



ECONOMIC IMPACT OF BIG BEAR AIRPORT

Economic Impact Analysis:

- ✈ Economic output
- ✈ Job creation (employment)
- ✈ Wage income
- ✈ **Direct impact, indirect impact and induced impact:** payroll, airport commercial spending, capital investments and visitor spending because of the Big Bear Airport



Prepared for: **The Big Bear Airport District**

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EXECUTIVE SUMMARY

This economic impact study, conducted by Sixel Consulting Group, Inc., was commissioned by the Big Bear Airport District. The purpose of the study is to determine the local economic impact of the Airport upon the immediate region around the airport. Simply put, this economic impact study quantifies economic activity in San Bernardino County, California, that would not occur in that area absent the Airport.

Knowing and understanding the economic impact of an airport is beneficial in many ways. It allows for a better understanding by the community and its leaders of the airport's contribution to the local economy. It can also guide Airport Management and Community leaders on economic and spending questions related to Airport.

This report estimates that, at its current level of economic activity, the Big Bear Airport has the following local economic impact:

- The Big Bear Airport is responsible, directly or indirectly, for some 63.9 local full time equivalent (FTE) jobs with an annual labor income of \$2.224 million.
- The Airport generates a total annual economic output of \$8.377 million.
- 38 on-Airport jobs have an annual labor income of \$1.62 million.
- The Airport creates another 25.9 local area FTE jobs from indirect or induced economic impact effect.
- On-Airport entities had an estimated \$902,977 in commercial (non-labor) spending in 2013. An estimated \$306,175 of this was spent locally and this spending generated \$204,671 in local economic output.
- Airport located entity capital expenditures totaled an estimated \$320,461 in 2013.
- In 2013, the Airport was an entry portal for an estimated 1,473 visitors to the Big Bear region. The estimated local spending of these visitors created \$312,907 in total economic output.

OBJECTIVE

This economic impact study estimates the annual local economic impact of the Big Bear Airport. This impact is estimated in terms of creation of jobs and commerce and the indirect and induced effects of those jobs and commerce on the local economy.



This study quantifies local economic activity that would not occur save for the existence of the local Airport. This activity is measured in the following terms:

- Job creation (employment)
- Commercial spending by Airport businesses and Airport Administration
- Capital expenditures by Airport business and Airport Administration
- Economic impact of visitors brought to the area by Big Bear Airport

Three types of economic impact measured:

- Direct impact, economic activity occurring directly at, or as a result of, airport economic activity;
- Indirect impact, activity resulting indirectly from airport activity;
- Induced impact, activity driven by payroll dollars from both direct and indirect activity.

BACKGROUND

Big Bear Airport (FAA code L35) is a public airport located in Big Bear Valley of San Bernardino County, California, United States. The Airport is operated by the Big Bear Airport District. The Airport opened in March of 1943, and covers an area of 117 acres. Its single runway (8/26) is 5,850 X 75 feet. The Airport is at an elevation of 6,752 feet. Runway 26 has a published instrument approach.

The Airport has a restaurant, a rental car agency and a Fixed Base Operator. Almost 30,000 annual take offs and landings occur at the Airport, with about 56% being transient general aviation aircraft. A total of 166 aircraft are based on the field; 159 single engine, 3 multi-engine, 1 civilian jet



and 1 glider and 2 helicopters. The Airport is located in Los Angeles Air Traffic Control space and the designated Flight Service Station is Riverside.

The Airport is an economic engine for the immediate region.

The Big Bear Airport District has commissioned Sixel Consulting Group, Inc., to estimate the annual economic impact of the airport. An understanding of the Airport's economic impact can guide community decisions about airport and air service related policies. Most of the 166 based aircraft are owned or operated by residents of San Bernardino County. Transient general aviation aircraft arrive and depart from all over California as well as nearby states - especially Arizona and Nevada.



AREA OF STUDY AND MAP

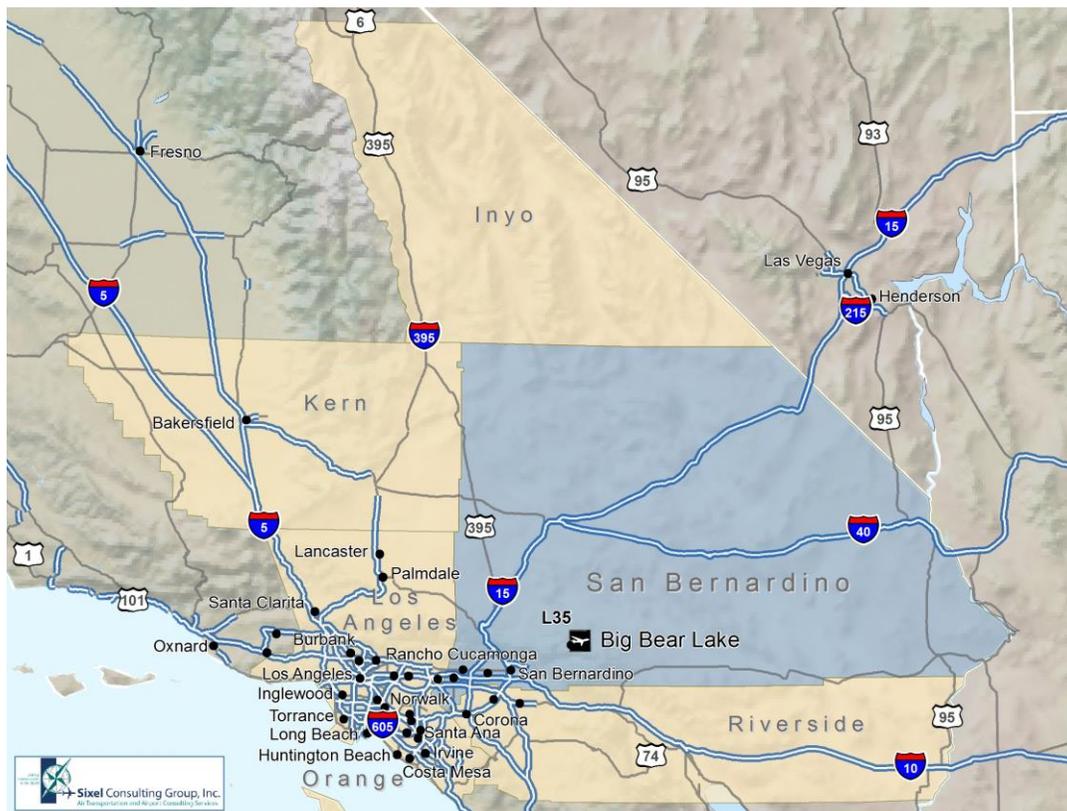
Economic impact from job creation and increased economic activity near an airport typically has an impact upon a much smaller and more localized area than the air service catchment area or the air cargo area or general aviation area outlined above.

