides daily commercial air travel to Houston, Atlanta, Dallas/Fort Worth, and Memphis. Alexandria's aviation services exceed the air travel options typically available in a region of its size. Employers rated air freight service and cost as average. The proximity of aviation facilities to the interstate and rail lines is particularly favorable for the movement of both passengers and freight. A Foreign Trade Zone covers the England Airpark, the Alexandria Regional Port, and Central Louisiana (CENLA) Industrial Park in the Rapides Parish.

Alexandria also offers access to waterborne freight at the Alexandria Regional Port on the Red River. This port connects to the Red River Waterway System, which reaches from Shreveport to the Mississippi. The Red River channel could be deepened from 9 feet to 12 feet in this area, increasing the functionality of the port.

2.20.4 Utilities

Employers rated electric power reliability as good, but evaluated power rates as borderline satisfactory. Energy-Louisiana and Concordia Electric Coop serve Rapides Parish. Businesses rated natural gas reliability as good and natural gas rates as satisfactory. The City of Alexandria has the capacity to deliver up to 25 million gallons of drinking water per day. The City also collects and treats wastewater. The City of Pineville operates water production and wastewater treatment facilities and plans to develop a new sewage treatment plant. Employers rated water and sewer treatment capacities as good. Most industrial sites in the region have access to public water and sewer. Employers evaluated solid waste service and cost as average. Employers also rated telecommunications services as satisfactory. A fiber optics corridor owned by Network USA runs parallel to the I-49 corridor. The report concludes that the region can enhance its economic competitiveness by developing a centralized source for detailed utility information.

2.20.5 Real Estate

The CENLA Chamber provides the CENLA Prospector, a real estate inventory database. Rapides Parish has the highest number of development sites in the region, a total of 36 sites covering 1,955 acres. The region also has 12 major industrial sites. At 3,000 acres, England Airpark is the region's premier business park. The report notes that England Airpark could enhance its competitive position by master planning and installing infrastructure and warehouse space on its west side. Overall, the current inventory of industrial buildings is small for a region of its size with an acute shortage of warehousing and distribution space. A detailed market analysis may be necessary to spur the development of industrial and/or warehouse uses. Employers rated the availability and cost of buildings and sites as slightly below satisfactory, but gave slightly above satisfactory ratings for the availability of financing for construction and business operations.



2.20.6 Business Climate

Employers rated the local government regulatory environment as satisfactory. England Airpark has emerged a leader due to a one-stop center for site approvals, financing, and business construction that accelerates the development review process. Louisiana state laws are generally favorable for businesses. Employers were less satisfied with business costs, worker's compensation, and state and local taxes. Employers were most unsatisfied with health care costs. Sales taxes in the Rapides Parish vary from 7.0% to 9.0% in Alexandria, Pineville, and Ball. Businesses evaluated existing business incentive and assistance programs as satisfactory. Most necessary vendors and suppliers to support business operations are also available in the region.

2.20.7 Overall Recommendations

The Wadley-Donovan Report identified a series of recommendations relevant to land planning and development opportunities at England Airpark:

- Develop stronger educator/employer linkages to enhance use of the region's educational resources by employers for employee training and recruiting, alert employers and promote a greater role by the private sector in workforce training;
- Encourage the expansion of fiber optic telecommunications networks to serve residents and employers throughout the region, where feasible;
- Create a centralized source for detailed information regarding the utility infrastructure within the region;
- Increase the number of business park sites within the region that are "shovel-ready;" and reduce the risk associated with speculative building and warehousing by conducting a detailed market analysis to determine optimal site selection and desired building characteristics.

2.21 QUALITY OF LIFE

Good schools, low crime, affordability in housing and cost of living, adequate transportation, and access to health care are among the many elements that contribute to quality of life within a community. Among the assets enjoyed by Rapides Parish and the surrounding region are: a rich cultural heritage, a wide array of recreational opportunities, strong educational institutions, good accessibility, and quality health care.

2.21.1 Historic and Cultural Resources

Central Louisiana's local communities reflect the rich heritage of an area known as the "crossroads" of the state. The region ranks only behind New Orleans in the number of historic sites on the National Register of Historic Places in Louisiana.

