
Airport Role and Activity Forecasts

AIRPORT ROLE

Present

GENERAL AVIATION

- ▶ There are 221,000 general aviation aircraft in the U.S., approximately 92% of the total civilian fleet.
- ▶ Some 78% of all GA aircraft have fewer than six seats and weigh less than a compact car.
- ▶ General Aviation generates about \$65 billion in U.S. economic activity each year.
- ▶ More than 65% of all GA flights are conducted for business, commercial, and public service purposes.
- ▶ Typically, there are approximately 132,000 GA flights per day.
- ▶ GA connects the majority of communities with the nation's air transportation system.
- ▶ GA serves more than 5,300 public-use airports in communities both large and small. Scheduled airlines serve only 660 U.S. airports and 75% of major airline flights operate out of only 66 big-city airports (half of these flights only serve 29 hub airports).

Jacqueline Cochran Regional Airport is one of five public airports owned by Riverside County. As a general aviation facility, the airport provides a base of operations for local pilots, a point of air access to the Coachella Valley region, eastern Riverside County and the Desert Resorts region and surrounding communities. It is also a place to conduct business, and a point of emergency access for the region. These airport functions are discussed below:

- ▶ **A Base for Jacqueline Cochran Regional Airport/Coachella Valley Pilots** — Jacqueline Cochran Regional Airport is the most convenient general aviation airport for the majority of pilots who live or work in the southern Coachella Valley and communities in proximity to the airport.
- ▶ **A Point of Air Access for Visitors to the Community** — The airport is an entrance to southeastern Riverside County, the Coachella Valley and communities, resorts and businesses surrounding the airport for both recreation and business activities. Visitors are attracted to nearby desert resorts, golf courses, spas, shopping, restaurants, and entertainment.

- ▶ **A Place to Conduct Business** — The airport is located close to major resort and conference facilities, and has facilities for meetings and theme parties.
- ▶ **A Site for Emergency Community Access** — Following such natural disasters as a major earthquake, fire, or flood, airports are often of critical importance as points of access into a community for emergency and disaster relief services. In addition, if local/regional surface access routes (i.e., highways, roads and rail lines) are rendered unusable or blocked, air transportation may be the only means of efficiently getting medical and relief supplies into the affected area. The Jacqueline Cochran Regional Airport has been used as a site for the aeromedical transfer of local hospital patients.

Personal/recreational flying: the use of aircraft by individuals (in their own, rented, or borrowed aircraft) for pleasure, recreational, or personal transportation not in furtherance of their occupation or company business.

Business flying: the use of aircraft by pilots (not receiving direct salary or compensation for piloting) in connection with their occupation, their employer's business, or in the furtherance of private business.

Corporate flying: the use of aircraft, owned or leased, and operated by a corporation or business firm, for the transportation of personnel or cargo in furtherance of the corporation's or firm's business, and which are flown by professional pilots receiving a direct salary or compensation for piloting.

The Future

The horrific events of September 11, 2001, had a serious, but temporary impact on the nation's air transportation system. For the first time in U.S. history the entire civil aviation fleet, other than some law enforcement aircraft, was grounded for a period of several days. Over the months, and perhaps years ahead we will see changes in the country's airport and air transportation systems that could not even have been imagined in the past. What these changes will ultimately entail can only be speculated on at this time, but it can be assumed that more restrictions, not fewer, will be imposed on civil aviation unless the threat to our national security is diminished.

Nonetheless, Jacqueline Cochran Regional Airport will continue to function much as it has in the past, i.e., as a general aviation airport serving a range of general aviation activities and providing services to current users (personal/recreational, and business). The current mix of aircraft at the airport ranges from small single-engine aircraft up to and including large business aircraft (e.g., Boeing Business Jet). No scheduled air carrier (passenger) or air cargo service is anticipated at this time. However, the potential exists that a scheduled airline or an air cargo carrier may propose serving Jacqueline Cochran Regional Airport in the future. As was recommended in the previous master plan, space should be maintained for future development of commercial aviation and air cargo facilities if a demand for these services materializes. Until then, Jacqueline Cochran Regional Airport needs to focus on providing the facilities needed to accommodate business aviation and personal/recreational flying. Planning for such growth is not easy due to numerous variables beyond local influence or control.



Boeing Business Jet

Nationwide Trends

After several years of significant growth the market for business jets had effectively stalled by the end of 2002. Prior to this, in the four years leading up to 2002, business jet sales had quadrupled, and this growth trend was projected to be maintained, or even enhanced over the next ten to twenty years. At the end of 2001, the 10-year forecast of business jet deliveries—6,896 aircraft worth an estimated \$94.4 billion between 2001 and 2010—represented a 70 percent increase over the \$54.3 billion in business jet deliveries between 1991 and 2000, and the worst year of this forecast was anticipated to be better than any year prior to 1999. (Aviation Week & Space Technology, January 14, 2002).

