



ECONOMIC IMPACT • 2011

General Aviation in Texas



The Economic Impact of General Aviation in Texas

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Summary Findings

The general and commercial aviation airports that are part of the Texas Airport System Plan (TASP) collectively generate thousands of jobs and support billions of dollars in economic activity across the state. In the following, we report the findings of our analysis of the economic impacts associated with the operations and capital improvement programs at these airports. A separately published executive summary to this report offers a summary of our findings. This report offers additional details and a description of our methodology. Further details of the study can be found in the accompanying Technical Appendix.

In summary, we find:

- General aviation activities and expenditures associated with airports, business activities of airport tenants, and visitor spending by itinerant pilots created \$14.6 billion in economic activity in Texas in 2010, supporting over 56,600 jobs paying \$3.1 billion in salaries, wages, and benefits.
- Commercial aviation activities and related spending boosts statewide economic activity by \$44.9 billion, increases labor income by over \$20 billion, and provides over 700,000 jobs across the state.
- Combined, the TASP airports increase economic activity in Texas by \$59.5 billion, supports 771,000 jobs, and increases labor income by \$23.2 billion.
- Capital spending associated with airport improvement programs from 2006 through 2010 totaled almost \$2.3 billion. This spending created about \$4.7 billion in statewide economic activity and supported over 37,000 job-years of employment.

Economic Impacts of Texas Airport System Plan Airports State of Texas, 2010	
<i>Description</i>	<i>Impact</i>
Economic Activity	\$ 59,510,557,000
Labor Income (salaries, wages, benefits)	\$ 23,231,069,000
Employment	771,355

Sources: UNT Center for Economic Development and Research, IMPLAN



Introduction

The presence of a high quality network of publicly accessible airports supporting general aviation activities in Texas has never been more important to the economic performance of the state of Texas. Business and flight support activities at these airports generate billions of dollars in economic activity, create jobs, and improve business operating efficiencies that help Texas to attract and retain some of the nation's best companies. In addition, Texas' network of safe and efficient airports helps communities across the state attract business and leisure visitors who contribute to local economies through spending on dining, lodging, entertainment, and retail purchases. Quantifying these impacts in studies conducted in 2003 and 2006 has allowed the Aviation Division of the Texas Department of Transportation to better plan aviation support and infrastructure development projects spurring economic growth across the state. The following reports the findings of the most recent assessment of the economic impacts of general aviation and commercial airports that are part of the Texas Airport System Plan (TASP).

The focus of this study is to specifically estimate the economic impacts of general aviation airport activities on the state economy and to provide an assessment for many of the airports of their impacts on their local economies. Because we focus on the impact of general aviation activities and facilities on their host communities, the findings of the impact of individual airports are not directly comparable to previous studies. Our methodological approach for our estimates of statewide impacts of general aviation and related infrastructure and activities is also slightly different than previous analyses conducted in 2003 and 2006. Most importantly, in this analysis we include the economic impacts associated with capital spending at the airports. Data on individual airport operations were gathered using multi-media surveys, in-person visits, and secondary data sources. These data included airport operations spending, airport employment, capital spending, and employment and/or operating expenditures by airport tenants. Utilizing a publicly-available, well recognized economic input-output model, we use the data gathered to assess how airport and tenant related spending flow through the state economy creating additional economic activity and jobs. In addition, airports were asked to identify community support and engagement activities that, while not necessarily quantifiable, provide important contributions to their host communities. Detailed findings for participating airports can be found in a series of individual reports available for download on the Texas Department of Transportation Aviation Division website at <http://www.txdot.gov/business/aviation/>

The Texas System of Airports

Figure 1 shows the system of public-access airports that are part of the TASP. These include commercial service airports that host general aviation activities in addition to commercial aviation, and publicly or privately owned general aviation airports. General aviation includes all aviation activity except for scheduled passenger services, scheduled air cargo services, and military flights. General aviation represents the lion's share of global aviation activities. The airports servicing general aviation activities range from major international

airports, such as Dallas-Fort Worth International Airport and Houston’s George H.W. Bush Intercontinental Airport, to privately-owned, unpaved airstrips. Public-use airports that are not a part of the TASP are not included in this study.

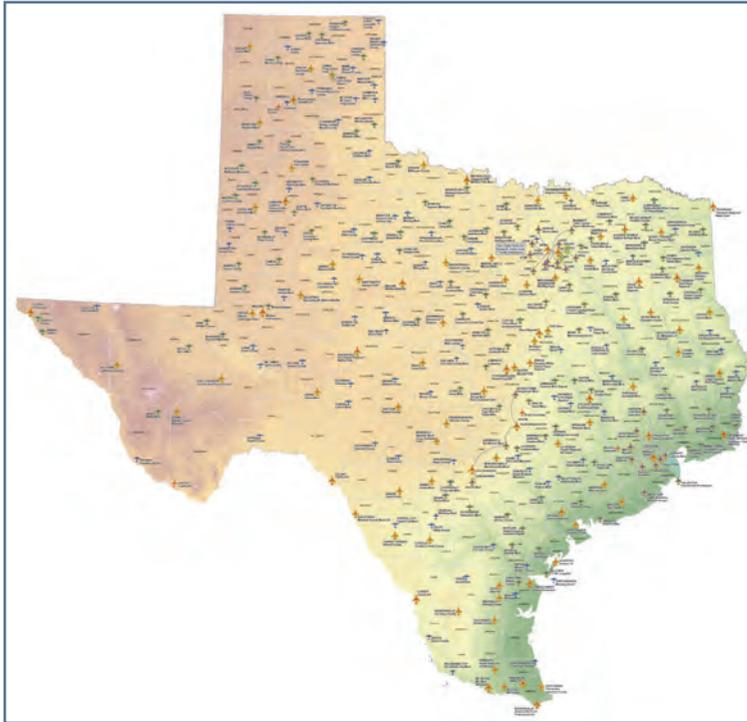


Figure 1. Map of Texas Airport System Plan Airports
Source: Texas Department of Transportation, Aviation Division

Overview of the Texas Economy

The last half of the first decade of the 21st century proved to be a challenging time for the Texas and national economies. After experiencing rapid growth during the 1990s, the decade of the 2000s experienced the first recession in ten years sparked by the “tech-wreck” and exacerbated by the economic shocks associated with the 9-11 terrorist attacks. This was followed by a rapid increase in military spending and a housing and related consumption binge that resulted in strong economic growth, low unemployment, and an expansion of household wealth in the US. Unfortunately, much of the growth in housing value was built on a basis of high-risk lending and myopic financial practices. When the housing bubble burst and high risk loans and their related exotic financial instruments imploded, a global financial system collapse came precariously close to reality and the US entered its worst economic downturn since the Great Depression (see Figure 2). While the US has technically been in recovery since the summer of 2009, employment growth has been tepid, and the national unemployment rate stubbornly remained at or above nine percent throughout 2010 (see Figure 3).

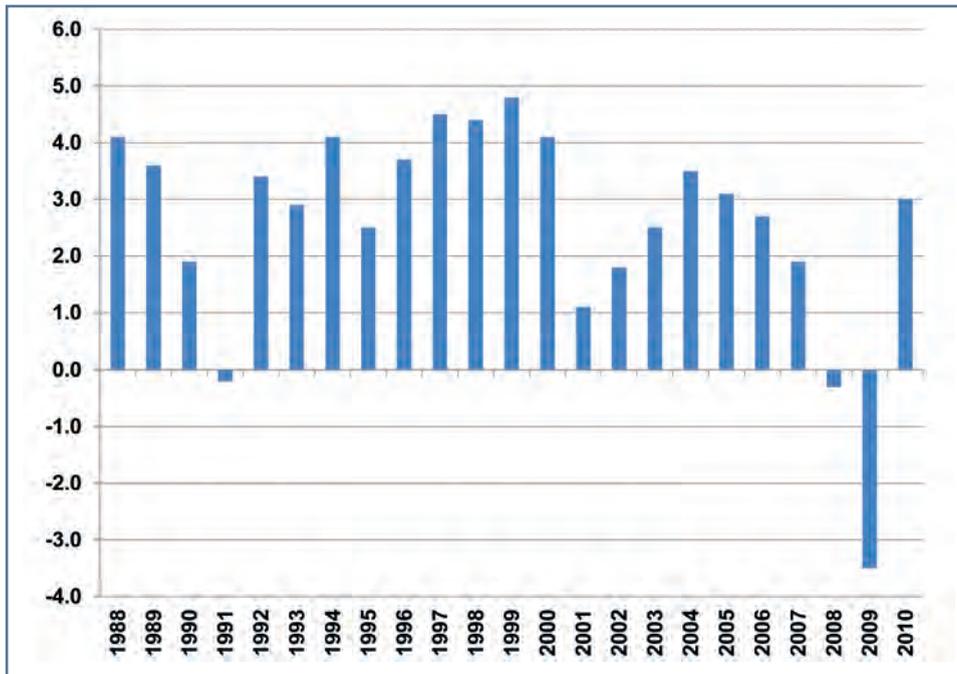


Figure 2. US Gross Domestic Product Year over Year Percent Change
 Source: US Bureau of Economic Analysis

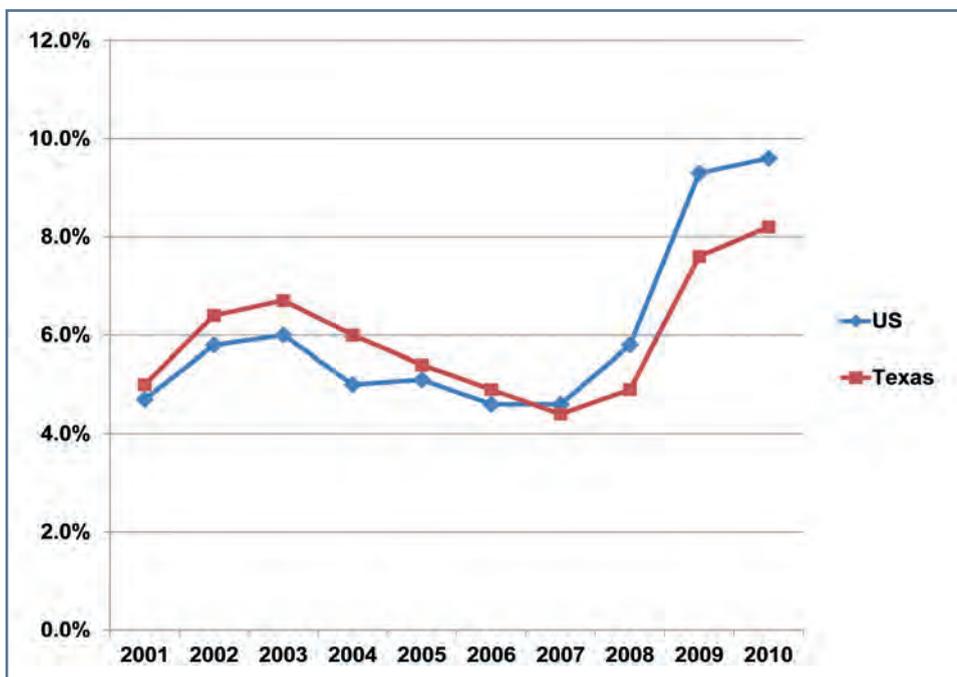


Figure 3. Unemployment Rate, US and Texas
 Source: US Bureau of Labor Statistics

While the Texas economy has outperformed the US economy in recent years (see Figure 3 and Figure 4), the state has nonetheless been challenged by the Great Recession with housing construction and related-industry employment being particularly hard hit. Though the state created net new jobs for 2010, job seekers are still finding limited opportunities in most industries. The downturn in housing values and reduced retail spending resulting from the recession resulted in lower revenues for state and local governments; however, government payrolls increased throughout 2010. (Government sector employment in Texas has since fallen.) While the good news has been a continued trend in private sector employment gains, state and local government budgets remain under stress. For this reason, the economic activity created by state and federally-funded investments in general aviation infrastructure - and the impacts of airport and airport tenant operations - is perhaps more important to the state and local economies of Texas than ever before.