A variety of area institutions celebrate Central Louisiana's vibrant culture, including the Alexandria Museum of Art, the Louisiana History Museum in Alexandria, the River Oaks Art Center, the Guinn Auditorium – Louisiana College and Convention Hall in Downtown Alexandria, the Coughlin-Sanders Performing Arts Center, which houses the Rapides Symphony Orchestra, and the Red River performance venue at the Alexandria Levee Park. The preserved



Fort Buhlow and Fort Randolph sites along the Red River are examples of earthwork/moat fortifications constructed during the Civil War.

2.21.2 Parks and Recreation

The Central Louisiana region offers an abundance of park space and recreational options. The September 2007 issue of National Geographic Adventure magazine named Alexandria, Louisiana as a "Top Wilderness Town" due to its "ideal mix of terrain, activity, and opportunity." Alexandria has convenient access to the 245,000-acre Kisatchie National Forest and the Bayou Boeuf Natural Area. Other regional recreational opportunities include Cane River Lake in Natchitoches Parish, Iatt Lake in Grant Parish which totals 7,100 acres, and Kincaid Lake and Cotile Lake in Rapides Parish. The region also boasts 37 golf courses and Bringhurst Field, home to the Alexandria Aces baseball team.

2.21.3 Education

Residents of Central Louisiana have access to various post-secondary educational options, including Northwestern State University, Louisiana College – Pineville, Louisiana Technical College, Louisiana State University at Alexandria, and The Learning Center for Rapides Parish. Along with higher education, secondary education is a priority for the region. The state implemented a school accountability program to encourage student attainment of higher educational standards. LEAP for the 21st Century (LEAP 21) is a state testing program in English/Language Arts and Math. Other programs include the K-3 Reading and Mathematics, Reading Excellence grants for tutoring and parent training in Pre-K programs, and the Class-Size Reduction Program, which seeks to hire more qualified grade 1-3 teachers.

2.21.4 Transportation

Central Louisiana's centralized location and improving accessibility make the region an emerging transportation hub. State and local officials have implemented various improvements to build on transportation linkages, including the expansion of Highway 165 and Highway 167, and the ongoing expansion of Highway 28 as part of the Gulf Coast Strategic Highway System, which will connect I-55 in Brookhaven, Mississippi to I-45 in Huntsville, Texas. As noted earlier, the region also has strong aviation, rail, and port access, as well as public transit service in the Cities of Alexandria and Pineville.

2.21.5 Health Care

The Central Louisiana region has 13 hospitals with a total bed capacity of 1,500. Major medical centers are based in Alexandria and Pineville. Rapides Regional Medical Center is a 359-bed medical facility, offering various medical specialties. The medical center also houses clinics, such as the Rapides Women's and Children's Hospital, cancer clinics, a heart center, and an MRI center. A new Neonatal Intensive Care Unit and a new Pediatric Intensive Care Unit opened in 2002 and 2003, respectively. The Rapides Regional Medical Center is undergoing a \$50 million expansion of the existing medical facility.

Christus St. Frances Cabrini is a 128-bed regional facility with cancer, heart and sports medicine clinics. Natchitoches Parish Hospital focuses on general medical specialties and is the only 24-



hour ambulance provider for Natchitoches Parish. Huey P. Long Medical Center, Avoyelles Hospital, Dubuis Hospital of Alexandria, and Central State Hospital also serve the eight-parish region. Despite the supply of medical facilities, the region suffers from a deficit of physicians with 134 doctors per 100,000 residents. The state averages 203 physicians per 100,000 residents, while the nation overall has 209 physicians for every 100,000 people.

2.21.6 Quality of Life Issues and Challenges

Overall, employers participating in the Wadley-Donovan Group survey on Central Louisiana identified the following factors as contributing positively to regional quality of life:

- Private education (K-12)
- Recreation
- Health care services
- Safety
- Availability of homes for transferred or relocated personnel
- Arts and cultural resources
- Traffic congestion

Survey respondents ranked the following factors as challenges in maintaining quality of life:

- Affordability of homes
- Public education (K-12)
- Personal income tax
- Availability of affordable rental homes

2.22 MACRO TRENDS

While the local and regional factors highlighted above affect the desirability of England Airpark and the surrounding community as an investment site, broader environmental and economic trends unfolding at the state, national, and global levels also strongly shape development opportunities.

