

# City of Longview, Texas

## Aerospace Assessment



Prepared for  
Southwestern Electric Power Company and The Longview Economic  
Development Corporation

by

Tucson Atlantic Consulting, Common Sense Economic Development,  
and our data partner, the University of Southern Mississippi

### Data Sources and Analysis:

To the best of our knowledge, all proprietary competitive information and statistical data was provided by the University of Southern Mississippi under their contract with Economic Modeling Specialists International (EMSI). Additional information was collected through the U.S. Bureau of Labor Statistics, and research and personal interviews by the authors, or was provided by local sources. All the data is the most current available, posted in 2019. Where practical, pictures, maps, and charts have been used to simplify data interpretation and trends. Airport data was secured via personal interviews with Airport Authority staff and FAA documents.

## Table of Contents

Executive Summary.....	2
Scope of Work .....	3
Introduction and Brief History .....	4
The Economic Advantages of Texas Aerospace Jobs .....	5
Aircraft Mechanics and Avionic Technicians Wages.....	6
Airframe and Powerplant (A&P) Mechanics and Avionics Technicians.....	7
72 Basic Manufacturing Skill Occupations.....	10
11 Core Aerospace Skill Occupations .....	12
The Aerospace Industry Manufacturing Sectors .....	15
East Texas Regional Airport (GGG).....	17
Strengths and Weaknesses .....	20
Strengths .....	20
Weaknesses .....	25
Recommendations.....	25
The Greater Longview Area’s Competitive Advantage .....	28
Marketing Strategies for Aerospace Recruitment .....	35
Appendices .....	38
Appendix A .....	38
Appendix B.....	40
Appendix C.....	41

## Executive Summary

This aerospace assessment was authorized to evaluate the resources and opportunities necessary to attract and support the aerospace industry in the Longview and Gregg County. Additionally, it offers insight to assist local leadership in deciding whether to target the aerospace industry. As former economic development practitioners, it is our intent to offer a document that is readable, practical, and executable. To ensure accuracy, we have taken a comprehensive approach to the assessment.



On a local and regional scale, we personally interviewed key leadership in workforce training, business, politics, education, and economic development, to more precisely evaluate resources, capabilities, and challenges. We purchased and examined proprietary data and research to compile a statistical view of the greater Longview-Gregg County Region, including aerospace resources in the surrounding 100-mile radius or within specific commuter drive times. We have used the East Texas Regional Airport as the data center-point of the region. Consequently, skills, industries, and other geographic-specific, distance-sensitive information have been measured from this point.

This examination also reviewed 14 critical factors specific to the aerospace industry, which stimulate relocation and expansion projects. These include existing aerospace industries, training and education institutions, airports, workforce, support services, and several quality-of-life factors, along with many secondary factors and data requirements (see **Appendix B**, *General Recruiting Overview and Purpose of AEROready™ Certification*).

We have used charts and maps where possible to simplify or clarify information for ease of reading and understanding. We have also presented some proven marketing and recruitment strategies and recommendations to successfully attract aerospace business into the region. Our research indicates that the area is currently positioned to attract and maintain aerospace manufacturing; there is a steady and very strong existing aerospace industry presence in the area. This assessment reveals a clear opportunity to expand the economic base and add aerospace businesses in and around Longview and Gregg County. The greater 100-mile region

contains adequate resources in both labor and industry to support aerospace industry expansions to the Longview Region. It is also our belief that there is a greater opportunity to add additional regional marketing partners to the recruiting effort.

The SWEPCO, Rusk County Electric Cooperative, the Texas Department of Commerce, Team Texas, surrounding counties, and their associated economic development organizations can form a formidable and exclusive regional marketing team capable of leveraging the resources of each organization to enhance the capabilities of the entire team marketing effort. The Texas Department of Commerce has been very successful recruiting and sustaining the aerospace industry throughout the state. They attend both national and international trade shows and aerospace events each year.

Consequently, we are pleased to award the **AEROready™ Community Certification** to Longview and Gregg County.



This certification can be engaged to market and recruit on websites, as well as in brochures, publications, media presentations, and discussions with aerospace industry prospects. *Common Sense Economic Development* and *Tucson Atlantic Consulting* also look forward to a sustained relationship and offer to provide continuing guidance to Longview’s economic development efforts. We believe that if this assessment and marketing strategy is employed, aerospace will become an essential and expanding component of the involved regional economy.

## Scope of Work

This aerospace assessment is designed to identify resources required by the aerospace industry, to offer insight to community leadership, and to give guidance concerning whether to target and recruit aerospace industries and the economic benefits they generate. It is also designed to provide a critical overview of a timeframe, rough cost estimate, and actions for recruiting aerospace businesses.

**For the sake of clarity, AVIATION refers to aircraft that operate within the atmosphere. On the other hand, AEROSPACE is the all-encompassing term that refers to both aviation activities and space flight.**

**We will primarily use the term AEROSPACE in this assessment and marketing plan, unless referring to specific aviation skills or industries.**

Our consulting team has economic development experience in multiple areas including piloting aircraft, airport management, FAA Part-147 aviation school management, workforce training, marketing, and recruitment activities. Our experience plays a central role in the following Assessment and Marketing Strategy.

We will begin with a brief examination of advantages of the aerospace industry, including impact and contributions to the Texas and Longview Regional economies. A statistical data analysis will follow, which recognizes the skills and workforce necessary to

support aerospace within a 75-mile drivetime of Longview. We then identify the key, existing aerospace industries within a 100-mile radius, to determine the aerospace industry base in the wider Longview Region.

Next, we assess the Longview and East Texas Regional Airport’s resources for their ability to attract and retain new aviation businesses and activities into the area. This is followed by a discussion of the strengths and weaknesses of the area, with regards to supporting the aerospace industry. When all the resources are present or readily available to successfully attract aerospace industries, we award an **AEROready™ Certificate**—or identify the resources lacking, yet necessary, to attract and sustain aerospace industries.

Finally, we will offer recommendations, marketing insight, and a strategy to guide the recruitment process to effectively attract aerospace business into the area. This analysis will assure prospective industries that Longview, the East Texas Regional Airport, and the surrounding region do possess the resources to support the aerospace industry. Ultimately, we will determine if the city and airport are able to support aerospace manufacturing not only from their local resources and incentives, but also from the business environment offered by the State of Texas and the broader 100-mile region surrounding Longview.



## Introduction and Brief History

Longview is the forty-fifth largest city in the State of Texas, hosting an estimated population of over 81,000. It is a hub of economic activity within a twelve-county region of almost 700,000 people and a workforce of over 300,000. It lies on Interstate 20 and US Highways 80 and 259, situated 125 miles from Dallas and 30 miles from the Louisiana line.

Home to an historic downtown, outstanding dining venues, and numerous outdoor recreational activities, Longview is a dynamic city, attractive to both young professionals and retirees. Shopping opportunities include both national brands and local specialty shops. Worldwide shopping opportunities are available in Dallas, less than two hours away via Interstate 20.

With a strong economic history anchored in the oil and gas industry, Longview now has a diversified economy with over 5,000 employed in healthcare-related jobs and a strong base in retail, education, and over 9,800 employed manufacturing.

The Burlington Northern Santa Fe and Union Pacific Railroads serve the area, as does Amtrak. Five different colleges and universities serve the region, plus Texas State Technical College.

East Texas Regional Airport, owned by Gregg County, serves as the area’s primary airport for commercial and general aviation. The Airport offers three direct flights to Dallas on American Eagle. From Dallas, passengers have direct access to much of the United States.



The LeTourneau University School of Aeronautical Science is located at East Texas Regional and operates its own fleet of planes.

Airport construction began in 1940 and was officially opened in July of 1947. Since that time, the facilities have steadily expanded and improved. The East Texas Regional Airport currently supports both a 10,000- and 6,109-foot runway. Approximately 900

acres lie within the airport’s boundary. We’ll evaluate the airport and its economic development potential in the airport section of this Assessment.

## The Economic Advantages of Texas Aerospace Jobs

The State of Texas supports all six of the primary aerospace manufacturing sectors, which includes the following: aircraft manufacturing, aircraft engine and engine parts manufacturing, other aircraft parts and auxiliary equipment manufacturing, guided missile and space vehicle manufacturing, guided missile and space vehicle propulsion unit parts manufacturing.

**Chart 1** shows some of the notable economic impacts of the aerospace industry in Texas. The state supports 1,300 aerospace firms and ranks in the top 3 aerospace states. By any metrics, Texas maintains a vibrant, expanding aerospace sector. Few states can compete with the scope and detail of the Texas aerospace industry.

The aerospace business is unlike any other, and its highly skilled

labor is generally higher paid than most manufacturing businesses. In the Skills and Aerospace Manufacturing sections below, we will examine the skills, labor, and industry present in the State of Texas and the greater Longview area.

<b>Chart 1. Aerospace in Texas Highlights</b>
One of the top 3-states for Aerospace
184,800 employed in aerospace & defense in 2020
Average salary \$84,300
Home of the Human Space Flight Center in Houston
Supports Six of the nation’s “busiest 50 airports”
Over 1,300 aerospace firms
Home to 17-FAA Part 147 maintenance schools
Graduated 1,390 aerospace engineers in 2019
Certifies over 1,800 aircraft maintenance & technology annually
Source: Governor’s Economic Development Office 2020

## Aircraft Mechanics and Avionic Technicians Wages

As illustrated in **Chart 2** below, the median average weekly wage for production workers in Texas is \$15.98 per hour, or \$33,240 per year; this is in significant contrast to the \$63,680 annual pay for maintenance, repair, and overhaul (MRO) workers and the \$56,680 paid annually to avionics technicians. Indeed, the two aviation occupations generally command higher pay than equivalent non-aviation categories shown on the chart.

Since their wages are higher, aviation industries have a higher economic impact in the communities where they are present. As one might expect, the larger the salary, the greater the contribution to the local economy. Aerospace jobs are generally high-skill, high-wage, and high-demand jobs that require technical training; therefore, businesses and the accompanying jobs make aerospace industries a prime recruiting target for states, regions, and local communities.

<b>Chart 2. Wages of Selected Maintenance Classifications, TX (SOC)</b>	Mean Hourly \$	Mean Annual \$
<b>Machinist 51-4041</b>	<b>\$22.52</b>	<b>\$46,850</b>
<b>Auto body repairers, 49-3021</b>	<b>\$22.07</b>	<b>\$45,910</b>
<b>Electronic equipment installers 49-2096</b>	<b>\$17.26</b>	<b>\$35,900</b>
<b>Industrial machinery mechanics, 49-9041</b>	<b>\$26.75</b>	<b>\$55,640</b>
<b>Millwrights 49-9044</b>	<b>\$25.41</b>	<b>\$52,850</b>
<b>Precision instruments and equipment repairers, 49-9069</b>	<b>\$24.95</b>	<b>\$51,900</b>
<b>Assemblers and fabricators, 51-2099</b>	<b>\$15.36</b>	<b>\$31,950</b>
<b>Production workers, 51-9199</b>	<b>\$15.98</b>	<b>\$33,240</b>
<b>Avionics technicians, 49-2091</b>	<b>\$27.25</b>	<b>\$56,680</b>
<b>Aircraft mechanics and service technicians, 49-3011</b>	<b>\$30.70</b>	<b>\$63,860</b>
Source: Texas Labor Market information, January 2020		

## Airframe and Powerplant (A&P) Mechanics and Avionics Technicians

The aviation industry is critically dependent on skilled, “touch” labor. The Federal Aviation Administration (FAA) certifies and requires a permanent record for each part that is installed on or removed from an aircraft, and an airframe or powerplant (A&P) mechanic must certify that the part has been properly installed on each aircraft.

As safety is essential when flying, both labor and parts tend to be more exacting and expensive, and specifications for both parts and installation are extremely demanding. This logically tends to concentrate expensive, specialized labor into industry clusters, such as the A&P mechanics.

Texas is home to seventeen FAA Part-147-approved maintenance schools scattered throughout the state. Texas schools also graduated over 1,800 aircraft maintenance technicians in 2019, and it is one of the top aviation maintenance training states. Aviation maintenance and assembly operations often prefer a convenient commuting distance to an FAA-certified Part-147 maintenance school to provide a dependable supply of such skills. Although A&P training can be accelerated, it generally requires 18-24 months and 1,900 hours of instruction to complete; mechanics must also be 18 years of age.

