

**Nebraska Department of Aeronautic's
Economic Impact Packet
July 1999**

Thank you for your interest in our package on economic impact. This information was prepared in an effort to help small general aviation airports estimate the impact they have on their local economy.

Acknowledgements

In starting we need to acknowledge that this package is a compilation of information from a variety of sources. If this process is interesting to you we would urge you to obtain and review one or more of the following resources.

AOPA's "Airports Then & Now: A Guide to Obtaining Community Support For Your Local Airport" is a tremendous resource for an airport proponent. It does a very good job of explaining for the layman the basics of economic impact analysis for an airport, as well as providing ideas for the organization of an airport support group, how to handle public relations, and airport planning.

A source that goes into much greater detail in the preparation of an economic impact analysis is a 1992 DOT Report entitled "Estimating the Regional Economic Impact of Airports".

Finally, an Eckrose/Green Associates publication, "How to assure the Future of Your Airport", is another good resource for the airport proponent. This publication was sponsored by NASAO in 1988. If you can find a copy, you will find it very helpful.

Process

In reviewing the information provided by the above sources, as well as many others, it was apparent that development of an economic impact analysis consists of several phases.

1. Direct Impact

The first phase is to determine the direct impact that airport businesses have on your local economy. In this situation the direct impact is defined as economic activity that stems directly from the airport. This would be payroll, business expenses, taxes, etc. that are generated by the businesses and entities located on the airport.

To assist you in figuring out what these impacts are you will need to survey each business or entity on the airport. When you do surveys make sure you consider all entities on the airport. FBO's, independent mechanics, painters, upholsterers, ag sprayers and even the airport owner (city, county, authority, etc.). The survey form attached will help you collect the information you will need to do the analysis.

When you do your survey, we would suggest that if at all possible you do it with an interview format. You will end up with a much better feel for the numbers and some of the intangibles of the business if you will do it this way rather than just handing someone a form and trying to interpret their responses later.

When all of your surveys are done you need to total them into an annual total direct impact. Please make sure that your numbers are in annual costs.

2. Indirect Impact

The second phase is to try to get a feel for what kind of indirect impacts your airport has on the community. What is indirect impact? Indirect impact is money that comes to your community through the airport, rather than being generated directly at the airport. Indirect impacts are expenditures made off airport as a result of the use of the services the airport provides.

Examples of indirect impacts would be:

- the hotel rooms the pilot and/or his passengers rent when they stay overnight,
- The cost of the meals they eat,
- Their entertainment while in town,
- Supplies they purchase.

In addition to the examples above, when a doctor comes to town for a clinic patients travel to your community to visit them. The money they spend in town is also an indirect impact. If you have a manufacturing facility in your town and corporate representatives fly in to check on the plant, there is some indirect impact in the jobs that are created by the easy access to their facility that the airport provides.

This is a phase in which you are going to have to brainstorm, you are going to have to use your imagination! How is your airport used and how does that affect your town? The following questions might get you started:

- How many operations, total and itinerant, occur at your airport per year?
- Who uses the airport?
 - Package services?
 - Doctors?
 - Life flights?
 - Charters?
 - Corporates?
 - Tourists?
 - Military?
- Do people come to your community for a day?
- Do they stay overnight?
- Do they typically stay for several days?
- Do they meet with one person or many?
- Do people come to your town to meet with those who fly in?
- What comes to your town through the airport?

- Critical parts so the assembly line keeps moving or the farmer keeps working?
- Rapid package deliveries?
- Bank check transfers?

While all of these things are kind of intangible they all serve you when you move to the next step, which is choosing a multiplier for calculating induced impact.

3. Induced Impact

What is induced impact? Each one of those direct dollars that you determined above, and each one of the indirect dollars that comes to the community through the airport circulates through your economy. For example, if one of these dollars is spent at the local hotel, then the hotel operator has an additional dollar, that came through the airport, to spend for materials at the lumber yard, or for supplies, or for wages. In turn, the lumber yard has a portion of that dollar to pay wages or buy additional merchandise. The hotel employee has part of that dollar to spend at the grocery store or to buy shoes or pay bills. In turn, now the grocery store has a fraction of that dollar to pay their wages or to advertise their specials. As you can see, the dollars continue to circulate through the economy.

How long do the dollars circulate? A very conservative multiplier for induced impact might be less than one, a very optimistic multiplier might be as high as seven. Some detailed analyses apply different multipliers to different kinds of impact. For the purposes of the examples shown we have used a conservative multiplier of 2.

