ESTIMATING ECONOMIC IMPACT OF A NON-HUB AIRPORT L. McCarthy Downs, III, Aviation Planning Associates, Inc.

#### Summary

Over the past few years numcrous studies have been prepared to determine the economic impact of various airports around the country. The Air Transport Association has conducted several of these projects at major air carrier airports and various other groups and local commissions have completed similar analyses.

The vast majority of these studies have been completed for large and medium hub airports. Very few have been conducted at the numerous nonhub air carrier facilities and large general aviation airports. However, it is these smaller terminals that most need to convince the local community of the importance of having a convenient, well maintained airport. The larger airports are in no real danger of being closed as a result of high property taxes, failure to operate at a profit, rising personnel costs and other problems facing the smaller single carrier and general aviation airports.

# The Airport As A Business

Many communities view an airport as merely another department or function of a city's or county's government. It is not recognized as an operation that can and should be managed as a business. As in the case of any large business, a community benefits from the presence of an airport for reasons such as:

- A service is provided.
- · Jobs are created.
- The local tax base is increased.
- The need for various services and supplies is expanded. (1)

Like other businesses, an airport facilitates the day-to-day operation of other firms in the community, including those located both on and off the airport. There are several different types of businesses which work together at an airport. These can be grouped into two separate categories, the providers of services and the users of services. Also impacting the economy is the airport operator and various government employees at the airport. Each of these groups impacts the economy of the community, and each will be discussed in detail.

#### Providers Of Services

Depending on the airport's size, there can be many different types of businesses providing service at the facility. These charge fees to the users and spend money for other supplies and services in the local area. They include:

Air carriers providing regularly scheduled passenger and/or cargo service and occasional charter activity. Airline revenues are derived from passenger ticket sales, cargo shipments and mail contracts. Expenditures are made for payrolls, supplies, terminal building office rentals, landing fees, fuel, utilities, maintenance, various taxes and capital investments.

- Air freight operators which work with existing carriers or have their own aircraft. Revenues come from shipping fees while expenses are similar to those faced by air carriers.
- Fixed base operators (FBO) typically offer flight training, aircraft sales, charter, maintenance and storage services as well as providing fuel sales. At some smaller airports, the FBO also serves as the airport operator. Revenues are derived from the above services with expenses similar to those paid by the airlines.
- Concessionaires provide numerous specialized goods and services to the various airport users. Revenues come from the sales of these merchants which include restaurants, newsstands, automobile rental agencies, pilot accessories, barber shops, etc. Expenditures include employee payroll, rents for space occupied, equipment and supply purchases and capital investments.

### Users Of Services

In addition to the providers of service an an airport, the users also increase the economic impact of the facility on the community. The users consist of the following:

- Local companies and the general public obtain "revenues" from the airport through saving time and travel expenses as a result of the airport's location.

  Shipping expenses can also be reduced while the sales are increased for companies because of the time savings. Expenditures for air travel and shipping are received by the airport, the airlines and its concessionaries and various taxes and other fees are collected from those companies which located in the community because of the presence of the airport.
- Aircraft owners including private individuals, corporate owners and government agencies like the category above, increase revenues (or decrease expenses) by saving time and expense related to air travel. Expenditures at the airport, its concessionaires, the FBO and the community occur due to landing fees, various taxes, aircraft storage and maintenance fees and fuel charges. Some corporate and government users also maintain their own aviation departments on the airport thus increasing jobs in the community.
- Commercial (non-aviation) tenants are firms which locate at the airport for reasons such as convenience, availability of office space and/or proximity to other companies. Expenditures are related to supplies, payroll, taxes and capital equipment and improvements.

While the revenues and expenditures of users of airport services may be difficult to quantify in an economic impact study, they should be estimated where possible and at the very least discussed since

the presence of the airport directly relates to the success of the users in being able to fulfill commitments and increase revenues for themselves and the community.

## Airport Operator And Others

The airport's management and other government agencies that might be located on the airport such as the Federal Aviation Administration, the National Weather Service, the Postal Service, and any military organizations pump dollars into the local economy in the form of payrolls and expenditures for supplies, services and capital items. Revenue from the various airport tenants and users also enter the economy through these groups as a result of the airport's existance.

# The Impact Of An Airport

The various groups discussed in the previous section combine to form the economic base of an airport. Their impacts on the community can be broken down into three separate groups: direct impacts, indirect impacts, and induced impacts.

#### Direct Economic Impacts

These impacts are associated with airport related dollars that flow directly into the local economy and are obtained through various surveys of airport employees and firms. Direct impacts from the various airport users and providers of service result from the following: employment and payroll, capital expenditures, expenditures for supplies and services, and local taxes paid.

Using statistics collected by various federal government agencies, the breakdown of an individual's or company's expenses can be estimated. For example, the Bureau of Labor Statistics of the Department of Labor makes estimates of high, moderate and low family budgets for major cities in the United States. The Fall 1980 composite U.S. moderate level budget is shown below: (2)

Expenditure for:	Percent of Total Budget
Food	24.1 percent
Housing	22.1
Transportation	9,2
Clothing	5.6
Personal care	2.0
Medical care	5.6
Social Security and disability payments	6.2
Personal income taxes	16.3
Other	8.9
	100.0 percent

By applying the above percentages to the total income of all employees at the airport, the total spent by the families of the employees for the above items can be estimated.

# Indirect Economic Impacts

While these cannot usually be traced directly to the airport, it must be assumed that the presence of an airport in a community has an indirect effect by attracting tourists, businesses, and industries. These groups then contribute directly to the economy through purchase of food, shelter, transportation, etc. Using passenger data obtained from the airport's

records and surveys of neighboring businesses, assumptions can be made regarding the indirect impact of the airport. An understanding of the importance of the facility can be obtained by asking questions such as "Was the airport a factor in deciding where to locate?", and "If the airport were to close, would the firm be likely to move also?"