2.22.1 Coastal Land Loss

The report “Coast 2050: Toward a Sustainable Coastal Louisiana” developed by the Louisiana Coastal Wetlands Conservation and Restoration Task Force³ outlines projections for coastal land loss and associated impacts to Louisiana’s coastal communities through 2050. The Coast 2050 plan also includes a series of ecosystem management strategies for federal, state, and local governments to avoid or mitigate many of the consequences of coastal land loss.

Various environmental and human-caused factors contribute to coastal land loss, including sea level rise, subsidence, compaction, and the altered hydrology of the Mississippi River and its

³ Louisiana Coastal Wetlands Conservation and Restoration Task Force and the Wetlands Conservation and Restoration Authority. 1998. Coast 2050: Toward a Sustainable Coastal Louisiana. Louisiana Department of Natural Resources. Baton Rouge, La.



adjacent wetlands. Estimates indicate that the State of Louisiana lost 1,900 square miles of land between 1932 and 2000. Current projections based on historic land loss patterns suggest that over 500,000 acres of marsh could be lost by 2050 if authorities do not pursue mitigating actions. Even with mitigation measures in place, substantial marshlands may vanish and other vital ecological lands lost or transformed.

A wide variety of possible environmental and economic impacts can result from the loss of coastal land. The range of potential impacts varies from fisheries depletion to abandonment of major infrastructure investments and areas of human settlement. One of the likeliest impacts of coastal land loss is increased vulnerability to coastal storms. In the aftermath of coastal storms, Alexandria will remain an important staging area for relief efforts. Ongoing exposure to severe and damaging coastal weather may also have the long-term effect of shifting Louisiana's population base and associated economic activity to the north. Inland state population centers, such as Alexandria are likely to serve as relocation areas for displaced persons and businesses. As a harbinger of wider population resettlement caused by coastal land loss and severe weather patterns, it is estimated that 3.5% of the population residents displaced by Hurricanes Katrina and Rita settled at least temporarily in Rapides Parish.

2.22.2 Climate Change and Aviation

Climate change will likely affect the future of aviation in the US in the form of new regulations or taxation. Airplanes emit carbon dioxide along with other pollutants that are known to exacerbate climate change. Environmental impacts will likely result in increased pressure to improve energy efficiency in the air transport system. Measures may include more efficient aircraft, lighter aircraft, increased utilization of flight capacity, more efficient scheduling systems, and reduced time in the air for holding patterns. Another option is heavier use of shorter, direct flights between smaller airports, also known as an 'air taxi' system or 'small aircraft transportation system (SATS)'⁴. This approach could enhance the strategic value of regional airports, such as Alexandria. On the positive side, the emissions from air travel may be offset by carbon credits purchased from other sectors of the economy. Overall, the impacts of climate change on aviation will likely result in improved efficiency and increased reliance on the latest in aeronautical and information technology to reduce energy waste and airport delays.

As companies also seek to improve efficiency, they look toward strengthening ties to regional transportation systems, including air transportation. Companies that participate in the marketplace must be able to efficiently transfer goods and people from one point to another. Particularly within the rapidly-growing advanced technology sectors, air transport is the preferred mode for the delivery of goods and services. Under globalization, transportation has essentially become part of the production process for many of today's firms. Factors such as the reliability, ease of access and reach of available commercial aviation become critical locational criteria. The presence of an airport with international links is a significant advantage for England Airpark, as an increasing number of small to medium sized business seek to compete globally.

⁴ "Future flight: The shape of things to come", Paul Rincon, BBC News Online, December 12, 2003



2.22.3 Energy and Land Use

Rising energy costs will increasingly alter individual travel behavior and in turn reshape the land use forms that generate demand for available transportation modes. Conventional development patterns typically separate uses, such as housing, schools, retail, and offices. Such widely dispersed built environments rely on the affordability and convenience of automobile travel, but rising gasoline prices, increasing traffic congestion, infrastructure costs, and environmental challenges are eroding the dominance of the suburban model.