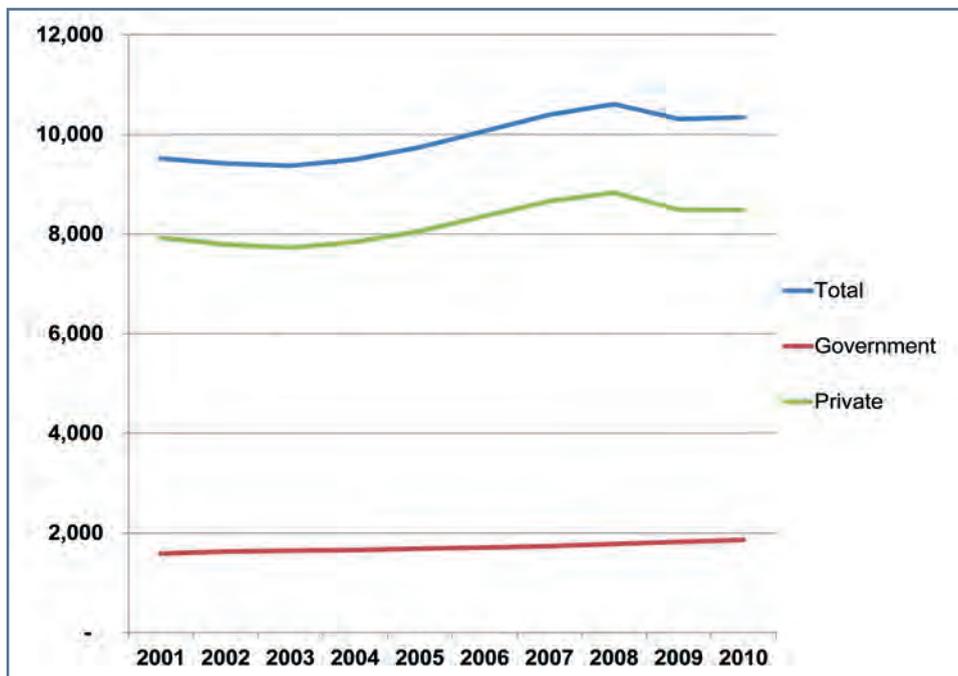


Figure 4. Texas Employment by Sector (000s)

Source: US Bureau of Labor Statistics

Trends in General Aviation Activities

US General Aviation Activity Trends

The US recession expectedly has had an impact on general aviation activities across the country. As shown in Figure 5, total hours flown based on Federal Aviation Administration (FAA) records decreased from 2007 through 2009, the latest period available in this data series. While there is some anecdotal evidence to suggest that general aviation activities have stabilized since 2009, and perhaps started to grow again during the economic recovery, overall activity levels remain below pre-recession levels. Figure 6 examines hours flown by use. While all categories of activity declined during the national recession, there has been a longer running decline in personal flying.

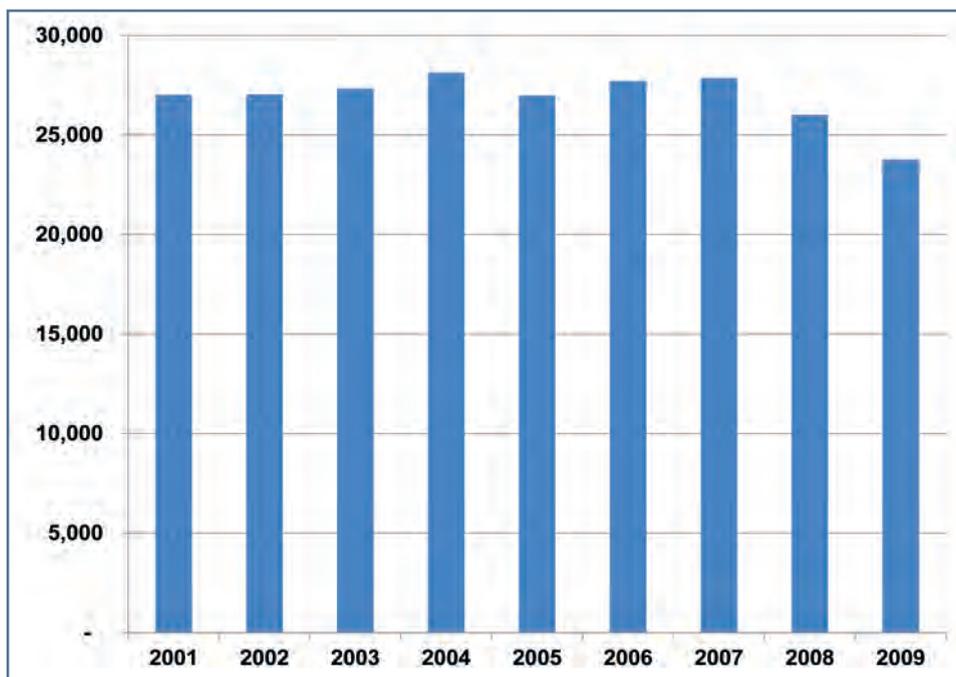


Figure 5. General Aviation Hours Flown in the US (000s)

Source: Federal Aviation Administration, General Aviation and Part 135 Activity Surveys

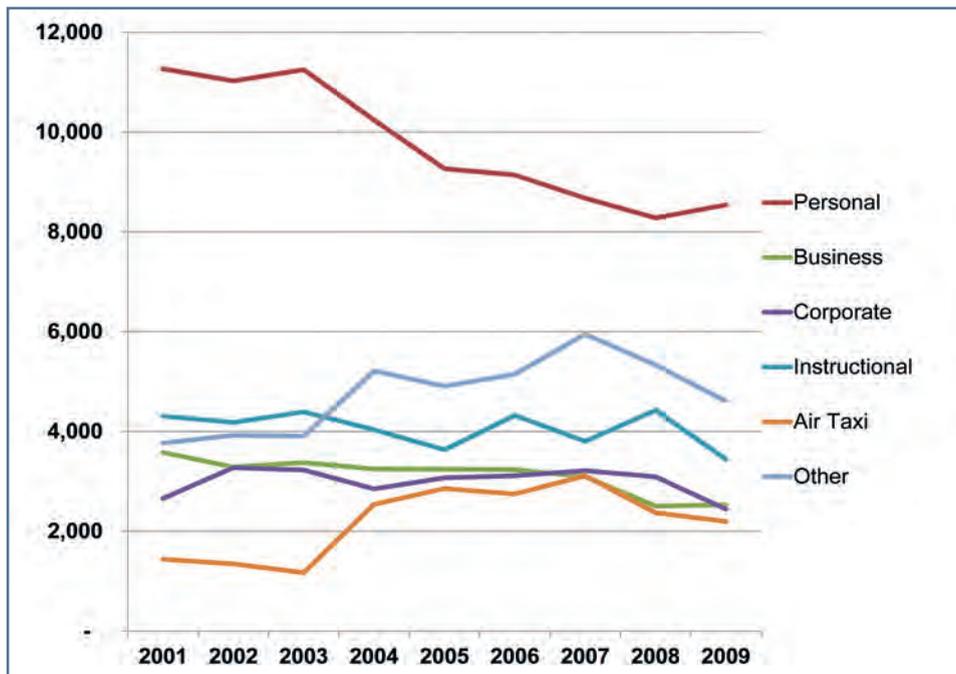


Figure 6. US General Aviation and On-Demand Hours Flown by Use (000s)
 Source: Federal Aviation Administration, General Aviation and Part 135 Activity Surveys

Texas General Aviation Activity Trends

The data for Texas show a more mixed picture. Total general aviation and on-demand hours flown during the 2001-2009 time period are very similar to national trends (see Figure 7). However, the number of active aircraft in Texas rebounded nicely after a substantial drop as Texas entered economic recession (see Figure 8). This bodes well for an increase in activity at general aviation airports as Texas continues to outperform the national economy.

Even though general aviation activities have declined in Texas since the state and nation entered into the worst economic downturn in 80 years, the analysis described below shows that general aviation and related facilities and activities continue to provide a tremendous boost to the state economy and serve as important contributors to regional economic performance.

