

## **Summary of Aviation Demand Forecasts**

Ricondo & Associates, Inc. (R&A) prepared demand projections for the period from 2009 through the year 2027. In developing baseline activity projections national and local trends and other forecasts were examined, including:

- Local demographic trends (i.e., population, employment, per capita income, total jobs)
- Local origin and destination (O&D) versus connecting traffic trends
- Enplanement trends at Norman Y. Mineta San Jose International Airport
- Future use of regional carriers at the Airport
- General fleet mix trends

Baseline Demand Forecasts were prepared for the basic components of airline activity at Norman Y. Mineta San Jose International Airport (Airport or SJC), including:

- O&D enplanements
- Connecting enplanements
- Domestic mainline air carrier activity (enplanements, operations and landed weight)
- Domestic regional/commuter air carrier activity (enplanements, operations and landed weight)
- International air carrier activity (enplanements, operations and landed weight)
- General aviation operations
- All-cargo operations
- Military operations
- Cargo tonnage
- Passenger air carrier and all-cargo carrier landed weight
- Aircraft fleet mix

The following sections of this technical memorandum further describe the key assumptions and findings of the baseline activity forecasts prepared for this study.

### **Key Assumptions and Findings**

The key assumptions used in preparing the baseline demand forecasts and the corresponding results are discussed in the following sections.

### **Economic Base for Air Transportation**

Norman Y. Mineta San Jose International Airport primarily accommodates domestic O&D passengers that originate or terminate their airline trip in San Jose. Since no major airline operates a connecting hub at SJC, the Airport is not dependent upon connecting passengers that transfer from one flight to another. According to data provided by the Airport, it is estimated that 96.1 percent of San Jose total enplanements were domestic O&D passengers for FY 2008. Since most of the airport's enplaned passengers are domestic O&D, enplanement growth at SJC is highly influenced by the underlying socioeconomic health of the region.

The geographical area served by the Airport primarily encompasses the six Californian counties of Alameda, Monterey, San Benito, San Mateo, Santa Cruz and Santa Clara (the county in which the

Airport is located). It is recognized that the Airport's total air trade area extends beyond this six county area, but it is the economic strength of this six county area that provides the primary base for supporting air transportation at the Airport. Therefore, for these analyses, the primary air trade area (the "Air Trade Area") for the Airport is considered to be the six counties listed above.

## Population

**Table 1** presents the historical and projected population for the Air Trade Area, the State of California, and the United States.

- As the table presents, the Air Trade Area's population increased at a compounded annual growth rate of 1.1 between 1990 and 2000. This growth in the Air Trade Area's population from 1990 to 2000, was on pace (although marginally below) with the 1.3 percent growth in population for the State of California and 1.2 percent growth for the nation, during this same period.
- Between 2000 and 2008, population growth in the Air Trade Area was 0.3 percent annually, which is lower than the growth experienced between 1990 and 2000 for the Air Trade Area and lower than the growth experienced for the State of California and the Nation during the 2000 and 2008 period. Population growth in the State of California and the United States between 2000 and 2008 was 0.9 percent and 0.6 percent, respectively.
- Also presented in Table 1 are population projections for the years 2010, 2015, 2020, and 2030 for the Air Trade Area, the State of California, and the United States. As shown, population trends experienced in the Air Trade Area between 2000 and 2008 are expected to continue through at least 2030. Population in the Air Trade Area is expected to increase from approximately 4.6 million people in 2000 to approximately 5.2 million in 2030 at a compounded annual growth rate of 0.4 percent during this period. The population growth for the Air Trade Area during the this period is lower than the compounded annual growth rates of 1.2 percent projected for California and 0.9 percent projected for the Nation.
- A geographical image of the Bay Area and the area's historic population per square mile for the years 1970, 1980, 1990, 2000, and 2008 are visually presented in **Exhibit 1, Exhibit 2, Exhibit 3, Exhibit 4, and Exhibit 5**, respectively. The exhibits visually demonstrates that the area surrounding the Airport had the highest accelerated population growth, from 1970 to 2008, in the Bay Area within a thirty-minute drive-time radius from the Airport, as compared to San Francisco International and Oakland International Airports. During this period, the area surrounding the Airport had the highest compounded annual growth of population at 1.3 percent within a thirty-minute drive-time radius as compared to San Francisco International at 0.3 percent and Oakland International Airport at 0.7 percent. Additionally, the area surrounding the Airport had the highest concentration of population in the Bay Area within a thirty-minute drive-time radius, compared to San Francisco International and Oakland International Airports. From 1970 to 2008, the Airport area's concentration of population in the Bay Area was 28.0 percent within a thirty-minute drive-time radius as compared to San Francisco International at 20.8 percent and Oakland International Airport at 25.2 percent.
- **Exhibit 6** also depicts a geographical image of the Bay Area and the area's projected population per square mile for the year 2013. The exhibit shows the area surrounding the Airport is projected to continue to be the Bay Area's fastest area for population growth. For the purposes of this forecast, we assumed the population of the area surrounding the Airport will continue to grow faster than the areas surrounding San Francisco International and Oakland International Airports.