Unfortunately, according to a later edition of Aviation Week & Space Technology (January 13, 2003), this had all changed by the end of 2002. Business jet deliveries declined in 2002 and most manufacturers announced production cuts for 2003. A considerable amount of the demand for business jets was generated as a result of fractional ownership (about 25-30%), and the future status of many of these companies is open to question. Until there is resurgence in demand, the market for new and used business jets is projected to be sluggish. Worse, the severity and length of this downturn depends on broader economic factors that do not look encouraging. This will also have an adverse effect on the development of the next generation of business jets, with manufacturers exercising caution in their plans for developing new models.

Local and Regional Trends

Personal/recreational aviation activities and facilities are anticipated to remain an integral component in the development of Jacqueline Cochran Regional Airport. Many people are either retiring to the area, or are building upscale winter homes in the region. Many of these people have airplanes that will require small hangars and other based aircraft facilities. Similarly, sailplane operations are anticipated to continue at the airport. Area population growth, coupled with increasing visibility of the Coachella Valley as a recreation and conference destination will result in an increase in sailplane operations over time.

Once the national economy stabilizes and as the economic base of the Coachella Valley evolves over the next 20 years, the Airport can expect to see increased use by turboprop and business jet aircraft. Most of the growth in operations is expected to be by transient aircraft using the airport for business and recreational purposes. The Airport is anticipated to see only limited growth in

rotorcraft operations, unless it comes from military or law enforcement activities.

Given the full range of these circumstances, including the future state of the economy, the availability of developable land both on and off the airport, and the economic incentives offered through the empowerment and enterprise zones, the future development potential for Jacqueline Cochran Regional Airport remains quite good. Therefore, it is anticipated that the basic role and functions of the airport today will continue for the 20-year period projected in this master plan study. Accordingly, the emphasis of the master plan is on supporting and maintaining the current role of the airport.

