

INTRODUCTION

The Los Angeles County Department of Public Works Aviation Division oversees the operation of five Countyowned General Aviation (GA) airports:

- > Brackett Field Airport (POC)
- > Compton/Woodley Airport (CPM)
- > San Gabriel Valley Airport (EMT)
- General William J. Fox Airfield ("Fox Field", WJF)
- Whiteman Airport (WHP)

As GA facilities, the County-owned airports play important roles in the National Integrated Airports System by Public Works expenditures are supplemented by federal and state funding to support the County-owned airports. The system is self-sustaining, meaning that revenues earned at the five airports are reinvested to support ongoing operations and capital improvements.

Under this model, relatively small County investments in the system translate to considerable economic benefits for the region.

The County-owned airports also serve roles extending well beyond the airfield—they provide sites and resources for aviation-related and nonaviation business on airport property, and support a number of valuable services that benefit surrounding communities.

The purpose of this study is to characterize the nature of benefits economic and otherwise—generated by each of the County-owned airports and the system as a whole.





BACKGROUND & METHODS

A wide variety of information was collected and analyzed over the course of this Economic Impact Analysis, including:

- Public Works records and financial information
- First-hand data from a survey distributed to all on-airport businesses
- Interviews with various onairport business operators
- Public agency and industry publications or data resources
- Industry-specific facility and operational characteristics

To ensure that the study fully reflects the benefits provided to Los Angeles County communities, it includes both quantitative and qualitative elements. Economic benefits are presented individually for each airport and collectively at a systemwide level.

Quantitative Evaluation

Five general categories of economic benefits provided by the County-owned airports were considered as inputs for the quantitative element of the analysis:

Operations and Management

- Los Angeles County, contracted airport operator, and Air Traffic Control
 - » Revenues and/or expenditures

Capital Projects

- Design and construction to improve airport facilities and infrastructure
 - » Project-related spending

Airport -Supported Industry

- Aviation-related and non-aviation businesses located on airport property
 - On-site business activity (revenues, employment, expenditures)

Visitation and Related Spending

- Spending associated with:
 - » Business and tourism-oriented travel using the County-owned airports
 - » Flight school students
 - » Business travel driven by on-airport industry

On-Location Film Production

- On-airport facilities are utilized for film shoots
 - » Associated spending and employment



A series of inputs was developed through the analysis, representing the industries and monetary values or employment associated with each economic benefit category. These input values were fed into the IMPLAN (Impact Analysis for Planning) modeling platform to measure the economic benefits provided to the Los Angeles County region.

The three types of economic effects quantified in results of the analysis are described in the table to the right.

Direct Effect

Economic activity occurring on site or directly linked to the airports.

For example—Public
Works expenditures,
spending on capital
improvements, revenues
earned by on-airport
businesses.

Indirect Effect

Increased economic activity among connected industries, typically located off airport in surrounding communities.

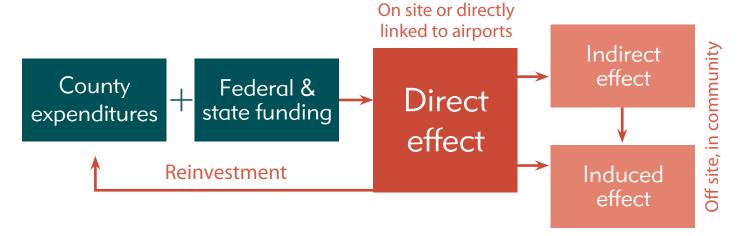
For example—

Construction material sales for a runway project, aircraft parts purchased by a maintenance operator, accounting or legal support.

Induced Effect

Expenditures driven by household income from employees and family members spending earned wages in the community.

For example—Mortgage and auto payments, supermarket purchases, healthcare spending.



Qualitative Evaluation

The County-owned airports strive to deliver benefits throughout surrounding communities as part of their mission. Beyond the economic impacts that have been quantified for this analysis, the County-owned airports and associated businesses make significant, positive contributions to local communities in ways that cannot be expressed by simple numbers. This study identifies some of the important community-oriented benefits associated with each County-owned airport.





BRACKETT FIELD AIRPORT (POC)

Located in the City of La Verne, Brackett Field Airport has served the community and broader Los Angeles County as a GA airport since 1940.