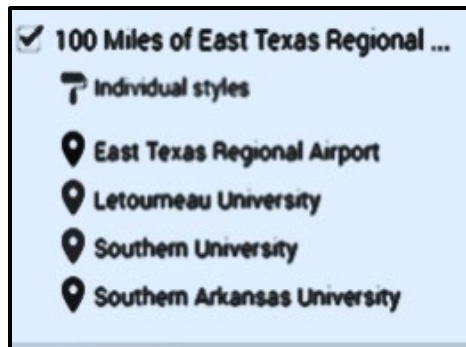
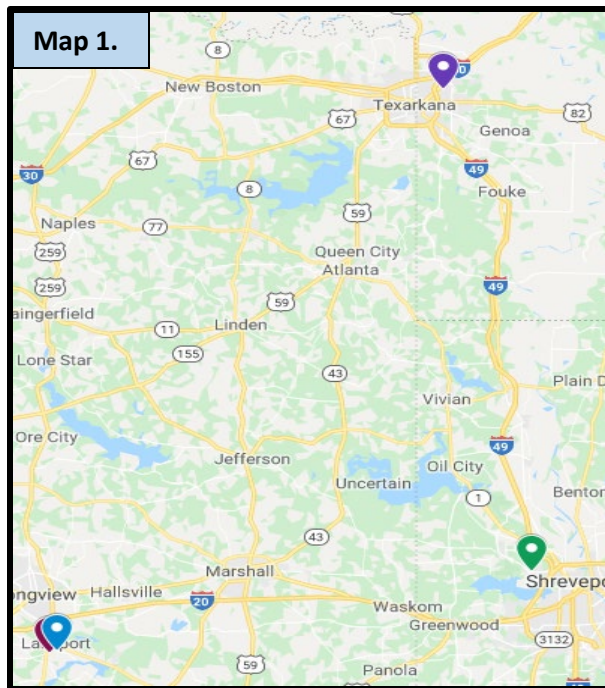
Fortunately, the closest FAA-certified A&P mechanic school is LeTourneau University, conveniently located at the East Texas Regional Airport. Similar nearby FAA maintenance training is also offered in Shreveport (65 miles) and Texarkana Arkansas (88-miles) as shown below on **Chart 3** and **Map 1**.

LeTourneau University currently participates in dual enrollment high school coursework whereby a student receives college credit for aircraft maintenance coursework while the student is still enrolled in high school. This is an excellent method to create a “culture of aerospace” in the community and expose students to high-skill, high-wage careers in aviation. Dual enrollment aviation maintenance courses should be considered within each of the four school districts in the city.

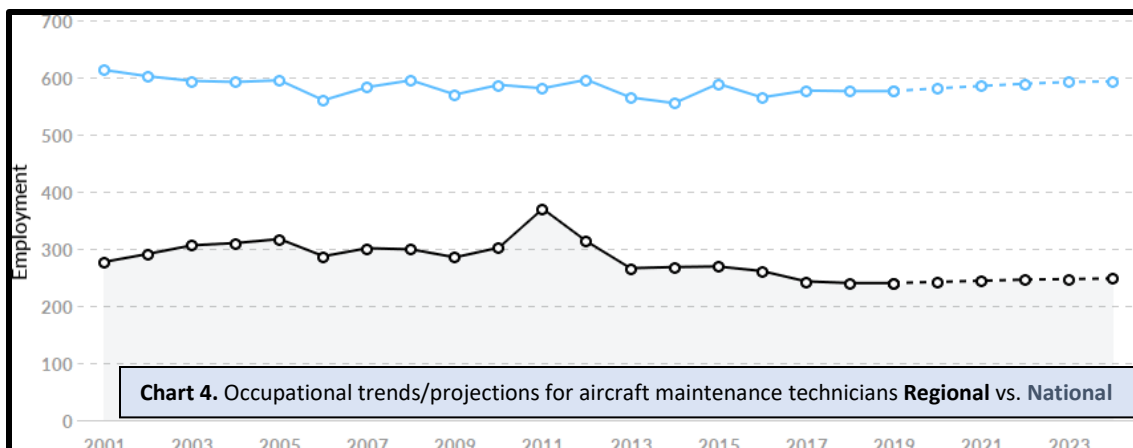




Chart 3.	
Name of School	Location
LeTourneau University	200 Airpark Dr., Longview, TX 75603
Southern University	3050 Dr. Martin Luther King, Dr., Shreveport, LA 71107
Southern Arkansas University	60 Globe Avenue, Texarkana, AR 71854



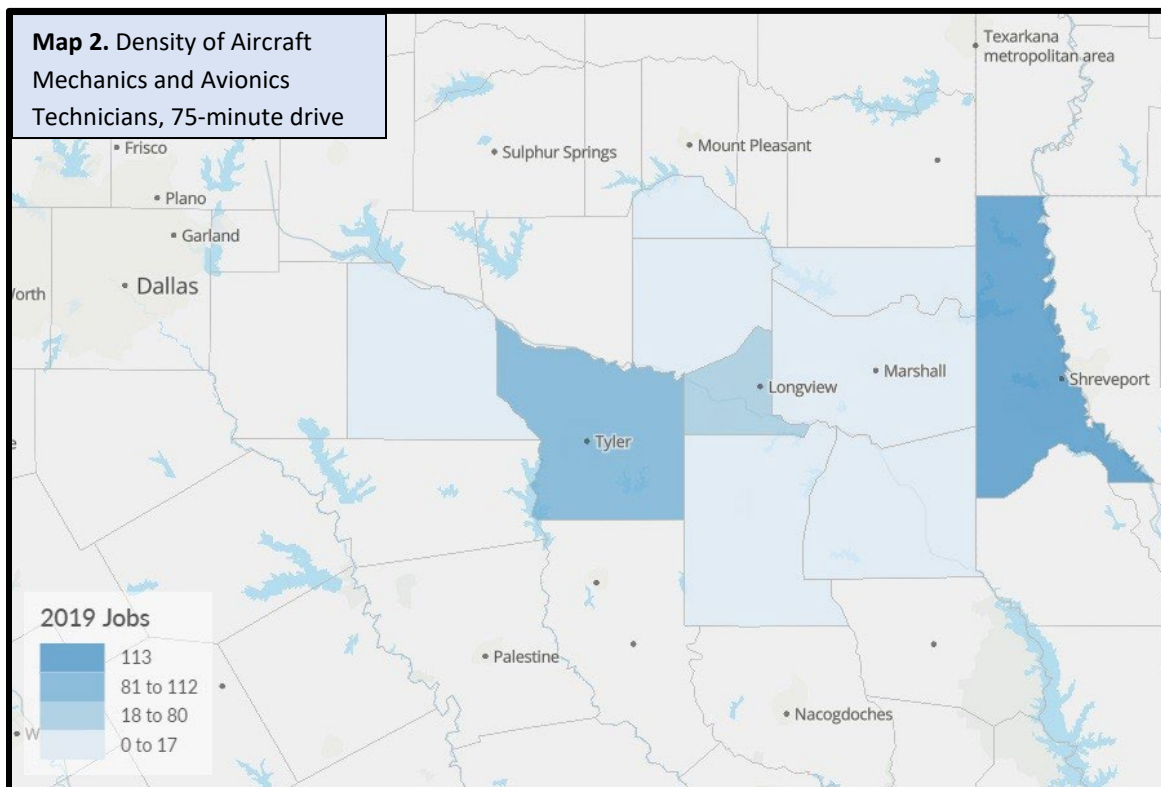
**Chart 4** below offers a summary of aircraft mechanics and avionics technicians metrics within a 75-minute drivetime of Longview. The data shows an increasing number of these skills and relatively high median earnings, but also indicates only a 0.41% concentration of these skills in the region compared to the national average of 1; this indicates that MRO operations are under-represented in the area.



As stated, the above (**Chart 4**) illustrates the regional versus national growth trends and projections for these maintenance skills through 2024. Regional growth rates are projected to roughly parallel national trends at 3% over the next 4 years. There are currently 17 regional employers that have posted aircraft maintenance jobs in 2019. Jobs postings average about 30 days until filled.

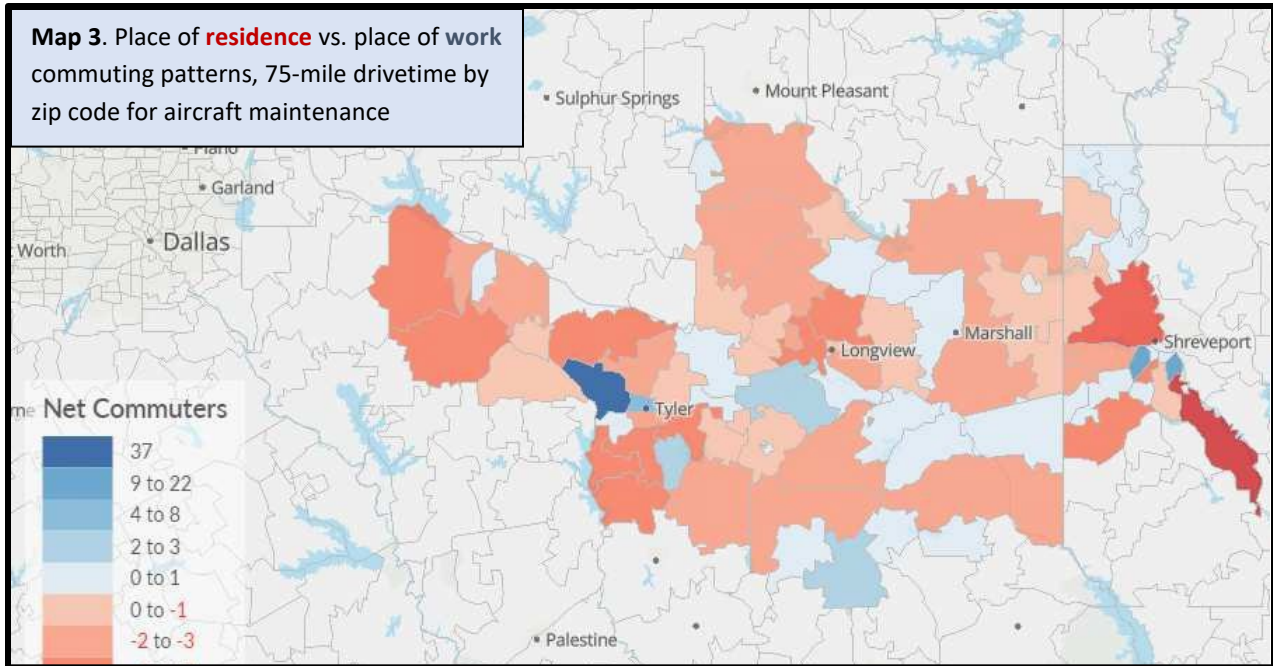
**Map 2** indicates the density of Aircraft Maintenance Technicians and Avionics Technicians within a 75-minute drive of the East Texas Regional Airport, covering nine counties in Texas and one in Louisiana. Employment is concentrated around Tyler in Smith County and Shreveport in Caddo Parish.

A total of 240 employees work in the region, averaging \$56,851 (\$27.33 per hour) annually. This compares to a U.S. average of 576 skilled aircraft technicians for a similar sized area with a \$63,094 (\$30.33 per hour) annual salary. Wages are roughly 10% less in this area than the national average. Additionally, within the region, 50.4% work for the federal government, either as military or civilian employees. Less than 5% of these employees are female.



**Map 3** illustrates the commuting patterns for aircraft maintenance workers within the region. Note that the place of work destinations for maintenance, repair and overhaul (MRO) operations are centered around businesses located both in Tyler and Shreveport. Furthermore, it is worth recognizing that aircraft maintenance skills are located throughout the 10-county

region, with commuter opportunities primarily concentrated in Smith County and Caddo Parish. Evidently, the aircraft maintenance MRO workers at the East Texas Regional Airport currently reside in Gregg County and do not commute long distances to work.