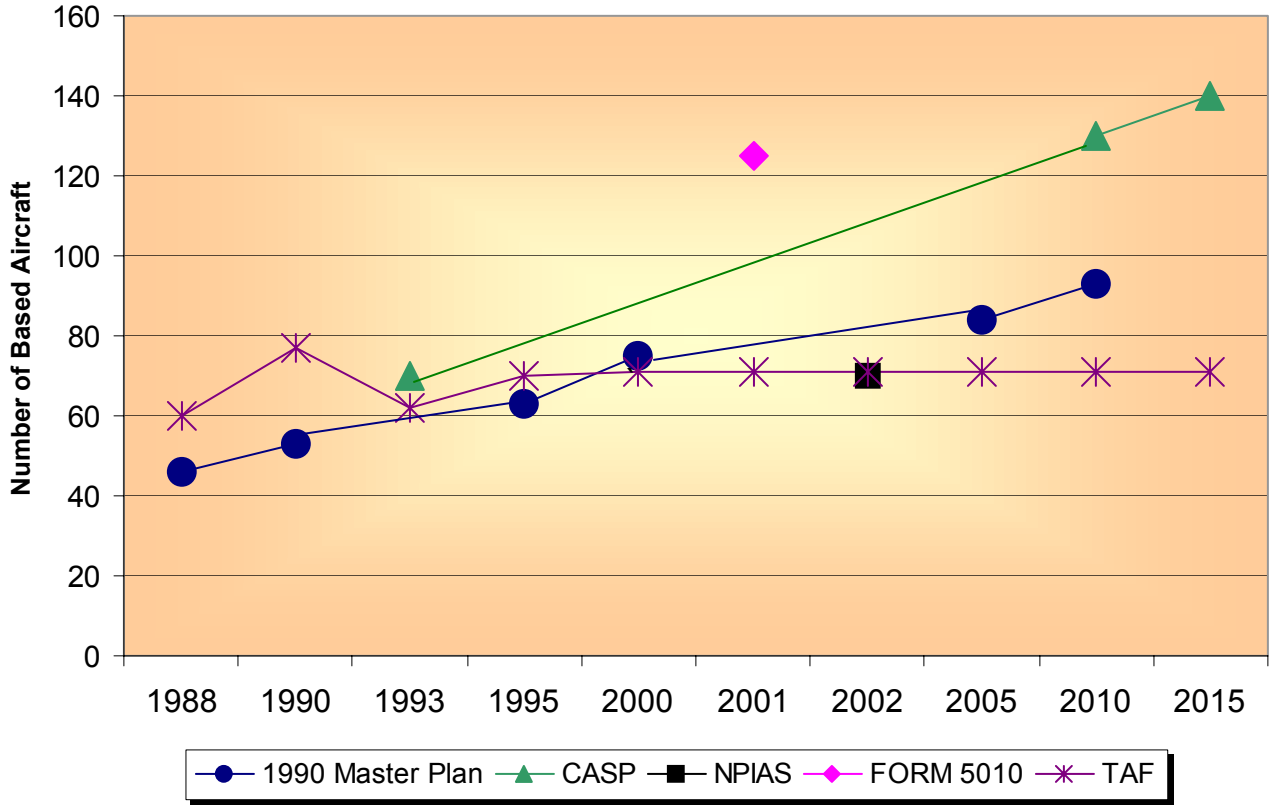
HISTORICAL AIRPORT ACTIVITY

Based Aircraft

As is common with most general aviation airports, reliable historical information on based aircraft is limited and even published information is often based on estimates. From information provided by Riverside County, it was determined that there were 71-based aircraft at Jacqueline Cochran Regional Airport in 2002¹. The majority of these aircraft are stored in hangars provided by the FBO (57) and in hangars on land leased from the County (7). Seven aircraft are parked at the FBO or on County-owned tie-down aprons. These based aircraft are inventoried by type in Table 2A. Also included in Table 2A is the forecast of based aircraft for 2022.

Historical data on based aircraft at Jacqueline Cochran Regional Airport were collected and analyzed in the 1990 airport master plan for the period 1970 through 1987. Basically, there were an estimated 59 aircraft based at the airport in 1970. This number dropped to 31 in 1971 and grew to 53 by 1990. By 2002, the number of based aircraft had increased to 71. Figure 2-1 shows the historical trend for based aircraft at Jacqueline Cochran Regional Airport for the period 1988-2002, along with forecasts of based aircraft through 2015 from the 1990 master plan, California Airport System Plan (CASP), National Plan of Integrated Airport systems (NPIAS), and FAA Terminal Area Forecasts (TAF). Table 2A shows the 2022 based aircraft forecasts.

¹ In its unpublished 2003 draft "Regional General Aviation Forecasts" report, the Southern California Association of Governments (SCAG) listed 49-based aircraft for 2002.



Source: Data compiled by Mead & Hunt, Inc. (February 2003)

Figure 2-1

Historical and Forecast Based Aircraft Jacqueline Cochran Regional Airport

Table 2A

Master Plan Activity Forecasts		
BASED AIRCRAFT		
	Actual	Forecast
Aircraft Type	2002	2022
Single-Engine	51	161
Twin-Engine	14	54
Jets	4	34
Helicopters	2	6
Sailplanes	0	0
Ultralights	0	0
Total	71	255



Gulfstream G-IV



Gulfstream G-V



Canadair CL-600

Transient Aircraft Parking

Information on the demand for transient aircraft parking is limited to data from tiedown fees and observations from FBO and County employees. Transient aircraft utilize the parking apron area provided by the major FBO north of Taxiway A. Demand for transient parking varies significantly on a day-to-day basis. During normal operations, transient parking is adequate. On peak days, up to eight aircraft may be on the transient apron, and during major events (e.g., PGA golf tournaments), both the transient apron and nearby tie-down areas are heavily utilized. During these periods of peak activity, there is a mix of both large and small aircraft on the parking aprons. These aircraft include very large business jets, such as the Gulfstream Aerospace G-IV and G-V, the Canadair CL-600 and, increasingly, the Boeing Business Jet (BBJ). The Airport is rapidly running out of parking area for these large business jets.

In addition, since September 11, 2001, many businesses have turned to aircraft charter services to transport employees, rather than utilizing scheduled air carrier services due to the likelihood of security and scheduling delays. It is anticipated that this trend will continue. The increased demand for transient parking will also include the need for facilities for small- to medium-sized (up to 25,000 pounds maximum gross takeoff weight--MGTOW) twin-engine business jets and turboprop airplanes. Typical of these aircraft are the Cessna Citation and Bombardier Learjet families of business jets, and the Raytheon Beechcraft King Air 200 and 300 series of turboprops.



Cessna Citation



Beechcraft King Air 200

Aircraft Operations

As with nearly all non-towered airports, no regular counts of aircraft operations are conducted at Jacqueline Cochran Regional Airport. Therefore, current operations are, of necessity, estimated. The only actual counts available are those samples taken by the California Division of Aeronautics (DOA) staff. The DOA periodically estimates the number of operations at non-towered airports using data gathered by an acoustical aircraft counter. The DOA typically takes two-week samples during each quarter and uses these to estimate total operations for the year. The most recent year for which the DOA attempted to prepare an estimate for Jacqueline Cochran Regional Airport was 2001. However, due to equipment failure this count was never completed.

