

Chapter 2

HISTORICAL AND FORECAST AVIATION ACTIVITY

2.1 INTRODUCTION

Aviation activity accommodated at an airport is a function of the population and economic characteristics of the area served by the airport – referred to as the “Airport Service Area.” An understanding of the present and likely future population and economy of the airport service area is therefore critical to the development of aviation activity forecasts.

This Chapter defines the airport service area of the Paso Robles Municipal Airport (the Airport) and presents the historical and forecast population and economic indicators that will have an effect on forecast aviation activity. Historical aviation activity at the Airport is presented including based aircraft and aircraft operations. The aviation activity forecasts are based on the assumption that the City of Paso Robles represents the major portion of the airport service area for the Airport.

2.2 THE AIRPORT SERVICE AREA

The geographic area served by any airport is designated as the airport service area. Typically, the airport service area includes a densely-populated urban area (such as a city and its environs) within a larger, less densely-populated area that is usually defined (or limited) by the existence of other airports.

Although the airport service area can seldom be precisely identified in terms of political boundaries, usually a city, county, or political region (such as a Standard Metropolitan Statistical Area) is selected to represent the airport service area because relevant population and economic data are readily available for such areas. Furthermore, trends in aviation demand typically correspond closely with general growth trends in the political subdivision containing the main concentration of population served by a given airport.

The Paso Robles Municipal Airport serves the City and those parts of northern San Luis Obispo County (the County) including Atascadero, San Miguel and Templeton, and southern Monterey County for which it is the most convenient airport.

2.2.1 Population

Historical and forecast population data for the City and the County of San Luis Obispo are presented in Table 2-1. A comparison is made with historical and forecast population data for the State of California and the United States as a whole.

Table 2-1

HISTORICAL AND FORECAST POPULATION TRENDS
City of El Paso de Robles, County of San Luis Obispo
State of California and United States
1970-2020

	Historical			Base Year	Forecast			
	1970	1980	1990	2000	2005	2010	2015	2020
City of El Paso de Robles	7,168 ¹	9,163 ¹	18,583 ¹	24,297 ²	26,600 ¹	29,200 ¹	31,900 ¹	35,000 ¹
Communities in North San Luis Obispo County ³	n.a.	n.a.	51,792	60,799	67,510	73,703	77,345	80,984
San Luis Obispo County ⁴	105,173	155,435	217,162	246,681	290,076	324,741	358,482	392,329
State of California ⁴	19,971,069	23,667,000	29,760,021	33,871,648	37,372,444	39,957,616	42,370,899	45,448,627
United States ²	203,302,031	226,545,805	249,439,000	281,421,906	287,716,000	299,862,000	312,268,000	324,927,000
Average Annual Percentage Change								
		1970-1990	1990-2000	2000-2005	2005-2010	2010-2015	2015-2020	
City of El Paso de Robles		4.9	2.7	1.8	1.8	1.8	1.8	
Communities in North San Luis Obispo County		n.a.	1.6	2.1	1.8	1.0	0.9	
San Luis Obispo County		3.7	1.3	3.3	2.3	2.0	1.8	
State of California		2.0	1.3	1.5	1.3	1.2	1.4	
United States		1.0	1.2	0.4	0.8	0.8	0.8	

1. City of El Paso de Robles (2005, 2010 and 2015 interpolated by Aries Consultants Ltd.)

2. U. S. Department of Commerce, Bureau of the Census

3. San Luis Obispo Council of Governments

4. State of California, Department of Finance

The population in the City increased from 7,168 in 1970 to 9,163 in 1980, an average annual increase of 2.5 percent. Between 1980 and 1990, the population increased from 9,163 to 18,583, an average annual increase of 7.3 percent. The annual population growth rate of 7.3 percent from 1980 to 1990 was significantly higher than the population growth in the County of 3.4 percent, the State at 2.4 percent, and the United States as whole with a 1.0 percent growth rate over the same ten-year period.

Based on discussions with representatives of the City, population forecasts for the City were prepared as part of the 1991 General Plan and were based on the ability of the City to accommodate a population of 35,000 residents. The 1991 General Plan anticipated that, based on the addition of an estimated 304 residential dwellings annually, the City could accommodate a population of 35,000 as early as 2010.

Population growth in the City grew from 18,583 in 1990 to 24,297 in 2000, an average annual growth rate of 2.7 percent, indicating that the continuing population growth in the City was slower than anticipated in the 1991 General Plan. Residential dwelling units increased by 148 annually from 1990 to 1999, representing about 50 percent of the annual 304 units anticipated in the 1991 General Plan.

Based on the historical trends in the growth of population and dwelling units, and the recognition that there will be variations in economic growth, the City approved using a projection of an additional 230 dwelling units annually resulting in an estimated population of 35,000 by 2020. The estimated City population of 35,000 by 2020 is presented in Table 2-1 and compared with population forecasts for the County, the State, and the United States as a whole.