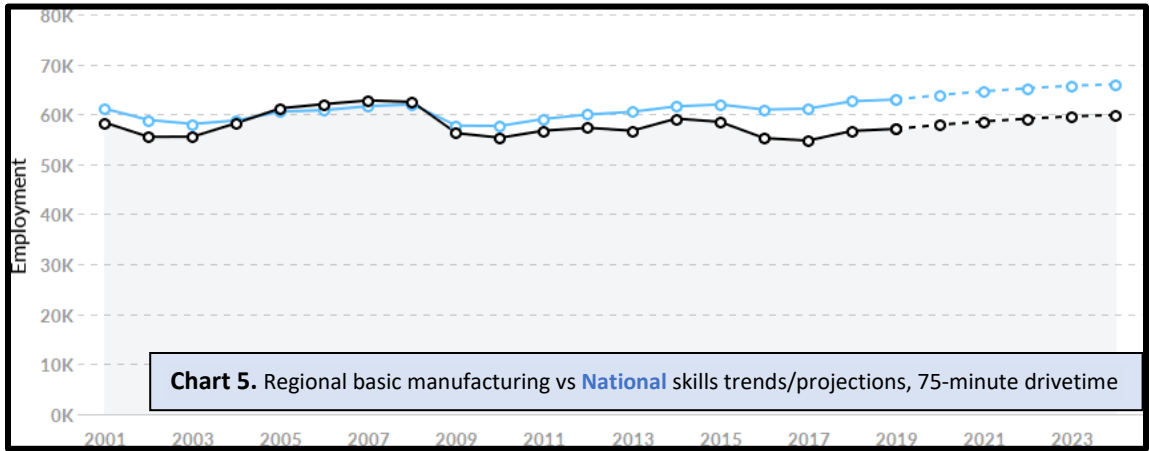
To summarize, the 240 aircraft mechanics and avionic technicians in the region is enough to support existing aircraft-related maintenance and parts manufacturing in the Longview and Gregg County area; that being said, if a large MRO operation selected a site at the East Texas Regional Airport, or if one of the two existing businesses at the airport expands significantly, skilled labor is likely to prove difficult to recruit, initially.

However, it is still an advantage of and benefit to the area to have LeTourneau University and the Part FAA-147 aviation maintenance school onsite at the East Texas Regional Airport. The A&P training site has enrolled 80 students and is internationally known and respected for its quality of aviation maintenance and flight school graduates. LeTourneau University offers a first-class resource to any prospective industry that requires aviation maintenance skills and is critical to support and sustain new aviation business operations.

## 72 Basic Manufacturing Skill Occupations

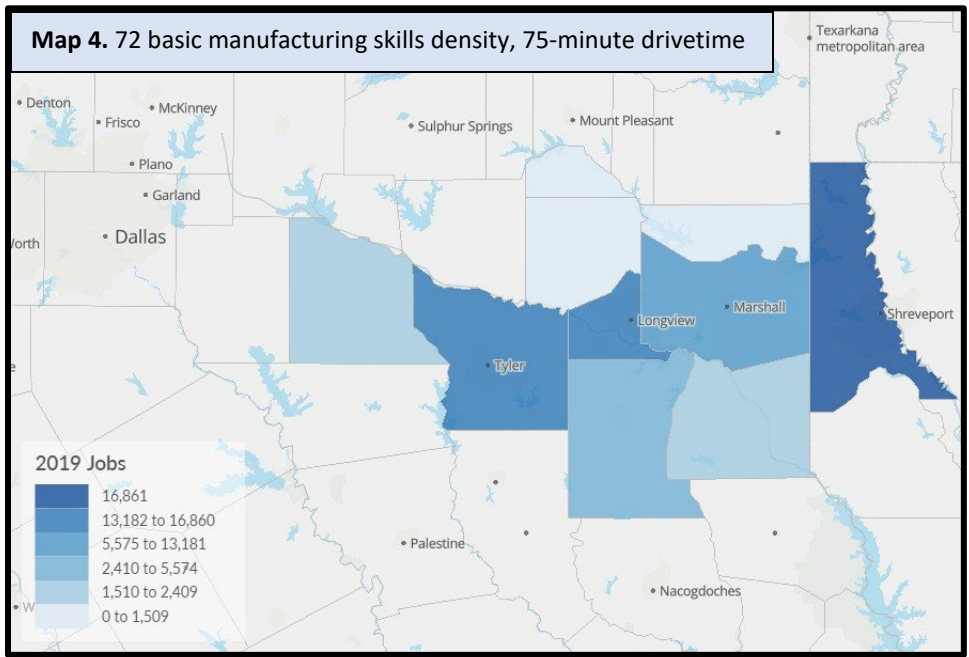
The overall aerospace industry requires 72 basic skills to operate, a complete listing of which can be found in **Appendix A**. Many of these occupational skills are common to other industry sectors and include categories that range from truck drivers and technicians to computer programmers and engineers. However, individuals will generally command higher salaries when employed by aerospace companies compared to general manufacturing.

**Chart 5** indicates the employment trends and growth projections for the basic 72 manufacturing skills in the region compared to the national average. Although these skills decreased regionally by 3% in the past 5 years, they are projected to increase at a 5% rate from 2020 to 2024, consistent with national projections.



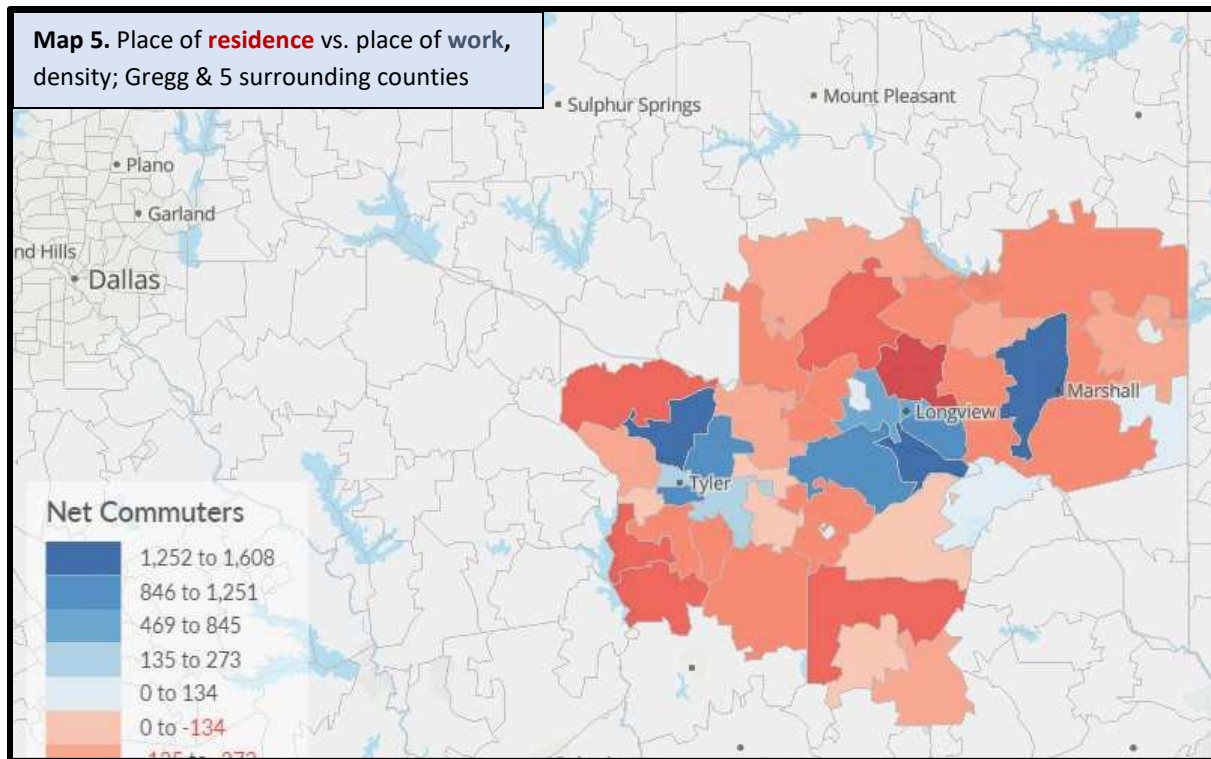
**Map 4** illustrates the density of the 72 basic manufacturing skills throughout the 75-minute drivetime region (10 counties). As one might expect, Caddo Parish in Louisiana and Smith and Gregg Counties in Texas support the heaviest concentrations of this occupation group.

<b>72 Basic Skills within a 75-mile drive</b>
57,077 total workers
A 3% decrease since 2014, 5% growth projected 2020-2024
Average Salary \$40,447
83% male, 17% female



Similarly, **Map 5** indicates the commuting pattern for these workers within Gregg County and the immediate 5 surrounding counties. The region’s 72 basic manufacturing skilled occupations commute to 3 primary employment centers, situated around the cities of Longview, Marshall, and Tyler.

This 6-county region supports 36,500 jobs with an average annual compensation of \$41,261. It represents a fluid, ample, and geographically diverse supply of the available 72 occupations. Five educational institutions graduated a total of 1,643 individuals with these skills as follows: University of Texas at Tyler (894), Tyler Junior College (408), LeTourneau University (244), Kilgore College (58) and East Texas Baptist University (40). Within this region, trends indicate a 6% growth of these occupations through 2024. Wages here average 17% less than the national average (\$19.84 versus \$23.86).



In short, the 72 basic manufacturing occupations are ample both in the wider 75-mile drivetime region, as well as the smaller 6-county region surrounding Longview. They could support a new aircraft parts industry or aerospace support business.

## 11 Core Aerospace Skill Occupations

The skills listed below are the 11 primary core skills necessary to directly support aerospace parts manufacturing, assembly, and ancillary business services. These are the core job skills that potential aerospace businesses are sure to evaluate when considering a potential location.

It is highly probable that a community will need to ensure that all or most of these key skills are present in order to receive consideration from an expanding aerospace industry. In 2018, 4,004 of these skilled workers resided within the 10-county region; unfortunately, this represents a slight decline of 122 individuals since 2013.

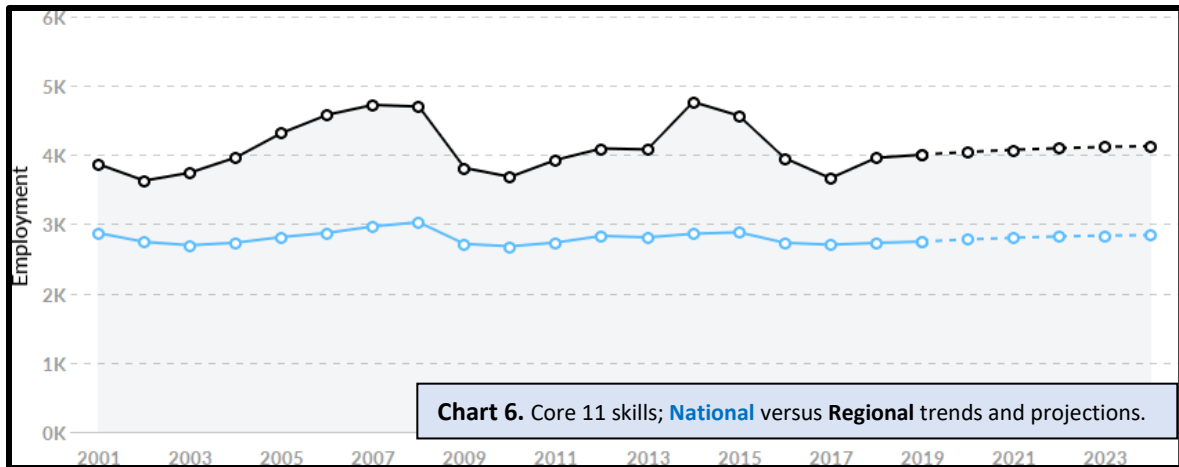
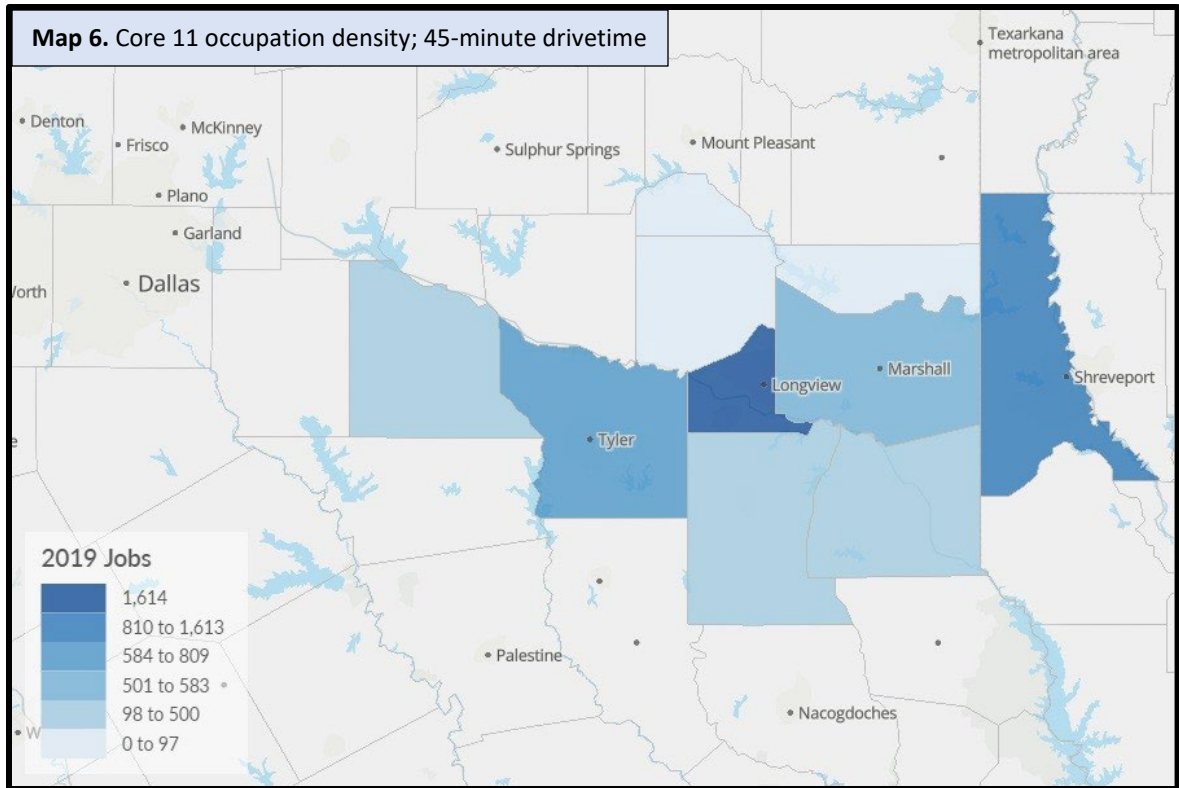
These skills are aerospace-specific or oriented toward an aerospace application. They include a wide range of Standard Occupational Classifications (SOC), from aerospace engineers to specialized metal welding. These skills also have application in traditional manufacturing industries but often require additional training for specialized aerospace fabrication, maintenance, and services. This training, excepting the training for A&P mechanics and avionics technicians, can normally be provided by local 4-year and community colleges or Texas Regional Workforce Councils.