On the basis of fuel and operations data collected in early 2000 by the aviation consulting firm of Shutt Moen Associates, it was estimated that the Airport had 43,000 annual operations in 1999. The FAA Airport Master Record (Form 5010-1) indicates a constant 76,500 annual operations from 2000-2002, and the FAA Terminal Area Forecasts (TAF) shows 76,500 annual operations from 1990 through 2015 (see Figure 2-2). Without a definitive source of operational information or an accurate count of annual operations, it is not possible to say exactly how many aircraft operations took place at Jacqueline Cochran Regional Airport in 2002. Additionally, the events of September 11, 2001, negatively affected the number of operations at airports around the country. Hence, County staff has estimated the annual aviation activity level for 2002 at around 65,000 operations². This is less than indicated on the Form 5010, but nonetheless allows for decreased operational levels as a result of current national economic trends and indicators, and, to some extent, the aftereffects of 9/11/2001.

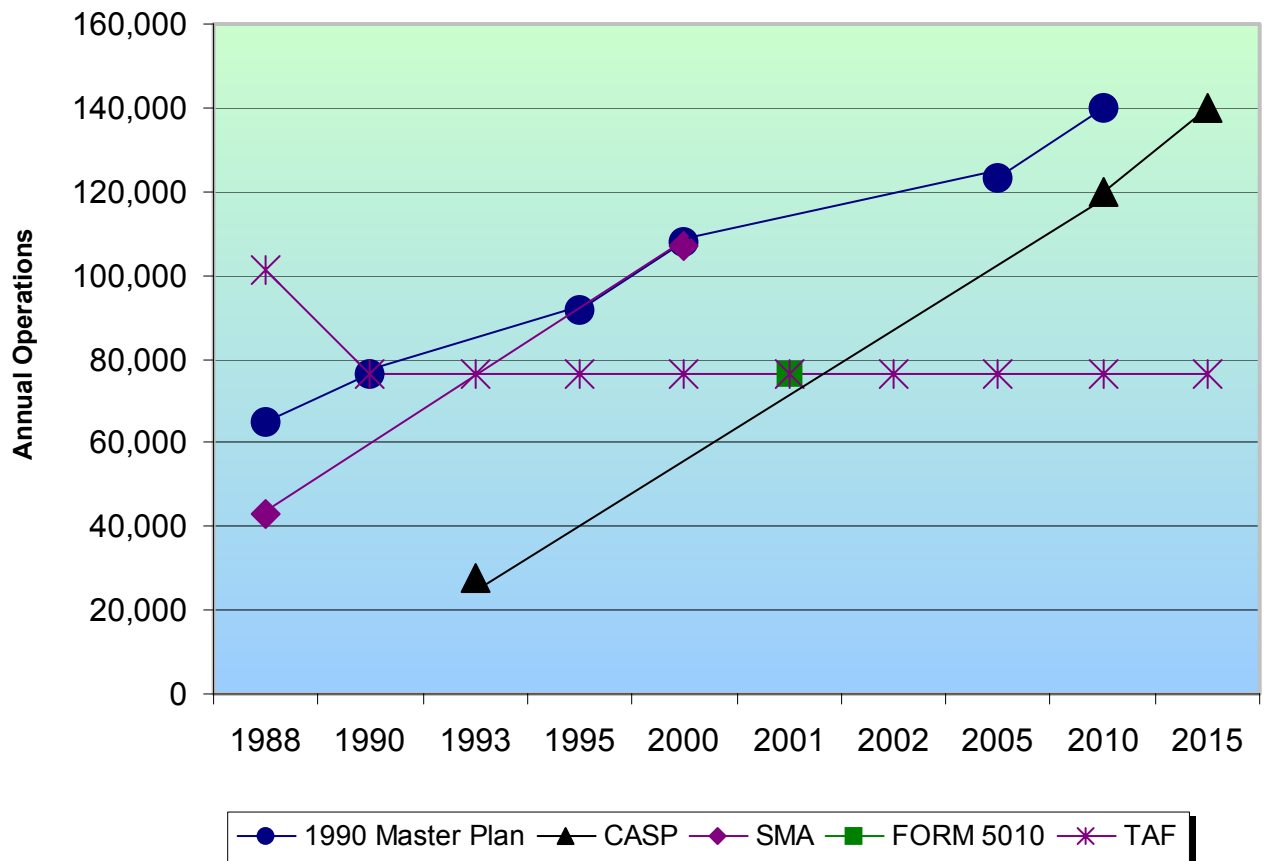
Distribution of Operations

The historical distribution of operational activity (i.e., day/night, VFR/IFR, local/itinerant) can be derived in part from airport records, and in part from discussions with those familiar with the airport (e.g., airport staff, airport users, etc.). Since Jacqueline Cochran Regional Airport has neither an FAA air traffic control tower, nor a precision instrument approach, the vast majority of operations at the airport are conducted during daylight hours. Such distribution of activity is consistent with day/night activity indices for comparable general aviation airports.