Population in the County is forecast to increase at an average annual rate of 2.3 percent from a population of 246,681 in 2000 to a population of 392,329 in 2020 while population in the State is forecast to increase at an average annual increase of 1.5 percent from 34 million in 2000 to a population of 45 million in 2020 based on forecasts prepared by the State Department of Finance. Overall population growth on the National basis is projected to increase at less than 1.0 percent annually over the 20-year forecast period.

Since 1970, the City and the County have grown faster than the State as a whole and are forecast to continue this trend. The City, County, and the State are expected to continue experiencing faster population growth than the United States.

Table 2-1 also presents population data for those communities in the northern portion of San Luis Obispo County for which the Paso Robles Municipal Airport could be considered the most convenient aviation facility. The communities in the North County area include the San Luis Obispo Council of Governments planning areas of Adelaida,

El Pomar/Estrella, Shandon-Carrizo, Nacimiento, North Coast, Atascadero, San Miguel, Templeton, and Salinas River Rural. Population forecasts for these North County communities are forecast to increase from a population of 60,800 in 2000 to an estimated population of 81,000 by 2020, an average annual increase of 1.4 percent.

The combined population of the City of Paso Robles and the North County area is forecast to increase from 85,100 in 2000 to 116,000 by 2020. The combined forecast population data for the City and the North County areas represent an average annual increase of 1.6 percent, a slightly slower growth rate than the average annual forecast increase of 1.8 percent for the City.

Population data was obtained from the Association of Monterey Bay Area Governments, the Metropolitan Planning Organization responsible for population and employment forecasts for Monterey, San Benito and Santa Cruz Counties. The estimated population in the unincorporated southern portions of Monterey County, including San Ardo and Bradley (south of the King City area) was 3,576 in 2000 and forecast to increase to 4,050 by 2020. This represents an estimated annual increase of 0.6 percent.

The combined population of the City, northern San Luis Obispo County and southern Monterey County communities, is forecast to increase from 88,700 in 2000 to 120,000 by 2020. This combined forecast represents an average annual increase of 1.5 percent, or a slightly slower growth rate than the average annual increase of 1.6 percent for the City and the North San Luis Obispo County communities and 1.8 percent for the City.

2.2.2 Economic Outlook

Based on information provided by the City, the economy for the Paso Robles area remains positive over the 20-year planning period.

Commercial and industrial development is expected to increase by the same 44 percent as the resident population during the 20-year planning period. Retail commercial and lodging are forecast to account for an estimated 50 percent of the commercial and industrial growth underscoring support of the increasing visitor industry. Manufacturing facilities are forecast to account for 35 percent of the commercial and industrial development; commercial services and offices are forecast to account for 8 percent of the growth, while warehousing and storage are forecast to account for the remaining 7 percent of the commercial and industrial growth. There are several proposed and approved development projects that provide for the orderly growth of commercial and industrial expansion within the City. In addition, other resort-type development projects are proposed to support the growing visitor industry in the area.

The North County Campus of Cuesta College, with approximately 2,000 students, is designed to accommodate between 8,000 and 10,000 students at full build out within 20 to 30 years. The College is continually developing programs that will focus on the needs of the North County area. These programs include the Agricultural Technology Program designed in part to support the expanding winery industry in the North County. An aviation program could be designed to provide ground-school pilot training. The actual rate of growth will be a function of State funding for buildings and facilities.

The 1999 *North Area Conceptual Development Plan* (the Plan) for the Paso Robles Municipal Airport was prepared by the City to enhance the economic development opportunities on the Airport. The Plan provides overall development guidelines that will enhance the attractiveness of the Airport for general aviation activities and aviation-related development. The City has recently constructed a terminal-office building, designed to provide amenities (lobby/waiting room, restaurant/bar, rental cars) that will enhance the attractiveness of the Airport to access business and recreational aviation activities in the area.

2.3 HISTORICAL AIR TRAFFIC ACTIVITY

This section presents an analysis of the historical air traffic activity at the Airport through 2000. A review of the historical scheduled air passenger service is presented, and the historical general aviation activity is also presented including based aircraft and aircraft operations. The data presented are based on FAA records at the National and local levels. Additional information was obtained from Caltrans Aeronautics Program, Airport Management records and discussions with persons knowledgeable of the Airport. Other available sources of data were used as applicable.

2.3.1 General Aviation

General aviation is defined as all civil aviation not classified as air carrier, commuter/air taxi or military. It includes a multitude of diverse and growing uses of aircraft, ranging from flying for enjoyment and the transportation of personnel or cargo by business firms and individuals in privately-owned aircraft, to highly specialized uses such as crop dusting, pipeline patrol, and aerial advertising. It includes agricultural, industrial and business/corporate aviation, using an aircraft for flight training, the aviation of Federal, State and local governments, and miscellaneous other aviation uses.

2.3.1.1 Based Aircraft

Based aircraft are those aircraft that are hangared or on tiedowns at the Airport and include those aircraft based on leaseholder sites. The number of aircraft based at an

airport is a function of many factors, including the number of active aircraft registered in the Airport's airport service area, aircraft registered elsewhere but used in the area (e.g., corporate or government aircraft), and the existence and location of other airports in the area. Although transient aircraft are not considered based aircraft, their needs for tiedown and hangar space must be considered at any public airport.