### **Core 11 Skills**

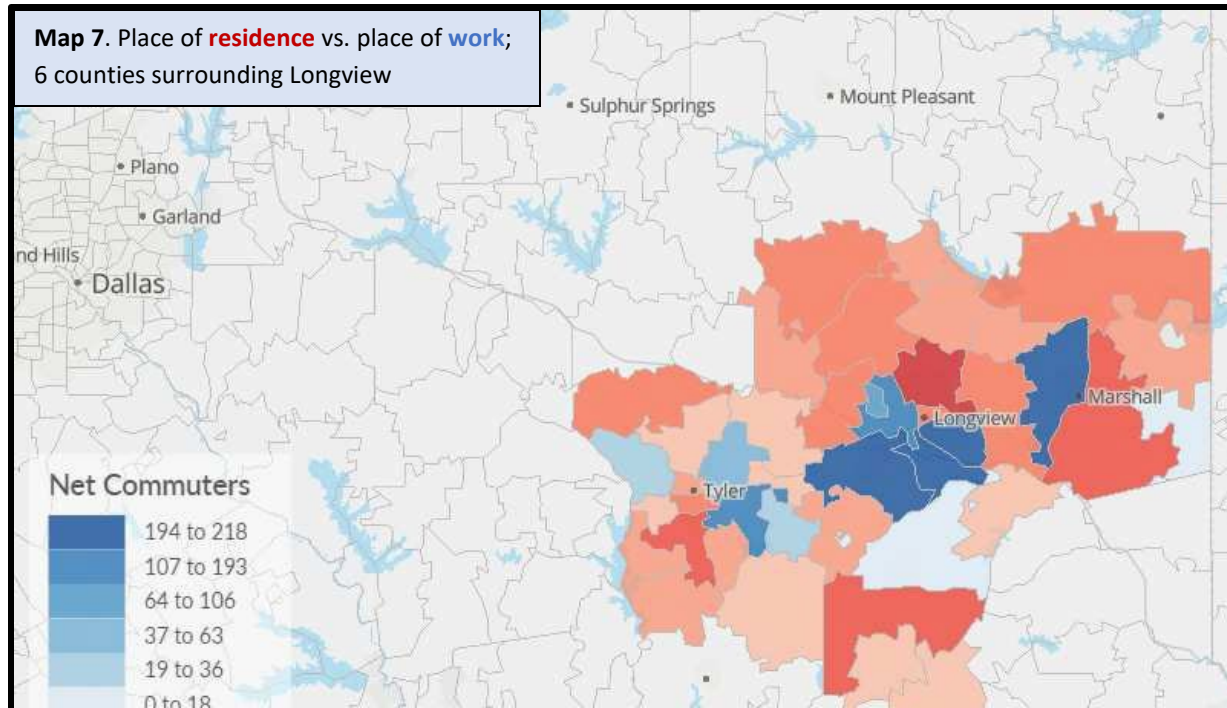
- *Aerospace Engineers*
- *Aerospace Engineering and Operations Technicians*
- *Avionics Technicians*
- *Aircraft Mechanics and Service Technicians*
- *Aircraft Structure, Surfaces, Rigging, and Systems Assemblers*
- *Structural Metal Fabricators and Fitters*
- *Fiberglass Laminators and Fabricators*
- *Computer-Controlled Machine Tool Operators, Metal and Plastic*
- *Computer Numerically Controlled Machine Tool Programmers, Metal and Plastic*
- *Welders, Cutters, Solderers, and Braziers Welding, Soldering, and Brazing Machine*
- *Setters, Operators, and Tenders*
- *Welders*

As illustrated on **Map 6**, the density of Core 11 workers is concentrated around Shreveport and Longview. Within the 10-county, 75-minute drivetime region, the Core 11 annual salary is \$40,047. Furthermore, the concentration of 4,004 skilled Core 11 workers is 1,255 more than the national average of 2,749 for a similar sized area. Consequently, the plentiful supply of these skills is advantageous to support an aerospace parts manufacturing facility or support operation.

National and regional trends and projections within the 10-county area are compared for these skills on **Chart 6**. Note that regional supply of these workers is consistently higher than national supplies, although the number of total workers had declined since 2014. However, this is once again currently increasing, and this trend is projected to continue through 2024. Projections indicate a consistent 3% increase in this occupation.



Now let's compare the commuting patterns within the 6-county area centered on Gregg County and Longview (**Map 7** below). Workers are commuting to Tyler, Longview, and Marshall, where these Core 11 skills are concentrated. This occupation of workers is 94.5% male and 5.5% female. Tyler Junior College, Kilgore College, and LeTourneau University are the top training institutions for these skills in the 6-county area.



As a summary, the supply and training of Core 11 skills is satisfactory to attract aerospace manufacturing. Furthermore, the local training institutions can adequately sustain an ongoing supply of these workers.

### The Aerospace Industry Manufacturing Sectors

The broader aerospace industry cluster is subdivided into its six primary sectors listed below in **Chart 7**. Fortunately, these sectors are all found in Texas. Consequently, Texas ranks as one of the top three aerospace manufacturing states.

As a result, the State of Texas has designated the aerospace industry as one of its top priority recruiting targets. State and local marketing efforts have proven very successful, and presently, the aerospace industry in Texas is home to over 1,300 companies, including the principal employers and producers of aerospace manufactured products.

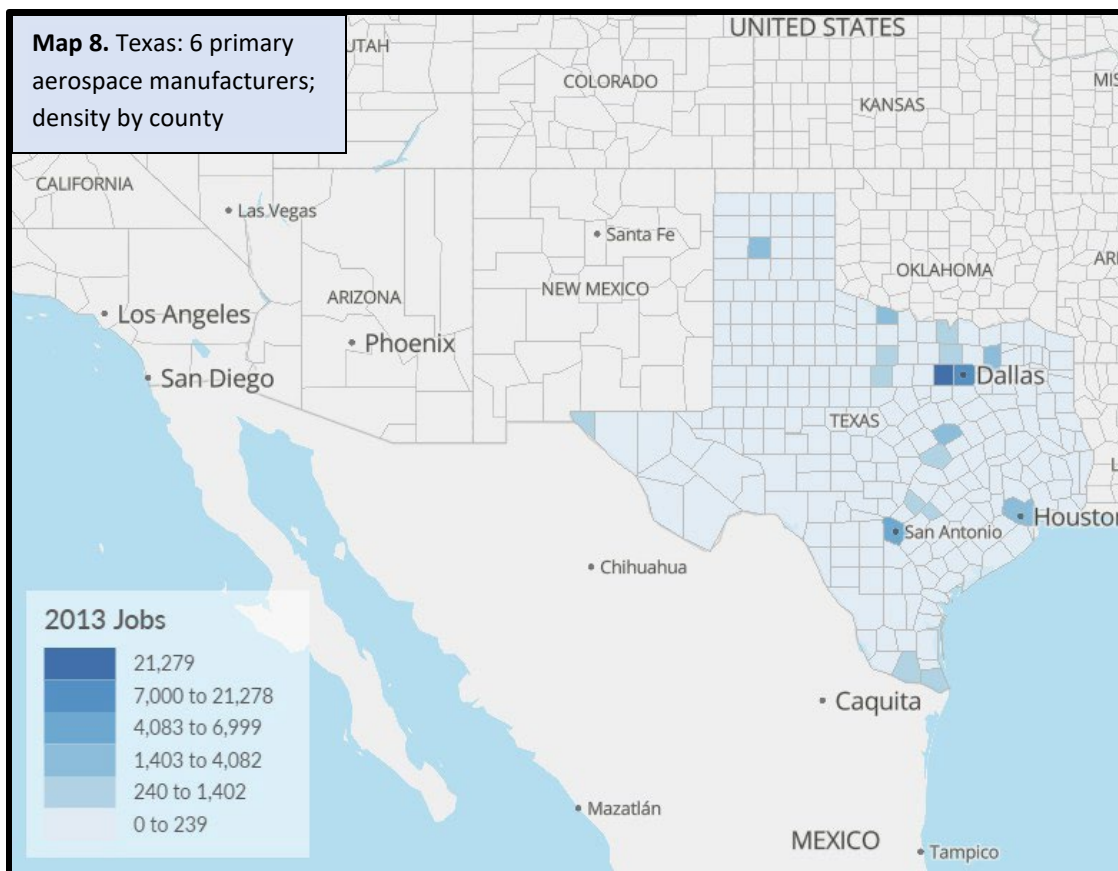
<b>Texas Aerospace manufacturing summary</b>
46,163 employed
\$134,192 average earnings
227 industries
One of the top 3 aerospace manufacturing states
Source: EMSI 2019