Definition: Operation

For purposes of reporting airport activity, an "operation" is considered to be a takeoff or a landing. A "touch-and-go" is counted as two operations, i.e., a takeoff and a landing.

² SCAG listed 54,400 aircraft operations in 2002 in its unpublished 2003 "Regional General Aviation Forecasts" report.



Source: Data compiled by Mead & Hunt, Inc. (February 2003)

Figure 2-2

Historical and Forecast Annual Operations
 Jacqueline Cochran Regional Airport

Of the 65,000 estimated total aircraft operations at Jacqueline Cochran Regional Airport in 2002, an estimated 64 percent were itinerant operations (i.e., flights that originated or terminated at an airport other than Jacqueline Cochran Regional Airport, including air taxi and military operations) and 36 percent were local operations (i.e., flights that began and ended at Jacqueline Cochran Regional Airport, including touch-and-go and other similar training operations). There were no scheduled air carrier or commuter airline operations in 2002. (See Table 2B below).

Table 2B

Master Plan Activity Forecasts		
ANNUAL OPERATIONS		
	Actual	Forecast
Type of Operation	2002	2022
Air Carrier	0	0
Commuter	0	0
Air Taxi	455	1,000
GA Local (incl. sailplanes)	23,400	38,000
GA Itinerant	40,300	70,000
Military	845	1,000
Total	65,000	110,000

Aviation Activity Forecasts

In accordance with FAA guidelines, the time horizon of the forecasts in this Airport Master Plan is 20 years. However, it must be noted that there have always been uncertainties in forecasting future events. In the past, these uncertainties made the forecasting of general aviation airport activity an inexact science at best. Yet today, general aviation faces even more uncertainties than ever before. The typical response to these uncertainties is to prepare two sets of forecasts, i.e., a “baseline” or less optimistic case and an “enhanced” or more optimistic case. The activity forecasts prepared for this report are in between the two.

The Airport Master Plan forecasts of future operational activities at Jacqueline Cochran Regional Airport are summarized in Table 2B. Projections have been developed for based aircraft and annual aircraft operations. As outlined in the following sections, these forecasts have been developed by:

- ▶ Considering the previously described historical activity levels at Jacqueline Cochran Regional Airport;
- ▶ Assessing national, state, and local trends and other factors which influence the airport's activity; and then
- ▶ Drawing conclusions from these data.

BASED AIRCRAFT

National and State Demand Factors

Many factors come into play when forecasting at the national level. The Federal Aviation Administration (FAA) uses numerous demand factors in forecasting aviation trends. These demand factors are part of what determines the growth rates of general aviation at a national level.

The following national demand factors for general aviation operations were taken from *FAA Aerospace Forecasts, Fiscal Years 2000 to 2011 (March 2000)*:

- ▶ Total active general aviation aircraft fleet
- ▶ Passage of product liability reform legislation in 1994
- ▶ Issuance of student pilot certificates
- ▶ Resurgence of piston-engine aircraft manufacturing
- ▶ Manufacture of new turbine-powered business aircraft

All of the above factors facilitated general aviation growth from 1994 through 2001, and the active general aviation fleet was forecast to experience an annual increase of 0.9 percent or 24,000 aircraft over the period of 2000 to 2001. It was assumed that by the year 2011, the general aviation fleet would total nearly 231,000 aircraft. This forecast, although only three years old, appears overly optimistic at this time given current economic conditions.

Nonetheless, the basis for the forecasts remains valid, although the original 12-year timeline may have to be extended. Under the FAA's assumptions for 2011, the majority of the general aviation fleet was projected to be piston-powered aircraft, representing 76.7 percent of the overall fleet. The turbine-powered (business jet and turboprop) fleet was expected to gradually change the composition of the active fleet by the year 2011, increasing at four times the rate of the piston-powered fleet.

Over 60 percent of the turbine fleet was anticipated to be turbojet aircraft and 39 percent were to be turboprop aircraft, with 11,295

turbojets and 7,240 turboprops added to the general aviation fleet over the forecast period. The increase in jet activity was attributed to a shift from commercial air travel to corporate/business air travel.