Table 2-2 presents historical data on based aircraft at Paso Robles Municipal Airport based on data obtained from the FAA Form 5010-1, *Airport Master Record*, and Airport Management records. The historical based aircraft data for the Airport are presented per 1,000 population of the City for the 1980 to 2000 time period.

Based aircraft at the Airport have decreased slightly at a rate of 0.6 percent annually from a total of 170 based aircraft in 1980 to 150 based aircraft in 2000. At the same time, the number of based aircraft per 1,000 population has also decreased from 18.6 based aircraft per 1,000 population in 1980 to 6.2 based aircraft per 1,000 population in 2000. Single-engine aircraft have decreased from 155 (91 percent of the total based aircraft) to 120 (80 percent of the total based aircraft) while multiengine propeller aircraft have increased as a percent of the total from 15 (9 percent) in 1980 to 10 percent in 2000. The five jet aircraft based at the Airport in 2000 account for 3 percent of the total based aircraft, while helicopters and all others account for the remaining 7 percent of total based aircraft.

The population of the City increased an average of 5.0 percent on an annual basis from a population of 9,163 in 1980 to 24,297 in 2000. However, the number of based aircraft per 1,000 populations decreased from 18.6 in 1980 to 6.2 in 2000 as noted earlier.

2.3.1.2 Distribution of Based Aircraft Owners

An analysis of the geographic distribution of based aircraft owners at the Airport was made based on information obtained from Airport Management records. Table 2-3 presents a comparison of the distribution of the based aircraft owners at the Airport for 1990 and 2000. Based aircraft owners from the City of Paso Robles have decreased from 64 percent of the total based aircraft in 1990 to 45 percent in 2000. San Luis Obispo County based aircraft owners have decreased from 92 percent of the total based aircraft in 1990 to 84 percent of the total in 2000.

2.3.2 Aircraft Operations

Historical data on aircraft operations at nontowered airports are limited. According to FAA Form 5010-1, *Airport Master Record*, there were an estimated 31,600 annual

Table 2-2

**HISTORICAL BASED AIRCRAFT
Paso Robles Municipal Airport
Selected Years: 1980-2000**

<u>Year</u>	<u>Single-Engine</u>	<u>Multi-Engine</u>	<u>Jet</u>	<u>Heli-copters</u>	<u>Other</u>	<u>Total</u>	<u>Population</u>	<u>Registered Aircraft per 1,000 Population</u>
1980 ¹	155	15	0	0	0	170	9,163	18.6
1985 ¹	149	15	0	1	6	171	12,700	13.5
1990 ²	150	17	0	8	2	177	18,583	9.5
1995 ³	135	16	1	8	2	162	20,900	7.8
2000 ⁴	120	15	5	9	1	150	24,297	6.2

1. FAA Form 5010-1, *Airport Master Record*
2. 1990 based on 1989 FAA Form 5010-1, *Airport Master Record*
3. Estimated
4. Airport Management Records

Table 2-3
DISTRIBUTION OF BASED AIRCRAFT OWNERS
Paso Robles Municipal Airport
1990 and 2000

<u>Location</u>	<u>Aircraft 1990</u>	<u>Aircraft 2000</u>	<u>Location</u>	<u>Aircraft 1990</u>	<u>Aircraft 2000</u>
<u>San Luis Obispo County</u>			<u>Mono County</u>		
Paso Robles	110	67	Mammoth Lake	<u>1</u>	<u>0</u>
Atascadero	27	26	Subtotal	1	0
Templeton	9	10	<u>Monterey County</u>		
San Miguel	6	3	Carmel	0	1
Cambria	7	4	Bradley	<u>2</u>	<u>1</u>
Arroyo-Grande	1	1	Subtotal	2	2
Creston	0	3	<u>San Diego County</u>		
San Luis Obispo	2	2	Del Mar	<u>1</u>	<u>0</u>
Santa Margarita	0	2	Subtotal	1	0
Cayucos	1	1	<u>Santa Barbara County</u>		
Los Osos	1	1	Buelton	1	0
Morro Bay	1	3	Santa Barbara	1	0
Shandon	1	0	Santa Maria	<u>0</u>	<u>1</u>
San Simeon	0	2	Subtotal	2	1
Avila Beach	<u>0</u>	<u>1</u>	<u>Placer County</u>		
Subtotal	157	126	Truckee	<u>0</u>	<u>1</u>
<u>Alameda County</u>			Subtotal	0	1
Oakland	<u>1</u>	<u>0</u>	<u>Sacramento County</u>		
Subtotal	1	0	Sacramento	<u>0</u>	<u>3</u>
<u>Kern County</u>			Subtotal	0	3
Bakersfield	<u>1</u>	<u>0</u>	<u>Unknown California</u>		
Subtotal	1	0	Subtotal	<u>0</u>	<u>9</u>
<u>Los Angeles County</u>			TOTAL	168	144
Burbank	1	0	<u>Other States</u>		
Hollywood	0	1	Illinois		1
Panorama City	1	0	Missouri		1
West Covina	<u>1</u>	<u>0</u>	Nevada		2
Subtotal	3	1	Oregon		<u>2</u>
<u>Mariposa County</u>			Subtotal Other States	3	6
Mariposa	<u>0</u>	<u>1</u>	TOTAL	171	150
Subtotal	0	1			