For this study, Airport related economic impact is calculated based on San Bernardino County economic data. The Airport is located in that county, which is the largest county in the United States by geographic size. The county is larger than each of the nine smallest states of the Union; is larger than the four smallest states combined, and larger than 71 different sovereign nations. It is important to note however, the physical size of a county is much less of a factor than the actual economics of the county.

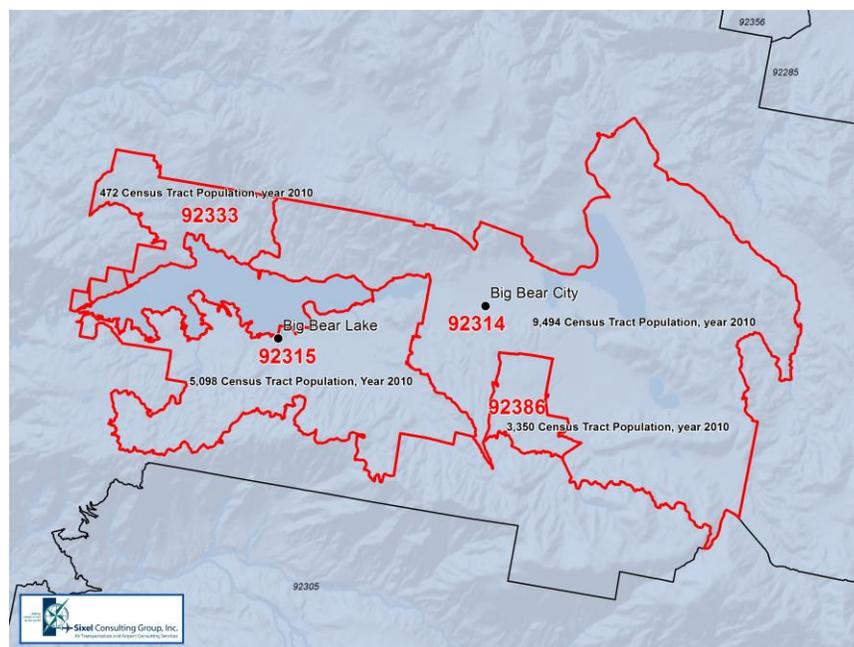
In this case, the county's population exceeds 2,000,000 and almost all of that population is located in the far western and southwestern corner of the county, directly west of Big Bear Airport. The county extends north of Big Bear over 100 miles and east of Big Bear all the way to the Nevada state line. Most of this terrain is desert and has very little resident population.

This study of the economic impact of the Big Bear Airport is based on San Bernardino County economic data.

Big Bear Airport and San Bernardino County



Big Bear Area Zip Codes



METHODOLOGY, TERMS, DEFINITIONS AND ASSUMPTIONS

Major Research Activities

Several steps are involved in the economic impact estimation process. Among the most important are survey data collection, visitor traffic and spending pattern estimates, and computer modeling.

Survey Data

Total direct employment, ongoing business spending patterns, and payroll and related tax estimates associated with the Airport and all of its economic functions, were estimated by surveying Airport tenants. This survey was completed in April of 2014.

Computer Modeling

To compile all economic activity related to the Airport's many economic activities and to project its overall economic impact, Sixel Consulting Group used the Impact Analysis for Planning (IMPLAN) computer program. Developed and produced by the Minnesota IMPLAN Group, Inc., this computer program is recognized as the industry standard for economic impact analysis. It is commonly used by consultants (in and beyond the aviation industry), city planners, academics, and other researchers. The model draws on US Bureau of Economic Analysis data and the survey data inputs discussed above to forecast the impact of any measurable economic activity or change, within a defined community.



IMPLAN computer modeling considers three types of economic impacts with each measured as a combination of sales, employment, and wages. The three types or layers of economic impact are: direct, indirect and induced.

Terms and Definitions

Terms and definitions commonly used in this report include:

Airport Economy – Economic activity at the airport including, jobs, business purchasing and consumer spend.

Full-Time Jobs (Full-Time Equivalents FTE) – A full time job is typically considered to be year round and 40 hours per week. Survey respondents were asked to report employment in FTE equivalents to compensate for part-time employees.

Labor Income – The sum of payroll and benefits paid to workers.

Value Added – The incremental increase(s) in economic production or dollars with each stage of production or round of spending.

Output – The quantity of goods and services created in an economic cycle.