General aviation hours flown was forecast to increase by 2.2 percent annually, from 29.8 million in 1999 to 38.8 million in 2011. The *FAA Aerospace Forecasts* estimated average annual increases in hours flown for each category of aircraft: single-engine piston (1.7 percent), multi-engine piston (0.3 percent), turboprop (1.2 percent), turbojet (7.6 percent).

Growth in the number of active pilots was also anticipated to increase annually, by 2.1 percent. The student pilot population was forecast to experience increased growth over the forecast period, 3.4 percent annually. Growth in this category suggests growth in both pilot training and flight training schools, which pointed toward industry-wide growth in instructional as well as personal/recreational flying.

The Federal Aviation Administration classifies Jacqueline Cochran Regional Airport as a general aviation airport. There are 2,472 designated general aviation airports in the United States and each of these airports is included in the FAA's *National Plan of Integrated Airport Systems (NPLAS)*. General aviation airports account for 37 percent of the nation's general aviation fleet.

General Aviation Airport- an airport serving civil aviation that comprises all segments of aviation except air carrier.

The statistics in the FAA's most recent *Report to Congress, National Plan of Integrated Airport Systems--2001-2005* (August 28, 2002) were already compiled prior to September 11, 2001. The consequences of these attacks included an immediate and substantial decline in air travel, a major emphasis on aviation security, and the temporary deferral of many airport capital improvement projects. As noted above, these declines are considered to be temporary setbacks, but with current economic conditions, the recovery may take several years.

Similarly, the FAA's Terminal Area Forecasts (TAF) for Jacqueline Cochran Regional Airport was prepared in 2001, prior to September 11, and is currently being revised. Until then, the TAF maintains the Form 5010 activity level of 76,500 annual operations through 2015 and maintains the based aircraft level at 71 through 2015.

The most recent California State Airport System Plan (CASP) was published in 1999. The system plan included all public-use airports in California. The plan anticipates significant growth at Jacqueline Cochran Regional Airport with a total based aircraft reaching 130

by 2010. By 2015, the CASP estimates based aircraft to total 140, effectively doubling the current count of aircraft based at the airport.

Local Demand Factors

The following airport-specific demand influences partially overlap the above national and state demand factors, but are more reflective of the conditions existing at Jacqueline Cochran Regional Airport:

- ▶ **Airport Role** — As noted above, the growth potential for Jacqueline Cochran Regional Airport’s primary users, i.e., personal/recreational and business aircraft, is very strong. While the majority of aircraft using Jacqueline Cochran Regional Airport is expected to remain in smaller single-engine and light twin-engine aircraft, moderate growth in business aviation and high-performance aircraft is also anticipated. This is important to Jacqueline Cochran Regional Airport because of the links between the local economy and business use of the airport, and the resort destinations.
- ▶ **Facilities and Services Available** — Existing general aviation facilities and services at Jacqueline Cochran Regional Airport provide the majority of services necessary to support current operations. However, what is currently lacking are basing and storage facilities for the larger, high-end business aircraft and smaller T-hangars and box hangars for light aircraft.
- ▶ **Demand for Hangar Space** — Increasingly, aircraft owners are seeking hangar space to store their aircraft. This is due in part to the fact that aircraft are increasing in value. Jacqueline Cochran Regional Airport has more than enough land area available to develop a sufficient number of hangars to accommodate demand beyond the 20-year master plan horizon. Any increase in the number of based aircraft will be driven in part by the availability of additional, suitably priced, aircraft storage hangars.
- ▶ **Proximity to Nearby Industry and Resorts** — Riverside County has always encouraged economic development. Tourism, recreation and associated support services are also major contributors to the regional economy. Internationally recognized golf tournaments, including PGA West and the Skins Game attract spectators from around the country. Land is available for major industrial and commercial businesses in surrounding areas and, as these areas are developed over the next

Future aircraft hangar sites are shown on the building area plan, including new hangar development on a site north of Million Air’s main hangar (6 acres) and north of the former Mig Museum.

twenty years, increased airport use by business and corporate aircraft is anticipated.

- ▶ **Demographics** — Population growth alone does not typically generate a corresponding increase in based general aviation aircraft demand. However, national growth trends indicate that the number of pilot certificates will increase, which in turn suggests industry-wide growth in flight training, personal/recreational and business flying. With new, upscale residential development proposed in proximity to the airport, along with the attendant increases in population and economic growth in the region, the result should be an increase in based aircraft at Jacqueline Cochran Regional Airport.

Based Aircraft Demand Conclusions

With respect to based aircraft at Jacqueline Cochran Regional Airport, increases in the number of based aircraft will be dependent on decisions by individuals and businesses as to where to base their aircraft. Additionally, the availability of both reasonably priced hangar units, as well as their high-end counterparts, will largely govern the amount of increase in aircraft based at the airport. At least three plans for such development are under consideration by the County at this time.

