HIGHLIGHTS

This report presents an analysis of the economic benefits of Oxnard Airport for fiscal year 2008. The economic benefits impact the airport service area, which includes Ventura County, the City of Oxnard, and neighboring communities. Oxnard Airport serves as a gateway that welcomes commerce and visitors into the region and provides access for citizens and businesses to travel outward via aviation. Economic benefits (revenues, employment and earnings) are created when economic activity takes place both on and off the airport. The highlights of the economic benefit analysis are set out below.

HIGHLIGHTS

Economic Benefit Analysis Oxnard Airport

- The total economic benefits (including all multiplier effects) of Oxnard Airport summed to \$80.2 million in fiscal year 2008, supporting 635 jobs in the service area.
- The primary economic benefits (not including multiplier effects) of combined on-airport activity and off-airport visitor spending summed to \$39.3 million in fiscal year 2008.
- On-airport economic activity (not including construction) produced \$30.3 million of output, creating employment for 150 workers, and labor and proprietor earnings of \$7.0 million.
- Air visitors spent \$7.3 million in the airport service area, supporting 102 jobs in the region.
- Economic activity resulting from the presence of the airport created \$12.3 million of annual tax revenues, including \$5.3 million revenues for state and local government
- Based aircraft at the airport flew 16,500 hours in fiscal year 2008; this travel had an estimated charter equivalent value of \$8.2 million.
- Each day of the year, Oxnard Airport generates more than \$220,000 of revenue within the service area to benefit the general economy.

1

METHODOLOGY & SUMMARY

The presence of an airport creates multiple benefits for a community. Measurement of these benefits is often complex, as impacts on the pace of economic development and quality of life may be difficult to quantify.

A well functioning airport serves as a portal that welcomes commerce and visitors into the region. Commercial airline travelers arriving at Oxnard Airport can visit friends and relatives, conduct business, or continue on to other points in Southern California. Outward bound residents have options to several points in the nation from Oxnard Airport via commercial air service, and also can connect to global destinations.

General aviation flyers can stop for fuel or stay over in the region for visits with friends and family, business meetings or to attend sporting or cultural events. Outbound general aviation (by private aircraft or chartered service) allows business travelers to reach destinations without the delays and uncertainty of today's airline flights and provides access to more than 5,300 airports in the nation, compared to approximately 564 served by scheduled airlines.

Airports bring essential services, including enhanced medical care (such as air ambulance service), support for law enforcement and fire control, and courier delivery of mail and high value parcels. These services raise the quality of life for residents and maintain a competitive environment for economic development.

Increasingly, metropolitan airports are also prime locations for businesses not directly related to aviation. Industrial parks, logistics facilities, and office buildings are often found at airports, which have become major employment centers in many areas.

Measuring Economic Benefits

Although qualitative advantages created by the presence of an airport are important, they are also difficult to measure. In studying airport benefits, regional analysts have emphasized indicators of economic activity for airports that can be quantified, such as dollar value of output, number of jobs created, and earnings of workers and proprietors of businesses.

Economic benefit studies differ from costbenefit analyses, which are often used to support decision-making, typically for public sector capital projects. Study of airport economic benefits is best viewed as a measurement of economic contribution. An economic benefit study identifies how an airport adds to economic activity (revenues, earnings and employment) in a region. The methodology was standardized in the publication by the Federal Aviation Administration, Estimating the Regional Economic Significance Airports, of Washington DC, 1992.

Following the FAA methodology, this study views Oxnard Airport as a source of measurable economic activity that creates revenues for firms, and employment and earnings for workers on and off the airport.

Business spending on the airport injects revenues into the community when firms buy products from suppliers and again when employees of the airport spend for household goods and services. In addition, spending by air visitors produces revenues for firms in the hospitality sector as well as employment and earnings for workers.

Benefit Measures

The quantitative measures of economic benefits of the Oxnard Airport are each described below.

Revenue is the value in dollars of the output of goods and services produced by businesses. For government units, the budget is used as the value of output.

Revenue is equivalent to purchases, spending or sales. From the perspective of the business that is the supplier of goods and services, the dollar value of output is equal to the revenues received by that producer. From the viewpoint of the consumer, the dollar value of the output is equal to the amount that the consumer spent to purchase those goods and services from the business.

Earnings are a second benefit measure, made up of employee compensation (the dollar value of payments received by workers as wages and benefits) and proprietor's income of business owners.

Employment is the third benefit measure, the number of jobs supported by the revenues created by the airport.

To measure the economic benefits of the airport, information on revenues, employment and earnings was obtained directly from suppliers and users of aviation services including private sector firms on the airport, government agencies, airport staff. commercial and general aviation air travelers, Surveys were and based aircraft owners. mailed to owners of aircraft based at the On airport businesses were airport. interviewed with telephone follow-up. Surveys were distributed to general aviation and commercial airline visitors to determine length of stay and spending patterns.

Administrative staff at Oxnard Airport and Ventura County Department of Airports were very helpful in providing current and historical information on airport operations and activity.

Summary of Economic Benefits

A summary of economic benefits created by Oxnard Airport is shown in Table 1.

The components of economic benefits include both **on-airport and off-airport** economic activity. These benefits encompass the revenues of firms, budgets of government agencies, their employment, and the earnings paid out to workers.

The on-airport and off-airport activity creates **primary benefits** (sometimes referred to as "direct" benefits) which measure the initial revenues, employment, and earnings associated with the presence of the airport.

In addition to the initial impact of primary benefits, **secondary benefits** (multiplier effects) are created when the initial spending by airport employers or visitors circulates and recycles through the economy. The secondary benefits measure the magnitude of successive rounds of re-spending in the service area.

For example, when an aircraft mechanic's wages are spent to purchase food, housing, clothing, and medical services, these dollars create more jobs and income in the general economy of the region through multiplier effects of re-spending.

Total benefits are the combined sum of primary and secondary benefits created both on and off the airport.

On-Airport Primary Benefits

Oxnard Airport supported a total of 15 private and public employers including commercial and general aviation, government agencies, and other tenants. In addition, on-going airport capital improvement projects created benefits on the airport. A major portion of construction spending involved improvement of airport infrastructure. However, private firms were also involved in construction and remodeling of facilities and space.