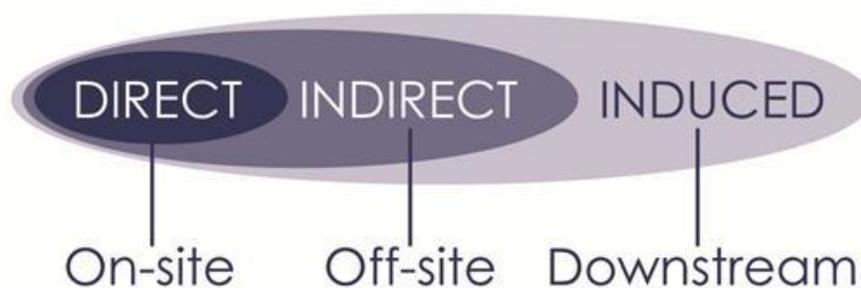
Direct impact refers to the economic impact generated on-site. This includes, for example, employment, payroll, and local expenditures of all organizations located at the Airport.

Indirect impact refers to the off-Airport economic activities and impacts that are driven by on-Airport dollars: the payroll driven local spending of people who

work at the airport, the commercial spending of airport business and the Airport administration and the off-Airport spending of Big Bear area visitors brought to the area by Big Bear Airport air service.

Induced impact relates to the off-Airport economic benefit derived downstream and beyond the combined direct and indirect impacts. Put simply, induced impact is the income generated by subsequent spending downstream and, therefore, is generally known as the “multiplier effect.” It could refer to the employment and expenditures generated by industries supplying services or goods to organizations that derive business from Airport on-site businesses, for example, jet fuel providers, office supply companies, and local restaurants adding employees because airport job holders are dining out.

The Airport’s Economic Impact



State and Local Taxes – The sum of sales, property, motor vehicle, severance, corporate, corporate profit, income and other state and local taxes.

Federal Taxes – The sum of social, excise, custom, corporate, corporate profit and personal income and other federal taxes.



Assumptions

This economic impact study is based on a number of assumptions. Core assumptions include the following:

- 1) If the Airport did not exist all the economic activity currently associated with the airport would either not occur or would take place at nearby airports. In the case of general aviation and business aviation this would mean at nearby Apple Valley Airport, or more typically at San Bernardino International Airport.
- 2) This analysis is a snapshot of Airport driven economic activity. Economic activity is not static. Leisure, general and business aviation activity expands as the national economic recovery occurs.
- 3) The economic impact of the Airport is assumed to occur in San Bernardino County. Certainly modest portions occur in neighboring counties. Airport economic impact analysis for a general aviation airport such as Big Bear Airport is typically assigned to the immediate area around the airport.
- 4) An economic impact study is only as good as the local economic activity survey data that forms the basis for the economic impact modeling. Some Big Bear Airport employers did not respond or provided limited response to the Economic Impact Survey used to generate this economic impact study. In some instances the report has extrapolated some data based upon other data from similar employers or business enterprises.
- 5) The economic database used for this report is for the year 2012, the most current annual data available. The IMPLAN economic impact software



takes the 2012 economic data of San Bernardino County and extrapolates it to 2014 data for the generation of the economic impact projections of this report.

SAN BERNARDINO COUNTY ECONOMIC SNAPSHOT

In 2012 the study area for this report had a population of 2,081,313. There were 662,624 households and average household income was \$95,370.

IMPLAN ECONOMIC IMPACT SOFTWARE SUMMARY OF SAN BERNARDINO COUNTY, CA

Data Year	2012	Value Added Economic Output Snapshot	
GRP	\$70,379,447,783	Employee Compensation	\$36,264,019,211
Total Personal Income	\$63,194,130,000	Proprietor Income	\$4,064,029,792
Total Employment	844,754	Other Property Type Income	\$24,584,028,634
		Tax on Production and Import	\$5,467,370,145
Number of Industries	386	Total Value Added	\$70,379,447,782
Land Area (Sq. Miles)	20,062		
		Total Economic Output Snapshot	
Population	2,081,313	Households	64,315,561,035
Total Households	662,624	State/Local Government	13,330,148,594
Average HH Income	\$95,370	Federal Government	9,916,115,610
		Capital	9,496,759,674
		Exports	60,235,894,635
		Imports	-82,403,642,616
		Institutional Sales	-4,511,388,563
		Total Final Demand:	\$70,379,448,369

Gross Regional Product (GRP), the sum of commerce for the region, was estimated to be \$70.4 billion dollars and total area employment was 844,754.

ON-AIRPORT JOBS AND LABOR INCOME

Estimated Employment Impact of the Airport

The Big Bear Airport supports 38 permanent full-time (FTE) jobs directly at the Airport. This includes employees of the Airport (public sector) and employment across a spectrum of aviation related sectors including: the Fixed Base Operation (FBO), corporate flight operations, aircraft maintenance, a sightseeing service, a Hertz car rental service and a café. The 38 on-airport FTE jobs generate \$1,620,322 in annual labor income.

On-Airport Public Sector Jobs and Labor Income

Airport administration and operational employment make up the Public Sector of the Airport economy. The Airport Administration sector employs 6.5 FTEs. Annual labor income for these 6.5 FTEs is \$372,905.