Many Americans are seeking cost-efficient alternatives in pedestrian-friendly mixed use environments that allow people to live near jobs, school, shopping and entertainment. Proximity to everyday needs encourages walking and cycling, lowers demand for auto trips, and supports transit options. Aside from the cost savings and convenience associated with reduced auto dependency, people value mixed use developments for the resulting quality of life. A compact and carefully designed community connects parks and gathering spaces to restaurants, shops and a variety of housing types, creating a more vibrant and healthier environment. Mixed use developments thus provide a sustainable development alternative with increasing appeal to economically critical and growing population segments, such as young professionals, empty-nesters and active adults.

Sustainable development marries two important themes: that environmental protection does not preclude economic development and that economic development must be ecologically viable now and in the long run. Common use of the term "sustainability" began with the 1987 publication of the World Commission on Environment and Development report, *Our Common Future*. Also known as the Brundtland Report, this document defined sustainable development as "development that meets the needs of the present without compromising the ability of future generations to meet their own needs." This concept of sustainability encompasses ideas, aspirations and values that continue to inspire public and private organizations to become better stewards of the environment and that promote positive economic growth and social objectives. The principles of sustainability can stimulate technological innovation, advance competitiveness, and improve our quality of life.

As a result, the England Authority is proactively implementing the tenants of sustainability to all Airpark development. Several speed control measures, including roundabouts, have and are currently being implemented to encourage the use of low speed vehicles such as electric cars or "Smart Cars". In addition, sidewalks and bike trails are being constructed in conjunction with LEED certified building development, both residential and commercial, to encourage a pedestrian friendly environment. Airport Management is also in the process of converting airfield lighting to LED, and is evaluating alternative energy sources and water conservation options including use of water cisterns for irrigation. The Authority has also encouraged "green" space development.



Other sustainable/conservation options could include:

- Use of solar, wind or natural gas technology to support energy requirements at the Airpark.
- Replacing diesel or gas powered vehicles with natural gas or electric vehicles.
- Implementing standby power generation for the terminal and other high power usage facilities which could be synchronized with the main power supply allowing use during high demand periods.
- Implementation of an “Integral Passive Infra Red detection system”⁵ to control lighting within public areas by allowing lights to reduce output by 90 percent during periods of low or no occupation or movement. This in conjunction with low energy lamps and signage would reduce energy output.
- The addition of a 24-hour water supply monitoring system which can identify periods of high flow, thereby providing improved leak detection and flow control.
- The use of “green” roofs on commercial and industrial facilities to decrease energy consumption, associated with heating and air conditioning, and stormwater runoff while possibly promoting urban vegetable gardens.
- Planting groves of Filbert/Hazelnut trees to limit stormwater runoff and soil erosion while utilizing the nut oil as high-level biodiesel fuel⁶, etc.

Plethoras of energy, land use, water, and biodiesel initiatives are being evaluated to determine their viability in a “real world” setting. The England Airpark because of its educational mission and available facilities and land make it an ideal location to attract and implement some of the sustainable options mentioned.

2.23 NATURAL FEATURES INVENTORY

In order to inventory potential environmental constraints to future development at the England Airpark, a review of available background information and literature was conducted. Sources of information included the following:

- 2004 Digital Orthographic Quarter Quad (DOQQ) aerial photography;
- Louisiana Department of Environmental Quality (LDEQ), Geographic Information Systems database;
- LDEQ, Air Quality Assessment Division digital data;
- LDEQ, Water Quality Assessment Division digital data;
- United States Department of Agriculture (USDA) Natural Resources Conservation Service (NRCS) digital soils mapping;
- United States Fish and Wildlife Service (USFWS) Federally Listed Species for the State of Louisiana (Updated December 2007);

⁵ Birmingham International Airport Energy and Sustainable development concepts

⁶ Arbor Day Society Research Project.



- Louisiana Department of Wildlife & Fisheries (LDW&F) Threatened and Endangered Species List;
- Louisiana Department of Natural Resources (LDNR) Coastal Restoration Division Geographic Information Systems database;
- Federal Emergency Management Agency (FEMA) Mapping Service Center digital 100-year floodplain map; and,
- 1998 Alexandria International Airport Master Plan, Chapter 9, Environmental Overview.