The *Master Plan* forecasts for based aircraft takes into account the number of existing based aircraft and the potential for development of new hangars and/or tiedowns at the airport over the long-term. Accordingly, the total number of based aircraft is estimated to increase from its present level of 71 (excluding ultralights) in 2002 to 255 by 2022. This is considerably more than the 140 based aircraft projected by the California Airport System Plan for 2015, and represents a constant overall average annual growth rate of 6.6 percent. The 6.6 percent average annual growth rate for based aircraft at Jacqueline Cochran Regional Airport is justified by its unique location, the availability of inexpensive land, and current and proposed hangar developments. Projected growth, however, is most likely to occur in spurts in both the short and long terms, respectively. This is due to the existing development proposals currently under review and implementation by the County and the fact that buildout of these proposals will go a long way toward meeting projected hangar demand through all but the long term. Table 2A (above) summarizes the based aircraft total by aircraft category.

AIRCRAFT OPERATIONS FORECASTS

Historical Aircraft Operations

Both the Federal Aviation Administration and Caltrans have prepared official forecasts for Jacqueline Cochran Regional Airport. The most recent FAA Terminal Area Forecast was released in 2001. The FAA forecast anticipates that operations will remain steady at 76,500 operations per year through 2015. The California Aviation System Plan, prepared in 1999, anticipates 140,000 annual operations by 2015.

Factors Affecting Operations Forecast

The above-described national and regional economic and development factors related to Jacqueline Cochran Regional Airport are also relevant in determining future airport operational levels:

Aircraft **charter** provides scheduled air service for a specific fee, generally based on hours of operation.

In general, **fractional ownership** allows individuals partial ownership or “fractional ownership” and accessibility of desired aircraft. The terms and conditions of fractional ownership vary. Primarily, fractional ownership is based on the cost of a desired aircraft, desired fraction of ownership (e.g., 1/4, 1/8, 1/16) and the number of hours flown.

- ▶ **Number and Type of Based Aircraft** — In 2002, small single-engine aircraft comprised almost 72 percent of the based aircraft fleet mix at the airport and light twins almost 20 percent. Jets and helicopters were 5.6 and 2.8 percent, respectively. By 2022, it is anticipated that single-engine aircraft will represent slightly more than 65 percent of the based aircraft and light twins will remain around 20 percent. Business jets will increase to almost 11 percent of the based aircraft.
- ▶ **Availability of Facilities and Services** — It is anticipated that at least one new fixed base operation will be established or major expansion of an existing FBO will take place within the next five years.
- ▶ **Extent of Transient Aircraft Use** — Increased business, corporate, and industrial development within the communities surrounding Jacqueline Cochran Regional Airport is expected to generate increased activity by both based and transient aircraft.

Annual Operations Demand Conclusions

Continued growth in annual aircraft operations at Jacqueline Cochran Regional Airport is anticipated over the 20-year planning period. In 2002, local operations accounted for 36 percent of all operations. By 2022, this number is anticipated to decrease to 34 percent. Itinerant operations will increase slightly from 62 percent to 64 percent. This slight upward trend in itinerant operations would be a result of the affordability of business aircraft

(i.e., fractional ownership of corporate aircraft), and renewed demand for charter services once economic conditions are stabilized.

Table 2B (above) summarizes the *Master Plan* 20-year forecast of future annual aircraft operations for Jacqueline Cochran Regional Airport. Accordingly, total annual aircraft operations are estimated to increase from 65,000 in 2002 to 110,000 operations by the year 2022. This is based on the FAA's NPIAS projected growth rate of 2.3 percent annual increase in general aviation operations through 2011 and 3.0 percent thereafter.

Instrument Operations

In 2002, there were 1,483-recorded IFR (instrument flight rules) operations at Jacqueline Cochran Regional Airport. This represented about 2.3 percent of total operations and about 3.7 percent of the itinerant operations. The number of IFR operations is not indicative of any adverse weather conditions at the airport. To the contrary, Jacqueline Cochran Regional Airport is noted for good flying conditions. The number of instrument operations is indicative of the high number of high-performance and business aircraft that file instrument flight plans to and from the airport. By 2022, the number of instrument operations is anticipated to double, going to 3,000 annual IFR operations primarily as a result of increased activity by high performance turbine-powered aircraft. This would represent 2.7 percent of all operations and about 4.3 percent of itinerant operations. Of these operations, approximately 52 percent are arrivals and 48 percent departures. The following table summarizes these operations.