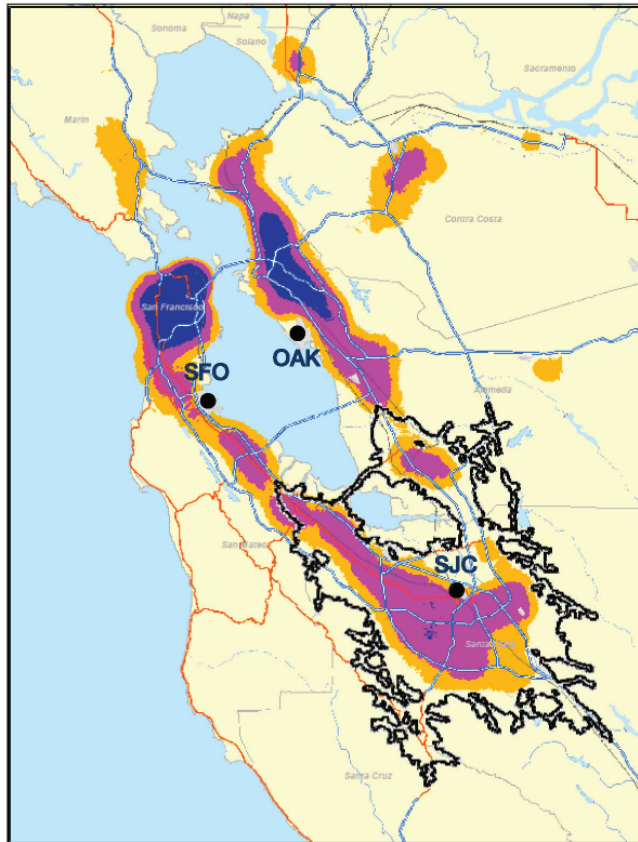
**Table 1**

**Historical and Projected Resident Population**

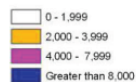
Area	Historical		Projected						Compounded Annual Growth Rate						
	1990	2000	2008	2010	2015	2020	2025	2030	1990-2000	2000-2008	2000-2010	2000-2015	2000-2020	2000-2025	2000-2030
Air Trade Area	4,078,650	4,559,510	4,653,410	4,694,110	4,794,910	4,902,620	5,030,680	5,183,800	1.1%	0.3%	0.3%	0.3%	0.4%	0.4%	0.4%
State of California	29,760,021	33,871,648	36,375,000	38,726,000	40,958,000	43,551,000	46,437,000	48,472,000	1.3%	0.9%	1.3%	1.3%	1.3%	1.3%	1.2%
United States	248,709,873	281,421,906	294,525,000	308,918,000	323,868,000	339,335,000	355,011,000	370,674,000	1.2%	0.6%	0.9%	0.9%	0.9%	0.9%	0.9%

Sources: U.S. Department of Commerce, Bureau of the Census (historical and projected State of California and United States population), February 2009; NPA Data (historical and projected Bay Area population by county), April 2009.

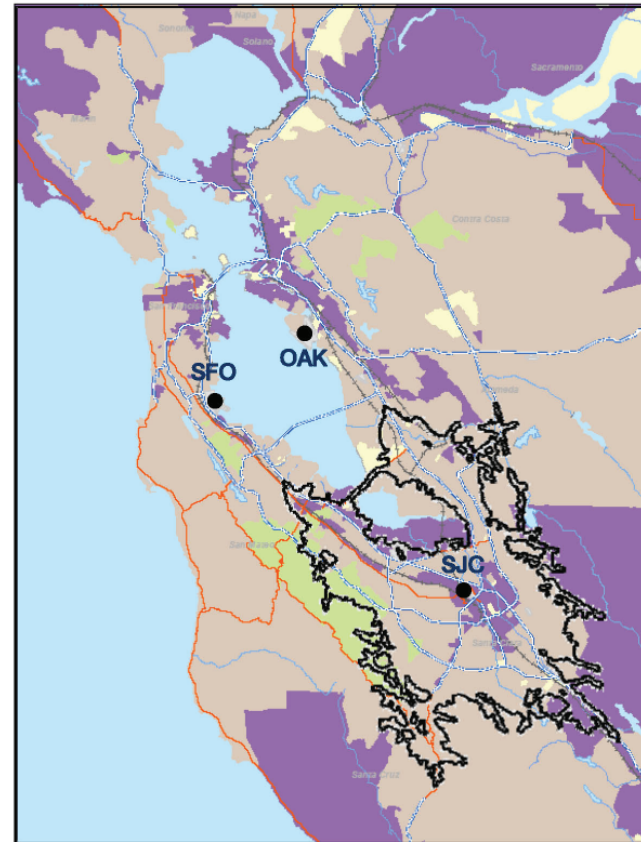
Prepared by: Ricondo & Associates, Inc., May 2009



People per square mile



30 minute drive radius



Median Household Income (Blockgroups)  
(In Current year dollar value)