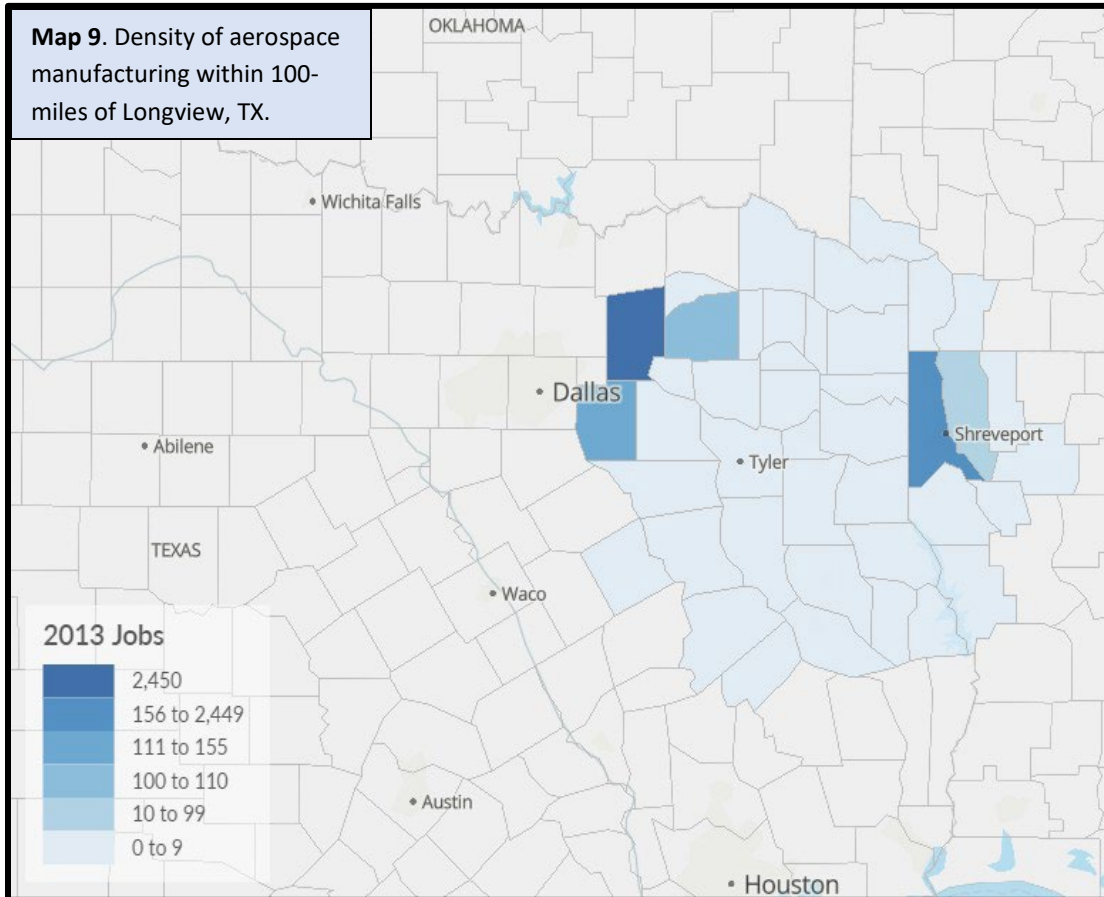
NAICS	Chart 7. Six Primary Aerospace Industry Sectors
336411	Aircraft Manufacturing
336412	Aircraft Engine and Engine Parts Manufacturing
336413	Other Aircraft Parts and Auxiliary Equipment Manufacturing
336414	Guided Missile and Space Vehicle Manufacturing
336415	Guided Missile and Space Vehicle Propulsion Unit and Propulsion Unit Parts Mfg.
336419	Other Guided Missile and Space Vehicle Parts and Auxiliary Equipment Manufacturing

*\*The maintenance, repair, and overhaul component of the aerospace industry previously mentioned are considered maintenance activities and are not included in this manufacturing data*

**Map 8** illustrates the location of primary aerospace manufacturers density by county. Note that the industry is concentrated primarily in Eastern Texas and centered around Dallas, San Antonio, and Houston. A total of 227 aerospace manufacturing industries together employed 46,163 in 2018, with average earnings of \$134,192.



Shown on **Map 9** is the density of the 6 primary aerospace manufacturing industries within 100-miles of Longview. Aerospace manufacturing employment is concentrated in the counties of Hunt, Hopkins, and Kaufman in Texas, and Caddo and Bossier Parishes in Louisiana. The average earnings of aerospace workers in this region is \$146,319, and the largest aerospace employer is L-3 Communications Integrated Systems, which is located in Greenville. This company alone employs over 4,000. In the 5 years from 2013 to 2018, aerospace manufacturing jobs in this region have increased by a remarkable 54%, adding 1,539 jobs. In Hunt County, the average aerospace manufacturing employee earns an average of \$150,000.



### East Texas Regional Airport (GGG)

Public airports are critical to aerospace economic development. Not only are they essential for MRO operations, but they also serve as entryways to a community, provide passenger commercial service, offer general aviation and military activities, and they are often a source for industrial and retail job creation. The 1,300-acre East Texas Regional airport currently offers all of these resources, in addition to being home to LeTourneau University, which provides FAA-certified aircraft mechanic and pilot training onsite.

Construction of the Gregg County Airport and terminal was opened on July 15, 1947. Once open, Mid-Continent and Delta Airlines serviced the airport with daily commercial flights. Continual improvements were added, including runway lights, approach lights, and an instrument landing system. In 1970, a 10,000-foot paved runway (13/31) was completed, and in 1976, a new air traffic control tower was built. In 2002, the airport was renamed the East Texas Regional Airport. Today, American Airlines offers 3 flights each day to Dallas.



### Runways

The airport support two runways- 13/31 and 18/36.

**13/31** is 10,000 X 150 FT asphalt, in good condition

Weight bearing- Single wheel -95, Double Wheeled 155, Double Tandem 288

High intensity edge lights

MALSR- 1,400 medium intensity lighting

Instrument approach: ILS. An area navigation (RNAV) approach is also available to each runway approach.

**18/36** is 6,110 X 150 FT, asphalt, in good condition

Weight bearing-Single wheel 95, Double wheel 155, Double tandem 280

4-light PAPI

### Services

Control Tower (operates 6am-10pm daily)

Major maintenance, aircraft painting

Flight school

FBO services available, pilot lounges, hangar rentals, tie down, 100LL & jet

A fuel sales

Rental cars, passenger terminal transportation, restaurants & vending

Commercial passenger service at airport terminal

American Airlines scheduled 3x, daily



## Operations

109-based aircraft; operations: 156 per day

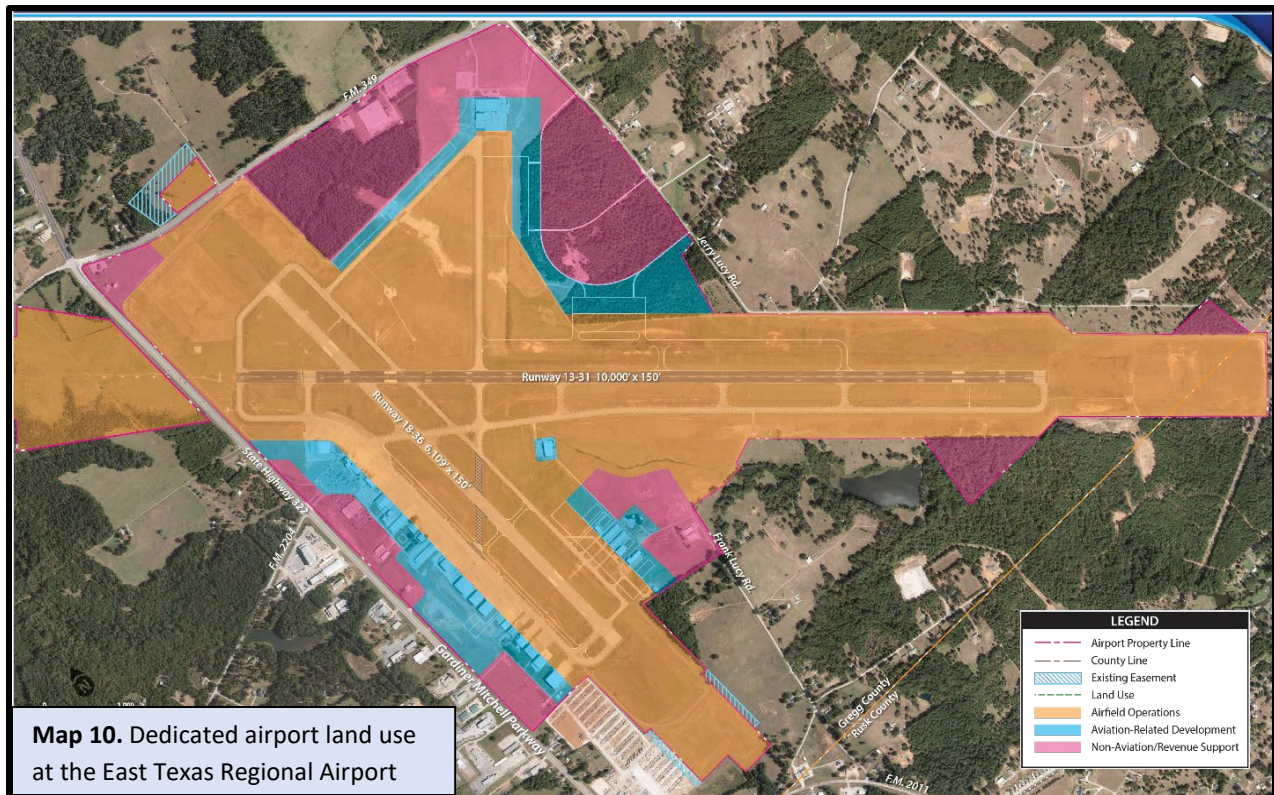
44% local general aviation, 30% transient general aviation, 17% air taxi, 9% military

## Development and Planning

East Texas Regional Airport is ideally suited for future growth and can support aviation or non-aviation activities. Fortunately, the airport has sites available for prospective maintenance repair or overhaul operations, hangar construction, or other aviation related services.

Additionally, space is available to support manufacturing, warehousing, vocational training, and retail activities.

**Map 10** illustrates the airport's various existing and potential land usages. Note the areas colored in **blue** for aviation-related activities and the area **pink** reserved to support non-aviation activities.



Fortunately, the airport is well-established for future growth and development. Due to its 10,000-foot runway and parallel taxiway, the airport is almost unlimited in its capability to handle any of the world's existing aircraft. A military-related maintenance, repair and overhaul operation or a commercial research and testing facility could be accommodated on airport property.

## Strengths and Weaknesses

### Strengths

The strengths listed below are evaluated for their ability to support an aerospace industry in a maintenance, repair and overhaul operation (MRO), or in one of the six primary aerospace manufacturing sectors. These community resources, characteristics, and services are critical to potential aerospace industries. The Longview region has strengths and assets which compare favorably with any small MSA in the United States, as well as with many that are much larger. These strengths are not listed in any order of magnitude since each can be critical to a potential new industry.

- **The Longview Economic Development Corporation (LEDCO)** is extremely strong financially, with an impressive annual budget and reserves enough to assist new and expanding companies with infrastructure needs and with other incentives. As a section 4A community, dedicated funding through a 1/4 percent sales tax insures dependable continued financial viability. The organization is managed and staffed by experienced economic development professionals who can assist new or existing corporate entities in solving problems or in taking advantage of opportunities. **AEROready™** officials were very impressed with the capabilities of the organization and its professional and volunteer leadership.
- **East Texas Regional Airport** offers assets that are rather unique in small MSA's and are competitive with most airports of any size. With runways of 10,000 feet length and 6,109 feet in length, the airport can basically handle all operational aircraft. Property for hangar expansion is available adjacent to existing hangars; additional properties of 50-acres and 150-acres are available within airport property for use in developing large MRO's or even aerospace parts manufacturing businesses.  
East Texas Regional Airport has a competent, experienced management team. It is owned by Gregg County, is well-funded, and is very competitive in lease pricing for airport clients.
- **Existing Tenants at the East Texas Airport**  
Numerous aerospace service businesses and a LeTourneau University flight and maintenance training facility are located at East Texas Regional Airport. Aviation-related businesses include an impressive FBO, several small MRO's, a private flight school, and a four-year University Flight Program which will soon add a two-year A&P certificate component:
  - ✓ KRS Jet Center is East Regional Airport's FBO. It offers hangar space for approximately 50 planes with a capacity of 60, ultra-modern pilot lounges,



local transportation, catering for meetings, fuel (including military) and charter flight services.