Table 2C

Instrument Operations		
Aircraft Type	2002	2022
Single-Engine	80	150
Twin-Engine (Piston)	71	150
Twin-Engine (Turboprop)	220	700
Jets	538	1,500
Other (Helicopters, Military)	574	500
Total	1,483	3,000

Scheduled Air Carrier and Air Cargo Operations

This Master Plan study does not project any scheduled or commuter airline operations at Jacqueline Cochran Regional Airport through the 20-year forecast period. Nor does it project any air cargo activity or operations. This is not to say that such operations or activities may not be feasible, but that there is no demonstrated demand for such facilities at this time, particularly in light of current economic conditions. Work done previously in the 1990 airport master plan supports this conclusion.

Air Carrier Service

The 1990 Airport Master Plan study assessed the feasibility of developing scheduled air carrier service at Jacqueline Cochran Regional Airport. The study determined that although the demographics for such service were favorable, the airport's proximity to Palm Springs International Airport made the likelihood of scheduled airline service to Jacqueline Cochran Regional Airport highly improbable. The study did note that scheduled commuter airline service could be feasible, along with charter operations by commercial jets. The total enplanement potential for the airport in 2010 was estimated at 187,000 passengers. Since the 1990 Airport Master Plan was completed, the airport has seen a number of improvements, including access, infrastructure, and an extension of the main runway from 6,800 feet to 8,500 feet. If anything, this would enhance the suitability of the airport for long-haul (over 2,500 miles) charter operations.

However, there are no passenger terminal facilities currently available for such activities, and the existing FBO terminal is not adequate for this purpose. This Master Plan concurs with the findings of the 1990 master plan in this regard and recommends that an area on the airport's east side be set aside for such purpose, in the event that an opportunity might arise in the future.

Air Cargo Service

The 1990 Airport Master Plan also assessed the probability of air cargo service at Jacqueline Cochran Regional Airport. It concluded that the airport's long-range cargo potential will depend on "industrial issues," i.e., the ability of the airport to develop air cargo facilities when the need arises. Hence, as with the 1990 airport master plan, this master plan recommends that an area designated for air cargo facilities also be set aside on the airport's east side.

Safety and Security Considerations

Since 1970, the FAA has had the statutory authority to issue airport operating certificates to airports served by commercial air carriers. Currently, airports serving air carrier aircraft with more than 30 seats must have an operating certificate issued by the FAA. Requirements for obtaining and maintaining the certificate are contained in Federal Aviation Regulations (FAR) Part 139, Certification and Operations: Land Airports Serving Certain Air Carriers (Part 139). The purpose of the certification process is to ensure that commercial passenger service airports meet certain safety standards. These standards include requirements for airport design, construction, maintenance, operations, fire fighting and rescue equipment, runway and taxiway guidance signs, control of vehicles, management of wildlife hazards, and record keeping. The FAA is currently (early 2003) deliberating a Notice of Proposed Rulemaking, which would extend the requirements of Part 139 to airports serving air carrier aircraft with more than 10 seats.

Jacqueline Cochran Regional Airport does not have a Part 139 operating certificate. To obtain a Part 139 operating certificate, significant upgrades would have to be made to the airport. These upgrades would include:

- ▶ Perimeter fencing and access controls (to the extent not currently installed).
- ▶ Runway and taxiway guidance sign system (to the extent not currently installed).
- ▶ Evaluation of all operational surfaces to determine the extent of modifications required to meet Part 139 requirements.
- ▶ Preparation of Airport Operations and Emergency Manuals.
- ▶ Acquisition of aircraft fire fighting and rescue equipment.
- ▶ Construction of an aircraft fire fighting and rescue equipment building.
- ▶ Construction of a passenger terminal building.
- ▶ Addition of qualified airport operations and fire fighting personnel.

This information is discussed in greater detail in Appendix B. Appendix B contains preliminary cost estimates. A detailed estimate of costs to upgrade the airport to Part 139 standards is beyond the scope of this master plan. It is recommended that, prior to entering negotiations with a potential commercial passenger operator, the County have a Part 139 inspection performed by a qualified inspector and an estimate of costs prepared.

Prior to November 2001, commercial service airport security was regulated by the FAA's Civil Aviation Security Division. Federal Aviation Regulations Part 107 established security requirements. The Aviation and Transportation Security Act of 2001 established the Transportation Security Administration (TSA), which now oversees security and commercial service airports. In order to accommodate commercial passenger operations, the County would need to construct passenger terminal facilities meeting TSA requirements for passenger and baggage screening, hold areas, and administrative areas. A detailed estimate of the costs to provide these facilities is beyond the scope of this master plan. It is recommended that, prior to entering negotiations with a potential commercial passenger operator, the County consult with an architectural firm familiar with TSA requirements.