Including the revenues and employment created by outlays for airport capital projects and private construction, all on-airport economic units were responsible for onairport primary benefits of:

- \$32.0 Million Revenues
- \$8.0 Million Earnings
- 166 On-Airport Jobs

Air Visitor Primary Benefits

During fiscal year 2008, there were more than 15,000 air visitors that arrived at the airport by commercial, private, or chartered aircraft. When air travelers make off-airport expenditures these outlays create revenues (sales) for firms that supply goods and services to visitors. Visitor spending created annual airport service area output, employment and earnings of:

• \$7.3 Million Revenues

- \$2.9 Million Earnings
- 102 Off-Airport Jobs

Combined Primary Benefits

The combined primary benefits represent the sum of on-airport and off-airport (visitor) revenues, earnings and employment due to the presence of the airport. Primary benefits are the "first round" impacts and do not include any multiplier effects of secondary spending. The primary benefits were:

- \$39.3 Million Revenues
- \$10.9 Million Earnings
- 268 jobs

Secondary Benefits (Multiplier Effects)

The initial primary revenue stream in the service area of \$39.3 million created by the presence of Oxnard Airport was estimated to stimulate secondary benefits from multiplier effects within the airport service area of:

- \$40.8 Million Revenues
- \$13.8 Million Earnings
- 367 Jobs

Total Economic Benefits

The total economic benefits created by the presence of Oxnard Airport are the sum of primary benefits and secondary (multiplier) benefits, and in fiscal year 2008 were:

- \$80.2 Million Revenues
- \$24.7 Million Earnings
- 635 Jobs

TABLE 1Summary of Economic Benefits: Fiscal Year 2008Oxnard Airport

	BENEFIT MEASURES		
Source	Revenues	Earnings	Employment
On-Airport Aviation Tenants & Employers	\$30,328,000	\$7,036,000	150
Capital Projects	1,730,000	971,000	16
All On-Airport Economic Benefits	32,058,000	8,007,000	166
Air Visitor Benefits	7,284,000	2,892,000	102
Primary Benefits: Sum of On-Airport & Air Visitor Benefits	39,342,000	10,899,000	268
Secondary Benefits (Multiplier Effects)	40,848,000	13,847,000	367
TOTAL BENEFITS	\$80,190,000	\$24,746,000	635

ON-AIRPORT BENEFITS

This section provides more detail on the economic benefits associated with activity on site at Oxnard Airport. Table 2 illustrates the annualized employment, earnings and value of output (revenues) produced by airport tenants in 2008. Values shown for revenues, employment and earnings are the primary benefits and do not include multiplier effects of secondary benefits.

On-Airport Output

On-airport economic activity created annual output of \$32.0 million (including \$1.7 million budgeted for capital projects).

Businesses at Oxnard Airport offer passenger services including airline ticketing, auto rental and other ground transport. Auto rental agencies on the airport also attract customers from Oxnard and nearby communities that are not necessarily air travelers.

Based on figures from the U. S. Department of Transportation, There were more than 11,000 originating outbound passengers departing Oxnard Airport in fiscal year 2008. The dollar value of outbound airline travel from Oxnard Airport was greater than \$3.0 million for that period.

Full FBO services available for the aviation community include aircraft charter and rental, maintenance, avionics, storage, and fueling for various categories of aircraft including piston, turboprop, jet and rotary. Aviation activities on the airport include private storage hangars for based and transient aircraft. Flight training is available for those interested in learning to fly. The airport has commercial space available that is utilized by firms not directly related to aviation. This is characteristic of modern airports which are increasingly favored locations for technology or light industry employers. There are several government agencies supporting aviation, including the Oxnard Airport staff from Ventura County Department of Airports, the Transportation Security Administration (TSA) and the airport tower.

Capital Projects

Capital projects are vital for airports to maintain safety and provide for growth. Airport improvements also create jobs and inject dollars into the local economy. In order to account for varying annual magnitude of projects, an average annual capital spending estimate was computed based on several years of activity. Private and public spending for construction projects on-going or authorized in 2008 was set at \$1.7 million to represent a typical year.

Employment and Earnings

There were 12 private employers on the airport in 2008 (aviation and non-aviation), and 3 administrative or government units. Surveys and interviews with on-airport employers provided a tally of 166 jobs on the airport (including 16 workers for capital Not including contractors for projects). capital projects, there were 128 private sector jobs on the airport. The ratio of administrative sector jobs to overall jobs was 22/166 or 13 percent of the total. On airport employees brought home annual earnings of \$8.0 million to spend in their own local communities. The average overall wage for workers on the airport was \$48,000.

TABLE 2On-Airport Benefits: Revenues, Earnings and EmploymentOxnard Airport

	BENEFIT MEASURES			
Sources of On-Airport Benefits	Revenues	Earnings	Employment	
On-Airport Private Employers Commercial Airlines Auto Rental FBO Services, Fueling, Supplies Aircraft Charter & Rental Avionics, Maintenance Aircraft Repairs & Refurbishing Aviation Training Commercial Activity Government & Administration	\$27,136,000	\$5,524,000	128	
Capital Projects (5 Year Average) Apron & Taxiway Improvements, Drainage, Fencing, Security & Safety Upgrades	1,730,000	971,000	16	
Government Agencies/Services Airport Administration Police & Fire Response Air Traffic Control Tower Transportation Security Administration	3,192,000	1,512,000	22	
ON-AIRPORT BENEFITS	\$32,058,000	\$8,007,000	166	
Source: Survey of Employers, Oxnard Airport, 2008				

AIR VISITOR BENEFITS

Oxnard Airport attracts commercial airline and general aviation visitors from throughout the region and the nation who come to the area for business, recreational and personal travel.

This section provides detail on economic benefits from commercial and general aviation air travelers who use the airport. Values shown for spending (revenues), employment and earnings are primary benefits of initial visitor outlays and do not include multiplier effects of secondary benefits.

Commercial Airline Visitors

During fiscal year 2008 there were 21,369 airline enplanements at Oxnard Airport. According to an analysis of the air traveler origin and destination data bank of the U. S. Department of Transportation, 42 percent or 8,975 enplaning passengers were visitors to the area (Table C3).

Information on air visitor spending and travel patterns was based on figures compiled especially for this study from passenger surveys taken at the airport. Surveys were stratified by time of day and destination to achieve balanced representative results.

Just over one half (57%) of airline visitors stated that the main purpose of their travel was "personal," including tourism or visiting friends and relatives. The remaining respondents (43%) were traveling for business related reasons.

The surveys of airline passengers revealed that the average length of stay for travel

parties was 5.3 days. Airline travelers accounted for 47,568 visitor days in the service area during fiscal year 2008.