SOURCE: Airport Management Records

aircraft operations at the Airport during 2000. There were also an estimated 31,600 annual aircraft operations at the Airport from 1990 through 2000 based on information provided by the Caltrans Aeronautics Program.

2.3.2.1 Air Taxi

Of the estimated 31,600 total aircraft operations, 2,400 (8 percent) are estimated to be by air taxis. Air taxi operations are the unscheduled operations of “for hire” air taxis carrying passengers and also include those operations by bank couriers and the occasional operations by other small package carriers.

2.3.2.2 General Aviation

Of the total estimated 31,600 annual aircraft operations in 2000, 28,000 (88 percent) of the aircraft operations were by general aviation. The general aviation operations are further categorized by itinerant and local operations.

Itinerant Operations. Of the 28,000 general aviation operations, an estimated 16,400 (59 percent) are itinerant operations. Itinerant operations are conducted by aircraft that take off at one airport and land at another airport. They include the operations of aircraft based at the Airport and flights of other aircraft to and from the Airport.

Local Operations. Of the 28,000 general aviation operations, an estimated 11,600 (41 percent) are estimated to be local operations. Local operations are performed by aircraft operating in the local traffic pattern and aircraft departing for, or arriving from, local practice areas. These operations include training operations (referred to as touch-and-goes) by both aircraft based at the Airport and aircraft from other airports in nearby areas.

2.3.2.3 Military

Military operations are estimated to be 1,200, or 4 percent of total operations. Military operations include those operations by military aircraft transporting personnel and routine support of activities at Camp Roberts, Camp San Luis Obispo and the Fort Hunter-Liggett Military Reservation.

2.4 REVIEW OF AVIATION ACTIVITY TRENDS AND FORECASTS

A review of historical and forecast trends in aviation activity on the National, State and local levels was made. This review includes historical data and forecast trends on the National level prepared by the Federal Aviation Administration and the 1999

Statewide Forecasts prepared by the State of California, Aeronautics Program, as part of the State's continuous aviation system planning process. Aviation activity forecasts prepared as part of the 1991 *Draft Airport Master Plan* for the Paso Robles Municipal Airport are also discussed.

2.4.1 Federal Aviation Administration

Historical and forecast general aviation trends on a National level are published annually by the FAA to meet the budget and planning needs of the FAA and to provide information that can be used by state and local entities, the aviation industry, and the general public. The most recent edition was published in March 2001 and is entitled *FAA Aerospace Forecasts, Fiscal Years 2001-2012*.

The FAA forecasts general aviation and air taxi aircraft to increase by an estimated 25,000 aircraft over the short-term 12-year period (through 2012) as presented in Table 2-4. This increase represents an average increase of 1.0 percent annually. Of the 24,900 total increase in aircraft, 53 percent (13,200) will be single-engine aircraft, 4 percent (1,000) will be multi-engine propeller and turboprop aircraft, 20 percent (4,900) will be turbo jet aircraft, 7 percent (1,800) will be rotorcraft aircraft, 13 percent (3,300) will be experimental aircraft, and 3 percent (700) will be all other aircraft types.

The FAA develops annual forecasts of aviation demand by airport to assist in the development of programs by assessing the resources needed to meet the anticipated demand for FAA services. Historical and forecast aircraft operations data for the Paso Robles Municipal Airport are presented in the FAA's *Terminal Area Forecasts*.

The FAA base year 2000 data indicate there were an estimated 32,538 annual aircraft operations at the Airport. The *Terminal Area Forecasts* indicate that total annual aircraft operations are expected to increase by an overall 10 percent from 32,538 annual aircraft operations in 2001 to 35,773 annual aircraft operations by 2015. The *Terminal Area Forecasts* show an increase in based aircraft over the same 15-year period from 150 based aircraft in 2001 to 162 based aircraft by 2015. *Terminal Area Forecasts* prepared for the Paso Robles Municipal Airport are graphically illustrated later in this Chapter.