Approximately 270 aircraft are based at Brackett Field Airport, and the airport supported more than 115,000 aircraft takeoffs and landings (tower-reported) in 2018. A variety of aviation-related and other businesses are located on airport property, including at the Brackett Air Business Park. Brackett Field Airport is home to a number of federal and local agency operations that provide critical law enforcement and public safety services to the region. The airport also hosts a number of annual community events, opens its doors to local schools, and is home to training programs preparing the pilots and aviation professionals of tomorrow. Planned capital improvements and the introduction of a new Fixed Base Operator (FBO) will contribute to continued growth and success at Brackett Field Airport.

Businesses and Organizations at Brackett Field Airport

Business	Type*
Air Pacific Academy, LLC	Flight training
Alliance International Aviation	Pilot supply shop
Brackett Hangars, LLC	Hangar leasing
Coastal Helicopters	Helicopter operator
Danco Anodizing, Inc.	Light industrial
Global Aviator's Academy	Flight training
Hoffman Enterprises, LTD	Hangar leasing
Howard Aviation, Inc.	Aircraft maintenance
Metrovest Management	Property management
Norm's Hangar Coffee Shop	Restaurant
Mt. San Antonio College	Flight training
Performance Engines	Aircraft engine production
Rotors & Wings Aviation	Flight training
So Cal Flying Club	Flight training
Sunrise Pacific Aviation	Hangar leasing
Universal Air Academy	Flight training
West Covina Wholesale Nursery	Agriculture & nursery
Z Designs	Aircraft & auto customization
Los Angeles County Sheriff Aero	Law enforcement/public safety
Los Angeles County Fire Aero	Public safety
Metro Sheriff	Law enforcement/public safety
Pomona Police Department	Law enforcement/public safety
Metropolitan Water District	Public service
Fontana Police Department	Law enforcement/public safety
US Drug Enforcement Agency	Law enforcement/public safety
US Department of Justice	Law enforcement/public safety
Air Traffic Control Tower (FAA)	Public service
Civil Air Patrol	US Air Force civilian auxiliary
Brackett Field Airmen Association	Not-for-profit aviation organization
San Gabriel Valley Ninety-Nines	Non-for-profit aviation organization

^{*}Primary function, though many serve multiple purposes



Economic Benefits—Brackett Field Airport

Impact Type	Employment	Employee Wages	Economic Output
Direct Effect	363	\$27.1 million	\$51.5 million
Indirect Effect	109	\$7.7 million	\$19.4 million
Induced Effect	142	\$8.0 million	\$22.8 million
Total Effect	614	\$42.8 million	\$93.7 million

Community Events

- Brackett Field Airport open house
- Taste of La Verne, a local food festival
- Civil Air Patrol search and rescue exercise
- > Academy of Model Aeronautics
- Experimental Aircraft
 Association Learn to Fly
- Educational visits from local elementary, middle, and high schools

BUSINESS SPOTLIGHT

Coastal Helicopters

Coastal Helicopters employs its fleet of light- to heavy-duty helicopters to support its wide-ranging work. The company has 25 employees and most of its work involves important behindthe-scenes services with public benefits. Coastal Helicopters equipment and employees are on call 24/7, and stand ready to respond to wildfire emergencies whenever and wherever they are needed. The company's utility inspection services help maintain the safety and reliability of overhead transmission lines, and biological survey services help monitor endangered species and critical habitat from the sky.





COMPTON / WOODLEY AIRPORT (CPM)

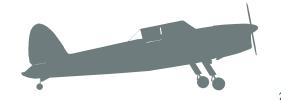
Compton/Woodley Airport has been in operation since 1924, providing general aviation services for the City of Compton and southern Los Angeles County.

Approximately 190 aircraft are based at Compton/Woodley Airport, and the airport supported some 66,000 aircraft operations in 2018. In addition to housing aviation-oriented and non-aviation businesses, Compton/Woodley Airport is home to an aeronautical museum and tremendously successful youth programs promoting close ties to the community. The airport is a vital community asset, and runway upgrades are among the recent capital improvements at Compton/Woodley Airport.