BIG BEAR AIRPORT ECONOMIC IMPACT				
Public Sector On-Airport Jobs & Income				
Airport Admin Output	Full Time Equivalents	Labor Income	Value Added	Output
Direct Effect	6.5	\$372,905	\$384,098	\$795,247
Indirect Effect	2.4	\$68,703	\$114,672	\$191,651
Induced Effect	2.7	\$65,974	\$136,574	\$196,545
Total	11.6	\$507,582	\$635,344	\$1,183,443
State & Local Tax				\$20,321
Federal Tax				\$102,127

The 6.5 FTEs create, by indirect and induced effect, 5.1 other FTEs in the area. Total annual labor income for the 11.6 FTEs is \$507,582 and total economic output is \$1,183,443. Annual state and local taxes are \$20,321 and federal taxes are \$102,127.



On-Airport Private Sector Jobs and Labor Income

Direct private sector employment at the Airport is 31.5 FTE jobs. For the measurement of economic impact this employment is analyzed in three sectors: Farsight Studios, Barnstorm Café and Other Private, which includes Vonesh Aircraft, Wing Waxers, Helicopter Big Bear, and the Hertz car rental agency.

Farsight Studios is a well-known video game development company with 22 local FTE jobs. While its physical location is not on the Airport, the company and others like it would not be located in the Big Bear Valley if not for the Airport. The company reported 2013 payroll of \$1,039,580. These jobs and payroll create, via indirect and induced effect, another 7.6 FTEs. Total annual labor income from the 29.6 FTEs is estimated at \$1,308,555. Total annual economic output is estimated at \$5.476 million. Annual state and local tax income from this economic activity is \$572,243 and federal tax generation is \$358,233.

The locally popular Barnstorm Café (also a favorite with transient general aviation fliers) reported 3.5 FTEs and annual labor income of \$80,000. These jobs and payroll create, via indirect and induced effect, another .8 local FTEs. Total annual labor income from the 4.3 FTEs is estimated at \$100,601. Total annual economic output is estimated at \$228,299. Annual state and local tax income from this economic activity is \$37,527 and federal tax generation is \$24,613.

The other private sector employers at the Airport combine to support 6.0 FTEs and a reported annual labor income of \$127,837. These jobs and payroll create, via indirect and induced effect, another 1.8 FTEs. Total annual labor income from the 7.8 FTEs is estimated at \$181,473. Total annual economic output is



estimated at \$583,181. Annual state and local tax income from this economic activity is estimated at \$94,717 and federal tax generation is \$69,347.

BIG BEAR AIRPORT ECONOMIC IMPACT				
Private Sector On-Airport Jobs & Income				
Farsight Studios	Full Time	Labor	Value	
Output	Equivalents	Income	Added	Output
Direct Effect	22.0	\$1,039,580	\$2,147,890	\$4,652,381
Indirect Effect	3.3	\$97,432	\$198,643	\$321,870
Induced Effect	4.3	\$171,543	\$342,851	\$501,943
Total	29.6	\$1,308,555	\$2,689,384	\$5,476,194
State & Local Tax				\$572,243
Federal Tax				\$358,233
Barnstorm Café	Full Time	Labor	Value	
Output	Equivalents	Income	Added	Output
Direct Effect	3.5	\$80,000	\$127,332	\$166,487
Indirect Effect	0.3	\$6,722	\$14,670	\$20,477
Induced Effect	0.5	\$13,879	\$28,728	\$41,335
Total	4.3	\$100,601	\$170,730	\$228,299
State & Local Tax				\$37,527
Federal Tax				\$24,613
Other Private	Full Time	Labor	Value	
Output	Equivalents	Income	Added	Output
Direct Effect	6.0	\$127,837	\$219,298	\$420,854
Indirect Effect	0.8	\$17,655	\$35,618	\$55,144
Induced Effect	1.0	\$35,981	\$74,476	\$107,183
Total	7.8	\$181,473	\$329,392	\$583,181
State & Local Tax				\$94,717
Federal Tax				\$69,347
On Airport Private Sector Employment Economic Impact				
Direct Effect	31.5	\$1,247,417	\$2,494,520	\$5,239,722
Indirect Effect	4.4	\$121,809	\$248,931	\$397,491
Induced Effect	5.8	\$221,403	\$446,055	\$650,461
Total	41.7	\$1,590,629	\$3,189,506	\$6,287,674
State & Local Tax				\$704,487
Federal Tax				\$452,193

The Airport's private sector economic activity and employment is responsible for a total of 41.7 local area FTEs with total annual estimated labor income of \$1.591 million. Total annual economic output is estimated at \$6.288 million. Annual state and local tax generation is estimated at \$704,487 and federal tax generation is estimated at \$452,193.

Total Airport Public and Private Sector Jobs and Labor Income

The combined Public and Private Sectors of the on-airport economy creates 38.0 FTEs which, in turn, create 15.1 full-time off-airport jobs either through indirect or induced economic effect in the local region.

On Airport Public Sector Employment Economic Impact				
Output	Full Time Equivalents	Labor Income	Value Added	Output
Direct Effect	6.5	\$372,905	\$384,098	\$795,247
Indirect Effect	2.4	\$68,703	\$114,672	\$191,651
Induced Effect	2.7	\$65,974	\$136,574	\$196,545
Total	11.6	\$507,582	\$635,344	\$1,183,443
State & Local Tax				\$20,321
Federal Tax				\$102,127
On Airport Private Sector Employment Economic Impact				
Output	Full Time Equivalents	Labor Income	Value Added	Output
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Total	41.7	\$1,590,629	\$3,189,506	\$6,287,674
State & Local Tax				\$704,487
Federal Tax				\$452,193
Total On-Airport Employment Economic Impact				
Output	Full Time Equivalents	Labor Income	Value Added	Output
Direct Effect	38.0	\$1,620,322	\$2,878,618	\$6,034,969
Indirect Effect	6.8	\$190,512	\$363,603	\$589,142
Induced Effect	8.5	\$287,377	\$582,629	\$847,006
Total	53.3	\$2,098,211	\$3,824,850	\$7,471,117
State & Local Tax				\$724,808
Federal Tax				\$554,320



Combined public/private annual labor income from the 38.0 on-airport FTEs is \$1.620 million. Total labor income, including that of indirect and induced job creation, totals over \$2.098 million.