2.4.2 California Aviation System Plan

The 1999 *Statewide Forecasts* were prepared by the State of California, Aeronautics Program as part of the State's continuous airport system planning process to identify the aviation facilities required to meet the air transportation needs of the State. The aviation forecasts were prepared by using a combination of forecasts from the FAA's

Table 2-4

**ESTIMATED ACTIVE GENERAL AVIATION AND AIR TAXI AIRCRAFT
BY TYPE OF AIRCRAFT (thousands)
1990 - 2012**

Historical	Total	Fixed Wing				Rotorcraft		Experi- mental	Balloons/ Dirigibles/ Gliders
		Piston		Turbine		Piston	Turbine		
		Single- engine	Multi- engine	Turboprop	Turbojet				
1990	203.4	158.7	21.4	5.2	3.9	2.9	3.9	n.a.	7.1
1991	197.1	153.8	20.9	4.9	4.1	3.2	3.6	n.a.	6.6
1992	197.8	153.9	21.1	4.6	4.3	2.5	3.8	n.a.	7.5
1993	183.6	143.4	18.2	4.5	3.9	2.2	3.5	n.a.	7.9
1994	172.9	127.4	14.8	4.1	3.9	1.6	3.1	12.1	5.9
1995	188.1	137.1	15.7	5.1	4.6	1.9	3.9	15.2	4.7
1996	191.1	137.4	16.2	5.7	4.4	2.5	4.1	16.6	4.2
1997	192.4	140.1	16.1	5.6	5.2	2.3	4.5	14.7	4.1
1998	204.7	144.2	18.7	6.2	6.1	2.5	4.9	16.5	5.6
1999	219.5	150.9	21.0	5.7	7.1	2.6	4.9	20.5	6.8
2000	221.2	151.6	21.1	5.7	7.4	2.7	5.0	20.8	6.8
Forecasts									
2001	223.5	152.9	21.2	5.8	7.8	2.9	5.1	21.0	6.9
2002	225.8	154.1	21.2	5.9	8.2	3.0	5.1	21.3	6.9
2003	228.1	155.4	21.2	6.0	8.7	3.1	5.2	21.6	7.0
2004	230.2	156.6	21.2	6.1	9.1	3.1	5.3	21.8	7.1
2005	232.5	157.8	21.2	6.1	9.6	3.2	5.4	22.1	7.1
2006	234.5	158.8	21.2	6.2	10.0	3.2	5.4	22.4	7.2
2007	236.4	159.8	21.2	6.3	10.5	3.3	5.5	22.6	7.2
2008	238.4	160.8	21.2	6.4	10.9	3.3	5.6	22.9	7.3
2009	240.4	161.8	21.2	6.4	11.3	3.4	5.7	23.2	7.4
2010	242.3	162.8	21.2	6.5	11.7	3.4	5.8	23.5	7.4
2011	244.3	164.0	21.2	6.5	12.1	3.5	6.0	23.8	7.5
2012	246.0	164.8	21.2	6.6	12.3	3.5	6.0	24.1	7.5

NOTE: Detail may not add to total because of independent rounding
SOURCE: 1990-1993 FAA Aviation Forecasts, Fiscal Years 1995-2006
1994 FAA Aviation Forecasts, Fiscal Years 2000-2011
1995-2012 FAA Aviation Forecasts, Fiscal Years 2001-2012

Terminal Area Forecasts, the forecasts of the Regional Transportation Planning Agencies in the four major metropolitan areas including the Southern California Association of Governments, the Metropolitan Transportation Commission, the San Diego Association of Governments, and the Association of Monterey Bay Area Governments, and Caltrans forecasts for areas outside the major metropolitan areas.

The California Aviation System Plan (CASP) predicts that, following years of stagnant (or negative) growth, general aviation based aircraft and annual aircraft operations will increase slightly over 1.0 percent annually from the base year 1995 through 2015 on a statewide basis. The CASP groups aviation activity forecasts within planning regions within the State and extends the forecasts to the year 2020. The Paso Robles Municipal Airport is within the Central Coast Region that includes the Counties of San Benito, San Luis Obispo, and Santa Barbara. Based aircraft in the Central Coast Region are forecast to increase from 1,234 based aircraft in the base year 1995 to 2,007 in 2020, an average annual growth rate of 2.0 percent. Annual general aviation operations in the Central Coast Region are forecast to increase from 425,000 in the base year 1995 to 672,000 in 2020, an average annual growth rate of 1.6 percent. Aviation activity forecasts prepared for the Paso Robles Municipal Airport as part of the CASP are graphically illustrated later in this Chapter.

2.4.3 1991 Draft Airport Master Plan

A review of the aviation activity forecasts prepared for the 1991 *Draft Airport Master Plan* was also made. Based aircraft were forecast to increase from 173 in the base year 1990 to 350 in 2010. Annual aircraft operations were forecast to increase from 102,000 in base year 1990 to 300,000 in 2010. The 1991 aviation activity forecasts were prepared based on a significantly higher base level of activity at the time, due in part to the location of a major helicopter training facility on the Airport and several development proposals for airport property. Aviation activity forecasts prepared for the 1991 *Draft Airport Master Plan* are graphically illustrated later in this Chapter.

2.5 AVIATION ACTIVITY FORECASTS

To assess existing facilities and to determine future requirements at Paso Robles Municipal Airport, it is necessary to forecast the demand for facilities expected to be generated by future air traffic activity. Such demand is created by air taxi, general aviation and military air traffic and may be stated in terms of aircraft operations, aircraft basing demand and related components. In turn, the air traffic generated at Paso Robles Municipal Airport relates directly to the population and economy of the surrounding area; to general aviation trends and forecasts on the National, State and local levels; and to the aviation demand and airport facilities and services provided at other airports in the surrounding area.