Businesses and Organizations at Compton/Woodley Airport

Business	Type*
Celebrity Helicopters	Helicopter operator
Sky Ads	Aerial advertising
Van Wagner Aerial Media LLC	Aerial advertising
Aircraft Rebuilders LLC	Aircraft maintenance
Black Pilots Association	Not-for-profit aviation organization
Experimental Aircraft Association	Not-for-profit aviation organization
Tomorrow's Aeronautical Museum	Museum and youth programming

^{*}Primary function, though many serve multiple purposes







Economic Benefits—Compton/Woodley Airport

Impact Type	Employment	Employee Wages	Economic Output
Direct Effect	34	\$2.9 million	\$7.0 million
Indirect Effect	17	\$1.2 million	\$2.8 million
Induced Effect	18	\$1.0 million	\$2.9 million
Total Effect	69	\$5.1 million	\$12.7 million

Community Events

- > Young Eagles rally
- Open house and youth air fair
- Experimental Aircraft
 Association model expo
- Youth backpack giveaway and toy drive
- > Career Day school visit







BUSINESS SPOTLIGHT

Tomorrow's Aeronautical Museum

Tomorrow's Aeronautical Museum (TAM) is a multi-faceted museum, community outreach, and educational organization that creates opportunities for children from the City of Compton by introducing them to the world of aviation.

Some 6,000 children are enrolled in TAM's after-school program at Compton/ Woodley Airport, with between 120 and 150 kids participating in a given day. The after-school program provides academic support, mentoring, and career-oriented training in STEM disciplines such as coding, engineering and design, robotics, and manufacturing, with a special focus on aviation and aerospace. Many graduates of TAM go on to pursue exciting careers and often return to the program to volunteer their time and serve as role models for the kids.

Through TAM, students can earn opportunities to enroll in flight training and learn to fly—among the organization's many successes, eight children from its program have set 15 different aviation world records for their accomplishments! TAM has recently invested in electric aircraft to continue offering children cutting-edge training that allows them to chase their dreams.

SAN GABRIEL VALLEY AIRPORT (EMT)

San Gabriel Valley Airport, previously named El Monte Airport, has been serving the surrounding community as a general aviation airport since 1936.

More than 250 aircraft are based at San Gabriel Valley Airport, along with a variety of businesses. The airport recorded more than 89,000 aircraft takeoffs and landings in 2018. San Gabriel Valley Airport is also a base for emergency service providers and hosts a variety of community service and outreach events. Recent reinvestment at San Gabriel Valley Airport includes improvements to airfield facilities, such as a comprehensive rehabilitation of nearly 50 acres of paved apron for aircraft.

Businesses and Organizations at San Gabriel Valley Airport

Business	Type*	
Aerial Art Photography	Aerial photography	
Aerial Sim Training	Flight simulation training	
AMDG Aviation, Inc.	Hangar leasing	
Annia's Kitchen	Restaurant	
Billion Air Aviation	Fixed base operator	
Aero Association of Caltech (aka Cal Tech/JPL Flying Club)	Flight training	
Joey's Mobile Detailing	Aircraft & auto services	
Mondo Beyondo Thrill Squadron	Flight training	
SoCal Flying Club	Flight training	
Universal Air Academy	Flight training	
Topway Auto Shop	Auto services	
Cox Aviation LLC	Aviation services	
Civil Air Patrol	US Air Force civilian auxiliary	
Mission Flight	Not-for-profit aviation organization	
San Gabriel Valley Airport Association	Not-for-profit aviation organization	
El Monte Police Department	Law enforcement/public safety	
Air Traffic Control Tower (FAA)	Public service	

^{*}Primary function, though many serve multiple purposes



Economic Benefits—San Gabriel Valley Airport

Impact Type	Employment	Employee Wages	Economic Output
Direct Effect	141	\$7.0 million	\$13.9 million
Indirect Effect	31	\$2.1 million	\$5.2 million
Induced Effect	43	\$2.4 million	\$6.8 million
Total Effect	215	\$11.5 million	\$25.9 million

Community Events

- Open House and Display
 Day events
- Household hazardous and electronic waste collection
- Aircraft Owners and Pilots
 Association (AOPA) Rusty
 Pilots refresher program
- > Airport tours for local schools

BUSINESS SPOTLIGHT

Billion Air Aviation

Billion Air Aviation is a FBO that offers an array of fueling, maintenance, and other services for private aircraft, and comfortand convenience-oriented amenities to passengers and pilots with an emphasis on corporate air travel. The company opened its San Gabriel Valley location in 2011, and its clients include corporate and other private jets. Billion Air's operation stimulates economic activity in El Monte and Los Angeles County, and fills a valuable role by providing services to corporate aircraft in the region.





GENERAL WILLIAM J. FOX AIRFIELD (WJF)

General William J. Fox Airfield, also known as "Fox Field", is located in the City of Lancaster in northern Los Angeles County and has been in operation since 1959.