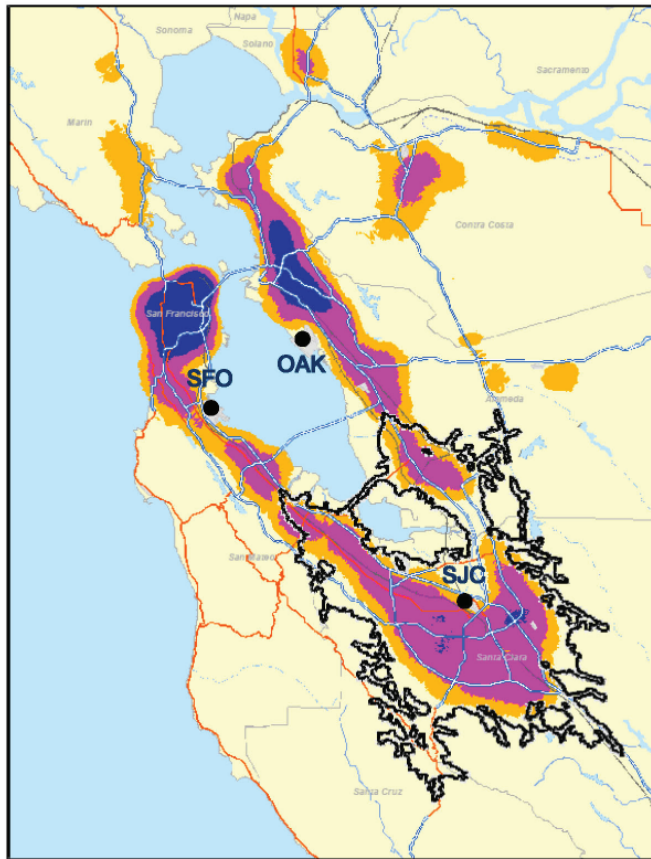


Sources: Applied Geographic Solutions (based on US Census Bureau data).  
Prepared by: Ricondo & Associates, Inc., April 2009.

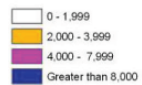
Exhibit 1

Not to Scale  
↑  
north

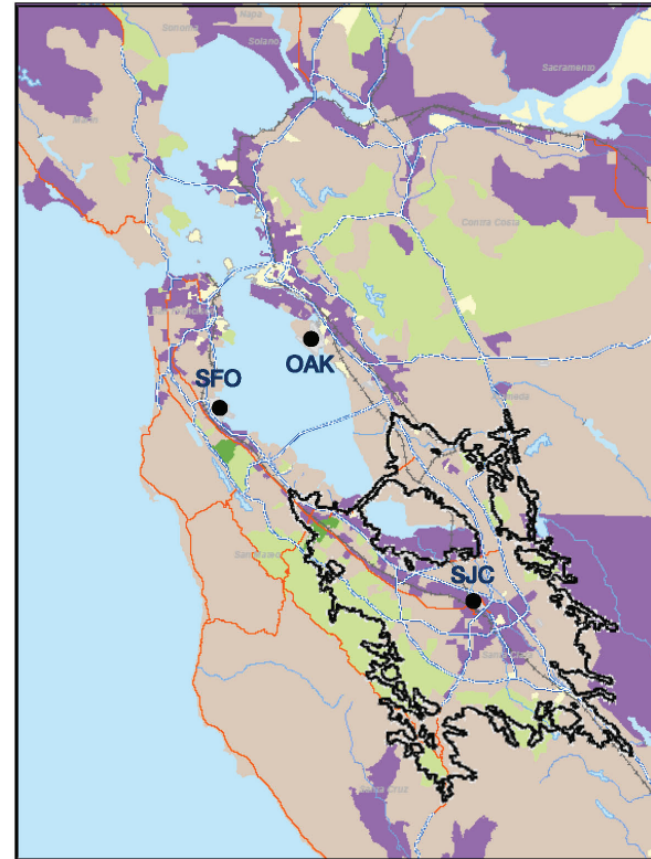
## Population and Median Household Income Demographics in 1970



People per square mile



30 minute drive radius



Median Household Income (Blockgroups)  
(In Current year dollar value)

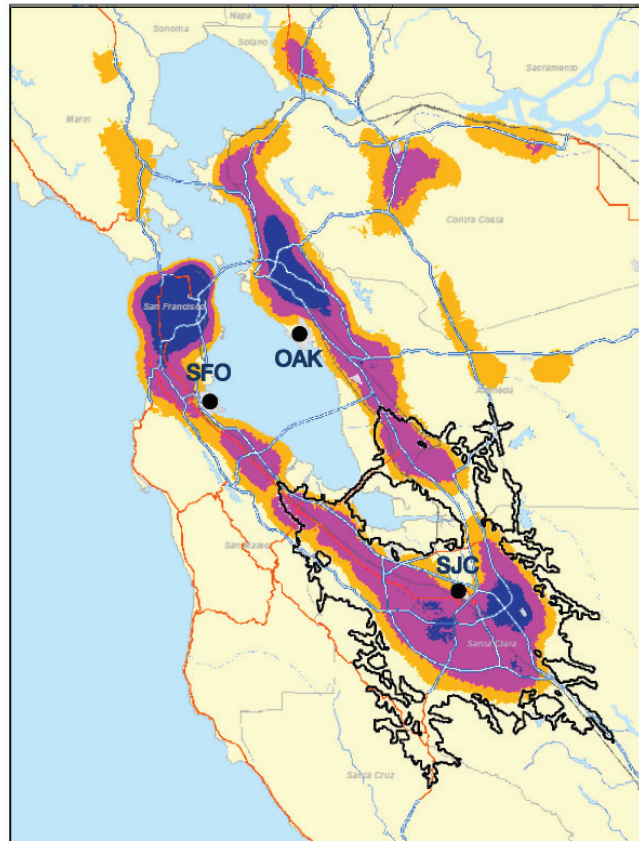


Sources: Applied Geographic Solutions (based on US Census Bureau data).  
Prepared by: Ricondo & Associates, Inc., April 2009.