The aviation demand forecasts presented in this section have been developed based on a review of the population and economic trends for the City of Paso Robles and surrounding areas; an analysis of the historical air traffic activity at the Paso Robles Municipal Airport; and an assessment of aviation trends on the National, State and local levels that have, or may have, a potential effect on aviation activity at the Airport. Discussions with persons knowledgeable of the Airport, including representatives of the City and airport tenants and aircraft owners have provided valuable insight into the preparation of the aviation activity forecasts.

2.5.1 General Assumptions

The following general assumptions were used in the preparation of the forecasts:

- These forecasts are demand-based and are, therefore, unconstrained by facility limitations or policy considerations.
- No policies that would constrain aviation growth will be imposed on the Airport by any governmental entity.
- The population and economic analyses and forecasts presented in Section 2.2 are satisfactory for purposes of aviation demand forecasting.
- The historical aviation activity data presented in Section 2.3 form an adequate basis for the forecasts presented in this Chapter.

These forecasts were prepared on the basis of the information and assumptions set forth above. Although the information and assumptions used constitute a reasonable basis for preparing the forecasts, the achievement of any such forecast may be affected by fluctuating conditions and is dependent upon the occurrence of future events, which cannot be assured. Therefore, the actual results achieved may vary from the forecasts, and such variations could be material.

It should also be noted that the potential long-term impacts on the aviation industry as a result of the September 11, 2001 events are not known at this time, particularly as these impacts may affect future general aviation activity. Congress is currently evaluating security and other requirements that may apply to general aviation airports. Continuous monitoring of these activities will be made as they relate to the Paso Robles Municipal Airport and the need to incorporate any additional requirements at the Airport.

The aviation activity forecasts are presented in Table 2-5 and discussed below. These forecasts are based on the City of Paso Robles data as discussed earlier in this chapter. Aviation activity forecasts based on the City of Paso Robles and northern San Luis Obispo County and southern Monterey County data would result in slightly lower forecasts than those presented in Table 2-5.

Table 2-5

AVIATION ACTIVITY FORECASTS
Paso Robles Municipal Airport
2001-2020

	Base Year ¹	Forecasts			
	<u>2001</u>	<u>2005</u>	<u>2010</u>	<u>2015</u>	<u>2020</u>
GENERAL AVIATION BASED AIRCRAFT					
Single-engine	121	130	136	148	153
Multiengine-propeller	15	20	29	36	43
Turbojet	5	6	7	8	10
Helicopter	<u>9</u>	<u>10</u>	<u>10</u>	<u>12</u>	<u>14</u>
Total	150	166	182	204	220
AIRCRAFT OPERATIONS					
Air Taxi	2,400	2,700	3,100	3,500	4,000
General Aviation					
Local	11,600	12,800	14,100	16,800	18,800
Itinerant	<u>16,400</u>	<u>19,800</u>	<u>23,100</u>	<u>28,500</u>	<u>33,200</u>
Subtotal	28,000	32,600	37,200	45,300	52,000
Military	<u>1,200</u>	<u>1,200</u>	<u>1,200</u>	<u>1,200</u>	<u>1,200</u>
Total	31,600	36,500	41,500	50,000	57,200
OPERATIONS PER BASED AIRCRAFT	210	220	228	245	260
PEAK HOUR AIRCRAFT OPERATIONS (Average Day, Peak Month)	16	18	20	24	28

2.5.2 Based Aircraft

The number of based aircraft at the Paso Robles Municipal Airport is forecast to increase from 150 in 2000 to 220 by 2020 as shown in Table 2-5. The growth in forecast based aircraft at the Airport is due in part to the forecast increases in population and economic activity in the City, and the City's continued marketing of commercial and industrial development.

Single-engine aircraft are forecast to increase from 121 in 2000 to 153 by 2020, an average annual increase of 1.2 percent over the 20-year planning period but will decrease as a percent of the total based aircraft from 81 percent in 2000 to 70 percent by 2020. Multiengine aircraft are forecast to increase from 15 in 2000 to 43 by 2020, an average annual increase of 5.4 percent over the 20-year planning period and will increase as a percent of the total based aircraft from 10 percent in 2000 to 20 percent in 2020. This increase is a reflection of increased use of the Airport by corporate and business aircraft. It is also estimated that 10 jet aircraft could be based at the Airport by 2020.

The increase in the use of helicopters in the general economy for business and agricultural uses over recent years suggests that additional helicopters could be based at the Airport by 2020. It is estimated that by 2020, up to 14 helicopters could be based at the Airport.

2.5.3 Aircraft Operations

The number of annual aircraft operations at the Paso Robles Municipal Airport, as presented in Table 2-5, is forecast to increase from an estimated 31,600 annual operations in 2000 to 57,200 annual operations by 2020.