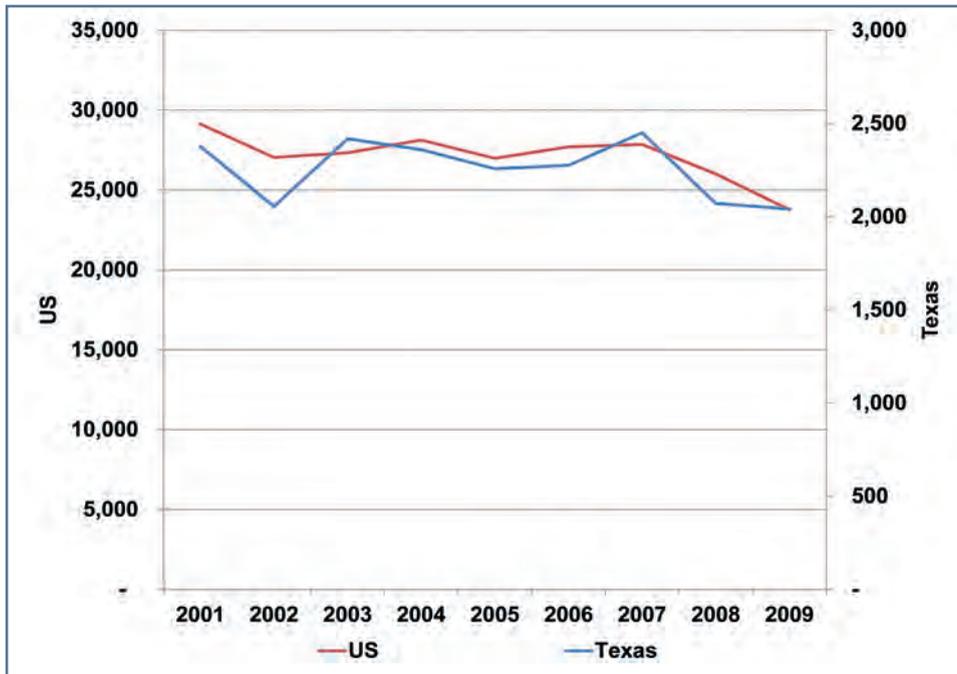


Figure 7. Total General Aviation Hours Flown (000s)

Source: Federal Aviation Administration, General Aviation and Part 135 Activity Surveys

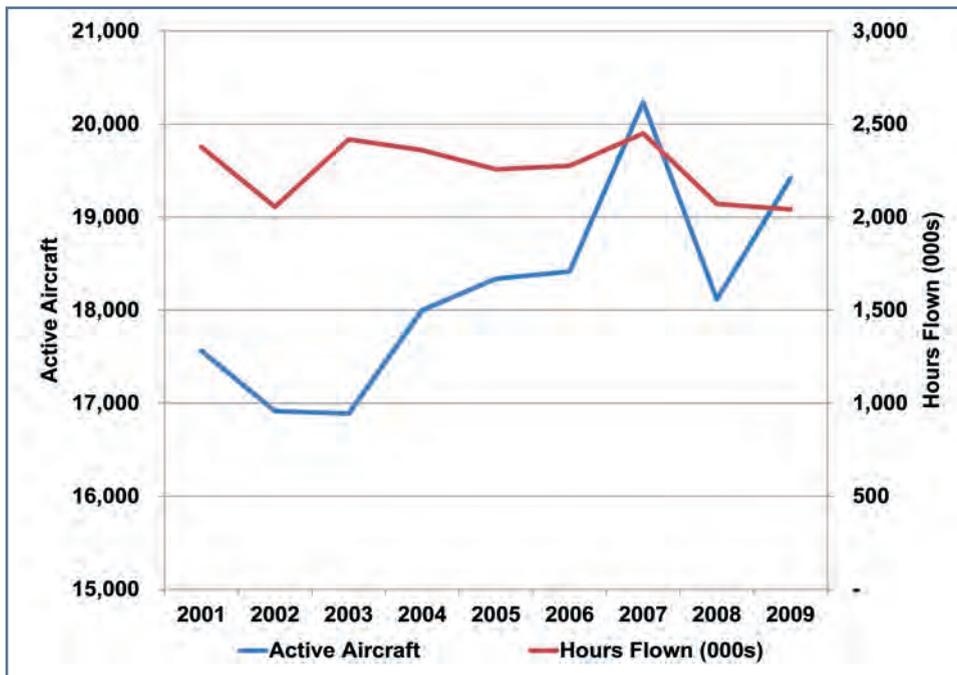


Figure 8. Texas Active General Aviation Aircraft and Total Hours Flown

Source: Federal Aviation Administration, General Aviation and Part 135 Activity Surveys

Methodology

In the following, we describe the methods and assumptions used in estimating the economic impacts of general aviation related activities in Texas. The data gathering phase consisted of multi-modal surveys of airport managers, airport tenants, and itinerant pilots. We then used these data to assess the economic impacts of activities and spending by these groups.

Airport Categories

In assessing the economic impact of the TASP, it is important to recognize key differences among the airports. While our focus is on general aviation activities at public-use airports, we have also included general aviation activities at commercial airports. The economic impact of commercial air services is presented later in this report. The listing of airports used to calculate the statewide impacts included in this analysis can be found in Appendix A at the end of this report.

Several general aviation airports are grouped together for the economic impact analysis. These mostly rural airports are typically limited service facilities with lower levels of activity. Many do not have dedicated staff and support the general aviation system by being a base for recreational fliers with a few small business tenants. For purposes of this analysis, these smaller activity facilities are labeled “Other Airports” and listed in Table 1:

Abernathy Municipal	Kent County	Mustang Beach
Hall-Miller Municipal	Giddings-Lee County	Edwards County
Stonewall County	Stanton Municipal	Mason County
Caldwell Municipal	The Carter Memorial	San Saba County Municipal
Childress Municipal	Colorado City	Sunray
Duval-Freer	Shamrock Municipal	Cypress River
Robert R Wells Jr	Real County	Marlin
Commerce Municipal	Miami-Roberts County	Throckmorton Municipal
Lampasas	Upton County	Avenger Field
Follett/Lipscomb County	Muleshoe Municipal	T-Bar
Denver City	Cochran County	Winkler County
Madisonville Municipal	Navasota Municipal	Harrison Field of Knox City
Cuero Municipal	Newton Municipal	Major Samuel B Cornelius Field
Hallettsville Municipal	San Augustine County	Crane County

Data Acquisition

Airport Managers

Airport managers provided a wide range of data regarding capital and operating expenditures, descriptions of the nature of operations at their airports, activities supporting local economic development, and community engagement and outreach. These data were obtained using in-person interviews, mail surveys, and web-based survey instruments. A copy of the Airport Managers survey questionnaire can be found in the accompanying technical appendix to this report. Managers were asked to report 2010 data on the following:

- Full- and Part-time employees
- Wages and benefits paid to airport employees
- Capital spending by year for the period 2006-2010
- Airport tenants and major users
- Aviation activities by type of activity
- Community engagement activities

Given tight resources at many municipalities and the resulting multi-faceted job duties of airport managers - many of whom also have significant responsibilities in city or county administration - fewer airports provided direct information for this analysis than experienced in previous studies. However, the response rate approached 70 percent, which is very high in economic impact research projects. Moreover, the diversity of responding airports, based on size, number of operations, and location provide an excellent basis from which to estimate operating characteristics of non-responding airports.

To estimate operating characteristics, such as airport employment, for non-responding airports, we first categorized these airports based on operations levels using FAA 5010 data. We also considered broad locational characteristics such as population density. We then calculated key operating expenditure estimates on a per-flight operation basis from a group of operationally-similar airports that provided data for this analysis. We have included these estimates for non-responding airports in assessing statewide economic impacts but have not offered specific impact assessments for the airports for which we do not have directly-reported operating data.

Capital spending at Texas' general aviation airports provides critical investments in local aviation infrastructure. However, many capital projects last more than one year or are timed such that spending occurs in multiple fiscal years. Because of this, and to enhance modeling accuracy, we asked airports to provide their capital spending for the single year 2010, and their projects over the 2006 through 2010 time period.

As shown in Table 2, total employment at general aviation airports and the general aviation divisions of commercial airports is 851 for 2010. In 2010, capital spending at commercial, commercial/reliever, and general aviation TASP airports totaled \$563 million. Taking the

longer view of capital spending, over the 2006 through 2010 period, TASP airports spent almost \$2.3 billion on capital projects.

<i>Airport Type</i>	<i>Operations Spending</i>	<i>Employment</i>	<i>Capital Spending</i>
Commercial Service Airports	\$ 556,814,899	174	\$ 428,354,046
General Aviation Airports	\$ 100,029,723	677	\$ 134,666,878
Total	\$ 656,844,622	851	\$ 563,020,924

Source: Airport Managers' Surveys, CEDAR estimates.

Airport Tenants

Data for airport tenants was obtained through interviews, mail surveys, web-based surveys, and secondary data sources. Starting with a list of airport tenants as reported in the 2005 study, we asked airport managers to update the list and to provide information on current airport tenants. We then used this list to engage in a mail survey of these tenants asking for information on sales, employment, and other data. The survey instrument sent to airport tenants is included in the Technical Appendix. Data requested from airport tenants include:

- Type of business (FBO, aircraft maintenance, flight instruction, other)
- Full- and Part-time employment
- Wages, salaries, and benefits paid
- Capital expenditures by year for 2006 through 2010
- Operating expenditures
- Gross sales

Consistent with previous studies, the response rate was not nearly as robust as with airport managers. Therefore, we relied on airport managers and secondary data sources to estimate the number of jobs represented by each tenant in absence of a survey response. For example, if we did not have a response from a given tenant based on the list provided by an airport manager, we checked third party data sources to see if the firm is still in operation and to obtain an estimate of the number of jobs at that specific location. These data sources included the AtoZ Database, Reference USA, and other web-based resources such as company websites. In absence of information from airport managers, we used geographic information systems, third party data providers, and web-based tools such as Google Earth to identify airport tenant companies.

Table 3 shows the most common industries/activities among TASP airport tenants for 2010.

Table 3 Most Common Industries/Activities by General Aviation Airport Tenants
Fixed Base Operators (FBOs)
Aircraft Maintenance & Repair
Flight Instruction
Air Taxis (on demand air services)
Medical Services (Air ambulance, medical evacuation)

Source: CEDAR

In total, tenants located at TASP airports had industry sales approaching \$8.9 billion and employed about 21,700 individuals in 2010 (see Table 4). These jobs, in turn, supported thousands of other state jobs as will be described in the next section of this report.

Table 4 Texas General Aviation Airport Tenants Sales and Employment		
<i>Airport Type</i>	<i>Industry Sales*</i>	<i>Employment</i>
Commercial Service Airports	\$ 2,667,961,000	6,867
General Aviation Airports	\$ 6,203,655,000	14,876
Total	\$ 8,871,616,000	21,743

* Estimated. Source: Tenant Surveys, CEDAR estimates.

Itinerant Pilots

Airport managers were asked to distribute or otherwise make available spending surveys to itinerant pilots visiting their facilities. The itinerant pilot questionnaire can be found in the technical appendix to this report. Pilots could respond to the surveys by mail, fax, or through a web-based survey program. These surveys asked pilots to report:

- Airport visited
- Number of travelers
- Type of aircraft
- Purpose of the trip
- Length of stay
- Expenditures
 - ♦ Lodging
 - ♦ Food and beverage
 - ♦ Local transportation
 - ♦ Retail/entertainment
 - ♦ Aircraft services (fuel, etc)

More than 300 pilots responded to the survey, providing valuable data for estimating new state and regional spending associated with general aviation activities in Texas. The survey responses from itinerant pilots cannot, by themselves, provide a reliable estimate of the total number of transient operations (i.e., those carrying visitors to the area) for any given airport. Therefore, the itinerant pilot surveys serve as one source of information for estimating spending by state visitors that arrive via general aviation. The aviation team at Wilbur Smith Associates, now a part of CDM, took a multi-source approach to estimating total visitor spending associated with general aviation activities in the state of Texas.