- ✓ Aerosmith Aviation is FAA-certified in paint, interior maintenance, and avionics and operates a large aviation paint center providing maintenance services onsite. Currently employing approximately 60, a new hangar is under construction which will require at least 5 new painters and mechanics. Aerosmith provides services critical to the aerospace industry and has very specialized paint design and application techniques. The one-stop aircraft service center has the potential to greatly expand its presence at the East Texas Regional Airport.
- ✓ Gregg Aircraft Services, Inc. has 5 mechanics located at East Texas Regional Airport. Major repair services are offered for planes as large as the Citation V. They also provide Annual Inspections.
- ✓ Skypark Aviation, LLC is a flight school located at East Texas Regional. It is led by a Master Flight Instructor.
- ✓ Don Maxwell Aviation Services, Inc., located at East Texas Regional, is a Mooney Authorized Service Center. Offering inspections, major and minor repairs, pre-purchase inspections, upholstery services, light paint work, and avionics services, Maxwell is a specialized component of East Texas Regional's growing aerospace presence. Maxwell has a total employment of approximately 15, including 7 A&P mechanics.
- ✓ PHI Air Medical.com operates a medical-related helicopter fleet out of East Regional Airport.
- ✓ LeTourneau University's Aviation and Aeronautical Science Department is located on the north end of the East Texas Regional Airport. It currently offers 4-year degrees in Aviation Maintenance Science, Aviation Management, Aviation Studies, Mission Aviation (Flight), Professional Flight (Maintenance and Military) and Remotely Piloted Aircraft Systems. In addition, the University will offer a two-year Airframe and Powerplant program beginning in the Fall of 2020. As a part of this program, LeTourneau will offer two



aerospace courses in area high schools on a two-plus-two basis. LeTourneau has a national aviation advisory board, which includes industry leaders of companies that have a close relationship with the University's Aviation Programs.

- **Longview's location on I-20** is just 128 miles east of Dallas; the Dallas and Fort Worth aerospace cluster offers Longview transportation advantages. Already a distribution hub of Dollar General, Neiman Marcus, Sysco, and others, there is potential for aerospace parts suppliers and parts manufacturers. Longview truly can connect corporate clients easily to both national and international markets.



- **Utility Providers reliability and supply.**
  - ✓ Southwestern Electric Power Company (SWEPCO) is a subsidiary of American Electric Power (AEP). SWEPCO supports competitively priced, dependable power and is an aggressive economic development marketing and recruiting partner. AEP and SWEPCO economic development professionals attend national and international aerospace related trade shows, have established relationships with major players in aerospace and are a national partner for Longview Economic Development in their recruiting effort.
  - ✓ Natural gas availability with service provided by CenterPoint Energy and Atmos Energy, two major corporations.
  - ✓ The Conterra Network is a dependable fiber provider in the region and offers service to support business needs.
  - ✓ Rusk County Electric Cooperative provides dependable electric service to a portion of the East Texas Regional Airport and are potential marketing support partners.
  - ✓ Longview Utilities is the single provider of water and sewer services for the entire county and has excess capacity in both water and sewer.
- **Quality of life** plays an important role in recruiting aerospace as those companies often bring in executives, engineers, and other professional staff to their new locations. Longview offers amenities comparable to any small MSA in the U.S., while providing easy access to world-class retail and entertainment in the Dallas area. Longview has numerous museums, a first-class theater facility at LeTourneau University, and a developing downtown area which is a part of Main Street USA.
- **Executive housing** is plentiful with beautiful subdivisions including Bar Chase, Hidden Hills, Hunters Creek, Pebble Ridge Place, Thorntree, and Wildwood.

- **Major retail** opportunities abound at Towne Crossing, Longview Mall, Marketplace and others.
- **Two large and strong hospitals:** Christus Good Shepherd Medical Center and Longview Regional Medical Center serve the area; plus, world-class medical care is just a short distance away in Dallas.
- **Industrial property attractive to aerospace companies** exists at numerous sites with the city. Both the Longview Business Park and the North Business Park offer zoning and protective covenants. The East and West Industrial Areas also offer potential property, and the East Texas Regional Airport has 150 acres available for MRO operations or aerospace parts manufacturers.
- **Local leadership in Longview and Gregg County are pro-business, efficient, and effective.** Elected leaders strongly support business and industry in partnership with the Longview Economic Development Corporation.
- **Workforce Solutions East Texas** provides job center services throughout the region. These services include job placement, recruiting, skills assessment, access to training funds and many others. These services are provided for existing and new companies.
- **Supportive and industry connected education institutions**
  - ✓ Texas State Technical Institute is a state-wide organization which works closely with community colleges to offer technical degrees and certificates. TSTI operates a campus in Marshall, about 25 miles from Longview. Their WACO facility offers comprehensive aerospace related training, and this curriculum is available in Marshall should the need arise.
  - ✓ Kilgore Community College offers both two-year Associate of Arts degrees and comprehensive vocational training. Manufacturing and Industrial Technology programs, alongside Welding and Industrial Maintenance programs are key, as they train students in the skills needed for aerospace parts manufacturing jobs.
  - ✓ The East Texas Advanced Manufacturing Academy works with local school districts, higher education institutions, and local industries to provide skills training needed to obtain entry-level positions in local manufacturing companies. Students can also obtain dual credit with Kilgore College or Texas State Technical College. Courses are available in Precision Machining, Instrumentation, Electrical technology, Corrosion Technology, Process





Technology, Heating, Air Conditioning & Refrigeration, and Industrial Maintenance.

- ✓ Local public schools offer Magnet Schools, an International Baccalaureate Program, the prestigious Diploma Program (vigorous college prep), plus comprehensive Technical Education courses. They work closely with Kilgore College and the Texas State Technical Institute on two-plus-two curriculums.

- **New Market Tax Credit property is available** for companies seeking to utilize this creative federal financing option.
- **Support industry** including welding, precision machining, and tooling shops are numerous in the region. These can be critical to attract and sustain aerospace parts manufacturers.

- **The Texas Governor's Office of Economic Development** includes The Texas Economic Development Corporation (TXEDC) and the Governor's Office of Economic Development and Tourism. These offices assist in both corporate relocations and expansions including the granting of incentives, financing options, and site search.

Furthermore, Team Texas is a member-based Texas business attraction program, which participates in numerous trade shows, marketing events, and consultant visitation events, including aerospace related shows. Team Texas members may participate in many of the events, bringing the power of the Texas name into local recruiting efforts.



- **Site location consultants and corporate real estate executives in nearby Dallas** handle many large projects each year. Easy access to these executives allows for personal contact and meaningful relationship building.
- **The Texas Economic Development Partnership** is a professional organization that provides numerous economic development support activities including economic development education for professionals, volunteers, and elected officials; it also advocates for the economic development community in the Texas Legislature.
- **The Transatlantic Business and Investment Council (TBIC)** promotes foreign direct investment (FDI) from European companies. As there are aerospace industry clusters throughout Europe, membership in TBIC is an excellent way to increase visibility and connectivity to those and other European manufacturing companies.
- **The Texas aerospace history, culture, and reputation are respected world-wide.** Texas is consistently a top 3 aerospace state with activity ranging from aircraft and aircraft parts manufacturing, aerospace research, military aviation, space exploration, and MRO

activities. Texas boards over 64 million passengers per year, from 26 commercial airports. The Texas aerospace brand is powerful, and numerous aerospace clusters exist within its borders.

- **L-3 in nearby Hunt County employs over 4,000** and is one of the world's leading aerospace suppliers. The company participates in virtually every aerospace trade show and event and is a valuable potential marketing and recruitment ally.



### Weaknesses

- **Aviation has not previously been widely recruited in Gregg County** despite strong aerospace support resources.
- **The East Texas Regional Airport has extraordinary aerospace resources but has not been promoted** for its job-creation potential.
- **Coordination with nearby regional economic development organizations and existing regional aerospace industries** will need to strengthen to effectively market and recruit aerospace related business.

### Recommendations

Recommendations are suggestions and insights provided to enhance and engage strengths and overcome or lessen weaknesses. Many communities have adequate airport runways, property, and other assets needed to be somewhat successful in recruiting aerospace jobs. The Longview area, however, has several some unique advantages that provide it with added aerospace resources:

- **Consider the creation of a regional aerospace alliance**, including communities, economic development agencies, and industries within an hour drive of Longview. A regional approach increases the likelihood of success for aerospace parts manufacturers. While attending aerospace trade events can be expensive, having many partners is likely to reduce individual costs. Mount Pleasant could be a natural partner as they are an **AEROREADY™** certified community which will share a labor force with Longview, and which will also depend on LeTourneau to help supply future A&P mechanic needs.
- **Create a special aerospace section on the Longview Economic Development Corporation website.** Include the strengths from this report, with an emphasis on those which are relatively unique (as mentioned above). Utilize other portions of the analysis which show your labor force assets as they relate to the 72 general manufacturing skills and the Core 11 aerospace skills. Link this aerospace section to the East Texas Regional Airport, educational & training institutions, and the websites of other marketing allies.
- **Develop a targeted marketing campaign that markets directly to aerospace corporate-level executives** throughout the United States and the world. Use the marketing

campaign to educate the aerospace executives on your key aerospace resources. Mailing and email lists of corporate aerospace executives are available from several sources and some marketing firms provide comprehensive services targeting such executives.

- **Build a special aerospace recruiting and support team with local aerospace partners** already mentioned in this report, along with other key partners including SWEPCO economic development personnel, Workforce Solutions East Texas, Texas State Technical Institute, Kilgore College, the East Texas Manufacturing Academy, the Texas Governor’s Office of Economic Development, and Team Texas. Many of these are already on your “A team,” but should also be on a special aerospace targeting team.



Your local aerospace partners, including LeTourneau, have national and even international aerospace contacts and relationships, which can open doors and provide access otherwise difficult—if not impossible—to obtain. Work with these partners to show them the potential benefits of growing aerospace in the region and ask for their help regarding the processes of identifying prospects and of developing a strategy to recruit new aerospace businesses while supporting and growing existing ones.

- **Cooperate with the LeTourneau College of Aviation and Aeronautical Science** to grow and market their program. Assist with their Aviation Advisory Board, as appropriate, to enhance the LeTourneau brand and to educate Advisory Board members on the advantages of doing business at East Texas Regional Airport and in the Longview Region. Assist LeTourneau in developing a high school aviation curriculum which can be offered in area schools on a two-plus-two curriculum to increase the awareness of potential aerospace careers and higher education opportunities.
- **Encourage local high schools to participate with LeTourneau’s College of Aviation and Aeronautical Science** with their goals of offering college-level, aerospace-related courses. Also encourage local high schools to establish local aerospace-related clubs. The National Association of High School Aviation Clubs is a great option. The Aircraft Owners and Pilots Association (AOPA) has developed a STEM curriculum available to high schools, which is designed toward both flight and UAS education. Motivating students interested in aerospace careers at an early age is critical to filling the future careers and skills gaps predicted for both pilots and A&P mechanics.
- **As illustrated in the Airport Layout Plan, set aside taxiway access property** at East Texas Regional Airport to be used exclusively for aerospace purposes including MRO, manufacturing, and support services. The 100-acre and 50-acre sites previously identified have great potential, but significant planning and engineering work will be needed before they can be successfully marketed.

- **Think and market regionally.** Aerospace businesses seek regional assets, and the economic benefits of aerospace are widespread. Work closely with all economic development agencies within the Longview area to maximize marketing efficiency. This can be done in a formal or informal manner. Perhaps an existing entity could be the coordinating arm to bring Dallas-based site location consultants, as well as commercial and industrial real estate executives into the region to see the aerospace assets. Mount Pleasant’s addition into the marketing effort will add the extraordinary Mid-America Flight Museum as an attraction.
- **Utilize the list of companies in the Competitive Advantages** section of this report as a beginning prospect list. Add to it through research. Airbus.com and Airframer.com are two good sources for identifying aerospace parts manufacturing prospects. Airframer is membership-based but does allow limited free use in identifying specific parts manufacturers for specific aircraft.

This report provides a general marketing plan and complementary suggestions. It can be used as a starting point in the development of a comprehensive marketing plan, strategy, and budget. A developed plan should include regular attendance at strategic air shows, be they regional, national, or international.

Relationship building is a critical part of recruiting, and those relationships are built and enhanced over time. Utilizing your aerospace team to help you meet aerospace executives can play a huge role in your success, but it is just the first step in building the type of relationships which can reveal opportunities and insight.