TABLE 3Airline Visitor Travel PatternsOxnard Airport			
Category	Value		
Enplanements	21,369		
Percent Visitors	42%		
Number of Visitors	8,975		
Personal Travel	57%		
Business Travel	43%		
Length of Stay (Days)	5.3		
Visitor Days 47,568			
Spending Per Visitor \$616			
Visitor Spending \$5,528,000			
Source: Visitor Survey 2008			

Respondents were asked provide to information on travel-related spending for lodging, food, retail goods and services and ground transportation during their stay in the service area. The average spending per visitor per trip was \$616 (figures are rounded to the nearest dollar to simplify tables). Multiplication of \$616 by 8,975 annual airline passenger visitors yields total airline visitor spending of \$5.5 million for the year.

On a typical day, there were 130 airline travelers in the airport service area spending an average of \$116 per person per day, creating revenues exceeding \$15,000 each day.

Those traveling for business reported shorter average stays (3.3 days) in the area, and larger expenditures per person (\$656 per trip). Visitors traveling for personal reasons stayed longer (6.7 days) and had smaller expenditures per person (\$550 per trip).

Over 90 percent of business travelers reported lodging outlays, while only one third of those traveling for personal reasons stayed at paid accommodations. Moreover, business travel parties spent \$160 on ground transportation, compared to an average of only \$70 for those traveling for personal reasons.

The figures for spending per person per trip can be used to derive the economic value of visitor expenditures from a typical passenger aircraft arriving at Oxnard Airport (Table 4).

TABLE 4Economic Value of Arriving AirlinerOxnard Airport

Item	Value
Average Passengers Per Aircraft	14
Percent Visitors	42%
Number of Visitors Per Aircraft	6
Trip Expenditures/Person	\$616
Value of Arriving Airliner	\$3,696
Source: US Dept. Transportation an Visitor Survey 2008	nd Airline

Based on current characteristics of arriving passenger aircraft, the average number of visitors per aircraft is 6. These 6 visitors per aircraft will spend on average \$616 per person per trip to the area.

Total airline visitor spending of \$3,696 is injected into the local economy for each arriving airliner, on average.

Spending by category and resulting economic benefits from all airline visitors are shown in Table 5.

The largest spending category was lodging (\$275 per person per trip), which is also the source of the greatest annual revenues (at \$2.5 million) and earnings (\$864,000).

Lodging outlays for the typical travel party of 1.5 persons, based on survey figures, were \$412 for the average trip. Note that these average figures also include responses by some travelers who reported that they stayed with friends and relatives and therefore had no lodging outlays.

Those visitors that reported paid accommodations incurred an average lodging cost of \$726 per party during their stay in the service area.

Airline visitor spending in eating and drinking places created the second largest revenues (\$1.3 million), earnings (\$461,000) and second greatest number of jobs (23).

Over all categories, the \$5.5 million of visitor spending by airline travelers created a total of 78 visitor-related jobs in the service area, with earnings to workers and proprietors of \$2.2 million.

Oxilaru Ali port				
Category	Spending Per Trip	Revenues	Earnings	Jobs
Lodging	275	\$2,468,000	\$864,000	27
Food/Drink	146	1,310,000	461,000	23
Retail Sales	83	745,000	343,000	13
Entertainment	39	350,000	164,000	6
Ground Transport	73	655,000	402,000	9
TOTAL	\$616	\$5,528,000	\$2,234,000	78

TABLE 5Economic Benefits from Airline Visitors: Revenues, Earnings and EmploymentOxnard Airport

Note: Earnings and employment figures were derived from the IMPLAN input-output model based on data from the California Department of Economic Development and the United States Bureau of Economic Analysis. Employment includes full and some part time workers, figures rounded to head counts.

General Aviation Visitors

In order to analyze general aviation traffic patterns at the airport, a database of 3,600 general aviation flight plans involving Oxnard Airport as either destination or origin for travel was obtained from the FAA.

In this sample, the most frequent source of itinerant flights arriving at Oxnard Airport was Van Nuys, California. Second in importance was Santa Monica, followed by Whiteman Airport in Los Angeles, Santa Barbara, and Burbank rounding out the top five (Table 6). Overall, general aviation aircraft arriving at OXR originated at more than 250 airports in California and other states.

Recent years have often seen more than

90,000 itinerant general aviation operations annually at Oxnard Airport. An operation may be either an arrival or departure, and local or itinerant.

Local operations typically involve based aircraft performing take-offs and landings for training or other local flying activity. An itinerant operation can include an arrival or departure by either based or transient aircraft.

An itinerant operation typically involves an origination or destination airport other than Oxnard Airport. Therefore, both based and non-based aircraft contribute to itinerant activity in any given day. When a based aircraft returns to Oxnard Airport from Orange County, California, for example, that is an itinerant operation.

TABLE 6GA Itinerant Aircraft OriginationOxnard Airport

Rank and Origin	State			
1. Van Nuys	CA			
2. Santa Monica	CA			
3. Whiteman Airport, LA	CA			
4. Santa Barbara	CA			
5. Burbank	CA			
6. Camarillo	CA			
7. San Luis Obispo	CA			
8. Orange County	CA			
9. Long Beach	CA			
10. Montgomery Field, San Diego	CA			
11. El Cajon	CA			
12. Las Vegas	NV			
13. Santa Maria	CA			
14. Carlsbad	CA			
15. El Monte	CA			
Source: FAA Flight Plan Data Base and				
Oxnard Airport Records				

When an aircraft based at an airport other than Oxnard arrives at Oxnard Airport that aircraft is classified as a transient itinerant. Transient aircraft represent outside spending brought in to the airport service area, and are therefore an important source of economic benefits.

According to analysis of FAA flight records, there were 7,004 transient aircraft arrivals at Oxnard Airport in 2008. Of these, 1,401 brought overnight visitors and 5,603 were one-day visitors (Table 7). Separate analyses were conducted for those GA visitors with an overnight stay and those whose visit was one day or less in duration.

TABLE 7General Aviation Transient AircraftOxnard Airport

Item	Annual Value	
Itinerant AC Arrivals	17,509	
Transient AC Arrivals	7,004	
Overnight Transient AC	1,401	
One Day Transient AC 5,603		
Source: Derived from FAA Flight Plan Data Base and Oxnard Airport Records		

Overnight GA Visitors

Information on visiting general aviation aircraft was derived from a survey of visiting aircraft owners and pilots. Visitors were asked about the purpose of their trip, the size of the travel party, length of stay, type of lodging, and outlays by spending category.