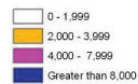
Exhibit 2

Not to Scale  
↑  
north

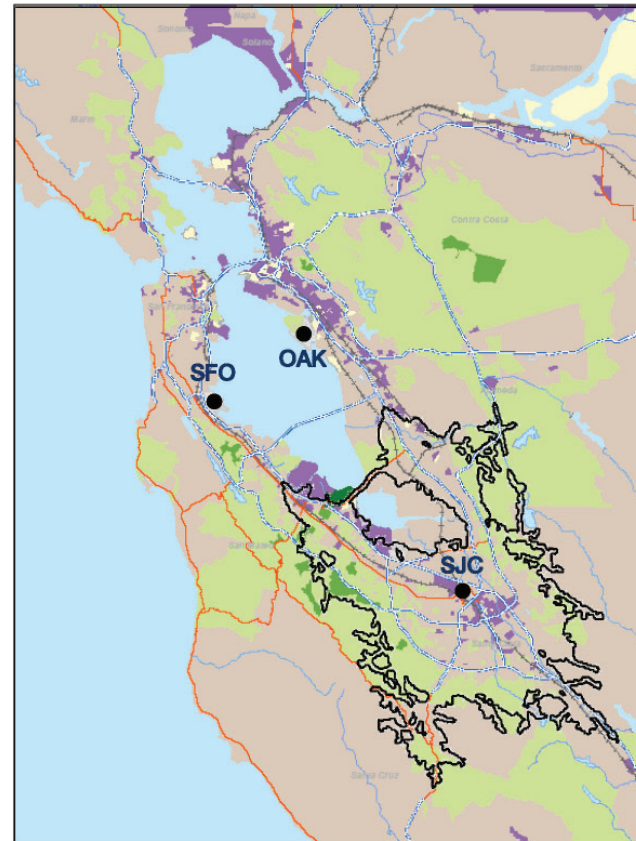
## Population and Median Household Income Demographics in 1980



People per square mile



— 30 minute drive radius



Median Household Income (Blockgroups)  
(In Current year dollar value)



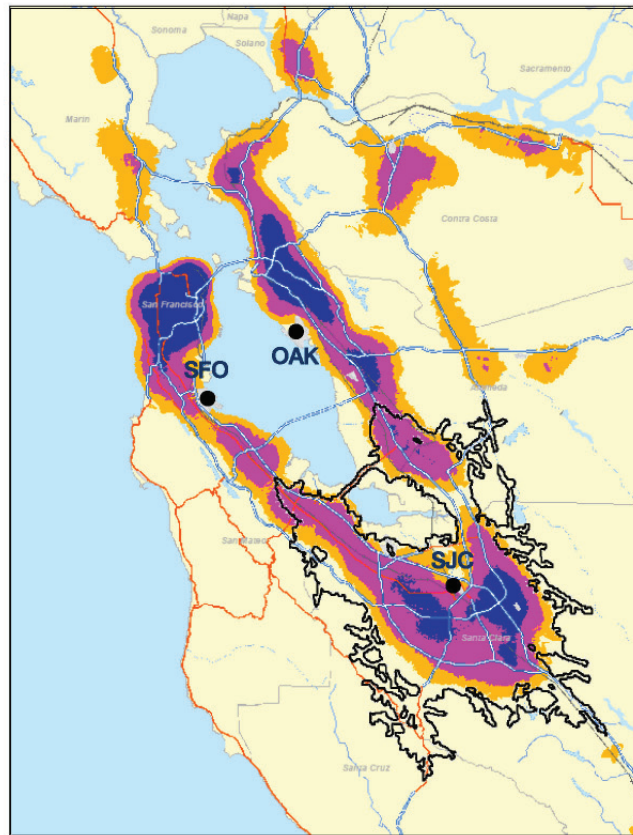
Sources: Applied Geographic Solutions (based on US Census Bureau data).  
Prepared by: Ricondo & Associates, Inc., April 2009.

Exhibit 3

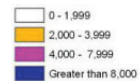
Not to Scale  
↑  
north

## Population and Median Household Income Demographics in 1990

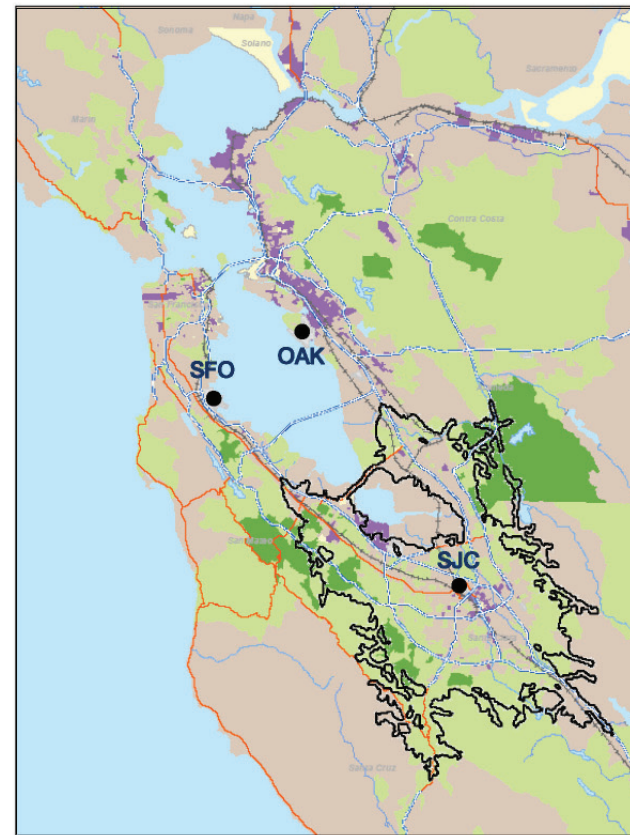




People per square mile



30 minute drive radius



Median Household Income (Blockgroups)  
(In Current year dollar value)