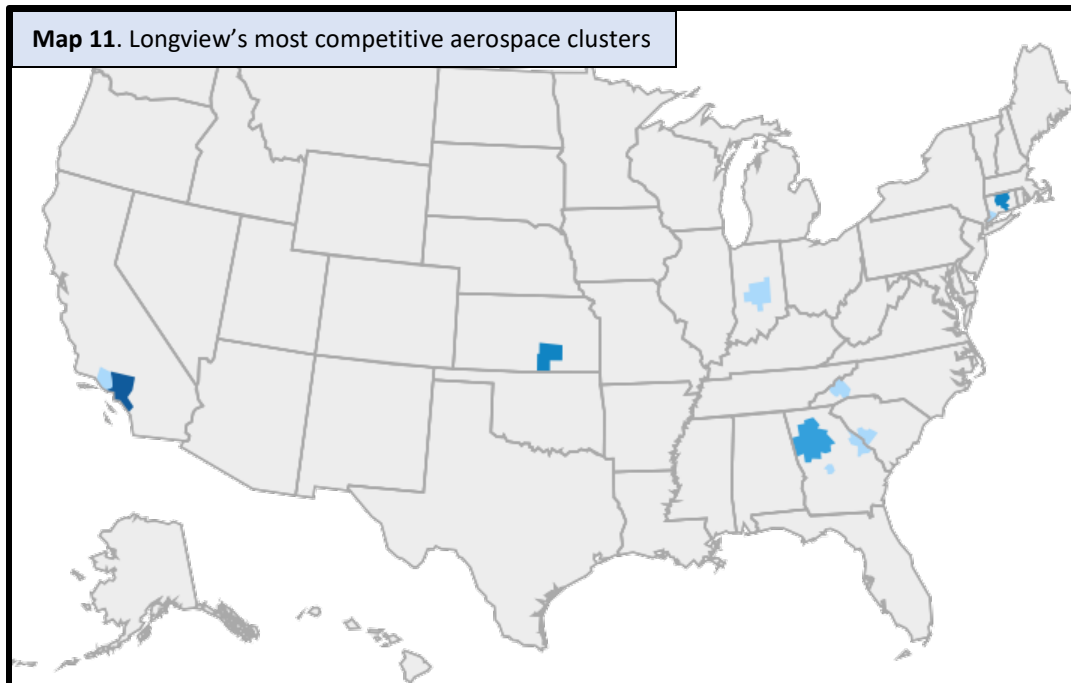
Continuing attendance at targeted aerospace shows is much more likely to yield positive results than a “one and done” approach.

Attending the shows with others who have an expanded reach is likely to increase effectiveness. Potential airshow recruiting partners include SWEPCO, Team Texas, and certain members of your local team who attend the MRO, NBAA and other shows.



## The Greater Longview Area's Competitive Advantage

Aerospace cluster regions around the United States shown in **Map 11** offer the best recruitment opportunities given their high payroll, business location, loss, and high cost of labor when compared to the 10-county, 75-minute drivetime region centered around Longview.



High labor cost and out-migration signals that businesses are dissatisfied with the region and are leaving to find better locations. The high cost of doing business may indicate an industry that is more likely to relocate to the Greater Longview Region where labor, taxes, and other business costs are lower.

Within ten clusters, the industries shown in the competitive analysis below are the largest aviation manufacturers within their respective regional groupings. Note that many of these companies are in multiple areas of the United States, depending on military, logistics, suppliers, or labor considerations. Often, companies with several locations tend to be excellent prospects and are comfortable expanding to new locations. The ten national, micro-aerospace clusters listed below are ranked by the most likely to match the resources of the Greater Longview 10-County Region.

Texas is home to over 1,300 aerospace industries (including 277 parts manufacturers), representing most of the nation's primary military contractors, aerospace parts manufacturers, and aircraft assemblers. The geographic proximity of these in-state industries offer an additional advantage to Longview. Fortunately, many of these existing aerospace industries are subsidiaries, operating units, or suppliers to many of the businesses identified in the ten

marketing clusters listed below. As such, they represent a convenient resource of market and industry information necessary to assist in Longview’s recruiting effort.

Regional industries are also relatively easy to access, and these executives can attest to the profitability of their business operations, availability of skilled labor, and state and local incentives in the region. This is often a “deal-making” assurance when such a testimonial is given to a prospective industry executive by a respected manager of a successful operating aerospace business. These groups also serve as “points of contact,” providing references and recruiting leads at trade shows and other aerospace-related events. Additionally, L-3 Communication and Integrated Systems (located in nearby Hunt County) is a likely ally that can assist with introductions, references, and testimonials.

<b>1. Los Angeles-Long Beach-Anaheim, CA</b>	
<b>343</b>	<b>\$145,008</b>
<b>Payrolled Business Locations (2019)</b>	<b>Avg. Earnings Per Job (2019)</b>
This region lost 15 payrolled business locations in the industry from 2014-2019. High payrolled business location loss signals that businesses are willing to relocate.	This region's industry earnings are above your state's industry earnings of \$93,813. Your state's cheaper average labor cost may make it easier to attract businesses.
<b>Business</b>	<b>Business Size</b>
R B Industries Inc	1,389
Thales Avionics Inc	1,300
Thales Avionics Inc	518
Ducommun Aero Structures	495
Aerospace Dynamics International	405
ATK Advanced Weapons Division	400
Sonic Industries Inc.	385
Aeronautical Systems Inc.	385
MS Aerospace Inc.	315
Machined Products Group	300
<b>2. Atlanta-Sandy Springs-Alpharetta, GA</b>	
<b>43</b>	<b>\$135,630</b>
<b>Payrolled Business Locations (2019)</b>	<b>Avg. Earnings Per Job (2019)</b>

This region lost 14 payrolled business locations in the industry from 2014-2019. High payrolled business location loss signals that businesses are willing to relocate.	This region's industry earnings are above your state's industry earnings of \$93,813. Your state's cheaper average labor cost may make it easier to attract businesses.
<b>Business</b>	<b>Business Size</b>
Quest One	180
Dixie Aerospace	180
Chromalloy Gas Turbine LLC	150
Avionics West	130
AATC	130
Atlanta Aviation Inc	130
Bae Systems	130
Commuter Craft	130
Northrop Grumman	130
Tim	130
<b>3. Warner Robins, GA</b>	
<b>7</b>	<b>\$108,289</b>
<b>Payrolled Business Locations (2019)</b>	<b>Avg. Earnings Per Job (2019)</b>
This region lost 11 payrolled business locations in the industry from 2014-2019. High payrolled business location loss signals that businesses are willing to relocate.	This region's industry earnings are above your state's industry earnings of \$93,813. Your state's cheaper average labor cost may make it easier to attract businesses.
<b>Business</b>	<b>Business Size</b>
Selex Galileo	180
Lockheed Martin	180
Cygnus Aerospace Inc.	180
Raytheon Co.	130
Northrop Grumman	130
PDES Inc.	130
Raytheon Robins Engineering Center	52

Perry Air LLC	13
Raytheon	8

#### 4. Augusta-Richmond County, GA

<b>3</b>	<b>\$113,827</b>
<b>Payrolled Business Locations (2019)</b>	<b>Avg. Earnings Per Job (2019)</b>
This region lost 8 payrolled business locations in the industry from 2014-2019. High payrolled business location loss signals that businesses are willing to relocate.	This region's industry earnings are above your state's industry earnings of \$93,813. Your state's cheaper average labor cost may make it easier to attract businesses.

<b>Business</b>	<b>Business Size</b>
Madison Research Corporation	21
Raytheon	2
Standard Aero	0

#### 5. Wichita, KS

<b>125</b>	<b>\$102,728</b>
<b>Payrolled Business Locations (2019)</b>	<b>Avg. Earnings Per Job (2019)</b>
This region lost 8 payrolled business locations in the industry from 2014-2019. High payrolled business location loss signals that businesses are willing to relocate.	This region's industry earnings are above your state's industry earnings of \$93,813. Your state's cheaper average labor cost may make it easier to attract businesses.

<b>Business</b>	<b>Business Size</b>
Cessna Aircraft Co.	1,000
Boeing Co.	900
FMI	240
Mid-continent Instrument and Avionics	200
Lee Aerospace Inc.	179
Triumph Accessory Services	161
Witchita Aero Space Spares	130
Maynard Inc.	130
Boeing Co	130



Park Aerospace Technologies Corp.	90
-----------------------------------	----

## 6. Hartford-East Hartford-Middletown, CT

<b>98</b>	<b>\$144,198</b>
<b>Payrolled Business Locations (2019)</b>	<b>Avg. Earnings Per Job (2019)</b>
This region lost 5 payrolled business locations in the industry from 2014-2019. High payrolled business location loss signals that businesses are willing to relocate.	This region's industry earnings are above your state's industry earnings of \$80,854. Your region's cheaper average labor cost may make it easier to attract businesses.
<b>Business</b>	<b>Business Size</b>
Barnes Aerospace	300
EDAC Technologies	220
Turbine Technologies	172
Aero Tube Technologies	150
Timken Aerospace Transmissions LLC	133
Kaman	130
Spartan Aerospace LLC	89
Jarvls Airfoil Inc.	85
Chromalloy Connecticut	80
GKN Aerospace Services Structures Corp.	75

## 7. Indianapolis-Carmel-Anderson, IN

<b>21</b>	<b>\$129,477</b>
<b>Payrolled Business Locations (2019)</b>	<b>Avg. Earnings Per Job (2019)</b>
This region lost 5 payrolled business locations in the industry from 2014-2019. High payrolled business location loss signals that businesses are willing to relocate.	This region's industry earnings are above your region's industry earnings of \$80,854. Your region's cheaper average labor cost may make it easier to attract businesses.
<b>Business</b>	<b>Business Size</b>

Regent Aerospace	80
Triumph Controls-Shelbyville	48
Midwest Aircraft	27
Advanced Aero Inc.	24
Dual Machine Corp	15
Aerospace Products	10

**8. Bridgeport-Stamford-Norwalk, CT**

<b>15</b>	<b>\$153,095</b>
<b>Payrolled Business Locations (2019)</b> This region lost 4 payrolled business locations in the industry from 2014-2019. High payrolled business location loss signals that businesses are willing to relocate.	<b>Avg. Earnings Per Job (2019)</b> This region's industry earnings are above your state's industry earnings of \$93,813. Your state's cheaper average labor cost may make it easier to attract businesses.

<b>Business</b>	<b>Business Size</b>
Sikorsky A Lockheed Martin Co.	6,600
E2v Aerospace & Defense Q P Semi-Conductor	130
H T D Aerospace Inc.	130
Kaman	4

**9. Oxnard-Thousand Oaks-Ventura, CA**

<b>18</b>	<b>\$98,563</b>
<b>Payrolled Business Locations (2019)</b> This region lost 4 payrolled business locations in the industry from 2014-2019. High payrolled business location loss signals that businesses are willing to relocate.	<b>Avg. Earnings Per Job (2019)</b> This region's industry earnings are above your state's industry earnings of \$80,854. Your state's cheaper average labor cost may make it easier to attract businesses.

<b>Business</b>	<b>Business Size</b>
Kinetx Inc.	180
Rolls-Royce Corp.	172
Lucix Corporation	150
ADIG International	130

Electronic Note Space Systems L.L.C.	130
Van Petty Manufacturing	130
Aerobanc Of America	130
Perkins Machine Co.	34
Gt Aeronautics	29
Nordisk Aviation Products Inc.	25

**10. Asheville, NC**

<b>2</b>	<b>\$82,816</b>
<b>Payrolled Business Locations (2019)</b>	<b>Avg. Earnings Per Job (2019)</b>
This region lost 4 payrolled business locations in the industry from 2014-2019. High payrolled business location loss signals that businesses are willing to relocate.	This region's industry earnings are above your state's industry earnings of \$80,854. Your state's cheaper average labor cost may make it easier to attract businesses.

<b>Business</b>	<b>Business Size</b>
Quest One	180
Dixie Aerospace	180
UCA Holdings Inc.	7

**Chart 8** summarizes the 10 competitive clusters and their average earnings per cluster. Note that the highest employee earnings are found in and around the Bridgeport-Hartford areas of Connecticut, and Los Angeles, California. These clusters also lost a total of 25 businesses over the past 5 years (Los Angeles lost 15), indicating a problem with the high-cost of doing business, labor, skill availability, or general business climate in each area. Consequently, these three clusters are a natural recruiting target for Longview, since Texas has a history of successful competition with these states.

<b>Chart 8. Salary Comparisons: Longview 10-County Region vs 10-Aerospace Competitive Clusters</b>	<b>Annual Salary \$</b>
<b>Longview 10-County Region</b>	<b>80,854</b>
1 Los Angeles-Long Beach-Anaheim CA	145,008
2 Atlanta-Sandy Springs-Alpharetta GA	135,630
3 Warner Robbins GA	108,289
4 Augusta-Richmond County GA-SC	113,827
5 Wichita KS	102,728
6 Hartford- Middletown CT	144,198
7 Indianapolis-Carmel-Anderson IN	129,477
8 Bridgeport-Stamford-Norwalk, CT	153,095
9 Oxnard-Thousand Oaks- Ventura, CA	98,563
10 Asheville, NC	82,816

We'll now look at some aerospace recruiting strategies and best practices that have proven nationally effective.