The environmental constraint categories are described in the following sections:

2.23.1 Air Quality

In compliance with the Clean Air Act (CAA), the Environmental Protection Agency (EPA) has set National Ambient Air Quality Standards (NAAQS). The NAAQS requires the monitoring of six principal pollutants:

1. Carbon monoxide;
2. Lead;
3. Nitrogen dioxide;
4. Particulate matter (PM₁₀);
5. Particulate matter (PM_{2.5}); and,
6. Ozone and sulfur oxides.

The LDEQ Air Quality Assessment Division collects data from ambient air monitoring stations located throughout the state. According to the data collected from these stations, the Alexandria International Airport status is “in attainment.” Attainment areas meet the CCA’s primary and secondary national air quality standards.

2.23.2 Wetlands

Wetlands/Other Surface Waters

The USACE bases their wetland jurisdictional claims on the presence of three factors: dominance of wetland vegetation, the presence of wetland or “hydric” soils, and evidence of wetland hydrology. Based on interpretation of aerial photography and NRCS soil mapping, the site contains areas that may be classified as jurisdictional wetland. These areas need to be field verified and if determined to be jurisdictional, will have to be delineated. Determination of the limits of each wetland will quantify jurisdictional areas and assess the ecological quality and function of each area. If jurisdictional wetlands are identified on site, coordination with the USACE will be necessary prior to any filling, clearing, dredging, or land altering activities that may affect wetlands.

Coastal

The LDNR manages, protects, and restores coastal wetlands throughout the state of Louisiana. If any portion of the property is located within a designated coastal zone, a coastal use permit will need to be acquired. According to digital information obtained from the LDNR Office of



Coastal Restoration and Management, the subject parcel is not located within a coastal zone. Therefore, a coastal use permit from LDNR would not be required prior to future development.

Floodplains

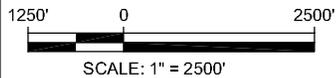
Northern portions of the site are located in FEMA 100-year flood zone designation A8. This designation is labeled as a 100-year flood area with flood elevation and flood hazard factors determined. If floodplain impacts are to occur as a result of proposed development, floodplain compensation may be required. A 100-year floodplain map is provided as **Exhibit 2-15**.

Water Quality

The LDEQ has monitored water quality throughout the State of Louisiana through its Water Quality Assessment Program. According to the LDEQ's available digital information, the nearest water quality monitoring station is Site #1210, which is described as Red River, north of Alexandria.



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Alexandria International Airport
Master Plan Update 2009
1999 FEMA Q3 (Rapides Parish)

FEMA
Floodplain
Map

Exhibit

2-15



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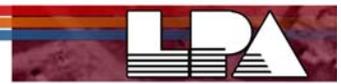


2.23.3 Biotic

Threatened /Endangered Species

As shown in **Exhibit 2-16**, the site has undeveloped areas that have the potential to contain suitable habitat for protected species utilization. For future projects that may impact previously undeveloped areas, a protect species survey may be necessary. A list of protected species in the State of Louisiana is provided as **Table 2-22**. If protected species are found consultation with the USFWS and LDW&F will be necessary.

TABLE 2-22 LISTED SPECIES IN THE STATE OF LOUISIANA			
Common Name	Scientific Name	Status	
		Federal	State
Plants			
American chaffseed	<i>Schwalbea americana</i>	E	*
earthfruit	<i>Geocarpon minimum</i>	T	*
Louisiana quillwort	<i>Isoetes louisianensis</i>	E	*
Invertebrates			
American burying beetle	<i>Nicrophorus americanus</i>	E	E
fat pocketbook	<i>Potamilus capax</i>	E	*
inflated heelsplitter	<i>Potamilus inflatus</i>	T	T
Louisiana pearlshell	<i>Margaritifera hembeli</i>	T	E
pink mucket	<i>Lampsilis abrupta</i>	E	*
Amphibians			
Mississippi gopher frog	<i>Rana sevosa</i>	E	*
Fish			
pallid sturgeon	<i>Scaphirhynchus albus</i>	E	E
Gulf sturgeon	<i>Acipenser oxyrinchus desotoi</i>	T	T
pearl darter	<i>Percina aurora</i>	C	*
Alabama shad	<i>Alosa alabamae</i>	C	*
Reptiles			
green sea turtle	<i>Chelonia mydas</i>	T/E	T
hawksbill sea turtle	<i>Eretmochelys imbricata</i>	E	E
Kemp's Ridley sea turtle	<i>Lepidochelys kempii</i>	E	E
leatherback sea turtle	<i>Dermochelys coriacea</i>	E	E
loggerhead sea turtle	<i>Caretta caretta</i>	T	T
gopher tortoise	<i>Gopherus polyphemus</i>	T	T
ringed map turtle	<i>Graptemys oculifera</i>	T	T
black pine snake	<i>Pituophis melanoleucus lodingi</i>	C	*
Louisiana pine snake	<i>Pituophis ruthveni</i>	C	*