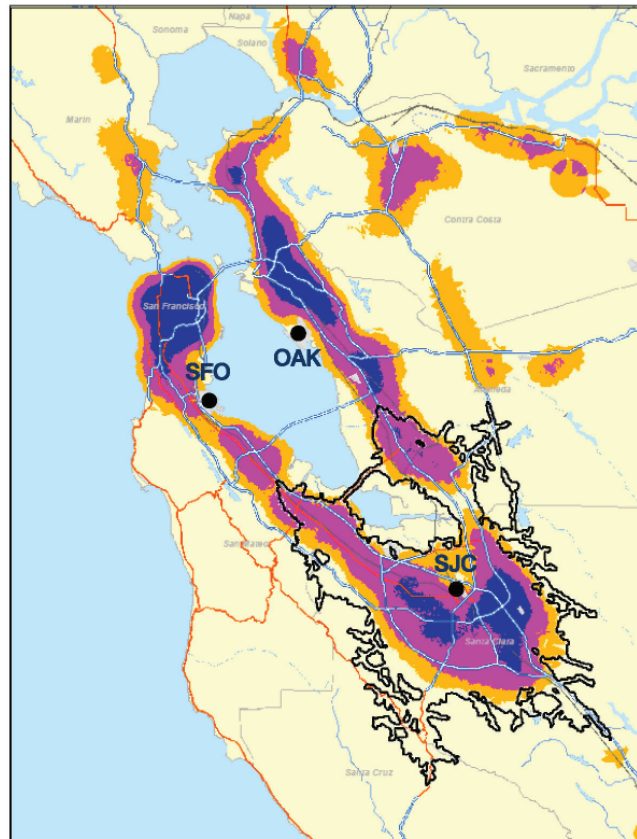


Sources: Applied Geographic Solutions (based on US Census Bureau data).  
Prepared by: Ricondo & Associates, Inc., April 2009.

Exhibit 4

Not to Scale  
↑  
north

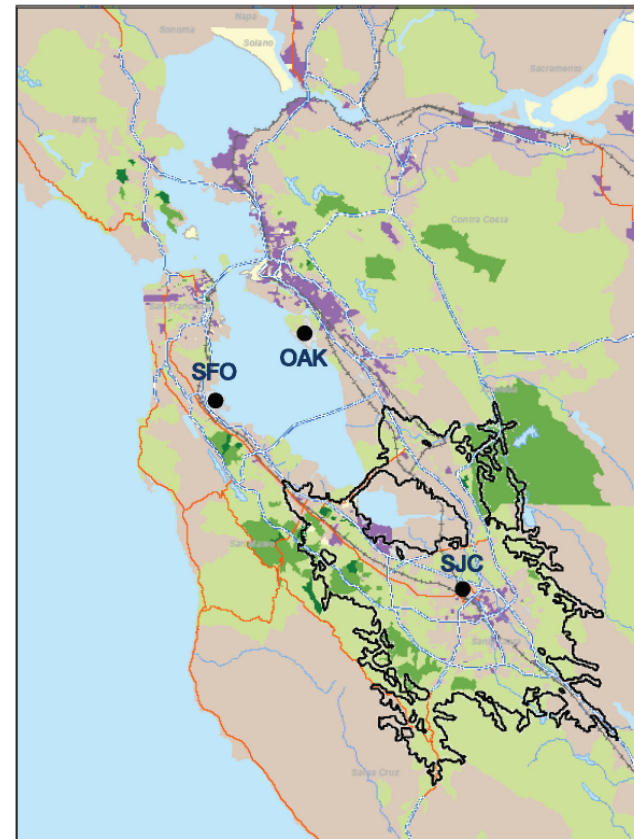
## Population and Median Household Income Demographics in 2000



People per square mile



— 30 minute drive radius



Median Household Income (Blockgroups)  
(In Current year dollar value)