The travel patterns underlying the calculation of overnight GA visitor economic benefits are shown in Table 8, for the 1,401 transient overnight aircraft arrivals during the year.

The average party size was 2.2 persons and the average overnight travel party stayed in the area for 2.3 days. There were 3,082 overnight visitors for the year with a combined total of 7,088 visitor days.

Spending per travel party per aircraft averaged \$1,046. Total spending by all GA overnight visitors summed to \$1.5 million for the year.

TABLE 8General Aviation Overnight VisitorsOxnard Airport

Item	Annual Value	
Transient AC Arrivals	7,004	
Overnight Transient AC	1,401	
Avg. Party Size	2.2	
Number of Visitors	3,082	
Average Stay (nights)	2.3	
Visitor Days	7,088	
Spending per Aircraft	\$1,046	
Total Expenditures \$1,465,000		
Source: Derived from FAA Flight Plan Data Base, Oxnard Airport Records and GA Visitor Surveys.		

Table 9 shows the percentage distribution of outlays by overnight travel parties at Oxnard Airport. Lodging accounts for 42 percent of overnight general aviation visitor spending, averaging \$448 per aircraft travel party of 2.2 persons for 2.3 nights.

Food and drink, at \$288 per overnight aircraft, made up 28 percent. Ground transportation, at \$126 and 12 percent was next in importance, followed by entertainment spending per aircraft at \$102, and 10 percent for the average travel party.

Retail spending was the smallest expenditure category, at \$82 for each visiting overnight general aviation travel party.

TABLE 9Spending Per Overnight GA AircraftOxnard Airport

Category	Spending	Percent	
Lodging	\$448	42	
Food/Drink	288	28	
Retail	82	8	
Entertainment	102	10	
Transportation	126	12	
TOTAL	\$1,046	100	
Source: GA Visitor Survey 2008			

Day GA Visitors

Based on flight operations records, an estimated 5,603 itinerant general aviation aircraft stopped at Oxnard airport for one day during the year. Some were only on the ground for a few minutes while others were parked several hours when the travel party had their aircraft serviced, pursued a personal activity or conducted business.

The economic benefits from arriving aircraft travel parties are of two types. Those pilots or aircraft owners that buy fuel or have their aircraft serviced on the airport are making purchases which contribute to the revenue stream received by aviation businesses on the airport. That type of spending creates output, employment, and earning on the airport. Those economic benefits are shown in Table 2 as on-airport benefits.

TABLE 10General Aviation Day VisitorsOxnard Airport

Item	Annual Value		
One Day Transient AC	5,603		
Stay >/= 4 Hours	2,241		
Avg. Party Size	2.0		
Number of GA Visitors	4,482		
Spending per Aircraft	\$130		
Total Expenditures \$291,000			
Source: Source: Derived from FAA Flight Plan Data Base and GA Visitor Survey 2008			

However, if the aircraft travel party leaves the airport to visit a corporate site, conduct a business meeting, or attend a sporting or cultural event, these off-airport activities will generate off-airport spending that create jobs and earnings in the local community.

To compute a conservative estimate of economic benefits of GA visitors, one day aircraft were partitioned into those staying less than 4 hours and 4 hours or more. The methodology assumes those staying less than 4 hours did not have time to leave the airport and did not contribute any significant spending off the airport, although they may have purchased goods or service on-site.

Visitor spending measures were computed only for those aircraft staying 4 hours or longer at Oxnard Airport. Through analysis of flight arrival and departure records, it was estimated that there were 2,241 general aircraft that stayed on the ground 4 hours or more during the year (Table 10)

Day trip aircraft brought 4,482 visitors to the airport service area during the year. According to visitor survey responses, the average spending per one-day aircraft was \$130. The total economic benefits created by off-airport spending by one-day general aviation visitors tallied to \$291,000 of output (revenues or sales off the airport).

The largest expenditure category for one-day visiting travel parties was food and drink, which averaged \$57 per aircraft travel party for the day and accounted for 44 percent of outlays (Table 11).

Retail spending was the second largest category, at \$31 per aircraft, followed by ground transportation at \$28. Entertainment spending was \$14 for each one day aircraft during the year.

TABLE 11Spending Per Day Visitor AircraftOxnard Airport				
Category	Spending	Percent		
Lodging	0	0		
Food/Drink	\$57	44		
Retail	31	24		
Entertainment	14	10		
Transportation 28 22				
TOTAL \$130 100				
Source: GA Visitor Survey 2008				

Combined GA Visitor Spending

Table 12 shows the economic benefits resulting from spending in the region by combined overnight and day general aviation visitors arriving at Oxnard Airport.

To recap, there were 7,004 transient general aviation aircraft that brought visitors to the airport during the year. Of these, 1,401 were overnight general aviation aircraft and 2,241 were one day visiting aircraft that were parked more than 4 hours.

Each overnight travel party spent an average of \$1,046 during their trip to the airport service area and travelers on each day visitor aircraft spent an estimated \$130 per trip. Multiplying the expenditures for each category of spending by the number of aircraft yields the total outlays for lodging, food and drink, entertainment, retail spending and ground transportation due to GA visitors during the year. This spending summed to \$1.8 million in revenues.

There were 11,570 visitor days attributable to general aviation travelers during the year. Sixty one percent of visitor days (7,088) were due to overnight GA travelers and thirty nine percent (4,482) were from one-day visitors.

On an average day, there were 32 visitors in the service area that had arrived by general

TABLE 12

Economic Benefits from GA Visitors - Revenues, Earnings and Employment Oxnard Airport

	Spending	per AC		Earnings	Employment
Category	Overnight	Day	Revenues		
Lodging	\$448		\$628,000	\$220,000	7
Food/Drink	288	\$57	531,000	187,000	9
Retail Sales	82	31	184,000	85,000	3
Entertainment	102	14	174,000	81,000	3
Ground Trans.	126	28	239,000	85,000	2
TOTAL	\$1,046	\$130	\$1,756,000	\$658,000	24

Note: Earnings and employment figures were derived from the IMPLAN input-output model based on data from the California Department of Economic Development and the United States Bureau of Economic Analysis. Employment includes full and some part time workers, figures rounded to head counts.

aviation aircraft. Average daily spending by all GA air travelers was \$4,810 within the airport service area. The average economic impact of any arriving GA transient aircraft (combined overnight and day visitors staying more than 4 hours) was \$482.