Total annual economic output as a result of the on-airport jobs and the indirect and induced job creation, is \$7.471 million dollars.

An estimated \$724,808 in annual state and local taxes are generated from the total economic output, as well as \$554,320 in annual federal taxes.



AIRPORT USER FEES, RENTALS, LEASES AND FUEL SALES

Airport users generate significant revenues for the Big Bear Airport. These user fees, rentals and leases pay a measurable portion of the Airport's operating budget.

Airport Facility User Fees and Rental Fees

The Airport's aeronautical infrastructure, the runway, the terminal, other buildings and hangars and land, generate significant annual user and rental or lease fees.

The runway was used for 14,663 take offs in 2013 or a total of 29,326 operations. This equates to 80.3 operations per day. Operations are generated by both locally based aircraft and by transient

BIG BEAR BASED AIRCRAFT & OPERATIONS: 2013			
Airport Based Aircraft		Aircraft Operations	
Type	Based Aircraft	Type	Number
Single-engine	159	Transient GA	8,211
Multi-engine	3	Local GA	5,425
Civilian Jet	1	Military	1,027
Civilian Helio	2		
Glider/UL	1		
Total	166	Total	14,663

visiting aircraft, both civilian and military. No commercial air taxi or charter operations occur at the Airport. There are civilian helicopter sight-seeing flights.

The Airport reported 166 based aircraft, including two based helicopters, in 2013. The AIRNAV website estimated that in 2012 that 56% of total Big Bear Airport operations were by transient general aviation, 37% were by local general aviation and 7% were by military aircraft.



The Airport's facilities and infrastructure is needed to support and make possible the basing of 166 aircraft and the operation of the 29,326 annual take offs or landings. Airport users pay fees to support the operation of the facility.

The Airport generated \$574,677 aeronautical revenues in 2013. Some \$430,785 of this was (75%) from hangar rental for the 131 on-field Hangar spots. Some \$91,188 was derived from fuel in-to-plane fees, which are charged per gallon but vary for Jet-A fuel vs. Av-gas.

BIG BEAR AIRPORT FACILITY USER FEES AND RENTAL FEES			
Aeronautical			Annual Airport Revenue
Fee Name	Fee Description	Denominator	Revenue
Fuel storage/flow fees	Fuel flowage and storage	Airport market up per Gallon	\$91,188
Airport property rental	Hangar rental	131 Hangars	\$430,785
Airport property rental	Tie down/parking fee	35 Tie downs	\$14,965
Terminal Rental	Concessions and Other	Per space or per square foot	\$25,590
Terminal Rental	Parking	Per event	\$10,466
Terminal Rental	Permits & Fees	Various	\$1,683
Total Annual Aeronautical Fees Generated			\$574,677
Non-Aeronautical			Annual Airport Revenue
Fee Name	Fee Description	Denominator	Revenue
Airport Land Lease	Land Lease	Per space	\$47,855
Property Tax Revenue	Property Tax Income	Income	\$1,151,000
Other Sales	Other revenues	Per space	\$10,968
Total Annual Non-Aeronautical Fees Generated			\$1,209,823
Total Annual Aeronautical and Other Use Revenues Generated at the Big Bear City Airport			\$1,784,500

Terminal rents total another \$37,739 in annual Airport rental/lease income.

Non-aeronautical revenue totals \$1,209,823, the bulk of which (95%) is the Airport's share of property tax revenues. Total annual reported Airport revenues in 2013 were \$1,784,500.

Jet and Aviation Fuel Purchases

During 2013, 195,677 gallons of jet fuel, or Av Gas, were placed on aircraft at the Big Bear Airport. Av-gas represented 67% of the uplift and 74% of the annual FBO



fuel purchase. With in-to-plane markup, the 2013 average retail price paid was \$5.29 a gallon for Av-gas and \$4.13 for Jet-A fuel.

AIRPORT FACILITY USER FEES AND RENTAL FEES				
Total Fuel Sales				Annual FBO Revenue
Fee Name	Fee	Fee Description	Denominator	
Jet A Fuel Sales	\$3.53	Per gallon enplaned	64,585 gallons	\$227,985
Av Gas Fuel Sales	\$4.89	Per gallon enplaned	131,092 gallons	\$641,040
Fuel Sales Total	\$4.44	Per gallon enplaned	195,677 gallons	\$869,025

This constitutes a significant bulk commodity purchase. Most of the economic value of this transaction is upstream on the economic chain from the Airport, involving the mining, refining and transportation of fuel to the Airport for consumption. Fuel arrives at the Airport via truck. For this economic impact estimate we have assumed only 25% of the transactional cost to be local in nature.

AIRPORT FBO RETAIL FUEL SALES				
Retail Fuel Sales Output	Full Time Equivalents	Labor Income	Value Added	Output
Direct Effect	2.0	\$98,210	\$182,316	\$217,271
Indirect Effect	0.2	\$6,094	\$13,335	\$18,582
Induced Effect	0.4	\$15,636	\$32,337	\$46,555
Total	2.6	\$119,940	\$227,988	\$282,408
State & Local Tax				\$54,179
Federal Tax				\$28,381

The wholesale value of the fuel sold at the Big Bear Airport in 2013 was \$869,025. Based on an assumption of 25% of economic value being local the Airport FBO's retail fuel sales generate 2.6 FTEs, \$282,408 in total annual economic output, \$54,179 in state and local taxes and \$28,381 in federal taxes.