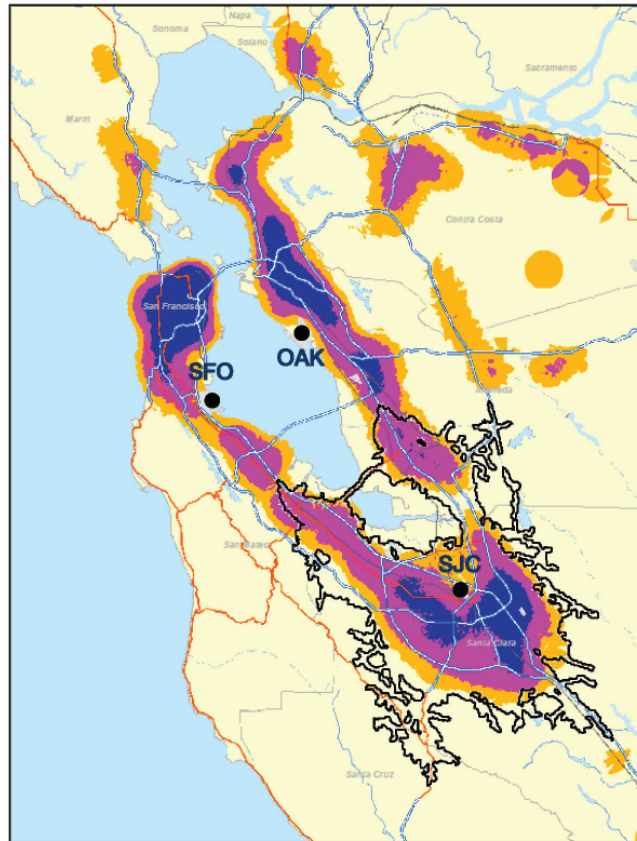
Sources: Applied Geographic Solutions (based on US Census Bureau data).  
Prepared by: Ricondo & Associates, Inc., April 2009.

Exhibit 5

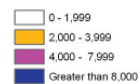
Not to Scale  
↑  
north

## Population and Median Household Income Demographics in 2008

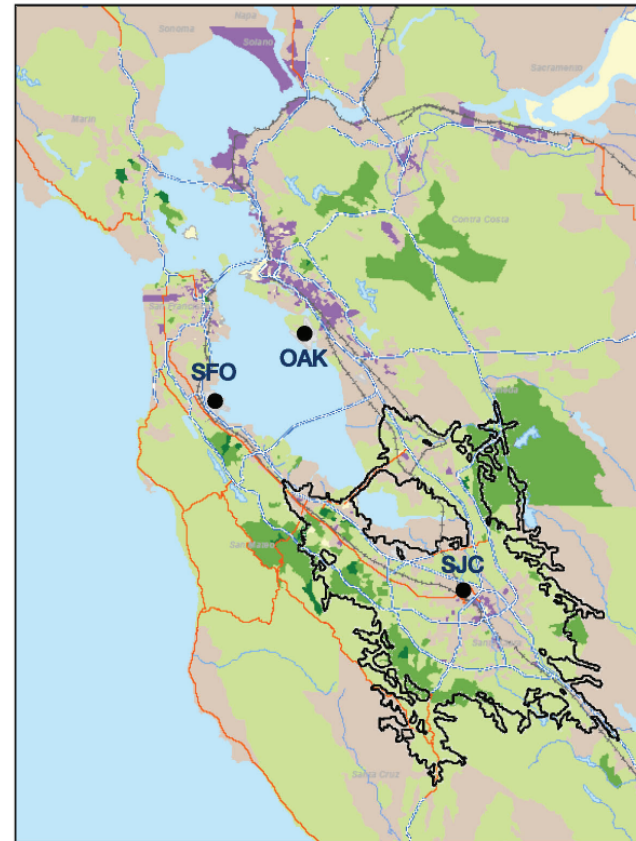




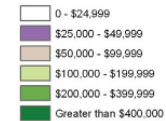
People per square mile



30 minute drive radius



Median Household Income (Blockgroups)  
(In Current year dollar value)



Sources: Applied Geographic Solutions (based on US Census Bureau data).  
Prepared by: Ricondo & Associates, Inc., April 2009.

Exhibit 6

Not to Scale  
↑  
north

## Population and Median Household Income Demographics in 2013

## Income

One measure of the relative income of an area is its Effective Buying Income (EBI). EBI is essentially disposable personal income and includes personal income less personal taxes (federal, state, and local), non-tax payments including fines and penalties, and personal contributions for social insurance (Social Security and federal retirement payroll deductions). EBI is a composite measurement of market potential and indicates the general ability to purchase an available product or service. Historic and projected EBI was obtained from the Demographics USA.

- **Table 2** presents per capita EBI for the Air Trade Area, the State of California, and the Nation between 2001 and 2007. As shown, per capita EBI for the Air Trade Area was consistently higher than that for California and for the Nation each year between 2001 and 2007. As also shown, per capita EBI for the Air Trade Area is projected to increase from \$27,180 in 2007 to \$29,895 in 2012. This increase represents a compounded annual growth rate of 1.9 percent during this period, which is slightly lower than the growth rates for California and the Nation (compounded annual growth rates of 2.3 and 2.2 percent, respectively).
- An additional indicator of the market potential for air transportation demand is the percentage of households in the higher income categories. An examination of this indicator is important in that as personal income increases, air transportation becomes more affordable and therefore, is used more frequently. Table 2 also presents percentages of households in selected EBI categories for 2007. As indicated by Table 2 data, 38.0 percent (17.0 percent + 21.0 percent) of households in the Air Trade Area had an EBI of \$75,000 or more in 2007, compared to 10.6 percent (6.4 percent + 4.2 percent) for California and 20.3 percent (11.0 percent + 9.3 percent) for the Nation.
- Also shown in Exhibit 1, Exhibit 2, Exhibit 3, Exhibit 4, and Exhibit 5 are the Bay Area's Median Household Income (MHI) per city-block for the years 1970, 1980, 1990, 2000, and 2008. The exhibits visually demonstrate that the area surrounding the Airport had the highest accelerated median household income growth rate, from 1970 to 2008, in the Bay Area within a thirty-minute drive-time radius from the Airport, as compared to San Francisco International and Oakland International Airports. During this period, the area surrounding the Airport had the highest compounded annual growth rates of MHI at 6.02 percent within a thirty-minute drive-time radius as compared to San Francisco International at 5.97 percent and Oakland International Airport at 5.62 percent.
- Exhibit 6 also depicts a geographical image of the Bay Area and the area's projected MHI per city-block for 2013. The exhibit shows that the area surrounding Airport is projected to continue to be the Bay Area's fastest area for MHI growth. For the purposes of this forecast, we assumed the MHI growth rate of the area surrounding the Airport will continue to outpace the areas surrounding San Francisco International and Oakland International Airports.