2.5.3.1 Air Taxi

Air taxi operations include the unscheduled operations of "for hire" air taxis carrying passengers and any operations by bank couriers or other small package carriers. The potential exists for air taxi operations at the Airport to serve persons accessing the growing population of the area and the increased use of the Airport businesses and visitors to the area.

Air taxi operations are forecast to increase from an estimated 2,400 annual operations in 2000 to 4,000 annual operations by 2020.

2.5.3.2 General Aviation

General aviation aircraft operations are forecast to continue to account for the largest share of total operations at the Airport. General aviation operations are forecast to increase from an estimated 28,000 annual operations in 2000 to 52,000 annual operations by 2020.

Itinerant Operations. Itinerant operations are forecast to increase slightly as a percent of total general aviation aircraft operations from 59 percent (16,400 operations) in 2000 to 64 percent (33,200 operations) by 2020 reflecting the increase use of the Airport for business and tourist-related activities in the area during the forecast period.

Local Operations. Local operations are forecast to decrease slightly as a percent of total general aviation aircraft operations from 41 percent (11,600 operations) in 2000 to 36 percent (18,800 operations) by 2020.

2.5.3.3 Military

Military aircraft operations represent a small share of total aircraft operations (about 1,200 operations in 2000), and the assumption has been made that these operations will continue at present levels and account for a small share of total aircraft operations in the future. Therefore, a constant level of 1,200 military operations per year has been assumed throughout the 20-year planning period.

2.5.4 Operations Per Based Aircraft

Operations per based aircraft is a useful guide to estimate the number and types of aircraft operations at a non-towered airport. Operations per based aircraft include the number of operations by visiting itinerant aircraft as well as those based at the Airport. The numbers also include training operations. Operations per based aircraft are forecast to increase from an estimated 210 annual operations in 2000 to 260 annual operations by 2020 reflecting a greater utilization of existing aircraft and increased training activity.

2.5.5 Peak Period Aviation Activity

Key forecasts that affect airfield, passenger terminal, general aviation, access and automobile parking planning are those indicating the levels of activity during the average day of the peak month. The peak hour forecasts are intended for use in the demand/capacity analysis and determining requirements for future Airport facilities.

Peak hour aviation activity forecasts for aircraft operations during the average day of the peak month for Paso Robles Municipal Airport are presented in Table 2-5.

The peak month typically accounts for approximately 10 percent of the annual aircraft operations. The peak hour of an average day in the peak month typically accounts for approximately 15 percent of the total daily operations.

The total peak hour aircraft operations are forecast to increase from 16 operations in the peak hour of an average day in the peak month in 2000 to 18 operations in 2005; to 20 operations in 2010; to 24 operations in 2015; and to 28 operations in 2020.

2.6 POTENTIAL DEMAND FOR COMMUTER AIRLINE SERVICE

The Paso Robles Municipal Airport has been provided with passenger service by a variety of air carrier and commuter airlines since the 1940s with the most recent commuter airline service provided by Skywest Airlines from April 1987 to March 1988.

As part of an expansion program to provide service to cities in Northern California, Skywest required a centrally-located maintenance base, which was located at the Airport. The airline's 19-passenger Metroliners were flown into Paso Robles from Monterey, Bakersfield, Fresno, San Francisco and Sacramento for maintenance and service. Paso Robles Municipal Airport was chosen as the site for the maintenance base because of the availability of facilities, the geographic location of the Airport, its remote location and the relative absence of environmental concerns that exist at other airports. Skywest Airlines expansion program into Northern California did not materialize as expected, and the airline's maintenance facilities were relocated to Salt Lake City in 1988.

Enplaned passengers at the Airport totaled 2,609 during the time scheduled passenger service was provided by Skywest. By comparison, while there have been no passenger enplanements at the Paso Robles Municipal Airport since 1988, enplaned passengers at the San Luis Obispo County Airport have continued to increase from over 78,000 enplanements in 1988 to over 142,000 enplanements in 2000 based on FAA data.

To assess the potential of the passenger market, representatives of commuter airlines who could potentially provide this service in the future were contacted. The activity levels that can be reasonably expected to occur at Paso Robles Municipal Airport are somewhat dependent on the facilities that are provided at the Airport (level of service) and the availability of similar services at other locations in the area (competition). Approximately 25 commuter flights are provided out of San Luis Obispo on a daily

basis providing either direct service to a desired destination or connecting service to virtually any destination worldwide. San Luis Obispo is a 32 mile, 45-minute drive from Paso Robles, and it would appear that at present the drive to San Luis Obispo offers the most significant competition to scheduled commuter airline service at Paso Robles Municipal Airport.