Estimates of itinerant operations (those operations that operate outside the airport's local traffic area) were derived from the total operations estimates through the use of FAA 5010 data. The 5010 data provided estimates of operations in five categories – air carrier, air taxi, local general aviation (typically flight training in the form of touch and goes), itinerant general aviation, and military. By combining those categories that included visitors (itinerant general aviation, air taxi at general aviation airports, air carrier at general aviation airports, and military at airports without a based military air unit), a percentage of total operations was determined from the 5010 data. This percentage was applied to the airport's estimate of total operations to determine the number of itinerant operations. For airports that did not provide an estimate of total operations, the appropriate combined operations from the 5010 data was used for the airport's itinerant operations. It was assumed that an airport's estimates of total operations were more accurate than 5010 data. In addition to the data gathered from the pilot survey, a national database of general aviation visitor expenditures was consulted. This data, derived from economic studies of hundreds of airports, was used to validate the survey data from Texas and to confirm that average expenditures in Texas were in line with similar airports throughout the United States.

Based on the data reviewed, it is estimated that 33 percent of itinerant operations were true transient operations that brought visitors to the region. Since every arriving aircraft bringing visitors has a corresponding departure at the end of the trip, true transient operations were cut in half to determine true transient arrivals. A summary of true transient arrivals is shown in Table 5.

<i>Airport Type</i>	<i>Total Operations</i>	<i>Itinerant Operations</i>	<i>True Transient Arrivals</i>
Commercial Service Airports	3,039,183	747,255	123,296
General Aviation Airports	3,393,405	1,550,437	255,841
Total	6,432,588	2,297,693	379,137

Note: Rounding errors may be present. Source: Wilbur Smith Associates, September 2011

The spending behavior of the transient visitors is based on the survey data obtained from the itinerant pilot survey. Since the spending habits of visitors are not the same at all airports, and it was impractical to obtain valid survey results from every Texas airport, average numbers were used based on four categories of airports. The commercial service airports and those designated as general aviation reliever airports by the FAA National Plan of Integrated Airport Systems were put into one category. The remaining airports were split into three tiers based on the number of jobs found on the airport, as was done in previous studies of the Texas system. The tiers are based on the number of full time equivalent (FTE) employees reported for each airport. Tier I airports employed more than 4.0 FTE employees. The number of employees at Tier II airports ranges from 0.6 to 4.0, and airports with 0.5 or fewer FTE employee are Tier III. Survey data from each of these categories of airports resulted in the mean values shown in Table 6.

<i>Airport Category</i>	<i>Visitors per Aircraft</i>	<i>Days Stayed per Visitor</i>	<i>Spending per Visitor per Day</i>
Commercial/Reliever	3.5	1.5	\$165
Tier I	2.6	0.9	\$255
Tier II	2.8	0.6	\$110
Tier III	2.2	1.2	\$80

Note: Rounding errors may be present. Source: Wilbur Smith Associates, September 2011

The spending per visitor per day estimate includes expenditures from all the types of spending surveyed, with the exception of aircraft services. To avoid double counting these expenditures, spending on aircraft services was excluded from visitor spending since the impacts of these expenditures would be captured in the direct impacts associated with the on-airport businesses providing these services.

These average values were used to estimate visitor spending at each Texas airport, according to the category under which it was classified, starting with an estimate of the number of visitors at airports in Texas, as shown in Table 7.

Table 7			
General Aviation Visitors, 2010			
<i>Airport Type</i>	<i>True Transient Arrivals</i>	<i>Visitors per Arrival</i>	<i>Estimated General Aviation Visitors</i>
Commercial Service Airports	123,296	3.5	431,542
General Aviation Airports	255,841	3.0	755,859
Total	379,137	3.1	1,187,401

Note: Rounding errors may be present. Source: Wilbur Smith Associates, September 2011

Average spending values were then applied to the number of general aviation visitors to obtain visitor expenditures. For example, a true transient aircraft visiting a Tier III airport was estimated to have an average of 2.2 passengers staying 1.2 days, with each passenger spending approximately \$80 per day on goods and services not related to aviation, whereas a visiting aircraft at a commercial/reliever airport was estimated to arrive with an average of 3.5 passengers staying 1.5 days, with each passenger spending approximately \$165 per day on non-aviation goods and services.

Table 8 summarizes the estimated 2010 general aviation visitor expenditures for the TASP.

Table 8				
General Aviation Visitor Expenditures at Texas Airports, 2010				
<i>Airport Type</i>	<i>General Aviation Visitors</i>	<i>Length of Stay</i>	<i>Spending per Day</i>	<i>Expenditures</i>
Commercial Service Airports	431,542	1.5	\$165	\$106,806,600
General Aviation Airports	755,859	1.2	\$190	\$169,493,200
Total Impacts	1,187,401	1.3	\$179	\$276,299,800

Note: Rounding errors may be present. Source: Wilbur Smith Associates, September 2011

As noted earlier, the survey of visiting pilots and passengers collected expenditure data by type of spending. This data was used to estimate the percentage of spending in each category and then applied to each airport's overall spending to arrive at estimates of spending in each category. Table 9 shows the expenditures by type of spending for Texas airports.

<i>Airport Type</i>	<i>Lodging</i>	<i>Food & Beverage</i>	<i>Ground Transportation</i>	<i>Retail & Entertainment</i>	<i>Other</i>
Commercial Service Airports	\$42.8	\$29.5	\$15.2	\$17.6	\$1.7
General Aviation Airports	\$69.5	\$46.5	\$16.3	\$24.8	\$12.5
Total Impacts	\$112.3	\$76.0	\$31.5	\$42.4	\$14.2

Note: Rounding errors may be present. Source: Wilbur Smith Associates, September 2011

The Analytical Model

The spending reported in the previous section represents an important contribution to the Texas economy and local areas hosting a general aviation airport. However, the total impacts of spending by airports, tenants, and transient visitors are much larger than their spending alone. To estimate the impacts of general aviation related spending in Texas we use an economic input-output model. Economic input-output models estimate how initial spending and economic activity flow through a state or regional economy. In this analysis we have estimated the total impacts of all general aviation related activities on the state of Texas. As noted earlier, we also estimate the impacts of individual airports on their local economies.

Figure 9 represents a production function for a hypothetical airport tenant that refurbishes corporate aircraft interiors. The company purchases materials for their work, invests in equipment, purchases electricity to run their equipment, hires employees, and purchases services such as bookkeepers, advertising reps, and other professional services. This spending represents the ***Direct Effects*** in an economic impact model.

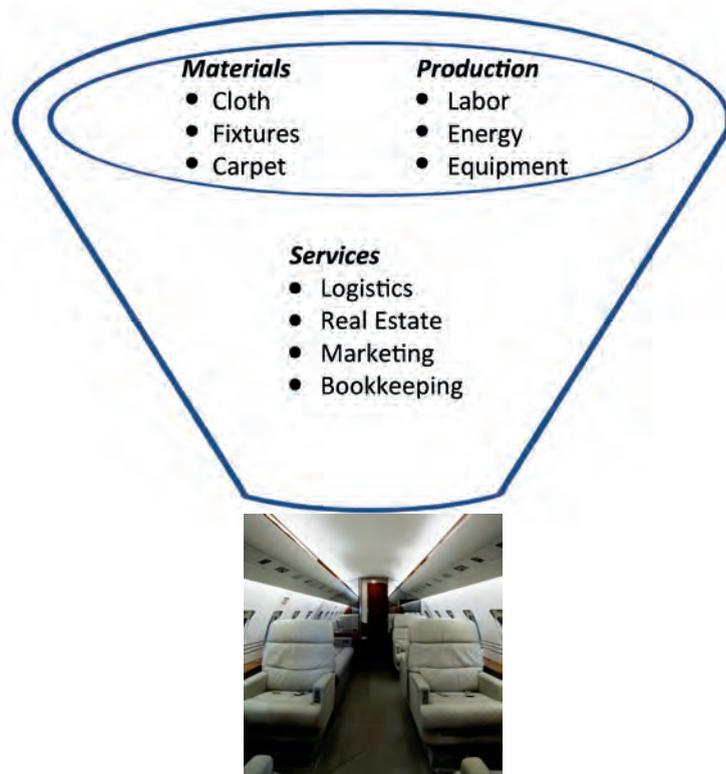


Figure 9. Production Function Example

Direct effects spending by the airports could include hiring employees, purchasing materials and services for runway repairs, utilities to support operations, and a number of other spending categories. Visitor spending in the local economy for lodging, food, and other spending also represents direct effects in the model. Importantly, if direct effect spending is not known, it can be estimated from employment levels. For any given industry, there is a relationship between the number of employees at a firm and the amount of sales required to support those employees. Therefore, economic input-output models typically allow sales or employment to be used as inputs.

Indirect Effects address secondary spending supported by direct effect expenditures. For example, the bookkeeping firm that is hired to keep the books for the aircraft interior refurbisher spends money to rent office space, hire employees, purchase office supplies, and other business services. The office supply retailer that sells to the bookkeeper also hires employees and other operating expenditures such as a janitorial service to clean the store. The initial spending by the airport tenant spreads across the local or state economy like ripples from tossing a rock into a pond. As the effects spread, they become smaller until they have no additional impact.

Induced Effects add household spending to the economic impact assessment. The employees of the aircraft refurbisher, the bookkeeper, the office supply store, and the janitorial service all spend a portion of their earnings in the economy for goods and services.

The input-output model used for this analysis makes two critical adjustments to the spending data. First, adjustments are made so that household spending captured by the Induced Effects is not double counted, such as when the household of an employee of the office supply retailer buys school supplies from the office supply retailer. The second adjustment accounts for spending in the Direct, Indirect, and Induced Effects that does not stay in the state/local economy. For example, the leather used to cover the refurbished aircraft seats could be manufactured in Italy, and thus that spending has very little impact on the state or local economy, though there would likely be some impact from the local distribution and transportation of the leather. For local areas, the impacts of a purchase in a county with a large population and diverse economic base are expected to be larger than a similar purchase in a smaller population county. Similarly, the state will capture a larger share of the indirect and induced impacts compared to individual counties. When added together, the sum of the direct, indirect, and induced effects is often greater than the initial spending, which is the “multiplier” effect.

The economic input-output model used in this analysis is the IMPLAN model developed by the Minnesota Implan Group. This model is widely used in academic and professional research, including previous estimates of the economic impacts of general aviation in the state of Texas. The IMPLAN model provides estimates of output, labor income, and employment.

- **Output** is essentially a measure of the value of transactions (spending).
- **Labor Income** includes salaries, wages, and benefits paid to employees plus proprietors' income.
- **Employment** is expressed as jobs.