## Employment

Recent employment trends for the San Jose-Sunnyvale-Santa Clara Metropolitan Statistical Area (San Jose-Sunnyvale-Santa Clara MSA) and the United States are presented in **Table 3**.

**Table 2**

Per Capita Effective Buying Income (EBI)

Year	Per Capita EBI		
	Air Trade Area	State of California	United States
<b>Historical</b>			
2001	\$24,881	\$18,652	\$18,491
2002	\$24,026	\$18,236	\$18,375
2003	\$25,013	\$18,821	\$18,662
2004	\$25,463	\$19,469	\$19,289
2005	\$25,390	\$19,705	\$19,779
2006	\$26,167	\$20,610	\$20,286
2007	\$27,180	\$21,716	\$20,717
<b>Projected</b>			
2012	\$29,895	\$24,273	\$23,133
<b>Compounded Annual Growth Rate</b>			
2001 - 2007	1.5%	2.6%	1.9%
2007 - 2012	1.9%	2.3%	2.2%
<b>Percentage of Households in Income Categories (2007 EBI)</b>			
Income Category	Air Trade Area	State of California	United States
Less than \$24,999	15.9%	34.9%	26.8%
\$25,000 to \$49,999	24.8%	36.7%	33.3%
\$50,000 to \$74,999	21.3%	17.8%	19.7%
\$75,000 to \$99,999	17.0%	6.4%	11.0%
\$100,000 or More	21.0%	4.2%	9.3%

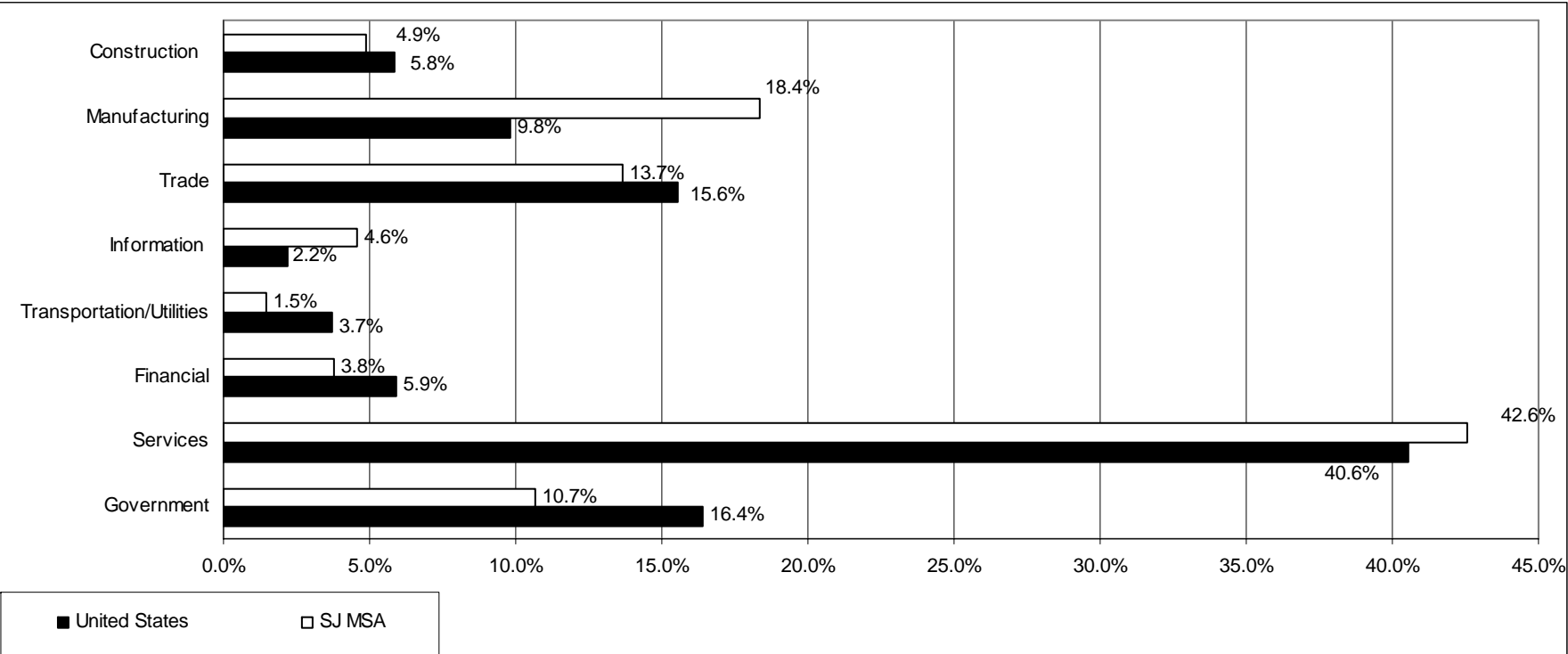
Source: Demographics USA, December 2008.