### Marketing Strategies for Aerospace Recruitment

Longview and its 10-county region are fortunate to be in a business-friendly state with a robust aerospace presence and the ability to train the specialized skills need to support the industry. Since aerospace manufacturing, maintenance, and support are so common in Texas, Longview holds an advantage of experienced and successful Texas industries that can be of invaluable assistance, if engaged.

Additionally, LeTourneau University and its aerospace curriculum and training facilities at the East Texas Regional Airport add an element of attractiveness that few cities or counties can match. The convenient location to the Dallas-Ft Worth aerospace cluster and the nearby L-3 facility in Greenville and Hunt County offer a further strategic advantage to Longview and Gregg County. The key to a marketing and recruitment plan is to assemble these unique resources and

promote them in a coordinated, effective campaign, directed at the most likely businesses to relocate or expand in the area.

Skilled employees will typically be willing to commute across longer distances to a higher-paying job, with aerospace business location likely to attract employees from a wide, 75-minute drivetime distance. Therefore, recognition of resources in the region is critical and should be engaged in the effort. This includes the East Texas Regional Airport, training institutions, existing industries, and marketing organizations outside Gregg County.

It is also important to note that inside the aerospace industry sector, many aerospace parts manufacturers, service providers, test services, and research and development firms do not require an airport location. As a result, the most two probable locations for an initial aerospace industry are either the airport or nearby industrial parks.

**Estimated Cost:**

We project that successful aerospace marketing will require a *dedicated minimum annual budget of \$35,000 for expenses and 2-3 years* to successfully recruit an aerospace industry to the Greater Longview and Gregg County area.

We'll now examine several principal elements of any aerospace marketing effort, which should be coordinated to ensure a successful aerospace recruiting effort. The following summary marketing outline is intended to serve as a strategic guide to aerospace recruiting; a more detailed marketing strategy should be designed to reflect Gregg County and its partners' financial and personnel commitments to recruit aerospace industries. Initial steps include:

1. **Establish a strong, committed, local alliance within Longview and Gregg County.** Workforce training and academic institutions, cities, counties, federal legislative officials, businesses, and utilities are all potential allies. Explain the objectives and benefits for aerospace recruitment and establish a three-year financial commitment. Develop a three-year comprehensive plan for aerospace recruitment based on the resources allocated and committed partners. Broaden the alliance to adjacent and neighboring counties, utilities, and state development organizations, and organizations that will complement the overall effort. If feasible, create a functional, regional organization as outlined in step two below.
2. **Establish a strong, committed regional aerospace alliance.** There is presently a very exceptional and compelling opportunity to form a super-regional cooperative marketing and recruiting alliance that includes the Longview EDC, regional educational and training organizations, utility providers, the East Texas Regional Airport, LeTourneau University and its aerospace staff, surrounding county economic development organizations, and existing industry partners. Each of these organizations

have representative areas that share similar workforce skills, a similar cultural history, and are united with a common commuting system.

3. **Create a brief formal marketing and recruitment summary strategy document** that will tie together the elements of this assessment into a sequenced, coordinated, comprehensive, and a funded plan of work for the region. This document will be useful for identifying responsibilities, clarity, and guidance in explaining plans to partners, as well as preparing grant applications.

4. **Advise the Texas Department of Commerce and workforce training partners** of Gregg County and Longview's intention to market and recruit aviation businesses; request marketing and research assistance.

5. **Invite the Texas Department of Commerce** and other recruiting partners to spend a day in the region learning about your aerospace assets and meeting with key partners. Entertain them as you would a prospect. Provide them with an aerial view of the East Texas Regional Airport, industrial sites and buildings, and regional workforce skills. Ask them to assist you in your endeavors to generate prospects, as well as assist in recruiting, training, and providing research.

6. **Interview and develop a personal network of aerospace industry managers, key supervisors,** and workers within 100-miles of Longview. *This is a critical first step before marketing outside the greater region.* These aerospace contacts are a key resource within the aerospace industry and can guide and assist, as well as provide testimonial information on the region to aerospace prospects.



7. **Create a trifold brochure and a dedicated aerospace website and webpage** that highlights the workforce training, local skills training facilities, the airport, and industrial land. Jointly link your website to as many of your partners' websites as possible and create a regional aerospace website. Recognize the Longview EDC as the central point of contact.

8. **Compose a list of suppliers to Airbus, Boeing, Lockheed Martin, and Gulfstream** and contact as many as possible at marketing events, especially those doing business within the 10-county region centered in Longview (**Appendix C**).

9. **Consider attendance at the following trade shows and marketing events:**

Domestic:

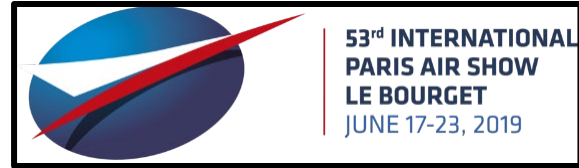
- Heli Expo: Focused on the helicopter industry both military and commercial. (February, various nationwide locations);
- NBAA - The National Business Aviation Association Show: specializes in commercial aviation. (October, various nationwide locations);

- MRO: This trade show concentrates on the maintenance, repair & overhaul (MRO) of Aircraft. (April, various rotating nationwide locations);
- Quad A: Primarily United Army military aircraft. (April; Nashville, TN).



International:

- Paris Air Show: Civilian and military aircraft - is also the world's largest airshow. Held in the odd years i.e., 2021, 2023, 2025 etc. (June, Le Bourget Airport, near Paris France);
- Farnborough Air Show: held at Farnborough Airfield near London. This event is held on the even years alternating with the Paris Air Show. (June; Farnborough Airport, near London, England);
- Singapore Air Show: held on the even years, four months prior to the Farnborough Air Show. (February, Singapore).



10. Use the AEROready™ Certification as a marketing resource on websites and documents, in the media, and in discussions with prospects (**Appendix B**). This certification will help to assure prospects that the region has access to the resources necessary to support aerospace industries.



## Appendices

### Appendix A

#### 72 Basic Manufacturing Skills Occupations

11-1021	General and Operations Managers
11-3021	Computer and Information Systems Managers
11-3051	Industrial Production Managers
11-9041	Architectural and Engineering Managers
13-1028	Buyers and Purchasing Agents
13-1081	Logisticians
13-1199	Business Operations Specialists, All Other
15-1121	Computer Systems Analysts
15-1131	Computer Programmers
15-1132	Software Developers, Applications
15-1133	Software Developers, Systems Software

15-1142	Network and Computer Systems Administrators
17-2011	Aerospace Engineers
17-2061	Computer Hardware Engineers
17-2071	Electrical Engineers
17-2072	Electronics Engineers, Except Computer
17-2111	Health and Safety Engineers, Except Mining Safety Engineers and Inspectors
17-2112	Industrial Engineers
17-2131	Materials Engineers
17-2141	Mechanical Engineers
17-2199	Engineers, All Other
17-3013	Mechanical Drafters
17-3021	Aerospace Engineering and Operations Technicians
17-3023	Electrical and Electronics Engineering Technicians
17-3026	Industrial Engineering Technicians
17-3027	Mechanical Engineering Technicians
17-3029	Engineering Technicians, Except Drafters, All Other
43-5061	Production, Planning, and Expediting Clerks
43-5071	Shipping, Receiving, and Traffic Clerks
47-2111	Electricians
49-1011	First-Line Supervisors of Mechanics, Installers, and Repairers
49-2091	Avionics Technicians
49-2094	Electrical and Electronics Repairers, Commercial and Industrial Equipment
49-3011	Aircraft Mechanics and Service Technicians
49-9041	Industrial Machinery Mechanics
49-9071	Maintenance and Repair Workers, General
49-9099	Installation, Maintenance, and Repair Workers, All Other
51-1011	First-Line Supervisors of Production and Operating Workers
51-2011	Aircraft Structure, Surfaces, Rigging, and Systems Assemblers
51-2028	Electrical, Electronic, and Electromechanical Assemblers, Except Coil Winders, Tapers, and Finishers
51-2031	Engine and Other Machine Assemblers
51-2041	Structural Metal Fabricators and Fitters
51-2091	Fiberglass Laminators and Fabricators
51-2098	Assemblers and Fabricators, All Other, Including Team Assemblers
51-4011	Computer-Controlled Machine Tool Operators, Metal and Plastic
51-4012	Computer Numerically Controlled Machine Tool Programmers, Metal and Plastic
51-4031	Cutting, Punching, and Press Machine Setters, Operators, and Tenders, Metal and Plastic
51-4032	Drilling and Boring Machine Tool Setters, Operators, and Tenders, Metal and Plastic
51-4033	Grinding, Lapping, Polishing, and Buffing Machine Tool Setters, Operators, and Tenders, Metal and Plastic
51-4034	Lathe and Turning Machine Tool Setters, Operators, and Tenders, Metal and Plastic
51-4035	Milling and Planing Machine Setters, Operators, and Tenders, Metal and Plastic
51-4041	Machinists
51-4081	Multiple Machine Tool Setters, Operators, and Tenders, Metal and Plastic
51-4111	Tool and Die Makers



51-4121	Welders, Cutters, Solderers, and Brazers
51-4122	Welding, Soldering, and Brazing Machine Setters, Operators, and Tenders
51-4191	Heat Treating Equipment Setters, Operators, and Tenders, Metal and Plastic
51-4192	Layout Workers, Metal and Plastic
51-4193	Plating and Coating Machine Setters, Operators, and Tenders, Metal and Plastic
51-4199	Metal Workers and Plastic Workers, All Other
51-9022	Grinding and Polishing Workers, Hand
51-9061	Inspectors, Testers, Sorters, Samplers, and Weighers
51-9121	Coating, Painting, and Spraying Machine Setters, Operators, and Tenders
51-9122	Painters, Transportation Equipment
51-9191	Adhesive Bonding Machine Operators and Tenders
51-9198	Helpers--Production Workers
51-9199	Production Workers, All Other
53-2021	Air Traffic Controllers
53-3032	Heavy and Tractor-Trailer Truck Drivers
53-6051	Transportation Inspectors
53-7051	Industrial Truck and Tractor Operators
53-7062	Laborers and Freight, Stock, and Material Movers, Hand

## Appendix B

### General Recruiting Overview and Purpose of AEROready™ Certification

Over 1200 data points—factors which are important to companies seeking new facility locations—have been identified by the International Economic Development Council (IEDC). A full listing, organized by 25 topic-specific spreadsheets, can be found at [www.iedc.org](http://www.iedc.org). These data points include a large percentage of the information companies might need in a site location search. The importance of any single data point or even any single spreadsheet category depends upon the nature of the location search, the factors of which are most important to the success (often the profitability) of the project. Non-direct profit-related items such as image, aesthetics, or quality of life factors may also be relevant in a site location decision.

Today, most states and/or communities utilize some type of site certification criteria to minimize risk for those seeking new locations. This ensures that environmental, wetland, soil borings, archaeological, and endangered species assessments have been completed by appropriate engineering personnel or others with expertise in those fields. Site certification assessments generally also consider the availability of needed utilities. While those essential reviews and certifications are extremely important in most site location decisions, they often do not address equally important issues related to marketability of sites and communities, or their ability to satisfy distinct needs of specific industries, such as aerospace/air-related companies.

**AEROready™ Certification** was created to directly address factors critical to the success of aerospace/aviation operations, and to site searches related to same.

## Appendix C

### **Aerospace Suppliers**

There are at least two exceptional sources of aerospace supplier lists.

[www.airbus.com](http://www.airbus.com) provides a comprehensive list of all suppliers to AIRBUS

[www.airframer.com](http://www.airframer.com) is an online directory linking aerospace manufacturers with their suppliers.

It is a subscription-based service but does allow a limited amount of free use each month. It lists suppliers by each plane type which can be extremely useful to economic developers.

Additionally, Airframer, a subscription directory list information on thousands of aerospace parts manufacturers [www.airframer.com/default.html](http://www.airframer.com/default.html)