

BUREAU OF BUSINESS AND ECONOMIC RESEARCH
UNIVERSITY OF NEVADA, RENO

BOULDER CITY MUNICIPAL AIRPORT

NEVADA GENERAL AVIATION AIRPORT ECONOMIC IMPACT STUDY

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Boulder City Municipal Airport

EXECUTIVE SUMMARY

This report presents the results of the Economic Impact Assessment survey for Boulder City Municipal airport that was commissioned by the Nevada Department of Transportation. This study was conducted by the Bureau of Business and Economic Research (BBER) at the University of Nevada, Reno, between October 2003 and March 2005. The aim of this study was to assess the economic effect of airport general aviation visitors, tenants and businesses on the local economy. It stands to reason that if the airport did not exist, that the direct and total impacts on the economy in inputs and employment would not exist in the greater community.

To achieve the goal of the survey, the project approach included the following steps:

- Surveying spending by visitors
- Annualizing the survey results to estimate a total yearly spend by visitors
- Alternative estimation of visitor spend when no surveys were received
- Collection of airport operations payroll and employment information
- Pro-rating estimate for airport tenants when a less than 100% return rate was received
- Alternate estimate of payroll, employment, and gross sales by airport tenant businesses when no surveys were returned
- Surveying airport tenants, where applicable, for information on employment, payroll, and gross annual sales
- Conducting economic modelling using IMPLAN to estimate the total economic values contributed to the community by the airport

Analysis of the data shows that on aggregate, the direct output impact was \$11,521,979, the direct employment impact was 150.8, and the direct labor income generated was \$4,264,708. Once the economic multiplier effect is added in, the total output effect is \$18,639,665, the total employment impact was 221.9 employees, and the total labor income generated was \$6,785,154. The complete breakdown, and explanation of the economic processes, is included in the analysis section of this paper. All the information presented has been annualized based on the 2000 NDOT measurements of itinerant visitors to the area.

INTRODUCTION

The Nevada Department of Transportation entered into a contract in October 2003 with the Bureau of Business and Economic Research (BBER) at the University of Nevada, Reno in order to assess economic benefits to communities and the state from general aviation activity. Twenty-five airports were surveyed in total, using a variety of survey instruments to capture direct and indirect expenditure by general aviation users of these airports. This analysis should provide insight for airport authorities and other local economic development agents to help make decisions to benefit the airport and the community at large.

The following report for Boulder City Municipal airport presents a brief explanation of the methodology that was used to collect the data, as well as a review of IMPLAN, the economic model that was used to compute the economic impact from the survey data. Report findings for Boulder City Municipal airport are presented and analyzed after the methodology discussion, while the

appendix contains examples of the survey instruments that were used for the data collection, as well as comments provided by survey respondents, if any were provided.

METHODOLOGY- SURVEYS

Two different surveys were used to measure the economic impact of general aviation activities on the local communities. All submitted information, either from individuals or from companies, was kept confidential and will only be presented in aggregate form in the results section of this paper.

- Airport Tenants Survey

Businesses on airport property are an important part of the revenue stream of any airport, though not every airport had tenants on the premises. Each airport manager was contacted to determine which airports did, in fact, have tenants, and then these businesses were sent a survey to complete. The Airport Tenants Survey sought to determine the level of employment and payroll, operating expenses, gross sales, as well as money spent for major capital improvements at the airport. This information is important to understand how tenants at the airport bring money into the community by existing at the airport, as well as determining how they support airport capital improvements.

- General Aviation Visitor Survey

The General Aviation Visitor Survey was used to find the general level of expenditure in the area by general aviation visitors. Visitors were asked to estimate on a per-day basis the amount of expenditure they made on hotel/motels, food and beverage, rental cars, entertainment, recreation (such as golf, skiing, hunting, etc), airport services (such as fuel, maintenance, parking fees), and a category for other expenditures. Surveying of the visitors took place using airport personnel who had good contact with visiting pilots. All effort was made to survey visitors during the busy summer travel period, however this was not possible in all instances.

METHODOLOGY- DATA ANALYSIS

The survey data was initially entered into an Excel database by airport, month, and survey type. Estimation for visitor spend per surveyed period was found by averaging the visitor responses collected in each category and then multiplying each number by the estimated number of itinerant visitors for an airport. The itinerant visitor information was obtained from the NDOT General Aviation Aircraft Operations Forecast. The base year of 2000 figures were used because these figures were the basis for forecasts through 2020 and were more likely to correspond to actual, observed operations and therefore be more accurate than projected figures.

For the airports that did not return any visitor survey information, either due to lack of communication with airport authorities or lack of services at the airport, visitor spending information was constructed using information from similar sized airports that had a good response rate. Boulder City Municipal had a good visitor survey response rate, and this data was assumed to be a good representation of general aviation visitors spending in the area. A few comments made by visitors can be found in the Appendix and the end of this report.

Unfortunately not all information was returned from all tenants at all airports. Some large airports with significant tenant populations, such as Carson City, required independent estimation of tenant output in order to accurately assess the true economic effect of the airport. Using Department of Employee Training and Rehabilitation (DETR) data, information on tenant payroll and employment was pulled, where available, and then plugged into the IMPLAN model. IMPLAN, in turn, estimated the total and direct output, total employment, and total labor income, based on the data provided for both. The resulting model output was then scaled to best represent conditions in the local area. This procedure was used for Boulder City Municipal Airport, as not all tenants reported their information.

