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AVIATION DIVISION

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November 1, 2001

Mr. Jim Pierce Assistant Town Engineer P.O. Box 9010 Addison TX 75001-9010

Dear Mr. Plerce

I have enclosed a proposed scope of work for a Texas Economic Impact Study for General Aviation in the State of Texas per our conversation of last week. This is not a final scope but is close. We do not anticipate beginning the Study until early next year and should conclude approximately 18 months after the notice to proceed.

Sincerely,

Bruce Ehly

Airport Planner

Enclosure: Texas Economic Impact Study proposed scope



#### WORKSCOPE

#### TEXAS ECONOMIC IMPACT OF GENERAL AVIATION

### Draft - October 12, 2001

#### BACKGROUND

Texas, with 275 general aviation airports and 27 commercial service airports, has one of the largest State airport systems in the country. General aviation plays a key role in providing access to many of the communities and helps to support a variety of commerce, recreation, safety, and community support activities. At the larger commercial service airports, the value that aviation provides the community and the State is often very apparent. At smaller airports, however, many people do not recognize the significant contribution airports make. In addition to being a catalyst for attracting new business to an area, smaller airports support a variety of activities such as agricultural spraying. recreation-related business such as hunting, and serve as a gateway into the community. The Economic Impact Analysis of General Aviation in Texas will gather data for each general aviation airport in the State. Also, general aviation activity at the 27 commercial service airports will be quantified. In addition to businesses located on the airport and visitors, multiplier impacts must be included to accurately reflect the total value of an airport. Airports also are home to a variety of non-quantifiable activities that support health, welfare and safety-related activities in a community. These include police and fire support, environmental/wildlife management, search and rescue, traffic reporting, real estate activity, and recreation.

In addition to being technically sound and based on proven economic theory, the Economic Impact Analysis for General Aviation in Texas will also promote the benefits generated by airports throughout the State. This study will be completed with special emphasis on the value that general aviation and general aviation airports provide to the State. It is anticipated that the study's Executive Summary will serve as a key promotional product of the study. A projection of future benefits will be prepared for a future point in time.

### Study Objectives - The primary study objectives are to:

- 1. Validate existing airport activity levels and provide a projection of future aviation activity (5-, 10-, and 20-year time frames). The projections will be used to estimate the potential change in the overall economic impact of general aviation.
- 2. Quantify the economic impacts associated with general aviation activity throughout the State. These impacts will be expressed in terms of employment, payroll, and economic activity stemming from general aviation airports, general aviation activity at commercial service airports, and visitors using general aviation aircraft.



- 3. Quantify the economic impact for individual airports. Special services such as access to recreation areas (hunting/fishing/etc.), aerial application, etc., will be evaluated, as appropriate. The economic impact for each airport (some low-activity airports may be grouped for convenience of reporting), including various health, safety, and welfare benefits will be summarized. The value of general aviation facilities to expanding and relocating businesses will also be assessed.
- 4. Communicate the study's results in useful and meaningful terms. WSA will prepare a technical report that contains summary sheets for each airport in the State, as appropriate. A high-quality summary brochure will be prepared to convey the importance of general aviation in the State to decision-makers, airport sponsors, elected officials, and interested parties.
- Present the study's process and key findings as needed. The consultant will be able to attend various State conferences and meet with parties as requested by TxDOT. Such meetings may require a supplemental agreement.

Economic Methodology - The economic impacts will be calculated using a methodology that has evolved over the past two decades and is nationally recognized as the standard for conducting economic impact studies of airports. The methodology is consistent with that advocated for use by the Federal Aviation Administration (FAA), and it explicitly follows the FAA-suggested procedures. WSA will develop, implement, and analyze a variety of surveys to collect data to estimate the direct and indirect (visitor) impacts associated with general aviation. The IMPLAN Model, or other similar model, will be used to calculate secondary impacts.

<u>Types of Economic Impact</u> - This study will identify and examine those aviation activities at the airports that create economic impact. These impacts are generated in the following three ways: Direct, Indirect, and Induced (or multiplier). Combined, these three impact types yield the total economic impacts of an airport.

#### SCOPE OF WORK

The scope of work is detailed in the following tasks.

### Task 1: Inventory/Determine Direct Economic Impact

- a. Obtain existing information on the following:
  - General aviation operations;
  - Based aircraft by type;

<sup>&</sup>quot;Estimating the Regional Economic Significance of Airports," Federal Aviation Administration, Washington, DC, 1992.