Operating and capital expenditures are treated somewhat differently in this analysis. Operating expenditures are recurring in nature, while capital projects provide temporary impacts. Given that capital construction and renovation projects often last for more than one year, we have separately estimated the economic impacts of airport capital spending over the 2006 through 2010 period. Since capital spending in this component of the analysis occurred over a multi-year period, our employment estimates focusing on capital projects are expressed as job-years of employment, meaning one job lasting for one year. The actual number of jobs in any given year varies based on the particular activities occurring in any given year. For most construction projects employment starts small during the design phase, peaks during construction, and is much smaller during final finish-out/inspection phases. For 2010 we include all spending, operating and capital, to more accurately show the total impacts of the TASP airports. However, this means that the estimates of capital spending impacts for the 2006 through 2010 period and the stated 2010 total impacts are not additive.

The Economic Impacts of General and Commercial Aviation in Texas

General aviation and related activities at commercial and general aviation airports generate an impressive number of jobs and direct impacts. Based on our findings and estimates, Texas’ general aviation activities from airport operations, tenant businesses, and visitor spending represents about \$9.4 billion in direct economic activity supporting almost 28,000 jobs. In addition, more than \$134 million was spent on capital projects in 2010 at these airports related to general aviation. These activities and spending create almost \$14.6 billion in statewide economic activity supporting 56,600 jobs that pay in excess of \$3.1 billion in salaries wages and benefits (see Table 10). Table 14 shows the impacts by airport on their local economies.

Table 10 Economic Impacts of General Aviation and Related Activities State of Texas, 2010	
<i>Description</i>	<i>Impact</i>
Economic Activity	\$ 14,582,332,000
Labor Income (salaries, wages, benefits)	\$ 3,127,309,000
Employment	56,635

Sources: UNT Center for Economic Development and Research, Wilbur Smith Associates, IMPLAN

In addition to general aviation activities, Texas’ commercial airports are huge engines for economic growth in the state. Based on data gathered in this analysis and previous studies, commercial airport operations and capital projects related spending generated almost \$45 billion in economic activity in Texas for 2010. This activity supported about 715,000 statewide jobs paying over \$20 billion in salaries, wages, and benefits (see Table 11). Table 15 details the impacts by commercial airports at the local level.

Table 11 Economic Impacts of Commercial Aviation and Related Activities State of Texas, 2010	
<i>Description</i>	<i>Impact</i>
Economic Activity	\$ 44,928,225,000
Labor Income (salaries, wages, benefits)	\$ 20,103,760,000
Employment	714,720

Sources: UNT Center for Economic Development and Research, IMPLAN

Adding together general aviation and commercial activities shows the impressive impact the TASP component of the Texas aviation system has on the state's economy. Including airport operations, tenants, visitor spending, and capital spending, TASP airports support \$59.5 billion in economic activity boosting labor income by \$23.2 billion and creating over 770,000 jobs (see Table 12).

Table 12 Economic Impacts of Texas Airport System Plan Airports State of Texas, 2010	
<i>Description</i>	<i>Impact</i>
Economic Activity	\$ 59,510,557,000
Labor Income (salaries, wages, benefits)	\$ 23,231,069,000
Employment	771,355

Sources: UNT Center for Economic Development and Research, IMPLAN

Capital spending at TASP facilities from 2006 through 2010 totaled almost \$2.3 billion. This spending created \$4.7 billion in economic activity for the state of Texas, increased labor income by \$1.8 billion, and supported over 37,000 job-years of employment (see Table 13). Table 16 shows the economic impacts of capital spending by airport.

Table 13 Economic Impacts of Capital Spending at Texas Airport System Plan Airports On the State of Texas, 2006-2010	
<i>Description</i>	<i>Impact</i>
Capital Spending	\$ 2,270,163,124
Economic Activity	\$ 4,697,071,977
Labor Income (salaries, wages, benefits)	\$ 1,778,872,641
Employment (job-years)	37,281

Sources: UNT Center for Economic Development and Research, IMPLAN

Table 14
Economic Impact of General Aviation Airports on Their Local Economies
(based on data provided by airports)
2010

<i>Associated City</i>	<i>Airport Name</i>	<i>Output</i>	<i>Labor Income</i>	<i>Employment</i>
Addison	Addison	\$369,749,760	\$136,329,552	2,339.9
Alice	Alice International	\$2,144,929	\$949,634	25.6
Alpine	Alpine-Casparis Municipal	\$2,168,823	\$1,044,007	36.1
Amarillo	Tradewind	\$3,556,089	\$1,318,689	28.6
Anahuac	Chambers County	\$636,266	\$258,131	9.3
Angleton/Lake Jackson	Texas Gulf Coast Regional	\$9,419,033	\$3,132,451	66.8
Arlington	Arlington Municipal	\$67,920,367	\$24,006,171	559.9
Athens	Athens Municipal	\$235,799	\$102,102	3.2
Bay City	Bay City Municipal	\$639,229	\$292,093	8.8
Beaumont	Beaumont Municipal	\$905,233	\$408,642	11.5
Big Spring	Big Spring McMahon-Wrinkle	\$9,253,086	\$2,983,098	64.6
Bishop	Bishop Municipal	\$226,781	\$90,487	2.1
Bonham	Jones Field	\$10,479,922	\$5,769,695	107.7
Borger	Hutchinson County	\$3,521,838	\$1,399,212	22.3
Bowie	Bowie Municipal	\$2,949,047	\$1,662,859	27.9
Brenham	Brenham Municipal	\$6,298,165	\$2,064,761	46.3
Brownfield	Terry County	\$1,153,377	\$393,813	9.0
Brownwood	Brownwood Regional	\$6,286,907	\$2,410,743	62.4
Bryan	Coulter Field	\$7,813,759	\$2,242,120	49.0
Burnet	Burnet Municipal-Kate Craddock Field	\$5,716,473	\$2,027,427	46.9
Cameron	Cameron Municipal Airpark	\$235,999	\$123,441	2.2
Carrizo Springs	Dimmit County	\$478,311	\$163,479	2.8
Castroville	Castroville Municipal	\$2,319,937	\$657,319	17.8
Center	Center Municipal	\$1,641,169	\$678,163	18.2
Clarendon	Smiley Johnson Muni/Bass Field	\$631,882	\$376,866	5.5
Cleburne	Cleburne Municipal	\$7,439,304	\$3,067,651	93.8
Cleveland	Cleveland Municipal	\$381,222	\$153,838	4.2
Clifton	Clifton Muni/Isenhower Field	\$1,454,000	\$711,249	23.4
Coleman	Coleman Municipal	\$156,368	\$73,300	3.4
Comanche	Comanche County-City	\$230,760	\$96,608	2.8

Table 14 cont'd

<i>Associated City</i>	<i>Airport Name</i>	<i>Output</i>	<i>Labor Income</i>	<i>Employment</i>
Cotulla	Cotulla-La Salle County	\$453,844	\$236,308	6.0
Dalhart	Dalhart Municipal	\$1,585,939	\$994,629	14.4
Dallas	Dallas Executive	\$18,229,078	\$5,590,780	111.2
Decatur	Decatur Municipal	\$4,504,753	\$2,130,463	65.5
Dell City	Dell City Municipal	\$182,382	\$98,458	2.4
Denton	Denton Municipal	\$148,846,113	\$34,197,210	853.9
Devine	Devine Municipal	\$1,300,293	\$220,786	8.6
Dimmitt	Dimmitt Municipal	\$2,254,578	\$1,246,002	34.9
Dryden	Terrell County	\$225,369	\$114,351	2.0
Dumas	Moore County	\$904,386	\$483,729	7.7
Eagle Lake	Eagle Lake	\$1,490,968	\$571,762	16.8
Eagle Pass	Maverick County Memorial Int'l	\$393,179	\$186,795	6.0
Edinburg	South Texas Int'l at Edinburg	\$11,075,943	\$3,495,567	91.3
El Paso	Horizon	\$8,649,024	\$2,670,959	52.5
Eldorado	Eldorado	\$217,415	\$161,866	5.4
Ennis	Ennis Municipal	\$602,982	\$288,086	9.3
Fabens	Fabens	\$718,470	\$245,929	9.2
Falfurrias	Brooks County	\$340,678	\$122,769	5.2
Floydada	Floydada Municipal	\$844,417	\$414,654	16.0
Fort Stockton	Fort Stockton - Pecos County	\$3,349,672	\$1,463,072	37.9
Fort Worth	Fort Worth Alliance	\$2,022,220,389	\$434,309,593	7,437.8
Fort Worth	Fort Worth Meacham Int'l	\$164,866,040	\$50,164,738	927.8
Fort Worth	Fort Worth Spinks	\$25,113,602	\$9,464,233	176.3
Fredericksburg	Gillespie County	\$2,469,137	\$1,049,059	32.4
Gainesville	Gainesville Municipal	\$109,695,382	\$53,496,397	1,532.2
Galveston	Scholes Int'l at Galveston	\$354,257,365	\$108,019,774	3,160.2
Gatesville	Gatesville Municipal	\$248,270	\$112,618	3.3
George West	Live Oak County	\$169,975	\$81,699	2.0
Georgetown	Georgetown Municipal	\$23,738,564	\$9,872,319	226.6
Gilmer	Fox Stephens Field - Gilmer Municipal	\$505,165	\$190,257	6.9
Gladewater	Gladewater Municipal	\$1,788,613	\$793,981	20.5
Goldthwaite	Goldthwaite Municipal	\$417,302	\$158,188	5.7
Graham	Graham Municipal	\$879,827	\$461,747	9.9