AIRPORT COMMERCIAL AND CAPITAL SPENDING

Both public and private sector employers at the Airport spend money day-to-day on materials and services necessary to continue operations. Both public and private sector employers at the Airport have capital expenditures, typically for new or additional equipment or for new or expanded building space.

Each of these expenditures has an economic impact. The challenge is determining the portion of commercial (material or services) or capital expenditure spent in the Big Bear area, as opposed to, for example, an equipment purchase from a vendor hundreds of miles away for a piece of equipment built at that location.

Economic impact surveying of Airport tenants for commercial (material or services) and capital spending is also challenging in that survey respondents sometimes do not know or do not want to share expenditure levels and also must often estimate the portion of an expenditure that is local in nature.

Airport tenant group responded to survey questions about commercial (material or services) and capital spending patterns. Among those some did not provide an estimate of spending that was local vs. spending that was global.

Based on spending patterns for survey respondents that did provide data plus data from other economic impact analyses and based on accepted rules of thumb for local vs. global portions, Sixel Consulting Group has estimated the economic impact of Airport public and private commercial and capital expenditures for 2013. Note that capital expenditures can vary widely up or down by year, depending on which capital projects are ongoing.



Airport Located Commercial Spending

Both the public and private sectors at the Airport generate measurable spending in the form of day-to-day expenditures for both materials and services.

BIG BEAR AIRPORT EMPLOYER COMMERCIAL SPENDING				
Sector	Annual Spending Type	Spend	Percent Local	Local Spend
Public	Materials	\$222,095	25%	\$54,602
	Services	\$203,382	65%	\$132,198
Private	Materials	\$477,500	25%	\$119,375
	Services	\$0	0%	\$0
Total	Materials	\$699,595	25%	\$173,977
	Services	\$203,382	65%	\$132,198
Total	Commercial Spending	\$902,977	34%	\$306,175

Spending on materials and supplies by Airport entities, both public and private, totaled an estimated \$902,977 in 2013. The public sector reported \$425,477 in total spending on materials and services, including utilities. The Airport indicated that it strives to spend 65% of its commercial spending locally and this was assumed except for utilities. The private sector reported \$477,500 in spending on materials and no spending on services. The private sector was assumed to spend 25% of the \$477,500 locally, making total 2013 public/private Airport commercial spending \$902,977 with 34% or \$306,175 spent locally.

BIG BEAR AIRPORT COMMERCIAL SPENDING				
Commercial Spending Output	Full Time Equivalentents	Labor Income	Value Added	Output
Direct Effect	2.2	\$64,462	\$94,163	\$141,495
Indirect Effect	0.7	\$16,014	\$24,631	\$34,388
Induced Effect	0.6	\$14,911	\$21,866	\$28,788
Total	3.5	\$95,387	\$140,660	\$204,671
State & Local Tax				\$44,107
Federal Tax				\$30,976

This local spending of \$306,175 on materials and services by Airport entities, both public and private, supports a total of 3.5 local FTEs. Total annual labor income is



estimated at \$95,387 and total annual local economic output at \$204,671. An estimated \$44,107 in annual state and local taxes and \$30,976 in annual federal taxes are generated.

Airport Located Capital Expenditures

Airport capital expenditures vary from year to year. The Capital Expenditures chart measures capital expenditures for buildings and equipment for year 2013, per the survey results from Airport located businesses and functions. An assumption of a 65% local spend was made. Combined public and private capital expenditures for 2013 were an estimated \$320,461, with \$208,300 or 65% being spent locally.

BIG BEAR AIRPORT CAPITAL EXPENDITURES

Sector	Annual Spending Type	Spend	Percent Local	Local Spend
Public	Capital Expenditures	\$236,461	65%	\$153,700
Private	Capital Expenditures	\$84,000	65%	\$54,600
Total	Total Capital Expenditures	\$320,461	65%	\$208,300

The Airport (public sector) spent \$236,461 or 74% of the Airport total while the private sector reported a total of \$84,000 of capital spending in the year.

The annual economic impact of Airport Employer Capital Spending is .6 FTE jobs and \$33,448 in local labor income. Total output related to this capital spending is \$106,446, estimated state and local taxes are \$6,018 and federal taxes are \$7,827.

AIRPORT EMPLOYER CAPITAL SPENDING				
Capital Spending	Full Time	Labor	Value	
Output	Equivalents	Income	Added	Output
Direct Effect	0.3	\$23,376	\$42,961	\$80,029
Indirect Effect	0.2	\$5,723	\$9,330	\$13,462
Induced Effect	0.1	\$4,349	\$9,002	\$12,955
Total	0.6	\$33,448	\$61,293	\$106,446
State & Local Tax				\$6,018
Federal Tax				\$7,827



BIG BEAR AIRPORT VISITOR (BY AIR) ECONOMIC IMPACT

The Big Bear Airport area (zip codes 92314, 92315, 92333 and 92386) has a resident population of 18,414. However, the area is visited by 100,000 people or more on any given weekend. The primary summer attraction is Big Bear Lake, which is seven miles long and one mile wide and is popular for fishing and boating. Surrounding the Lake is the San Bernardino Forest, popular for hiking, mountain biking and horseback riding. In winter, two ski resorts draw visitors from Southern California and Nevada. While most Big Bear area visitors drive, some fly in via general aviation aircraft using the Big Bear Airport. These visitors contribute to the economy of the area.