Spending for lodging accommodations accounted for 36 percent of GA visitor spending, with outlays of \$628,000 for the year. Spending by general aviation visitors for food and drink off the airport was \$531,000 or 30 percent of the total.

Taken together, these two categories accounted for two thirds of the economic benefits from GA visitors to Oxnard Airport.

Of total off-airport spending of \$1.8 million created by GA visitors, an average of 37 cents of each dollar was used within the service area by employers as earnings paid out to workers.

Wages taken home by tourism/visitor sector workers for spending in their own community summed to \$658,000 during the year. Earnings in the lodging services industry accounted for one third of total earnings from GA visitor spending.

Expenditures by GA visitors created 24 primary jobs in the tourist sector in the service area. Food and drink spending created the greatest number of jobs, 9, followed by lodging with 7.

Combined Airline and GA Visitors

Airline and general aviation visitors combined to spend \$7.3 million in the service area during the year, creating 102 jobs off the airport with earnings to workers of \$2.9 million (see Table 13). The greatest number of jobs created were in lodging (33) and food services (32).

There were 59,138 visitor days attributable to commercial and general aviation travelers during the year. Eighty percent of visitor days (46,567) were due to commercial air travelers and twenty percent of days (11,570) were from general aviation visitors.

On an average day, there were 162 visitors in the service area that had arrived by airline or general aviation aircraft at Oxnard Airport.

Average daily spending by all air travelers injected into the economy of the airport service area was \$20,000.

Table 13 shows that the largest spending category by aviation visitors was expenditures for lodging, with outlays of \$3.1 million, or 43 percent of the total. Spending for food and drink accounted for 25 percent of visitor spending and was the second largest category, with outlays of \$1.8 million.

TABLE 13

Economic Benefits from Airline and GA Visitors: Revenues, Earnings and Employment Oxnard Airport

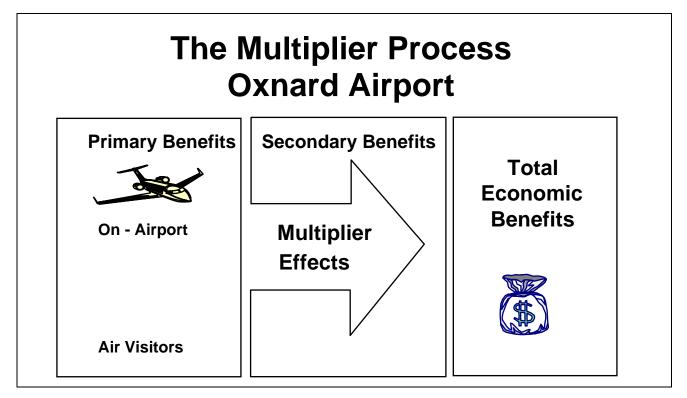
Category	Revenues	Earnings	Employment
Lodging	\$3,096,000	\$1,084,000	33
Food/Drink	1,841,000	648,000	32
Retail Sales	929,000	428,000	17
Entertainment	524,000	245,000	9
Ground Transport	894,000	487,000	11
TOTAL	\$7,284,000	\$2,892,000	102

Note: Earnings and employment figures were derived from the IMPLAN input-output model based on data from the California Department of Economic Development and the United States Bureau of Economic Analysis. Employment includes full and some part time workers, figures rounded to head counts.

SECONDARY BENEFITS: MULTIPLIER EFFECTS

The output, employment, and earnings from on-airport activity and off-airport visitor spending represent the initial or primary benefits from the presence of Oxnard Airport. For the service area, these primary benefits summed to \$39.3 million of output (measured as revenues to firms and budgets of administrative units), 268 jobs, and earnings to workers and proprietors of \$10.9 million. These figures for initial economic activity created by the presence of the airport do not include the "multiplier effects" that result from additional spending induced in the economy. Production of aviation output requires inputs in the form of supplies and labor. Purchase of inputs by aviation firms has the effect of creating secondary revenues and employment that should be included in total benefits of the airport. Airport benefit studies rely on multiplier factors from input-output models to estimate the impact of secondary spending on output, earnings and employment to determine secondary and total benefits, as illustrated in the figure below.

The multipliers used for this study were from the IMPLAN input-output model based on data from the California Department of Economic Development and the U. S. Bureau of Economic Analysis. To demonstrate the methodology, average aggregated multipliers are shown in Table 14. The full analysis used separate multipliers for each industry.





The multipliers represent weighted averages for combined industries in each category. For example, the visitor benefits multipliers shown combine lodging, food services, retailing, auto rental and entertainment multipliers used in the analysis.

The multipliers in this table illustrate the process for calculating the secondary and total impacts on all industries of the regional economy resulting from the primary impact of each aviation related industry. The multipliers for output show the average dollar change in revenues for all firms in the service area due to a one-dollar increase in revenues either on the airport or through visitor spending.

For example, the \$32.0 million output (revenue) created by on-airport employers circulates through the economy until it has stimulated total output in all industries in the service area of \$64.5 million. The revenue multiplier of 2.0124 for on-airport activity shows that for each dollar spent on the airport there is <u>additional</u> spending created of 1.0124 or \$1.0124 of secondary or multiplier spending.

Primary revenues from all sources associated with the presence of Oxnard Airport were \$39.3 million for the year. After accounting for the multiplier effect, total revenues created within the service area were \$80.2 million. Secondary or multiplier revenues were \$40.8 million, the difference between total and primary revenues.

The multiplier for earnings shows the dollar change in earnings for the service area economy due to a one-dollar increase in earnings either on the airport or in the visitor sector. The earnings multipliers determine how wages paid to workers on or off the airport stay within the economy and create additional spending and earnings for workers in non-aviation industries. For example, each dollar of wages paid for workers on the airport stimulates an overall total of \$2.2189 of earnings in the total economy.

The initial primary wages of \$8.0 million for aviation workers and proprietors on the airport were spent for consumer goods and services that in turn created additional earnings of \$9.8 million for workers and proprietors in the general economy.

The total earnings benefit of the airport was \$24.7 million, consisting of \$10.9 million of primary benefits and \$13.8 million of secondary benefits. The economic interpretation is that the presence of the airport provided earnings for workers, who then re-spent these dollars in the service area for consumer goods and services.

The multipliers for employment show the total change in jobs for the service area economy due to an increase of one job on or off the airport. Each job on the airport is associated with 2.7228 total jobs in the overall airport service area economy. Each job on the airport supports 1.7228 <u>additional</u> jobs in the rest of the economy.