The potential demand for commuter airline service to the Paso Robles Municipal Airport has been addressed in previous studies. The 1991 *Draft 2010 Airport Master Plan* evaluated the potential for commuter airline service and ascertained that, *with the continued promotion of the Paso Robles area to attract businesses and industries that will enhance and diversify the economic development of the area, coupled with the continued population and economic growth experienced in Paso Robles over the past decade, the potential for the reintroduction of scheduled commuter service at the Paso Robles Municipal Airports exists within the long-term planning horizon.* The Plan went on to say that, *to be successful in securing the desired services, it will be necessary for the City to undertake the responsibility as a Community to actively pursue scheduled air service and continue to promote and develop the Airport as an attractive alternative to the increasing congestion at other airports. The City needs to identify the potential service it can reasonably expect to acquire and prepare an air service marketing and promotion program to attract an air carrier/commuter that can best provide that service.*

The 1998 Paso Robles Municipal Airport Development Program stated that, with commuter air services at the San Luis Obispo Airport, it is unlikely that such service would be initiated at the Paso Robles Municipal Airport in the near future. Thus, an air passenger terminal may not be required for a number of years. However, if Paso Robles were to develop an Airport Terminal, provisions should be made to accommodate air passenger facilities at a future date – possibly as a new wing to the Airport Center Building.

It should be noted that the 1991 *Airport Master Plan* and the 1998 *Airport Development Program* were developed close to a decade apart. There were significant changes in the airline industry beginning in the early 1990s as the commuter airlines began a significant growth period by replacing major airlines in the short-haul markets and by providing connecting service at hub airports as partners with the major airlines. However, as a result of the overall declining economy beginning in mid-2001, commuter airline services to the smaller airports began to decline. The September 11, 2001 events have had further significant impacts on the airline industry as a whole, and air carrier and commuter airline service has been reduced by between 20 and 30 percent at airports across the Nation.

In 2002, the San Luis Obispo Council of Governments (SLOCOG), in partnership with the City of Paso Robles, prepared the *North County Air Service Market Analysis* that examined if a market currently exists for new commercial passenger services at the Paso Robles Municipal Airport. The study determined that, while the air travel market is growing, new commercial passenger services at the Paso Robles Municipal Airport are unlikely in the near future, given the current market size and the current air service provided at the San Luis Obispo Regional Airport.

2.7 POTENTIAL DEMAND FOR SMALL PACKAGE/AIR CARGO SERVICE

There are no historical data available on the air cargo handled at the Paso Robles Municipal Airport. A bank courier provides daily service with Piper Navajo aircraft. United Parcel Service provides service with Beech 99, Cessna 208, Caravan and Piper Navajo aircraft on occasions when the demand and/or weather conditions warrant.

An evaluation of the potential for air cargo/small package/mail service at the Airport was made based on discussions with existing and potential air cargo/small package carriers and knowledge of these types of operations at airports comparable to Paso Robles Municipal Airport in terms of population and geographic location. The express air cargo/small package carriers have stringent requirements for their operation centers and distribution networks. Small packages are typically delivered overnight to a centrally-located airport from which the highest density of demand in an area can be reached within the shortest period of time. Pick up and delivery to and from the central airport is primarily by truck, as access to and from the cargo aircraft and the outlying areas is critical to the successful delivery of time-sensitive packages. Small packages going to remote rural areas are transferred to contract carriers, e.g., fixed base operators or air taxis and then to trucks with a two-day delivery guarantee.

As the demand for operations by air cargo/small package/mail service increases in the Paso Robles area, additional services could be provided by an increase in the frequency of service and the use of larger aircraft at the San Luis Obispo Regional Airport where the carriers have established a distribution network. Operations by air cargo/small package/mail service could be initiated directly to the Paso Robles Municipal Airport as businesses and industries develop in the area along with an attendant increase in population and employment. However, the Airport is not located within a geographic area with a high concentration of population and employment base required to attract the attention of larger, all cargo air carriers.

2.8 LONG-RANGE AVIATION ACTIVITY FORECASTS

At the request of the City, long-range aviation activity forecasts through 2050 were prepared for the Airport based on a straight-line extrapolation of the population

projections for the City of Paso Robles. The long-range aviation forecasts respond to the City's Airport Vision statement for maintaining the Airport as a regional airport supporting and promoting economic development and growth in tourism through service to both general aviation and regular commercial air service. The long-range aviation activity forecasts will be used to identify land that should be reserved in the Airport Master Plan for potential aviation use.

Based aircraft are forecast to total 390 aircraft by 2050 based on the projected population growth for the City of Paso Robles. Annual aircraft operations are forecast to total 139,300 operations by 2050.

2.9 COMPARISON OF AVIATION ACTIVITY FORECASTS

Comparisons of the forecasts of aviation activity for the Paso Robles Municipal Airport discussed previously in this Chapter are graphically illustrated on Figures 2-1 and 2-2. Forecasts of based aircraft prepared in the FAA Terminal Area Forecasts, Caltrans 1999 Aviation Forecasts, the 1991 Draft Airport Master Plan, and the 2000 Airport Master Plan, are graphically illustrated on Figure 2-1. Forecasts of annual aircraft operations are graphically illustrated on Figure 2-2. It should be noted that the forecasts were prepared at different times based on variations in both socioeconomic and aviation activity conditions.