The overwhelming majority of these visitors-by-air spend money in San Bernardino County, more specifically, in the Big Bear Lake area. The Airport and its private sector tenants track overnight visitors. From this data we are able to estimate the number of Big Bear Valley visitors-by-air for year 2013.

BIG BEAR AIRPORT VISITOR BY AIR COUNT 2013

Source	Overnight Aircraft Stays	People/Aircraft	Overnight Stays
Vonesh Aircraft			25.0
Farsight Studio			10.0
Wing Waxers			30.0
Transient Count	601	2.5	1,502.5
Total	601		1,567.5

The private sector firms listed above kept track of the number of overnight stays in the Big Bear Airport area by visitors-by-air to their businesses. The Airport kept track of overnight aircraft parking during 2013 and estimated that overnight aircraft had an average of 2.5 persons per aircraft.

Key Assumptions for Visitor (by Air) Economic Impact

In order to estimate the economic impact of the Airport visitors, we make some key assumptions. Many of these assumptions are derived from the 2013 Big Bear Special Events Visitor's Economic Impact report of February, 2014.

- 94% of visitors-by-air stayed in the Big Bear Valley (February 2014 study)
- 65% of visitors used a local hotel/motel (February 2014 study)
- Average stay in the area was 1.88 days (February 2014 study)
- The average daily room rental rate (ADR) is \$100.00 (estimated)
- The average visitor spends \$104 total per day (February 2014 study)

When combined, these assumptions allow us to estimate the local economic impact of visitors-by-air.

Visitor Economic Impact Hotel/Motel

Visitors who arrived by air via the Big Bear Airport generated an estimated 900.3 annual local hotel or motel room nights.

LOCAL HOTEL/MOTEL DEMAND BY VISITORS ARRIVING VIA THE BIG BEAR AIRPORT

Element	Number	Source
Annual Visitors to Big Bear via Use of the Airport	1,568	Airport Counts
Percent Staying Locally	94%	Event Resource Office Report
Visitors Staying Locally	1,473	Derived
Percent Using Local Hotel/Motel	65%	Event Resource Office Report
Persons Using Local Hotel/Motel	958	Derived
Persons per Room	2.0	
Room Nights	478.9	
Average Stay (Nights)	1.88	Event Resource Office Report
Annual Room Nights	900.3	Derived
Average Daily Rental Rate	\$100.00	Estimated
Annual Hotel/Motel Revenue	\$90,028	Derived



These hotel/motel rentals generated an estimated \$90,028 in annual local hotel/motel room rental revenue.

Visitor hotel and motel spending creates 1.1 FTEs via direct, indirect and induced effect. Annual labor income for these jobs totals \$33,030. Annual state and local taxes total \$6,578 while annual federal taxes total \$8,176.

LOCAL HOTEL/MOTEL SPENDING ECONOMIC IMPACT				
Hotel/Motel Output	Full Time Equivalentents	Labor Income	Value Added	Output
Direct Effect	0.8	\$21,886	\$46,265	\$90,028
Indirect Effect	0.2	\$6,850	\$11,114	\$17,504
Induced Effect	0.1	\$4,294	\$8,889	\$12,792
Total	1.1	\$33,030	\$66,268	\$120,324
State & Local Tax				\$6,578
Federal Tax				\$8,176

Visitor Non-Hotel Spending Economic Impact Estimate

The 2013 Big Bear Special Events Visitor's Economic Impact Report of February 2014 also estimated local visitor spending at \$104 per person per day.

Visitor spending (except hotel/motel) runs across a wide gamut of sectors of the local economy, including visitor spending patterns in sectors such as retail gifts, clothing, rental car gasoline, miscellaneous, recreational, sightseeing, and restaurant and bar.

We are estimating this spending at \$54 per visitor day, based on an assumption that the balance of the estimated \$104 per day visitor spending (\$50 per person and \$100 for two people per day) was allocated to hotel/motel or transportation (rental car) expenses.

With an average area stay of 1.88 days the 1,473 annual visitors by air staying locally in the Big Bear area are estimated to generate 2,769 annual visitor days



in the Big Bear area. Multiplied by the estimated \$54 a day in non-hotel or transportation spending, this means local retail, food and drink spending of \$149,526 in the Big Bear Lake area.

LOCAL (NON HOTEL/CAR) VISITOR SPEND IMPACT				
Visitor Spend	Full Time	Labor	Value	
Output	Equivalents	Income	Added	Output
Direct Effect	2.5	\$53,891	\$84,312	\$149,526
Indirect Effect	0.1	\$5,289	\$11,729	\$16,711
Induced Effect	0.2	\$8,844	\$18,306	\$26,346
Total	2.8	\$68,024	\$114,347	\$192,583
State & Local Tax				\$14,867
Federal Tax				\$15,465

This visitor spending creates 2.8 FTEs from direct, indirect and induced effect. Annual labor income for these jobs totals \$68,024. Total annual output is estimated at \$192,583 while annual state and local taxes total \$14,867 while federal taxes total \$15,465.

Total Visitor Lodging and Other Spending Economic Impact

Visitors by air to the Big Bear Lake area via the Airport generated \$312,907 in total annual economic output. This output came from both hotel/motel spending and other visitor spending.

BIG BEAR LOCAL AREA TOTAL VISITOR SPEND IMPACT				
Visitor Spend	Full Time	Labor	Value	
Output	Equivalents	Income	Added	Output
Direct Effect	3.3	\$75,777	\$130,577	\$239,554
Indirect Effect	0.3	\$12,139	\$22,843	\$34,215
Induced Effect	0.3	\$13,138	\$27,195	\$39,138
Total	3.9	\$101,054	\$180,615	\$312,907
State & Local Tax				\$21,445
Federal Tax				\$23,641

A total of 3.9 FTEs are generated with annual labor income of \$101,054. Annual output is estimated at \$312,907 and state and local taxes total \$21,445 while federal taxes total \$23,641.