- Airport tenants (businesses with employees, government);
- Military activity; and
- General understanding of airport business users.
- b. Develop Airport Tenant Surveys inquiring about jobs and local expenditures.
- c. After TxDOT review of the survey, it will be mailed to all tenants/airport sponsors.
- d. Visit select airports after mailing the surveys and conduct follow-up interviews of non-responding tenants, if required. It is anticipated that up to 100 airports will be visited.
- e. Site visits are not anticipated for the limited activity airports or airports that are unattended. WSA will work with TxDOT staff to determine which airports require site visits. Telephone interviews with airport sponsors and mail surveys provide a cost-effective way to obtain needed data for these airports.
- f. An overview of economic conditions in Texas will be prepared. This overview will focus on factors that have a correlation with impacting general aviation activity (population, employment, etc.). This information will be presented for the State both as a whole and as specific regions, as appropriate (perhaps TxDOT regions). This information will serve as a background for future activity projections and highlight the overall economic condition of the State.
- g. Process the collected information and present direct impacts separately for each airport in terms of total jobs, total "direct expenditures," and other non-quantifiable impacts. Direct expenditures at or near the airports consist of the following three general classifications: employment, payroll, and economic activity (sales or expenditure data plus average capital expenditures).
- h. Base data for 2000 and 2001 will be collected to help assess the short-term impact of September 11<sup>th</sup>'s tragic events on the State's general aviation system.

<u>Task 1 Product</u> Direct impacts for the airport in terms of jobs, payroll, and economic activity broken out by business function, as appropriate, at each system airport.

#### Task 2: Determine Indirect Economic Impact

The "Indirect" impacts consist of expenditures by visitors to a community arriving via an airport. The air visitor expenditures are calculated in a manner consistent with the methodology advocated by the FAA that estimates the number of visitors arriving at the airports. An average expenditure rate is developed from the passenger survey. Visitors include general aviation pilots and passengers.



- a. Estimate airport visitor expenditure characteristics, according to the following:
  - Number of arriving visitors per year;
  - Average visitor length of stay in the region;
  - Average visitor expenditure by general expenditure type (i.e. food, lodging, entertainment, ground transport, retail sales, business, etc.);
  - Much of this information will be collected via a General Aviation Air Passenger Surveys To understand the type of transient general aviation visitors who use the airports, a transient pilot survey will be conducted that gathers information about the transient user's trip, purpose, persons per aircraft, length of stay, and average daily expenditures. The FBOs at select airports(airports visited in Task 1) will be asked to assist by distributing the surveys to GA pilots at the FBO counters. Surveys, supplies, and return envelopes will be provided to the FBOs for their return of the completed transient user surveys. In addition, discussions with the FBOs and other knowledgeable parties will be used to further understand how local businesses use the airports.
- b. Estimate the impacts associated with any other airport-dependent operations. Such businesses are typically located off-airport and depend on the airports to either ship final goods and/or receive manufacturing imports, and/or receive critical spare parts. A Non-Aviation Business Survey will be developed and distributed to up to 5,000 area businesses to assess this important impact.
  - <u>Task 2 Product</u> Indirect impact totals broken out for each airport. Direct and indirect impacts will be discussed as First-Round Impacts.

### Task 3: Determine Multiplier Economic Impact

The specific approach for estimating the induced impacts associated with the State's airports is outlined below:

- a. Obtain Texas-specific IMPLAN model multipliers. For this study, Statewide multipliers will be adequate to assess individual airports as well as total statewide impacts.
- b. Summarize the aviation "final demand" impacts (i.e. the direct and indirect impacts) for each airport and the State by corresponding impact category.
- c. Evaluate the model output and compare with inputs for soundness.



#### Task 3 Product

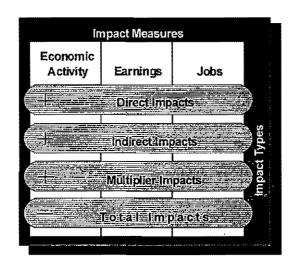
Quantified multiplier impacts broken out by impact type (expenditures, payroll, and jobs) and by airport and summarized for the entire State. Less active airports with no tenants will be combined into an "Other Airports" category. The importance of these airports with regard to access, recreation, etc., will be stressed in the report. WSA will work with the State to determine what airports should be assigned to this category.

### **Task 4: Determine Total Economic Impacts**

The output of the model will enable the presentation of total economic impacts in terms of the following three economic impact measures, defined below: 1.) Economic Activity (Output); 2.) Earnings (Payroll plus benefits); and 3.) Jobs.

- <u>Economic Activity</u> Economic activity (output) is defined as the sum of earnings, expenditures, and average capital outlays.
- Earnings The sum of the wages and benefits paid to all employed persons that can attribute their jobs to the airport. Earnings impacts are always included in the Economic Activity totals; therefore, they should not be summed with the Economic Activity impact.
- <u>Jobs</u> The number of employees who are employed as a result of the airports' activities, plus the aviation-oriented share of those that are employed in sectors that support the air passenger (hotels, restaurants, etc.), plus those employed in the industries included in the multiplier effect impacts.