The airport is home to approximately 190 based aircraft, and a number of aviation-oriented and non-aviation businesses are located on site. In 2018, there were more than 81,000 takeoffs and landings at Fox Field. The airport has been home to the annual Los Angeles County Air Show for several years, and this event is one of the premier air shows in California. A US Forest Service air-tanker facility at the airport provides firefighting support during wildfire emergencies in the region. Planned improvements at Fox Field include a runway reconstruction and other work to maintain the airport's high standard of quality.

Businesses and Organizations at General William J. Fox Airfield

Business	Type*	
Barnes Aviation	Flight training	
Exodus Air Service	Aircraft maintenance	
Foxy's Landing	Restaurant	
High Desert Avionics	Aircraft maintenance/avionics	
Land Sea Air Leasing Corporation	Hangar leasing	
MH Aviation, Inc.	Aircraft maintenance	
Antelope Valley College	Maintenance training	
Air Traffic Control Tower (Serco)	Public service	
US Forest Service	Public safety	
Civil Air Patrol	US Air Force civilian auxiliary	
Antelope Valley Chapter of the Ninety-Nines	Not-for-profit aviation organization	
Fox Field Airport Association	Not-for-profit aviation organization	

^{*}Primary function, though many serve multiple purposes





Economic Benefits-General William J. Fox Airfield

Impact Type	Employment	Employee Wages	Economic Output
Direct Effect	122	\$9.0 million	\$17.3 million
Indirect Effect	52	\$3.8 million	\$9.2 million
Induced Effect	53	\$3.0 million	\$8.5 million
Total Effect	227	\$15.8 million	\$35.0 million

Community Events

- Los Angeles County Airshow
- Antelope Valley 99's Annual Poker Run
- Civilian Air Patrol Summer
 Camp Day at the Airport with
 Aircraft
- > Community fundraisers

BUSINESS SPOTLIGHT

Barnes Aviation

Barnes Aviation is a flight training and aircraft maintenance business at William J. Fox Airfield that has been in continuous operation since 1940. The company provides a wide variety of aviation services including flight training, aircraft rental, and all types of aircraft maintenance including major repairs and rebuilding. Barnes Aviation estimates that its operation leads to 500 visits to the Antelope Valley each year as students and customers travel to Fox Field.



WHITEMAN AIRPORT (WHP)

Whiteman Airport has been serving the community of Pacoima and San Fernando Valley for more than 70 years.

The airport is home to more than 600 based aircraft—the most in the Los Angeles County system—and facilitated more than 116,000 takeoffs and landings in 2018. Businesses located at Whiteman Airport include a number of aircraft maintenance, flight training, and other aviation-oriented operations. The airport has experienced significant growth as an economic presence over the past several years. To support this continued growth, upcoming improvements at Whiteman Airport include construction of a new apron area and improved vehicle access.



Businesses and Organizations at Whiteman Airport

Business	Type*	
Welk Aviation: Angel City Air, Summit Helicopter & West Coast Helicopters	Helicopter operations	
Able Air Corporation	Aircraft maintenance	
Argubright Construction	Hangar construction & leasing	
Burbank Air Service	Aircraft maintenance	
California Hangars	Hangar leasing	
Erect-A-Tube, Inc.	Hangar leasing	
Glendale Community College (Aviation Program)	Flight training	
Hartmann Hangars	Hangar leasing	
Helitender	Avionics	
Keystone Aerial Surveys	Aerial surveys	
M & D Aircraft Storage Inc.	Hangar leasing	
Pacific West Aviation/Western Hangars	Hangar leasing	
Rick Coulter	Hangar leasing	
Schiff Aviation	Aircraft maintenance	
Sierra Pacific Aviation, LLC	Hangar leasing	
Specialty Aero Leasing	Hangar leasing	
Vista Air	Flight training	
Vista Aviation	Aircraft maintenance	
Air Traffic Control Tower (Serco)	Public service	
Sod & Soil Depot	Landscaping products	
Mesquite Productions	Film production	
Civil Air Patrol, Squadron 35	US Air Force civilian auxiliary	
Experimental Aircraft Association	Not-for-profit aviation organization	
Whiteman Airport Association	Not-for-profit aviation organization	

^{*}Primary function, though many serve multiple purposes



Economic Benefits—Whiteman Airport

Impact Type	Employment	Employee Wages	Economic Output
Direct Effect	273	\$22.7 million	\$60.8 million
Indirect Effect	169	\$12.0 million	\$28.6 million
Induced Effect	141	\$8.0 million	\$22.7 million
Total Effect	583	\$42.7 million	\$112.1 million