TOTAL BIG BEAR AIRPORT ECONOMIC IMPACT

The Big Bear Airport supports 38 FTE jobs directly at the Airport across a broad spectrum of public and private aviation related sectors.

These jobs and the economic activity they generate are responsible, after direct, indirect and induced economic effect, for a total of 63.9 FTE jobs in the Big Bear Lake area. These 63.9 FTE jobs have an annual labor income of \$2,448,040. Annual state and local tax generation from these jobs is \$850,557 and annual federal tax generation is \$645,145.

These jobs and related Airport commercial and capital spending result in an annual total economic output of \$8,377,549 million dollars in the Big Bear Lake area.

Some 166 aircraft are based at the Airport and 29,326 take offs or landings were recorded in 2013. Aviation related activities at the Airport generated \$574,677 in aeronautical fees and revenues in 2013. The Airport generated an additional \$1,209,823 in non-aeronautical fees in the same period, making total Airport related revenues \$1.784.5 million. The Airport also sold \$820,000 of fuel to its based and transient aircraft owners or operators. These retail fuel sales generated \$282,408 in additional Airport revenue.

The chart on the next page compiles the sector totals already reviewed in this report into a total economic impact summary.

Total On-Airport Employment Economic Impact				
Output	Full Time Equivalents	Labor Income	Value Added	Output
Direct Effect	38.0	\$1,620,322	\$2,878,618	\$6,034,969
Indirect Effect	6.8	\$190,512	\$363,603	\$589,142
Induced Effect	8.5	\$287,377	\$582,629	\$847,006
Total	53.3	\$2,098,211	\$3,824,850	\$7,471,117
State & Local Tax				\$724,808
Federal Tax				\$554,320
AIRPORT FBO RETAIL FUEL SALES				
Output	Full Time Equivalents	Labor Income	Value Added	Output
Direct Effect	2.0	\$98,210	\$182,316	\$217,271
Indirect Effect	0.2	\$6,094	\$13,335	\$18,582
Induced Effect	0.4	\$15,636	\$32,337	\$46,555
Total	2.6	\$119,940	\$227,988	\$282,408
State & Local Tax				\$54,179
Federal Tax				\$28,381
BIG BEAR AIRPORT COMMERCIAL SPENDING				
Output	Full Time Equivalents	Labor Income	Value Added	Output
Direct Effect	2.2	\$64,462	\$94,163	\$141,495
Indirect Effect	0.7	\$16,014	\$24,631	\$34,388
Induced Effect	0.6	\$14,911	\$21,866	\$28,788
Total	3.5	\$95,387	\$140,660	\$204,671
State & Local Tax				\$44,107
Federal Tax				\$30,976
AIRPORT EMPLOYER CAPITAL SPENDING				
Output	Full Time Equivalents	Labor Income	Value Added	Output
Direct Effect	0.3	\$23,376	\$42,961	\$80,029
Indirect Effect	0.2	\$5,723	\$9,330	\$13,462
Induced Effect	0.1	\$4,349	\$9,002	\$12,955
Total	0.6	\$33,448	\$61,293	\$106,446
State & Local Tax				\$6,018
Federal Tax				\$7,827
BIG BEAR LOCAL AREA TOTAL VISITOR SPEND IMPACT				
Output	Full Time Equivalents	Labor Income	Value Added	Output
Direct Effect	3.3	\$75,777	\$130,577	\$239,554
Indirect Effect	0.3	\$12,139	\$22,843	\$34,215
Induced Effect	0.3	\$13,138	\$27,195	\$39,138
Total	3.9	\$101,054	\$180,615	\$312,907
State & Local Tax				\$21,445
Federal Tax				\$23,641
BIG BEAR AIRPORT TOTAL AIRPORT ECONOMIC IMPACT				
Output	Full Time Equivalents	Labor Income	Value Added	Output
Direct Effect	45.8	\$1,882,147	\$3,328,635	\$6,713,318
Indirect Effect	8.2	\$230,482	\$433,742	\$689,789
Induced Effect	9.9	\$335,411	\$673,029	\$974,442
Total	63.9	\$2,448,040	\$4,435,406	\$8,377,549
State & Local Tax				\$850,557
Federal Tax				\$645,145

SUMMARY

The Big Bear Airport is a significant economic engine for the surrounding region.

Some 166 aircraft are based at the Airport and nearly 30,000 aircraft movements are made on the runway each year. There are 38 FTE jobs on the Airport and those jobs and the economic activity they make possible create, via direct indirect and induced economic effect, another 25.9 local area jobs. For an area with a resident population of only 14,592 this total of 63.9 FTE jobs is a measurable number in the area's overall economic picture.

The Airport enabled an estimated 1,473 visitors to come to the Big Bear area in 2013, and those visitors made measurable contributions to the local economy with local spending on hotels, transportation, meals and entertainment.

Beyond the economic dollar measurements, an Airport is an intangible asset to a community in terms of quality of life and life style options as well as in matters of public safety. Availability of an Airport matters to a small community, even one in the shadow of the greater Los Angeles basin.

It can matter to a local business with a private aircraft or to a local resident that owns all, or a share, of a private aircraft. Without the Airport that local business or that local resident might move someplace else. The Airport also can play an important public safety role in terms of both aerial scouting and fighting of forest fires and in terms of rapid medical evacuations (Flight for Life).