METHODOLOGY- ECONOMIC IMPACT ASSESSMENT

Once the survey data was formatted by survey type, survey time period, and industry, the information was entered into IMPLAN (Impact Analysis for PLANning) economic modeling software. This software is nationally recognized as a standard economic impact assessment tool, and is used extensively by regional economists. IMPLAN is based on input-output accounting of the flow of goods and services from producers to intermediate and final consumers. Economic impact models built using IMPLAN assess the economic relationships between producers and suppliers in the study area. In this instance, an IMPLAN model will quantify the economic benefit of businesses located at the airport as well as the stimulation provided by external visitors to the airport, on the local economy.

The economic data derived from the IMPLAN model is reported as direct, indirect, induced, and total economic effects. A good analogy to explain economic impact of a single industry in a community is that of a rock thrown in a pond. Money spent directly on goods and services on the industry in question ripples into the broader economy due to the multiplier effect. Supplier industries receive money and in turn spend the money on their own suppliers. Employees at both the direct and indirect companies in turn spend their wages on local services and goods, stimulating other parts of the economy that have no relationship whatsoever to the initial directly-impacted industry.

Direct effects refer to the direct output (gross sales) and employment of the industries affected by spending from visitors that flew in to the airport and by businesses operating at the airport, including the airport operation. In this survey those industries were hotel/motel/lodging, restaurants/ food and beverage, car rental, entertainment (including gambling), recreation, airport services, airport tenants and others. The yearly average spend by visitors on each sector was plugged into the IMPLAN model, which then applies county average information regarding employment, wages, and gross sales by industry. The total direct output (gross sales), employment, and labor income data given by the model are a sum of the seven industries directly impacted by airport visitors. Airport tenant data (business and airport operation payrolls and other expenditures) was inputted by NAICS code, and corresponding IMPLAN code, to retrieve the same information.

Indirect effects measure the economic value supplying industries in the area receive when direct industries spend some of their revenue on goods needed to keep their business operating. These industries also need employees as well. IMPLAN calculates the total output (gross sales), employment, and labor income for these industries as well.

Induced effects accrue when workers in the direct and indirect industries spend their wages on local goods and services. These expenditures in turn stimulate other sectors in the local economy far

removed from the industries where the initial visitor's dollar, and that of the airport tenant, if applicable, was spent

Total effects are the sum of direct, indirect, and induced effects. These represent all transactions attributable, either directly or indirectly, to visitor activity and business operations at the airport under study.

ECONOMIC IMPACT ESTIMATES AND ANALYSIS

Boulder City was a larger airport that reported tenant information. The economic impact of the tenants on the airport is given in Table 1. Table 2 presents the economic impact solely from visitors to the area, while Table 3 is the aggregate of the tenant and visitor information.

Table 1: Tenant Economic Effect Estimates: Boulder City Municipal Airport

	Output	Employment	Labor Income
Direct	\$3,243,629	35	\$1,193,236
Total	\$5,556,858	59.1	\$2,030,401

Table 2: Visitor Economic Effect Estimates: Boulder City Municipal Airport

	Output	Employment	Labor Income
Direct	\$8,278,350	115.8	\$3,071,472
Total	\$13,082,807	162.8	\$4,754,753

Table 3: Aggregate Economic Effect Estimates: Boulder City Municipal Airport

	Output	Employment	Labor Income
Direct	\$11,521,979	150.8	\$4,264,708
Total	\$18,639,665	221.9	\$6,785,154

These figures show that the presence of the airport, and the services it provides to an estimated 15,000 itinerant visitors per year, injects an estimated \$11,521,979 per year into the local economy in the sectors of airport services, lodging and food expenditures, rental car services, and recreational activities in the Boulder City area. When all economic effects are accounted for, the airport helps generate \$18,639,665 into the local economy, while supporting about 221.9 employed positions in the greater economy. Those employees in the sectors directly related to the airport gain \$4,264,708 a year from their jobs. Boulder City Airport's aggregate total economic output represents 6.7% of the state-wide total output of \$275,503,316.

The impact generate by the airport as well as by employee spending is most likely kept within the Boulder City area, though the close proximity of Boulder City with Henderson and Las Vegas, not to mention sites in Arizona, suggests that some of the economic benefit of the airport may "leak" into these other communities, and not stay wholly in the Boulder City area as it would in smaller, more isolated areas. Additionally, the tenant impact at this airport is quite significant, and reflects some

involved tenants at the airport, specifically the skydiving tenant, which brings “visitors” to the airport who may otherwise never need to venture to Boulder City Municipal Airport.

CONCLUSION

The Boulder City Municipal airport clearly contributes to economic activity in the Boulder City area, both in gross sales for businesses at all economic levels, as well as contributing to the creation and maintenance of jobs. If the airport did not exist these economic effects would not be realized in the greater economy. It is the income from external visitors that brings increased economic benefits to the area. Airport management should be aware of the needs of visitors and work to ensure that the Boulder City Municipal airport supports their needs, as well as the needs of local businesses and local private aviators.

APPENDIX

A1: Survey Comments Received

What a great experience!

Awesome jump