Table 14 cont'd

<i>Associated City</i>	<i>Airport Name</i>	<i>Output</i>	<i>Labor Income</i>	<i>Employment</i>
Granbury	Granbury Regional	\$17,135,358	\$3,671,525	67.8
Grand Prairie	Grand Prairie Municipal	\$47,277,663	\$17,721,776	395.5
Henderson	Rusk County	\$548,789	\$279,221	5.6
Hillsboro	Hillsboro Municipal	\$1,084,196	\$513,386	11.2
Hondo	South Texas Regional	\$31,491,584	\$8,211,611	298.8
Houston	Ellington Field	\$110,023,852	\$43,169,639	864.5
Houston	Lone Star Executive	\$33,497,508	\$13,911,552	383.3
Houston	David Wayne Hooks Memorial	\$56,634,773	\$18,057,454	302.1
Houston	Sugar Land Regional	\$38,356,094	\$16,128,584	253.2
Houston	Houston - Southwest	\$6,596,255	\$3,096,114	65.2
Houston	Pearland Regional	\$4,694,935	\$2,244,839	53.9
Huntsville	Huntsville Municipal	\$3,119,180	\$1,518,488	48.1
Jacksonville	Cherokee County	\$2,340,635	\$744,292	16.5
Jasper	Jasper County - Bell Field	\$432,358	\$210,333	5.8
Junction	Kimble County	\$1,691,300	\$828,677	25.2
Kerrville	Kerrville Municipal/Louis Schreiner Field	\$44,988,676	\$12,093,356	309.6
Killeen	Skylark Field	\$51,246,656	\$20,753,318	404.0
Kingsville	Kleberg County	\$874,151	\$384,269	11.1
Kirbyville	Kirbyville	\$137,546	\$68,000	2.0
La Grange	Fayette Regional Air Center	\$1,481,387	\$623,489	16.4
La Porte	La Porte Municipal	\$4,211,649	\$1,473,400	37.5
Lago Vista	Lago Vista Tx - Rusty Allen	\$3,006,284	\$1,051,424	17.3
Lamesa	Lamesa Municipal	\$1,160,180	\$786,324	20.3
Lancaster	Lancaster Regional	\$18,093,646	\$5,949,872	93.2
Levelland	Levelland Municipal	\$1,865,805	\$818,120	23.8
Liberty	Liberty Municipal	\$1,394,728	\$633,949	13.1
Littlefield	Littlefield Municipal	\$426,704	\$209,067	4.9
Livingston	Livingston Municipal	\$316,743	\$134,858	3.7
Llano	Llano Municipal	\$919,915	\$429,162	6.2
Lockhart	Lockhart Municipal	\$476,386	\$160,179	6.5
Lufkin	Angelina County	\$3,437,212	\$1,597,144	31.7
Marfa	Marfa Municipal	\$1,163,862	\$385,644	18.5
Marshall	Harrison County	\$3,075,008	\$976,912	22.1

Table 14 cont'd

<i>Associated City</i>	<i>Airport Name</i>	<i>Output</i>	<i>Labor Income</i>	<i>Employment</i>
McKinney	Collin County Regional at McKinney	\$44,248,730	\$17,709,560	377.5
Memphis	Memphis Municipal	\$311,185	\$242,393	8.7
Menard	Menard County	\$794,100	\$307,329	9.1
Mesquite	Mesquite Metro	\$10,516,944	\$4,979,641	74.4
Mineola/Quitman	Wood County	\$317,878	\$126,332	3.8
Mineral Wells	Mineral Wells	\$42,544,792	\$14,124,406	457.3
Monahans	Roy Hurd Memorial	\$173,872	\$84,836	2.5
Mount Pleasant	Mount Pleasant Regional	\$6,375,375	\$2,098,106	50.0
Nacogdoches	A L Mangham Jr Regional	\$1,087,937	\$496,927	14.5
New Braunfels	New Braunfels Municipal	\$25,631,652	\$7,077,190	120.0
Olney	Olney Municipal	\$235,245,296	\$26,424,650	374.5
Orange	Orange County	\$447,480	\$211,307	4.3
Palacios	Palacios Municipal	\$536,224	\$270,509	12.3
Palestine	Palestine Municipal	\$583,331	\$340,512	7.6
Pearsall	McKinley Field	\$4,824,935	\$1,462,517	26.8
Pecos	Pecos Municipal	\$1,682,129	\$550,070	25.2
Plainview	Hale County	\$1,366,087	\$458,238	12.1
Port Isabel	Port Isabel - Cameron County	\$1,074,475	\$482,897	11.0
Presidio	Presidio Lely International	\$190,554	\$80,615	3.6
Quanah	Quanah Municipal	\$960,114	\$412,078	8.6
Rockdale	H H Coffield Regional	\$187,293	\$82,958	2.4
Rockport	Aransas County	\$17,269,314	\$5,835,651	189.0
Rockwall	Rockwall Municipal	\$627,457	\$266,331	6.9
San Antonio	Stinson Municipal	\$23,850,456	\$8,941,676	240.4
San Marcos	San Marcos Municipal	\$44,973,180	\$10,517,515	248.4
Sherman/Denison	N. Texas Regional - Perrin Field	\$62,158,272	\$20,841,714	530.1
Slaton	Slaton Municipal	\$2,321,395	\$938,787	22.8
Smithville	Smithville Crawford Municipal	\$268,750	\$85,174	2.6
Snyder	Winston Field	\$3,268,394	\$1,286,783	29.3
Stephenville	Clark Field Municipal	\$2,607,511	\$812,488	21.0
Sulphur Springs	Sulphur Springs Municipal	\$12,316,938	\$3,484,179	84.9
Temple	Draughon - Miller Central Texas Regional	\$18,176,984	\$7,136,239	191.0
Terrell	Terrell Municipal	\$5,309,438	\$1,978,791	42.4

Table 14 cont'd

<i>Associated City</i>	<i>Airport Name</i>	<i>Output</i>	<i>Labor Income</i>	<i>Employment</i>
Waco	McGregor Executive	\$9,968,338	\$3,405,662	75.0
Waco	TSTC Waco	\$1,813,854,208	\$307,840,512	5,235.2
Weslaco	Mid Valley	\$5,738,019	\$1,859,626	42.2
Wharton	Wharton Regional	\$1,433,338	\$487,616	9.5
Winnie/Stowell	Chambers County - Winnie Stowell	\$292,154	\$165,092	3.8
Winnsboro	Winnsboro Municipal	\$329,240	\$124,112	4.0
Woodville	Tyler County	\$425,671	\$134,231	5.2
Other	Other System Airports	\$2,173,403	\$1,066,669	26.0

Table 15
Economic Impact of Commercial Airports on Their Local Economies
2010

<i>Associated City</i>	<i>Airport Name</i>	<i>Impact</i>	<i>Total Output</i>	<i>Total Labor Income</i>	<i>Total Employment</i>
Abilene	Abilene Regional	CS	\$130,301,734	\$48,013,249	1,253
		GA	\$17,803,884	\$6,394,803	188
		Total	\$148,105,618	\$54,408,052	1,441
Amarillo	Rick Husband Amarillo International	CS	\$231,620,621	\$103,248,759	3,637
		GA	\$101,863,472	\$48,289,096	1,238
		Total	\$333,484,093	\$151,537,855	4,875
Austin	Austin-Bergstrom International	CS	\$2,408,277,327	\$1,161,187,622	40,381
		GA	\$25,416,734	\$10,667,090	281
		Total	\$2,433,694,061	\$1,171,854,712	40,662
Beaumont/Port Arthur	Jack Brooks Regional	CS	\$19,376,497	\$7,206,187	204
		GA	\$80,933,778	\$14,251,215	227
		Total	\$100,310,275	\$21,457,402	432
Brownsville	Brownsville/South Padre Island International	CS	\$74,602,405	\$31,682,451	948
		GA	\$6,175,448	\$2,256,728	69
		Total	\$80,777,853	\$33,939,180	1,017
College Station	Easterwood Field	CS	\$59,095,217	\$22,116,657	750
		GA	\$14,375,643	\$6,120,047	164
		Total	\$73,470,860	\$28,236,704	914
Corpus Christi	Corpus Christi International	CS	\$246,898,053	\$104,484,478	3,442
		GA	\$57,528,260	\$14,645,876	460
		Total	\$304,426,313	\$119,130,354	3,902
Dallas	Dallas Love Field	CS	\$2,341,640,837	\$1,079,122,813	38,863
		GA	\$480,351,680	\$167,845,568	2,220
		Total	\$2,821,992,517	\$1,246,968,381	41,083
Dallas-Ft. Worth	Dallas/Fort Worth International	CS	\$15,626,379,766	\$7,373,325,519	267,597
		GA	\$75,075,408	\$26,931,636	321
		Total	\$15,701,455,174	\$7,400,257,155	267,918
El Paso	El Paso International	CS	\$732,468,646	\$352,374,919	13,501
		GA	\$15,593,378	\$5,669,882	190
		Total	\$748,062,024	\$358,044,801	13,691

Table 15 cont'd

<i>Associated City</i>	<i>Airport Name</i>	<i>Impact</i>	<i>Total Output</i>	<i>Total Labor Income</i>	<i>Total Employment</i>
Harlingen	Valley International	CS	\$227,471,709	\$41,407,539	2,399
		GA	\$28,059,504	\$11,614,307	313
		Total	\$255,531,213	\$53,021,846	2,712
Houston	George Bush Intercontinental/Houston	CS	\$11,281,770,104	\$5,359,020,066	192,513
		GA	\$9,602,816	\$4,036,425	104
		Total	\$11,291,372,920	\$5,363,056,491	192,617
Houston	William P Hobby	CS	\$2,771,721,129	\$1,206,503,569	43,433
		GA	\$76,041,744	\$30,741,262	713
		Total	\$2,847,762,873	\$1,237,244,831	44,146
Killeen/Ft. Hood	Robert Gray AAF	CS	\$219,854,564	\$66,432,743	2,417
		GA	-0-	-0-	-0-
		Total	\$219,854,564	\$66,432,743	2,417
Laredo	Laredo International	CS	\$121,919,188	\$45,195,174	1,347
		GA	N/A	N/A	N/A
		Total	\$121,919,188	\$45,195,174	1,347
Longview	East Texas Regional	CS	\$26,667,159	\$10,526,605	283
		GA	\$46,390,224	\$11,691,049	366
		Total	\$73,057,383	\$22,217,654	648
Lubbock	Lubbock Preston Smith International	CS	\$290,227,766	\$133,646,902	4,673
		GA	\$20,481,178	\$7,214,633	176
		Total	\$310,708,944	\$140,861,534	4,849
McAllen	McAllen Miller International	CS	\$219,971,463	\$94,015,984	3,299
		GA	\$30,410,956	\$9,895,572	262
		Total	\$250,382,419	\$103,911,556	3,560
Midland	Midland International	CS	\$297,252,409	\$125,323,026	4,323
		GA	\$57,468,152	\$20,519,988	435
		Total	\$354,720,561	\$145,843,014	4,757
San Angelo	San Angelo Regional/Mathis Field	CS	\$95,290,902	\$40,156,420	1,059
		GA	N/A	N/A	N/A
		Total	\$95,290,902	\$40,156,420	1,059

Table 15 cont'd

<i>Associated City</i>	<i>Airport Name</i>	<i>Impact</i>	<i>Total Output</i>	<i>Total Labor Income</i>	<i>Total Employment</i>
San Antonio	San Antonio International	CS	\$3,755,349,987	\$1,512,718,290	52,948
		GA	\$2,679,333,376	\$542,906,368	8,706
		Total	\$6,434,683,363	\$2,055,624,658	61,654
Tyler	Tyler Pounds Regional	CS	\$52,897,085	\$22,519,907	759
		GA	\$13,242,817	\$4,815,356	142
		Total	\$66,139,902	\$27,335,263	901
Victoria	Victoria Regional	CS	\$30,314,888	\$11,190,926	138
		GA	N/A	N/A	N/A
		Total	\$30,314,888	\$11,190,926	138
Waco	Waco Regional	CS	\$60,019,204	\$21,813,246	694
		GA	\$193,771,344	\$34,290,244	675
		Total	\$253,790,548	\$56,103,490	1,368
Wichita Falls	Sheppard AFB/Wichita Falls Municipal	CS	\$31,702,466	\$12,377,114	445
		GA	\$5,073,428	\$803,445	18
		Total	\$36,775,894	\$13,180,558	462