The overall result is that the 268 primary jobs created by the airport supported an additional 367 jobs in the service area as secondary employment. The sum of the primary aviation related jobs and secondary jobs created in the general economy is the total employment of 635 workers that can be attributed to the presence of the airport.

The information above is intended for illustration only. In the full analysis 12 separate multipliers were used for on-airport aviation employers and visitor spending categories.

TABLE 14Average Multipliers and Secondary Benefits Within the Airport Service AreaOxnard Airport

Revenue Source	Primary Revenues	Average Output Multipliers	Secondary Revenues	Total Revenues
On-Airport Benefits	\$32,058,000	2.0124	\$32,457,000	\$64,515,000
Visitor Benefits	7,284,000	2.1519	8,391,000	15,675,000
Revenues	\$39,342,000	2.0382	\$40,848,000	\$80,190,000
Earnings Source	Primary Earnings	Average Earnings Multipliers	Secondary Earnings	Total Earnings
On-Airport Benefits	\$8,007,000	2.2189	\$9,760,000	\$17,767,000
Visitor Benefits	2,892,000	2.4132	4,087,000	6,979,000
Earnings	\$10,899,000	2.2705	\$13,847,000	\$24,746,000
Employment Source	Primary Employment	Average Employment Multipliers	Secondary Employment	Total Employment
On-Airport Benefits	166	2.7228	286	452
Visitor Benefits	102	1.7968	81	183
Employment	268	2.3707	367	635

Notes: Multipliers above are weighted averages intended to illustrate how secondary and total benefits were calculated for Oxnard Airport. In the full analysis, separate multipliers were used for on-airport employers (airlines, FBO, other aviation businesses), and visitor spending (lodging, eating places, retailing, entertainment, and ground transportation). Multipliers were for Oxnard Airport service area (Ventura County) as produced by the IMPLAN input-output model based on data from the California Department of Economic Development and U. S. Bureau of Economic Analysis.

BASED AIRCRAFT BENEFITS

A survey of owners of aircraft based at Oxnard Airport was conducted to compile information on private aircraft usage patterns, including number of trips per year, purpose of travel, average party size, and hours flown per trip. Questions were also posed concerning the importance of the airport for residential location and businesses of flyers.

TABLE 11 Based Aircraft Profile Oxnard Airport	
Туре	Number
Total Based Aircraft	178
Single Engine	150
Multi-Engine	20
Helicopter/Other	8
Source: Oxnard Airport	

Mailing addresses were obtained through the assistance of Ventura County Department of Airports who provided access to public records on aircraft ownership.

There were 178 based-aircraft at Oxnard Airport (Table11). Of these, 150 were single engine, 20 were multi-engine, and there were 8 helicopters.

Characteristics of based aircraft at Oxnard Airport are shown in Table 12. The table sets out survey data, showing the average reported value for an individual aircraft was \$129,000 and annual outlays were \$13,150 for upkeep, maintenance, storage, and other expenses such as insurance.

Multiplying the average expenditures per aircraft of \$13,150 times 178 aircraft gives total outlays by aircraft owners of more than \$2.0 million injected into the economy, much of it going to the immediate airport service area.

The aircraft based at Oxnard Airport represent assets to their owners with estimated total value exceeding \$23.0 million. Many based aircraft are viewed as investments by their owners that provide returns through enhanced revenues and time savings when compared to scheduled airline travel. Entries in Table 12 also illustrate the relation between private aircraft ownership and business activity in the Ventura County area served by the airport.

Aircraft owners contribute to the economy when they use their aircraft for business purposes. Faster travel and more responsive businesses make the entire region more competitive. According to the aircraft owner survey, Oxnard based aircraft were used for business for 6,000 flying hours in fiscal year 2008.

The presence of the airport as a factor affecting the personal quality of life and business success of aircraft owners was measured by survey questions asking respondents to rate the airport as "very important, important, slightly important, or not important" to their residential location decision and their business.

The survey results show that Oxnard Airport is a significant factor in influencing the success of business and professional activity of aircraft owners.

- Seventy percent of all responding based aircraft owners said that the airport is "very important" or "important" to the success of their business.
- Similarly, eighty-eight percent of based aircraft owners stated that the airport is "very important" or "important" to their residential location decision.

Those who reported the airport as important

to their business were also asked for information about their business.

• Firms represented by users of based aircraft for business purposes accounted for 2,450 employees in the county and surrounding area, with estimated annual sales of \$400 million

Drawing from these results, it is evident that Oxnard Airport plays a key role in the overall quality of life and level of economic activity in the Oxnard County area, and particularly supports the business community.

TABLE 12Based Aircraft Characteristics and Business ActivityOxnard Airport		
Category	All Based AC	
Average Aircraft Value	\$129,000	
Maintenance & Upkeep per Year	\$13,150	
Business Hours Flown per Year	6,000	
Business Hours as Percent of All Hours	36%	
Airport "Very Important" /"Important" to Business	70%	
Employees of Owners of Based Aircraft	2,450	
Estimated Annual Sales at Firms Related to Based AC	\$400,000,000	

Combined based aircraft owners at Oxnard Airport reported flying 16,500 non-training hours per year (Table 13). Of these, 6,000 or 36 percent were for business and 10,500 or 64 percent were for personal travel. Of all owners, 51 percent reported some business use for their aircraft. The average use per aircraft was 93 flying hours per year.

TABLE 13Based Aircraft Use PatternsOxnard Airport				
Usage Measure	Annual Hours			
Total Number of Hours	16,500			
Avg. Hours per AC	93			
Business Hours	6,000			
Personal Hours	10,500			
Percent Business Hours 36%				
Percent Personal Hours 64%				
Source: Based Aircraft Owner Survey				

The typical business trip for a general aviation aircraft had 1.9 persons in the travel party (Table 14), according to survey responses completed by aircraft owners. The average aircraft was flown 34 hours on business during the year. Oxnard Airport based aircraft flew 11,400 passenger hours during the year for business purposes.

The average aircraft based at Oxnard Airport was flown 59 hours on personal trips per year. The typical round trip for pleasure, recreation or other personal reasons had 2.5 persons in the travel party (Table 15). There were 30,450 passenger hours flown for personal reasons that originated at Oxnard Airport. (Note: Passenger hours flown on business or personal use were computed from multiplying average party size by hours flown, to obtain total passenger hours.)