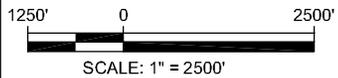
**TABLE 2-22
LISTED SPECIES IN THE STATE OF LOUISIANA**

Common Name	Scientific Name	Status	
		Federal	State
Birds			
brown pelican	<i>Pelecanus occidentalis</i>	E	E
bald eagle	<i>Haliaeetus leucocephalus</i>	T	E
peregrine falcon	<i>Falco peregrinus</i>		T/E
piping plover	<i>Charadrius melodus</i>	T/E	T/E
interior least tern	<i>Sterna antillarum athalassos</i>	E	E
red-cockaded woodpecker	<i>Picoides borealis</i>	E	E
Mammals			
manatee	<i>Trichechus manatus</i>	E	E
blue whale	<i>Balaenoptera musculus</i>	E	E
finback whale	<i>Balaenoptera physalus</i>	E	E
Sei whale	<i>Balaenoptera borealis</i>	E	E
sperm whale	<i>Physeter macrocephalus</i> (= <i>P. catodon</i>)	E	E
Louisiana black bear	<i>Ursus americanus luteolus</i>	T	T

Sources: United States Fish and Wildlife Service (USFWS) Threatened and Endangered Species System (TESS) (December 15, 2007), Louisiana Department of Wildlife and Fisheries (2007) <http://www.wlf.state.la.us/experience/threatened/threatenedandendangeredtable/>



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Alexandria International Airport
Master Plan Update 2009

Airport Property
Map

Exhibit

2-16



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Hazardous Materials/Contaminated Areas

England Airpark/Alexandria International Airport was an operational military facility and has the potential to contain areas that are considered hazardous and/or contaminated. Several studies were conducted at the site to determine the extent of contamination. These studies are located at the DOD Administrative Record and Document Archive (<https://afarpaar.afarpa.pentagon.af.mil/ar/docsearch.aspx>). For undeveloped areas, Phase I and Phase II Assessments will be necessary to determine the presence, absence, and/or extent of hazardous contamination. Based on the results of Phase I and Phase II studies, clean-up operations in coordination with the United States Environmental Protection Agency may have to be conducted.

Farmland, Prime and Unique:

According to the Farmland Protection Policy Act (FPPA P.L. 97-98), lands already committed to urban development such as the England Airpark / Alexandria International Airport, do not meet the definition of prime or unique farmlands.

2.23.4 Cultural

Archeological Resources/Historic Properties

Based on literature review and previous research the airport property contains sites identified as historic or archeological resources by the State of Louisiana Historic Preservation Program office (SHPO). Previous correspondence from the SHPO indicates the potential for cultural resources, specifically three archeological sites. Two sites are near the Bayou Rapides, within the area designated as “Future Aviation Related Development” in the current Airport Layout Plan. The other site is located northwest of the golf course. It is recommended that coordination with the SHPO be made prior to any future development.

2.24 CONCLUSION

The inventory section provides the foundation upon which the remaining elements of the master plan process will be developed. The information contained in this section provides guidance to assess potential changes to facilities and procedures necessary to meet the goals of the airport planning process. The inventory section presents data to determine the needs of airport users and prepares the England Authority to meet those needs. Thus, the inventory of existing conditions is the first step in the complex process of developing the plan to meet projected aviation demands in the community. This information is based on activity in the 2007 timeframe and facility observations in 2007/2008 timeframe.



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