Table 16
Economic Impact of Capital Spending at Texas Airport System Plan Airports
(based on data provided by airports)
2006-2010

<i>Associated City</i>	<i>Airport Name</i>	<i>Total Output</i>	<i>Total Employment</i>
Abernathy	Abernathy Muni	\$16,923	0.2
Abilene	Abilene Regional	\$44,455,352	383.0
Addison	Addison	\$3,411,336	28.3
Alice	Alice Int'l	\$221,641	2.5
Alpine	Alpine-Casparis Muni	\$1,845,888	18.6
Amarillo	Rick Husband Amarillo Int'l	\$15,113,205	142.0
Angleton/Lake Jackson	Texas Gulf Coast Regional	\$1,234,326	10.1
Arlington	Arlington Muni	\$36,184,515	325.2
Athens	Athens Muni	\$1,546,568	17.8
Atlanta	Hall-Miller Muni	\$44,756	0.4
Austin	Austin-Bergstrom Int'l	\$111,837,248	960.0
Bay City	Bay City Muni	\$259,613	2.5
Beaumont	Beaumont Muni	\$3,528,584	26.8
Beaumont/Port Arthur	Jack Brooks Regional	\$15,411,123	107.0
Big Spring	Big Spring McMahan-Wrinkle	\$10,309,833	96.0
Bishop	Bishop Muni	\$2,818,882	24.1
Bonham	Jones Field	\$6,097,130	70.4
Borger	Hutchinson County	\$2,311,680	16.6
Bowie	Bowie Muni	\$2,664,597	29.8
Brownfield	Terry County	\$1,387,949	15.3
Brownwood	Brownwood Regional	\$824,106	8.6
Burnet	Burnet Muni-Kate Craddock Field	\$1,079,013	11.6
Cameron	Cameron Muni Airpark	\$68,901	0.6
Castroville	Castroville Muni	\$829,267	9.1
Center	Center Muni	\$1,093,625	10.7
Cleburne	Cleburne Muni	\$1,038,227	10.8
Cleveland	Cleveland Muni	\$794,046	7.9
Clifton	Clifton Muni/Isenhower Field	\$945,037	11.2
College Station	Easterwood Field	\$20,072,990	185.0
Columbus	Robert R Wells Jr	\$83,213	0.8
Comanche	Comanche County-City	\$160,423	1.8
Commerce	Commerce Muni	\$694,038	7.1
Corpus Christi	Corpus Christi Int'l	\$47,360,512	405.0
Crane	Crane County	\$1,163,571	10.8

Table 16 cont'd

<i>Associated City</i>	<i>Airport Name</i>	<i>Total Output</i>	<i>Total Employment</i>
Cuero	Cuero Muni	\$27,073	0.3
Dalhart	Dalhart Muni	\$708,470	6.8
Dallas	Dallas Love Field	\$91,766,640	760.0
Dallas	Dallas Executive	\$6,874,633	56.9
Dallas-Fort Worth	Dallas/Fort Worth Int'l	\$331,070,208	2,742.0
Decatur	Decatur Muni	\$1,048,297	11.0
Denton	Denton Muni	\$32,342,914	284.2
Denver City	Denver City	\$81,983	0.8
Devine	Devine Muni	\$6,178	0.1
Dimmitt	Dimmitt Muni	\$272,533	3.1
Dryden	Terrell County	\$372,636	2.1
Dumas	Moore County	\$1,520,143	15.2
Eagle Lake	Eagle Lake	\$1,844,261	18.3
Edinburg	South Texas Int'l at Edinburg	\$13,407,198	150.7
El Paso	El Paso Int'l	\$41,348,144	414.0
El Paso	Horizon	\$31,061	0.3
Eldorado	Eldorado	\$167,961	1.6
Ennis	Ennis Muni	\$397,978	4.0
Falfurrias	Brooks County	\$3,461,040	34.8
Floydada	Floydada Muni	\$12,035	0.1
Follett	Follett/Lipscomb County	\$2,911	0.0
Fort Stockton	Fort Stockton-Pecos County	\$2,887,462	29.0
Fort Worth	Fort Worth Alliance	\$98,586,976	886.1
Fort Worth	Fort Worth Meacham Int'l	\$25,512,635	229.3
Fort Worth	Fort Worth Spinks	\$5,853,732	52.6
Fredericksburg	Gillespie County	\$3,537,636	38.4
Freer	Duval-Freer	\$26,256	0.2
Gainesville	Gainesville Muni	\$1,466,259	13.9
Galveston	Scholes Int'l at Galveston	\$10,191,783	76.4
Gatesville	Gatesville Muni	\$82,679	0.9
George West	Live Oak County	\$8,061	0.1
Georgetown	Georgetown Muni	\$2,710,001	22.6
Giddings	Giddings-Lee County	\$287,941	2.6
Gilmer	Fox Stephens Field - Gilmer Muni	\$720,067	7.7
Gladewater	Gladewater Muni	\$3,544,124	31.8
Goldthwaite	Goldthwaite Muni	\$1,948,089	25.1
Graham	Graham Muni	\$4,577,917	51.4
Granbury	Granbury Regional	\$7,097,535	71.7

Table 16 cont'd

<i>Associated City</i>	<i>Airport Name</i>	<i>Total Output</i>	<i>Total Employment</i>
Grand Prairie	Grand Prairie Muni	\$5,273,118	47.4
Hallettsville	Hallettsville Muni	\$434,952	4.9
Harlingen	Valley Int'l	\$32,095,722	340.0
Henderson	Rusk County	\$1,789,028	14.8
Hillsboro	Hillsboro Muni	\$514,912	5.7
Hondo	Hondo Muni	\$10,895,080	120.1
Houston	Ellington Field	\$80,620,782	608.4
Houston	William P Hobby	\$408,266,496	3,081.0
Houston	Lone Star Executive	\$28,785,480	246.1
Houston	David Wayne Hooks Memorial	\$1,509,767	11.4
Houston	Sugar Land Regional	\$11,758,883	81.8
Houston	George Bush Intercontinental/Houston	\$188,657,024	1,424.0
Houston	Houston-Southwest	\$11,922,711	82.9
Houston	Pearland Regional	\$4,034,674	33.1
Jacksonville	Cherokee County	\$136,222	1.5
Jayton	Kent County	\$15,245	0.7
Jefferson	Cypress River	\$245,075	2.8
Junction	Kimble County	\$2,489,443	27.9
Kerrville	Kerrville Muni/Louis Schreiner Field	\$16,101,684	172.7
Killeen	Skylark Field	\$1,931,737	19.0
Kingsville	Kleberg County	\$138,435	1.3
Knox City	Harrison Field of Knox City	\$21,612	0.2
La Grange	Fayette Regional Air Center	\$971,892	9.7
La Porte	La Porte Muni	\$1,724,970	12.1
Lamesa	Lamesa Muni	\$2,322,974	22.1
Lampasas	Lampasas	\$772,844	7.7
Lancaster	Lancaster Regional	\$7,821,241	60.8
Leakey	Real County	\$2,387	0.0
Levelland	Levelland Muni	\$873,475	9.1
Liberty	Liberty Muni	\$1,380,232	13.2
Littlefield	Littlefield Muni	\$57,879	0.7
Llano	Llano Muni	\$1,030,037	10.2
Lockhart	Lockhart Muni	\$36,580	0.4
Longview	East Texas Regional	\$33,958,692	283.4
Lubbock	Lubbock Preston Smith Int'l	\$68,250,232	651.0
Lufkin	Angelina County	\$9,455,436	92.2
Marfa	Marfa Muni	\$88,268	0.9
Marshall	Harrison County	\$613,419	5.2

Table 16 cont'd

<i>Associated City</i>	<i>Airport Name</i>	<i>Total Output</i>	<i>Total Employment</i>
McAllen	McAllen Miller Int'l	\$26,352,048	291.0
McKinney	Collin County Regional at McKinney	\$51,561,047	476.0
Memphis	Memphis Muni	\$474,113	5.1
Menard	Menard County	\$774,478	8.7
Mesquite	Mesquite Metro	\$9,385,488	73.0
Miami	Miami-Roberts County	\$724,552	7.6
Midland	Midland Int'l	\$32,642,092	278.0
Mineola/Quitman	Wood County	\$2,193,055	22.6
Mineral Wells	Mineral Wells	\$40,699	0.4
Monahans	Roy Hurd Memorial	\$544,792	3.5
Morton	Cochran County	\$345,616	3.8
Mount Pleasant	Mount Pleasant Regional	\$8,611,689	89.7
Muleshoe	Muleshoe Muni	\$81,162	1.0
Nacogdoches	A L Mangham Jr Regional	\$4,041,172	37.2
New Braunfels	New Braunfels Muni	\$5,141,094	47.4
Newton	Newton Muni	\$8,806	0.1
Olney	Olney Muni	\$6,445	0.1
Orange	Orange County	\$388,999	3.3
Palacios	Palacios Muni	\$67,312	0.6
Palestine	Palestine Muni	\$221,469	1.9
Pearsall	McKinley Field	\$17,157	0.2
Pecos	Pecos Muni	\$3,041,596	29.7
Plainview	Hale County	\$99,982	1.0
Port Aransas	Mustang Beach	\$795,940	6.3
Port Isabel	Port Isabel-Cameron County	\$3,129,163	30.3
Presidio	Presidio Lely Int'l	\$1,169,118	11.5
Rockdale	H H Coffield Regional	\$129,481	1.0
Rockport	Aransas County	\$14,587,774	145.4
Rockwall	Rockwall Muni	\$905,013	8.5
San Antonio	San Antonio Int'l	\$772,628,608	6,621.0
San Antonio	Stinson Muni	\$11,046,538	94.7
San Augustine	San Augustine County	\$28,077	0.3
San Marcos	San Marcos Muni	\$6,301,218	61.3
Shamrock	Shamrock Muni	\$24,288	0.2
Sherman/Denison	North Texas Regional/Perrin Field	\$6,661,069	58.4
Slaton	Slaton Muni	\$119,174	1.1
Snyder	Winston Field	\$5,104,728	43.5
Spearman	Major Samuel B Cornelius Field Airport	\$31,434	0.3

Table 16 cont'd

<i>Associated City</i>	<i>Airport Name</i>	<i>Total Output</i>	<i>Total Employment</i>
Stephenville	Clark Field Muni	\$1,499,035	15.2
Sulphur Springs	Sulphur Springs Muni	\$9,111,582	89.7
Sunray	Sunray	\$8,651	0.1
Sweetwater	Avenger Field	\$733,178	5.9
Temple	Draughon-Miller Central Texas Regional	\$13,321,099	131.1
Terrell	Terrell Muni	\$2,927,886	28.3
Throckmorton	Throckmorton Muni	\$779,708	8.8
Tyler	Tyler Pounds Regional	\$22,507,304	209.0
Waco	Waco Regional	\$31,224,698	290.0
Waco	McGregor Executive	\$7,500,000	71.0
Waco	TSTC Waco	\$784,540	7.3
Weslaco	Mid Valley (Westlaco)	\$10,959,290	121.0
Wharton	Wharton Regional	\$1,411,443	13.5
Wink	Winkler County	\$260,662	2.2
Winnsboro	Winnsboro Muni	\$37,215	0.4

*Airports not shown did not have or did not report capital expenditures for 2006 through 2010.