TABLE 14Based Aircraft - Business UseOxnard Airport				
Item	Annual Value			
Business Hours	6,000			
Avg. Hours per AC	34			
Avg. Party Size	1.9			
Passenger Hours 11,400				
Source: Based Aircraft (Owner Survey			

TABLE 15 Based Aircraft - Personal Use Oxnard Airport

Usage Measure	Annual Value	
Personal Hours	10,500	
Avg. Hours per AC	59	
Avg. Party Size	2.5	
Passenger Hours30,450		
Source: Based Aircraft Owner Survey		

An estimate of the value of travel on based aircraft may be obtained by computing the cost of making these same trips on a chartered flight. This approach is approved by the Internal Revenue Service for valuation of aircraft travel use by corporate executives. The cost of charter flights varies by time, distance and type of aircraft. Table 16 shows charter rates for air travel in Southern California at mid-year 2008. A weighted average charter cost was determined for single and multi engine aircraft by assigning a cost weighted by the number of each aircraft type based at the airport.

For example, since 88% of the aircraft are single engine, the cost of a single engine charter had a weight of 0.88 in the charter cost for single and multi engine flights, to produce a weighted charter cost of \$449 per hour for charters (helicopters were excluded from this analysis). The 170 fixed wing aircraft based at the airport flew 16,500 hours for the year. Assigning an average charter value of \$449 per hour, the "charter equivalent value" of general aviation travel originating at Oxnard Airport for the year totaled \$8.2 million.

The computation is a conservative estimate of the value of general aviation travel. The estimate does not include all costs associated with charter service, such as standby fees, fuel surcharges, landing fees, or the standard two hour minimum requirement. Also, this value of travel estimate does not accurately measure all the associated economic gains and benefits that result from business trips. A single air trip can result in additional profits, fees, or revenues to a firm. Further, the flexibility compared to scheduled airline travel and the time saved by general aviation travel compared to automobile use is not calculated here, but has economic significance.

TABLE 16Charter Equivalent Value of General Aviation TravelOxnard Airport					
Aircraft Type	Number	Weights	Hourly Charter Cost	Weighted Charter Cost	
Single Engine	150	0.88	\$430	\$381	
Twin Engine	20	0.12	575	68	
TOTAL	170			\$449	

Charter Equivalent Value Based On Weighted Cost Per Hour

Hours	Hourly Cost	Total Value
16,500	\$449	\$8,200,000

Note: Charter costs by aircraft type based on average of rates as posted by various firms serving Southern California. Does not include standby time, landing fees, other charges including standard 2 hour minimum charge for charter travel.

CURRENT & FUTURE BENEFITS

Airports are available to serve the flying public and support the regional economy every day of the year. On a typical day at Oxnard Airport, there are more than 200 operations by aircraft involved in local or itinerant activity including flight training, cargo service, private pilot or corporate travel, or commercial aircraft bringing passengers visiting the area for personal travel or on business.

During each day of the year, Oxnard Airport generates \$220,000 of revenues within its service area (see box). Revenues and production support jobs, not only for the suppliers and users of aviation services, but throughout the economy. Each day Oxnard Airport provides 166 jobs directly on the airport and in total supports 635 area workers who bring home daily earnings of \$68,000 for spending in their home communities.

On an average day during the year, there are 160 visitors in the area who arrived at Oxnard Airport. Some will stay in the Ventura County area for only a few hours while they conduct their business, and others will stay overnight. The average spending by these visitors on a typical day injects \$20,000 into the local economy.

As aviation activity increases in the airport service area, the economic benefits of the airport to the regional economy can be expected to rise. The tables below show projections of future economic benefits as enplanements and operations grow.

Oxnard Airport Daily Economic Benefits • \$220,000 Daily Revenues • 635 Area Jobs Supported • \$20,000 Visitor Spending

• 160 Air Visitors

TABLE 17Summary of Economic Benefits Net of Capital Project Spending: 2008Oxnard Airport

	Revenues	Earnings	Employment
On-Airport Activity	\$30,328,000	\$7,037,000	150
Air Visitors	7,284,000	2,892,000	102
Primary Benefits	37,612,000	9,929,000	252
Secondary Benefits	38,842,000	13,024,000	351
Total Benefits	\$76,454,000	\$22,953,000	603

Note: Revenues, earnings and employment benefits reflect activity associated with 91,000 operations; does not include capital improvement and construction projects.

The figures in these tables do not include estimates of annual capital improvement expenditures, since there can be substantial variation from year to year from larger projects that would make comparison difficult over different time periods.

Table 17 shows a summary of the current economic benefits of the airport, not including capital project spending. Total benefits to the service area, including secondary or multiplier effects, are \$76.4 million in revenues, 603 jobs and earnings of \$22.9 million.

Short Term Forecast

The planning horizon for the short term is associated with an increase in enplanements to an annual level of 38,000 and growth in operations to 97,900 total operations (Table 18). In these forecasts, enplanement growth drives increases in revenues, employment and earnings related to visitor spending. Onairport economic activity is driven by increases in operations, and rises at a somewhat slower pace due to constraints on facilities to accommodate growth.

Not including outlays for capital projects, at the short term level of 38,000 enplanements and 97,900 operations, airport-related total benefits will include revenues that rise to \$92.7 million and employment will be 774 workers in the airport service area. Onairport activity will be \$32.3 million in revenues with 160 on-site jobs.

Visitor spending will reach \$12.9 million (measured in 2008 dollars) and jobs related to air visitors will increase to 181 in the short term forecast.

TABLE 18Summary of Economic Benefits: Short TermOxnard Airport

	Revenues	Earnings	Employment
On-Airport Activity	\$32,357,000	\$7,508,000	160
Air Visitors	12,953,000	5,143,000	181
Primary Benefits	45,310,000	12,651,000	341
Secondary Benefits	47,403,000	17,052,000	433
Total Benefits	\$92,713,000	\$29,703,000	774

Note: Revenues, earnings and employment for short term planning period reflect activity associated with 38,000 passenger enplanements and 97,900 operations; does not include capital improvement and construction projects. All figures in 2008 dollars.