These three impact measures are inter-related, but must be expressed separately. The total economic activity, earnings, and job impact measures are comprised of direct, indirect, and induced (multiplier) impact types, as shown below:





#### Task 4 Product

Presentation and interpretation of total impact findings, including a detailed breakdown and analysis of each impact component for both airports.

### Task 5: Forecast Activity

This focus of this task will be to update the forecasts for general aviation activity at Texas general aviation airports. In addition, general aviation activity at the State's 27 commercial service airports will be reviewed. Projections will be prepared for the 5-, 10- and 20-year time frames. Base data will be collected during the inventory effort discussed above. Existing TxDOT projections, as well as available master plans, FAA Terminal Area Forecasts, and other planning studies, will serve as a base for these projections. It is anticipated that TxDOT will supply copies of all relevant studies. Projections may be developed based on regional trends, airport functional use, or other system levels of planning detail. Projections will be prepared for operations (local and itinerant) and based aircraft. Fleet mix projections will also be prepared. This task can be initiated following the completion of the inventory effort.

#### Task 5 Product

This information, including all text and tables, will be presented in a stand-alone chapter. This chapter will be considered an overview of aviation activity in Texas and will serve as an update to previously completed forecasts.

### **Task 6: Estimate Future Impacts**

It is very likely that many Texas airports will experience an increase in aviation activity over the next 20 years. The potential economic impact for the forecast years (5-, 10-, and 20-years) will be developed based on projected operational activity, proposed capital improvements, and changes in airport roles that may be identified in the State's system plan.

<u>Task 6 Product</u> Future economic impacts will be expressed as employment, payroll, and economic activity. Non-quantifiable impacts resulting



to area businesses will be discussed for such impacts to the extent possible.

### Task 7: Produce Report

The results of the airport economic impact study will be documented in a final Technical Report. Draft versions will be presented to TxDOT for review and approval. In addition to total impacts, the Technical Report will include the following:

- a. A description of the study approach, the study methodology, fieldwork, the survey process, the Regional Input-Output Modeling System, and impact findings, as outlined above.
- b. Airport operational and based aircraft data
- c. The impact findings will be presented in a series of tables and charts as discussed above.
- d. An individual data sheet(s) will be prepared for study airports that will highlight the benefits provided to its local community. This information will be useful for airport stakeholders to show the overall value the airport has. Non-quantifiable benefits, such as life flights, ag spraying, search and rescue, police/fire, etc., will be discussed as appropriate for each airport. Specific examples of business use at each airport will also be presented, as appropriate. Limited use and/or unattended airports will be combined into one section that discusses the cumulative benefits of this group. Individual airport summary sheets will not be prepared for these airports. This group will be identified in Task 1.
- e. All individual airport economic impacts will be combined to show the total value general aviation has in the State of Texas. A table will be prepared to show the projected economic impact as indicated by the forecasting effort.
- f. To the extend practical, the short-term impact to the State's aviation system from the events on September 11 will be assessed. Base data for 2000 as well as 2001 will be compared. It is possible that any decline of activity between the two years may be attributed to a reduction in flying following September 11th. WSA will discuss this data with TxDOT as it is obtained to determine the most prudent way to present.



Task 7 Product

An electronic file and 50 comb-bound copies of a report will be provided. This information will facilitate decision-making and promote the value of the airports.

### **Task 8: Produce Summary Brochure**

A full color Summary Brochure (12 to 16 pages) will include an abbreviated description of the study methodology that is concise and easily understood. Similarly, other pertinent information from the Technical Report will be included in the brochure. Draft versions will be presented to TxDOT for review and approval. Specifically, the summary will include the following:

- A public relation- oriented narrative describing the direct, indirect, and multiplier impact types measured in terms of economic activity, earnings, and jobs;
- b. A short description of the study approach, methodology, fieldwork, survey process, and multiplier model; and
- c. Graphs, charts, tables, pictures, and maps that clearly illustrate study findings.

<u>Task 8 Product</u> 3,000 copies of a stand-alone Summary Brochure that presents the study findings.

#### Task 9: Client Meetings/Coordination

The Consultant will meet with TxDOT as required. This will include an initial meeting at the beginning of the study to review methodology, specific concerns, and ideas, as well as to collect all pertinent study materials. Four additional meetings are anticipated to review material and discuss the findings throughout the study effort. A final meeting and formal presentation will be scheduled to present the findings of the study. Additional meetings may require a supplemental agreement.

Task 9 Product

Up to six meetings are planned throughout the project to discuss progress, findings, and product development. WSA will supply all necessary handouts, presentation materials, etc.



# STUDY SCHEDULE

## **Months from Start**