Appendix A
Texas Airport System Plan Airports Included in the Statewide Economic Impact Analysis

<i>Facility Name</i>	<i>Associated City</i>	<i>Facility Name</i>	<i>Associated City</i>
Abernathy Municipal	Abernathy	Karnes County	Kenedy
Addison	Addison	Skylark Field	Killeen
Alice International	Alice	Kleberg County	Kingsville
Alpine-Casparis Municipal	Alpine	Kirbyville	Kirbyville
Tradewind	Amarillo	Harrison Field of Knox City	Knox City
Chambers County	Anahuac	Hawthorne Field	Kountze/Silsbee
Andrews County	Andrews	Fayette Regional Air Center	La Grange
Texas Gulf Coast Regional	Angleton/Lake Jackson	La Porte Municipal	La Porte
Arlington Municipal	Arlington	Lago Vista TX - Rusty Allen	Lago Vista
Stonewall County	Aspermont	Lamesa Municipal	Lamesa
Athens Municipal	Athens	Lampasas	Lampasas
Hall-Miller Municipal	Atlanta	Lancaster Regional	Lancaster
Bruce Field	Ballinger	Real County	Leakey
Bay City Municipal	Bay City	Levelland Municipal	Levelland
Beaumont Municipal	Beaumont	Liberty Municipal	Liberty
Beeville Municipal	Beeville	Littlefield Municipal	Littlefield
Reagan County	Big Lake	Livingston Municipal	Livingston
Big Spring McMahon-Wrinkle	Big Spring	Llano Municipal	Llano
Bishop Municipal	Bishop	Lockhart Municipal	Lockhart
Jones Field	Bonham	Angelina County	Lufkin
Hutchinson County	Borger	The Carter Memorial	Luling
Bowie Municipal	Bowie	Madisonville Municipal	Madisonville
Curtis Field	Brady	Marfa Municipal	Marfa
Stephens County	Breckenridge	Marlin	Marlin
Brenham Municipal	Brenham	Harrison County	Marshall
Bridgeport Municipal	Bridgeport	Mason County	Mason
Terry County	Brownfield	Upton County	McCamey
Brownwood Regional	Brownwood	Collin County Regional at McKinney	McKinney
Coulter Field	Bryan	McLean/Gray County	McLean
Burnet Municipal Kate Craddock Field	Burnet	Memphis Municipal	Memphis
Caddo Mills Municipal	Caddo Mills	Menard County	Menard
Caldwell Municipal	Caldwell	Mesquite Metro	Mesquite
Cameron Municipal Airpark	Cameron	Mexia-Limestone County	Mexia
Hemphill County	Canadian	Miami-Roberts County	Miami

Appendix A cont'd			
Facility Name	Associated City	Facility Name	Associated City
Dimmit County	Carrizo Springs	Mid-Way Regional	Midlothian/ Waxahachie
Panola County-Sharpe Field	Carthage	Wood County	Mineola/Quitman
Castroville Municipal	Castroville	Mineral Wells	Mineral Wells
Center Municipal	Center	Roy Hurd Memorial	Monahans
Childress Municipal	Childress	Cochran County	Morton
Cisco Municipal	Cisco	Mount Pleasant Regional	Mount Pleasant
Smiley Johnson Municipal/ Bass Field	Clarendon	Franklin County	Mount Vernon
Clarksville/Red River County-J D Trissell Fld	Clarksville	Muleshoe Municipal	Muleshoe
Cleburne Municipal	Cleburne	Munday Municipal	Munday
Cleveland Municipal	Cleveland	A L Mangham Jr Regional	Nacogdoches
Clifton Municipal/ Isenhower Field	Clifton	Navasota Municipal	Navasota
Coleman Municipal	Coleman	New Braunfels Municipal	New Braunfels
Colorado City	Colorado City	Newton Municipal	Newton
Robert R Wells Jr	Columbus	Odessa-Schlemeyer Field	Odessa
Comanche County-City	Comanche	Olney Municipal	Olney
Commerce Municipal	Commerce	Orange County	Orange
C David Campbell Field- Corsicana Municipal	Corsicana	Ozona Municipal	Ozona
Cotulla-La Salle County	Cotulla	Dan E Richards Municipal	Paducah
Crane County	Crane	Palacios Municipal	Palacios
Houston County	Crockett	Palestine Municipal	Palestine
Crystal City Municipal	Crystal City	Perry Lefors Field	Pampa
Cuero Municipal	Cuero	Panhandle-Carson County	Panhandle
Dalhart Municipal	Dalhart	Cox Field	Paris
Dallas Executive	Dallas	McKinley Field	Pearsall
Decatur Municipal	Decatur	Pecos Municipal	Pecos
Del Rio International	Del Rio	Perryton Ochiltree County	Perryton
Dell City Municipal	Dell City	Pineland Municipal	Pineland
Denton Municipal	Denton	Yoakum County	Plains
Denver City	Denver City	Hale County	Plainview
Devine Municipal	Devine	Pleasanton Municipal	Pleasanton
Dimmitt Municipal	Dimmitt	Mustang Beach	Port Aransas
Terrell County	Dryden	Port Isabel-Cameron County	Port Isabel
Dublin Municipal	Dublin	Calhoun County	Port Lavaca
Moore County	Dumas	Post-Garza County Municipal	Post
Eagle Lake	Eagle Lake	Presidio Lely International	Presidio

<i>Appendix A cont'd</i>			
<i>Facility Name</i>	<i>Associated City</i>	<i>Facility Name</i>	<i>Associated City</i>
Maverick County Memorial Int'l	Eagle Pass	Quanah Municipal	Quanah
Eastland Municipal	Eastland	Rooke Field	Refugio
South Texas International at Edinburg	Edinburg	Rio Grande City Municipal	Rio Grande City
Jackson County	Edna	Northwest Regional	Roanoke
Horizon	El Paso	Robert Lee	Robert Lee
Eldorado	Eldorado	Nueces County	Robstown
Ennis Municipal	Ennis	H H Coffield Regional	Rockdale
Fabens	Fabens	Aransas County	Rockport
Brooks County	Falfurrias	Edwards County	Rocksprings
Floydada Municipal	Floydada	Rockwall Municipal	Rockwall
Follett/Lipscomb County	Follett	Fisher County	Rotan/Roby
Fort Stockton-Pecos County	Fort Stockton	Stinson Municipal	San Antonio
Fort Worth Alliance	Fort Worth	San Augustine County	San Augustine
Fort Worth Spinks	Fort Worth	San Marcos Municipal	San Marcos
Fort Worth Meacham International	Fort Worth	San Saba County Municipal	San Saba
Gillespie County	Fredericksburg	Gaines County	Seminole
Duval-Freer	Freer	Seymour Municipal	Seymour
Gainesville Municipal	Gainesville	Shamrock Municipal	Shamrock
Scholes International at Galveston	Galveston	Sherman Municipal	Sherman
Gatesville Municipal	Gatesville	North Texas Regional/Perrin Field	Sherman/Denison
Live Oak County	George West	Alfred C 'Bubba' Thomas	Sinton
Georgetown Municipal	Georgetown	Slaton Municipal	Slaton
Giddings-Lee County	Giddings	Smithville Crawford Municipal	Smithville
Fox Stephens Field - Gilmer Municipal	Gilmer	Winston Field	Snyder
Gladewater Municipal	Gladewater	Sonora Municipal	Sonora
Goldthwaite Municipal	Goldthwaite	Major Samuel B Cornelius Field	Spearman
Roger M Dreyer Memorial	Gonzales	Arledge Field	Stamford
Possum Kingdom	Graford	Stanton Municipal	Stanton
Graham Municipal	Graham	Clark Field Municipal	Stephenville
Granbury Regional	Granbury	Sulphur Springs Municipal	Sulphur Springs
Grand Prairie Municipal	Grand Prairie	Sunray	Sunray
Majors	Greenville	Avenger Field	Sweetwater
Groveton-Trinity County	Groveton	T-Bar	Tahoka

<i>Appendix A cont'd</i>			
<i>Facility Name</i>	<i>Associated City</i>	<i>Facility Name</i>	<i>Associated City</i>
Gruver Municipal	Gruver	Taylor Municipal	Taylor
Hallettsville Municipal	Hallettsville	Teague Municipal	Teague
Hamilton Municipal	Hamilton	Draughon-Miller Central Texas Regional	Temple
Hamlin Municipal	Hamlin	Terrell Municipal	Terrell
Haskell Municipal	Haskell	Throckmorton Municipal	Throckmorton
Hearne Municipal	Hearne	City of Tulia/Swisher County Municipal	Tulia
Jim Hogg County	Hebbronville	Garner Field	Uvalde
Rusk County	Henderson	Culberson County	Van Horn
Hereford Municipal	Hereford	Oldham County	Vega
Higgins-Lipscomb County	Higgins	Wilbarger County	Vernon
Hillsboro Municipal	Hillsboro	McGregor Executive	Waco
Hondo Municipal	Hondo	TSTC Waco	Waco
Lone Star Executive	Houston	Marian Airpark	Wellington
Houston-Southwest	Houston	Mid Valley	Weslaco
David Wayne Hooks Memorial	Houston	Wharton Regional	Wharton
Sugar Land Regional	Houston	Wheeler Municipal	Wheeler
Pearland Regional	Houston	Kickapoo Downtown	Wichita Falls
Ellington Field	Houston	Van Zandt County Regional	Wills Point
Huntsville Municipal	Huntsville	Winkler County	Wink
T P McCampbell	Ingleside	Chambers County-Winnie Stowell	Winnie/Stowell
Cherokee County	Jacksonville	Winnsboro Municipal	Winnsboro
Jasper County-Bell Field	Jasper	Winters Municipal	Winters
Kent County	Jayton	Tyler County	Woodville
Cypress River	Jefferson	Yoakum Municipal	Yoakum
Kimble County	Junction	Zapata County	Zapata