TABLE 19Summary of Economic Benefits: Intermediate TermOxnard Airport

	Revenues	Earnings	Employment
On-Airport Activity	\$34,241,000	\$7,945,000	169
Air Visitors	15,339,000	6,090,000	214
Primary Benefits	49,580,000	14,035,000	384
Secondary Benefits	52,042,000	18,990,000	476
Total Benefits	\$101,622,000	\$33,025,000	860

Note: Revenues, earnings and employment for intermediate term planning period reflect activity associated with 45,000 passenger enplanements and 103,600 operations; does not include capital improvement and construction projects. All figures in 2008 dollars

TABLE 20Summary of Economic Benefits: Long TermOxnard Airport

	Revenues	Earnings	Employment
On-Airport Activity	\$38,075,000	\$8,835,000	188
Air Visitors	20,452,000	8,120,000	286
Primary Benefits	58,527,000	16,955,000	474
Secondary Benefits	61,777,000	23,087,000	568
Total Benefits	\$120,304,000	\$40,042,000	1,042

Note: Revenues, earnings and employment for long term planning period reflect activity associated with 60,000 passenger enplanements and 115,200 operations; does not include capital improvement and construction projects. All figures in 2008 dollars.

Intermediate Term Forecast

The intermediate term planning horizon is based on enplanements of 45,000 passengers and 103,600 operations (Table 19). Passenger levels increase by 18.4 percent over the short term figure and operations are up by 5.8 percent.

Revenues on the airport will rise to \$34.2 million and air visitor spending will increase to \$15.3 million, in 2008 dollars. On-airport employment will increase to 169 jobs and employment related to air visitor spending will rise to 214 jobs.

Total economic benefits of the airport to the service area will exceed \$100 million in revenues, and employment in the region due to the presence of the airport will increase to 860 total jobs, including the influence of all multiplier effects.

Long Term Forecast

The long term forecast is associated with passenger enplanements of 60,000 which is an increase of one third over the intermediate term level of 45,000. Assuming that the visitor proportion remains at 42 percent, there will be 25,000 visitors moving through the airport in the long term. Visitor spending will be \$20.4 million (in 2008 dollars), supporting 286 visitor related jobs in the airport service area.

Revenues on the airport will increase to \$38.0 million, with 188 on-site jobs. The mix of based aircraft in the long term forecast will include 6 turbo prop and 6 jet aircraft, which will have an effect on FBO and other services.

The total economic benefits of the airport in the long term include \$120 million of revenues and more than 1,000 jobs.

Tax Impacts

Because of the spending, jobs, and earnings created by the presence of Oxnard Airport, the facility is an important source of public revenues. As airport activity expands, tax revenues will continue to grow.

Estimated tax potential is set out in Table 21. The table shows the revenues for each tax category based on current average tax rates relative to output and personal income (earnings) for Ventura County and California. Federal taxes are applied using current federal rates.

The first column in Table 21 shows tax revenues associated with the current level of airport activity and total economic benefits of \$80.2 million. The 635 workers in the service area have taxable earnings of \$24.7 million.

Federal social security taxes are estimated at \$3.2 million, the largest component of federal taxes. The second largest federal tax category

is the personal income tax of \$2.6 million.

Overall, federal tax revenues currently collected due to economic activity associated with Oxnard Airport are estimated to be \$7.0 million. State and local tax revenues are shown in the lower portion of the table. State and local tax revenues sum to \$5.3 million for the current level of operations. The largest single component is sales taxes of \$1.7 million. Combined federal, state, and local taxes are \$12.3 million at the current level of operations and enplanements.

Projected taxes for future demand based activity levels are linked to growth rates in airport operations. From \$14.9 million for short term activity, total taxes increase to \$16.4 million as passengers and airport activity rise in the intermediate term. In the long term planning period, total economic benefits related to aviation reach \$120.3 million, including all multiplier effects and taxes are \$19.4 million.

TABLE 21Tax Impacts from On Airport and Visitor Economic ActivityOxnard Airport

	Fed	leral Taxes		
Revenue Category	Current	Short Term	Intermediate Term	Long Term
Corporate Profits Tax	\$751,000	\$911,000	\$998,000	\$1,182,000
Personal Income Tax	2,629,000	3,185,000	3,491,000	4,134,000
Social Security Taxes	3,221,000	3,904,000	4,278,000	5,066,000
All Other Federal Taxes	453,000	548,000	601,000	712,000
Total Federal Taxes	\$7,054,000	\$8,548,000	\$9,369,000	\$11,093,000
	State an	nd Local Taxes		
Revenue Category	Current	Short Term	Intermediate Term	Long Term
Corporate Profits Tax	\$187,000	\$227,000	\$248,000	\$294,000
Motor Vehicle Taxes	62,000	76,000	83,000	98,000
Property Taxes	1,315,000	1,594,000	1,747,000	2,068,000
Sales Taxes	1,691,000	2,049,000	2,246,000	2,659,000
Personal Income Tax	950,000	1,151,000	1,262,000	1,494,000
All Other State & Local	1,077,000	1,304,000	1,430,000	1,693,000
Total State & Local	\$5,282,000	\$6,401,000	\$7,016,000	\$8,307,000
Total Taxes	\$12,336,000	\$14,949,000	\$16,385,000	\$19,400,000

Note: All figures are in 2008 dollars. Derived from average tax rates in Ventura County, California and Federal sources. Current impact estimate based on economic activity associated with 91,000 operations; short term operations of 97,900; intermediate operations of 103,600 and long term operations of 115,200.

2008 vs. 1995

Table 22 compares current economic benefits associated with the airport with results from the 1995 benefit study. Capital spending outlays have been removed and all figures are in 2008 dollars. The table excludes multiplier effects as well, showing only primary benefits.

On airport revenues are 24 percent greater, and on airport real earnings are up by 30 percent. But visitor spending is lower in 2008 due to a reduction in enplanements. Due to reduced passenger activity, combined revenues are down by 5 percent, along with earnings and employment.

TABLE 22Ratio of Economic Benefits: FY 2008 vs. FY 1995Oxnard Airport					
2008	Revenues	Earnings	Employment		
On-Airport Activity	\$30,328,000	\$7,037,000	150		
Air Visitors	7,284,000	2,892,000	102		
Primary Benefits	37,612,000	9,929,000	252		
1995 (2008 Dollars)	Revenues	Earnings	Employment		
On-Airport Activity	24,531,180	5,397,840	185		
Air Visitors	14,954,460	\$5,822,602	204		
Primary Benefits	39,485,640	11,220,442	389		
Ratio 2008/1995	Revenues	Earnings	Employment		
On-Airport Activity	1.24	1.30	0.81		
Air Visitors	0.49	0.50	0.50		
Primary Benefits	0.95	0.88	0.65		