Community Events

- > Annual open house
- Experimental Aircraft
 Association Young Eagles
 program
- Field trips for local academic and community organizations

BUSINESS SPOTLIGHT

Vista Aviation

Vista Aviation (Vista) is a growing business at Whiteman Airport that specializes in aircraft maintenance, inspections, and avionics installations. The company's owners also operate the Vista Air flight school from the same airport. Many customers fly to and from Whiteman Airport to have their aircraft serviced by Vista. The company serves domestic and international customers, including defense contractors. Vista actively participates in the airport's community outreach programming and supports local charities through donations.



LOS ANGELES COUNTY

AIRPORT SYSTEM



This study has examined and quantified the economic benefits associated with each of the five County-owned airports:

- > Brackett Field Airport (POC)
- Compton/Woodley Airport (CPM)
- San Gabriel Valley Airport (EMT)
- General William J. Fox Airfield ("Fox Field", WJF)
- > Whiteman Airport (WHP)

The County-owned airports are GA facilities that play important roles in the National Integrated Airports System by facilitating civil air traffic.

Systemwide Economic Benefits

These airports are used extensively for business, charter and private travel, and flight training. Each airport makes valuable contributions to the Los Angeles County region by supporting economic benefits and community services.

Among these community services, the County-owned airports support a number of law enforcement, disaster response, and public safety operations, offer restaurants and viewing areas to the public, and host air shows and open house events each year.

The cumulative total of economic benefits produced by the five County-owned airports represents a



substantial systemwide contribution to the region's economy.

In total, the County-owned airports support more than 1,700 jobs representing \$118 million in employee wages and \$279 million in economic output within the County each year.

These values include the operations and management of the five-airport system, capital investments, on-airport business activity, and the "ripple effect" that occurs through transactions involving off-airport businesses and residents in Los Angeles County.

EMPLOYMENT

Indirect Effect............ 378

Induced Effect.......... 397

Total..... 1,708



EMPLOYEE WAGES



\$68.7Direct Effect

\$26.8Indirect Effect

\$22.4Induced Effect

\$117.9Total

ECONOMIC OUTPUT

Direct Effect.... \$150.5

Indirect Effect..... \$65.2 MILLION

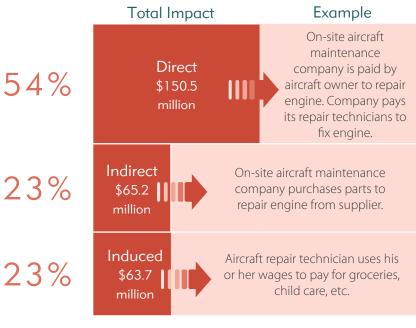
Induced Effect..... \$63.7

Total.....\$279.4







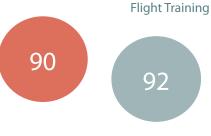


Outcomes of the analysis show that while the direct effect accounts for 54% of the airport system's total economic output, nearly half of the economic output—46%—is associated with the indirect and induced effects as economic activity ripples across surrounding Los Angeles County communities.



The County-owned airports support high-quality jobs for local residents, including in rapidly growing aviation-oriented sectors.

Food & Beverage Service



Aviation Support & Aircraft Maintenance



Public Sector—Gov't Services

68

Construction—Airport Improvements



291



Community Benefits Summary

Each of the County-owned airports operates within the context of surrounding communities, and as part of their mission, the airports strive

to deliver benefits to all residents. In addition to the economic benefits that have been quantified through the analysis, the County-owned airports provide a number of tangible benefits that are not as readily characterized in numeric terms. The following table summarizes some of these valuable contributions.

Key Community Benefits



Education

- > Youth programming & outreach
- > Flight training
- > Aviation & aerospace career development
- > Aircraft fabrication & assembly



Public Safety

- > Aerial firefighting against wildfires
- > Law enforcement
- Medical support
- > Power line utility support
- > Designated staging area for natural disasters



Facility & Mobility

- > Charter, shuttle, private air travel
- > Government operations as needed
- > Outlet for enthusiasts



Community Service & Events

- > Events and air shows
- > Tourism services
- > Aerial news & traffic reporting





5

general aviation airports



467,000 aircraft operations in 2018

94 on-airport businesses & organizations

\$279 million total economic output