4. Formulas

Finally, plug your total direct impact and your operational numbers into the formulas provided. When you get done you should have a range of total impacts. Some will be very conservative, others will be very optimistic. What you present to people is up to how comfortable you are with what you have done.

For each of the following formulas we used the same basic information so that you can get a feel for how the different formulas vary in their output.

EXAMPLE Airville Airport

Annual operations	\$ 8,000
Local	6,000
Itinerant	2,000
Direct impact	\$500,000

Sample Formula #1

This formula assumes that at a small GA airport itinerant operations do not generate enough indirect impact to count. It also assumes a very conservative multiplier for induced impact.

Direct	\$500,000
Indirect	\$ 0
Induced (.5xDirect)	<u>\$250,000</u>
Total Impact	\$750,000

Sample Formula #2

This formula assumes that indirect impact equals ½ of direct impacts, regardless of airport operations. It also assumes that induced impacts equal 2x Direct plus 1X Indirect.

Direct	\$500,000
Indirect (.5xDirect)	\$250,000
Induced (2.5xDirect)	<u>\$1,250,000</u>
Total Impact	\$2,000,000

Sample Formula #3

This formula calculates indirect impact based on operations, an average number of 2.5 passengers\GA flight and an assumption that the average passenger will spend \$70 while in your community. For the purposes of this formula you may choose to vary the average number of passengers and the dollars spent based on your experience and knowledge of your airport.

You may also choose to vary the multiplier in the calculation of the induced impact.

Some propose a range from 2 to 7. This example uses a conservative multiplier of 2.

Direct	\$ 500,000
Indirect	
2,000 ops/2 = 1,000 arrivals	
1,000 arrivals x 2.5 pax/arrival	
= 2,500 people	
2,500 x \$70/day	\$ 175,000
Induced	
(Direct+Indirect)*multiplier	
\$675,000 *2	<u>\$1,350,000</u>
Total Impact	\$2,025,000

Sample Formula #4

This formula is very similar to #3, with the following revision. Some people will travel to your community and stay for the day, some will stay for more than one day. This formula suggests that, on average, 1/3 of your passengers will stay for 3 days; the remaining 2/3 will come to town, do their business and leave that day.

Again, you may choose to the average number of passengers, the dollars spent/day, the fractions (1/3-2/3) of those who stay, the average length of stay and the induced impact multiplier based on your experience and knowledge of the airport.

Direct	\$ 500,000
Indirect	
2,000 operations/2 = 1,000 arrivals	
1,000 arrivals x 2.5 pax/arrival = 2,500 people	
Assume 2/3 arrivals stay	
only for the day, 1/3 stay 3 days	
2,500 x .66 x 1 day x \$70/day	\$ 115,500
2,500 x .33 x 3 daysx \$70/day	\$ 173,250
Induced	
(Direct+Indirect)*multiplier	
\$788,750 * 2	<u>\$1,577,500</u>
Total Impact	\$2,366,250

Conclusion

We have done a lot of research over the years and what you have just read is a very simplistic presentation of what we have learned. Please, use this information in the spirit in which it was intended. We are not economists, nor are we in the business of analyzing airports for their value. But we are very interested in aviation and we understand how important an airport is to a community. We believe that you probably feel the same way. Perhaps our work, and yours, will help educate others as well.

Sample Survey

As the first step in trying to estimate the economic impact our airport has on the local economy we are conducting a survey of all aviation business entities located on the airport. Your answers to the following questions will be invaluable in assessing the total value of aviation and the airport to our community.

Please understand that we do not need exact numbers or details about your business. We realize that is your business. Any approximate or ballpark numbers you provide will never be published by business but will be lumped together with similar information from all other businesses on the airport to give us a feel for approximately how much money flows into our economy directly as a result of the airport.

1. How many employees do you have at the airport?

2. What is your approximate annual payroll at the airport?

\$ _____

3. Do you employ additional people off the airport who are integral to your operation on the airport?

4. If so, what is the annual cost of those additional employees?

\$ _____

5. What are your typical annual business expenses at the airport?

Building rental/lease	\$ _____	
Pad/apron lease	\$ _____	
Utilities	\$ _____	
Office supplies/equipment	\$ _____	
Tax/accounting services	\$ _____	
Fuel costs	\$ _____	
Parts	\$ _____	
Insurance	\$ _____	
Materials/chemicals	\$ _____	
Miscellaneous	\$ _____	
Advertising	\$ _____	
Total business expenses		\$ _____

TOTAL DIRECT ECONOMIC IMPACT

\$ _____