### Induced Economic Impacts

Induced impacts are associated with the "multiplier effect", an economic principle that provides an estimate of the total amount of respending. According to the multiplier effect, every dollar expended is "recycled" by trade, or multiplied by some factor, to generate additional dollars of income or revenue. (3) The factor has been estimated to be as much as five times the initial dollar spent; however, the Air Transport Association has conducted several economic impact studies and uses a conservative multiplier factor of two. (4) Based on the ATA's experience in the area it is suggested that others performing these studies use a similar multiplier, unless a comprehensive study can be undertaken to determine the actual multiplier.

An example of the multiplier effect is the way airport related construction expenditures in the community increase employment and payroll in the local construction industry. The lengthening of a runway may require more heavy equipment and operators, thus increasing sales at the equipment distributor, thus causing the distributor's income to rise which is in turn invested in other segments of the economy.

#### Raising The Economic Impact

In surveying the various groups used to estimate direct impacts, it is important to ask what, if anything, can be done to increase the level of business and use of the airport. Suggestions for improving the level of activity at an airport, particularly a small one, will generally fall into one or more of three areas: facilities, services, and management.

### Facilities 5 4 1

Airside and landside improvements which increase the capacity and utilization of an airport can have a major impact on a community. Longer runways which can accommodate the larger aircraft used by the airlines and large corporations can usually be justified by the amount of dollars that the community can expect from the improvement. Longer runways coupled with improved navigation aids frequently result in greater utilization of the airport during poor weather.

Increased terminal building capacity and parking areas might also raise the use of the airport thus increasing its importance. Detailed feasibility studies will usually estimate the benefits expected as a result of a planned terminal improvement program. Another landside improvement may be the development of an industrial park at the airport. Light, clean industry that uses air transportation and which is not affected by the higher noise associated with an airport can not only increase the revenues of the airport, but also greatly expand the economy of the entire area.

#### Services

At an air carrier facility, increased service by both large and small airlines often results in increased use of the airport, thereby impacting favorably on the local economy. On occasion, air carriers are precluded from operating at an airport because of insufficient market size, short runway, inadequate terminal facilities, etc. Also, before air service at an existing facility can be increased, the community must be supporting the current level of service.

Those airports which cater strictly to general aviation interests can also improve their services. The fixed base operator (FBO) is usually the key to improved service at such an airport. The FBO supplies fuel, accessories, maintenance, leasing and charter services, flying lessions, etc. If the FBO is not operating at full capacity, not providing dependable services, and/or is charging excessive fees, aircraft owners may decide to take their business elsewhere.

A good FBO can be a major attraction device for aviation activity while a poor FBO or the lack of one may be causing an airport to fail to realize its full economic potential.

#### Management

Airport management is another key to economic activity. The way an airport is run has a significant influence on the type and number of users an airport will attract.

If the airport continually raises user fees, is lax about snow removal, is slow to maintain facilities, or provides poor security of private property, airport users will quickly relocate to more suitable facilities. Often the city or county which operates the airport requires the airport manager to recover all expenses of operating the field through user fees. Unfortunately, the higher user fees may be driving business away, business that would give far more to the community than could be recovered from the increased fees.

# Presentation And Use Of Findings

Too often the result of economic impact studies is merely a chapter in a larger document such as a master plan, system plan or some type of financial feasibility study. The results are not presented properly to the public nor are they fully understood. To be effective, the results should be properly published and distributed.

### Report Preparation

Ideally, two complete reports should be prepared discussing the methodology and findings of the economic impact study, one a technical document and the other a summary.

The technical document, produced in limited quantities, should thoroughly outline the approach used in the study to determine direct, indirect and induced economic impacts. Copies of survey forms should be presented and a tabulation of the answers should be provided. Assumptions relating to indirect and induced impacts must also be presented. The technical document should serve as backup for the shorter summary report.

The summary presentation should be professionally prepared in the form of a brochure or small booklet. The Air Transport Association generally uses a one page, high gloss, multicolor brochure

which is folded and can be easily distributed. Tables, graphs and other exhibits will generally facilitate review of the material. If possible, areial and ground level pictures of the airport and its use should be included. Color, although expensive, comes across well. The summary report can be a one page document or three to four pages.

#### Distribution And Use Of Findings

After preparing the reports, a presentation of the findings should be made public at an open city or county council meeting or some other appropriate gathering where the media will be present. A small airport may not be able to generate enough interest on its own. The summary document should be distributed to area businesses, particularly those located in the vicinity of the airport. Any newspaper articles on the findings will also be useful. Local, state and federal employees connected with the airport and all elected officials should be given information about the study.

Economic impact studies have been useful in convincing community leaders of the value of an airport, helping to secure funds for airport growth, attracting new devleopment to the community and combating attempts by groups wanting to close the airport. The airport might have prepared the study for one specific application or merely to generate additional support and interest for the facility in the community.

#### Conclusion

The small air carrier/large general aviation airport is a major asset. Most of those connected with aviation realize the importance of the facility to the local community, the state and even the nation. While an economic impact study is useful in helping to educate those less familiar with the airport as to its benefits, the project can only be one part of a larger public relations effort. However, a study of the type discussed here (or one similar) should be undertaken by every small non-hub airport, especially where its future is questionable because of lack of community support. On more than one occasion, an economic impact study has proven useful in helping to awaken a community to the value and benefits that can be derived from its airport.

#### References

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