Prepared by: Ricondo & Associates, Inc. May 2009.

Table 3  
Employment Trends by Major Industry Division

Industry	San Jose-Sunnyvale-Santa Clara MSA Nonagricultural Employment					United States Nonagricultural Employment (000s)				
	1998	Percentage of Total Employment	2008	Percentage of Total Employment	Compounded Annual Growth Rate	1998	Percentage of Total Employment	2008	Percentage of Total Employment	Compounded Annual Growth Rate
Construction <sup>1/</sup>	43,200	4.5%	44,500	4.9%	0.3%	6,794	5.4%	7,989	5.8%	1.6%
Manufacturing	245,700	25.3%	168,000	18.4%	-3.7%	17,560	13.9%	13,431	9.8%	-2.6%
Trade	129,100	13.3%	125,200	13.7%	-0.3%	20,405	16.2%	21,320	15.6%	0.4%
Information <sup>2/</sup>	29,300	3.0%	41,700	4.6%	3.6%	3,218	2.6%	2,997	2.2%	-0.7%
Transportation/Utilities	17,100	1.8%	13,300	1.5%	-2.5%	4,781	3.8%	5,065	3.7%	0.6%
Financial	34,200	3.5%	34,800	3.8%	0.2%	7,462	5.9%	8,146	5.9%	0.9%
Services	378,300	39.0%	389,700	42.6%	0.3%	45,801	36.4%	55,620	40.6%	2.0%
Government	92,900	9.6%	97,800	10.7%	0.5%	19,909	15.8%	22,500	16.4%	1.2%
Total <sup>3/</sup>	969,800	100.0%	915,000	100.0%	-0.6%	125,930	100.0%	137,068	100.0%	0.9%

PERCENT OF 2007 NONAGRICULTURAL EMPLOYMENT



Notes:  
1/ Includes mining employment.  
2/ The information sector includes communications, publishing, motion picture and sound recording, and on-line services.  
3/ Columns may not add to totals shown because of rounding.

Source: U.S. Department of Labor, Bureau of Labor Statistics, February 2009.  
Prepared by: Ricondo & Associates, Inc., May 2009.

- As shown, the Air Trade Area's civilian labor force decreased from approximately 969,800 workers in 1998 to approximately 915,000 million workers in 2008. This decrease represents a compounded annual decline of 0.6 percent during this period, compared to 0.9 percent annual growth for the Nation. The decrease in the San Jose-Sunnyvale-Santa Clara MSA's civilian labor force was primarily driven by the global economic recession, including the September 11 aftermath, economic impacts, and the recession that hit the dot-com industry of the Silicon Valley and its associated sectors.
- With the exception of manufacturing, trade, and transportation/utilities, each of the major industry divisions in the Air Trade Area experienced positive growth between 1998 and 2008, with the highest growth occurring in the services sector, the largest employment sector. Manufacturing employment in the Air Trade Area decreased from approximately 245,700 workers in 1998 to approximately 168,000 workers in 2008. This decrease in the manufacturing base between 1998 and 2008 was not unique to the San Jose-Sunnyvale-Santa Clara MSA, as manufacturing employment nationwide decreased 2.6 percent on a compounded annual basis during this same period. Trade employment in the San Jose-Sunnyvale-Santa Clara MSA decreased from approximately 129,100 workers in 1998 to approximately 125,200 workers in 2008. Transportation/utilities employment in the San Jose-Sunnyvale-Santa Clara MSA also decreased from approximately 17,100 workers in 1998 to approximately 13,300 workers in 2008. The decrease in the transportation/utilities base between 1998 and 2008 was primarily due to the downsizing of utility companies over the past ten years (due to increased efficiency) and restructuring by legacy air carriers in the post-9/11 period.
- A shifting of San Jose-Sunnyvale-Santa Clara MSA's employment base occurred between 1998 and 2008, as manufacturing employment decreased from 25.3 percent of total employment in 1998 to 18.4 percent in 2008; and services employment increased from 39.0 percent of total employment in 1998 to 42.6 percent in 2008. The shifting of San Jose-Sunnyvale-Santa Clara MSA's employment base is consistent with changes in the employment base nationwide, as manufacturing decreased from 13.9 percent to 9.8 percent and services increased from 36.4 percent to 40.6 percent during this same period.
- Shown in **Table 4**, annual unemployment rates for the Air Trade Area, the State of California and the United States each year between 2006 and 2008. The Nation's annual unemployment rate increased from 4.6 percent in 2006 to 5.8 percent in 2008, signaling an eventual downturn of the Nation's economy. During this same period, the State of California's unemployment rate grew from 4.9 percent in 2006 to 7.2 percent in 2008. Over the last three years, the Air Trade Area experienced lower unemployment as compared to the State of California, but was higher than those of the U.S.
- Also shown in Table 4, are projected annual unemployment rates for the Air Trade Area, the State of California, and the United States for 2009 and 2010. The projected annual unemployment rate of the Nation is estimated to significantly increase from 5.8 percent in 2008 to 8.8 percent and 9.0 percent for 2009 and 2010, respectively. The State of California's unemployment rate is also projected to significantly increase from 7.2 percent in 2008 to 11.2 percent and 11.6 percent in 2009 and 2010, respectively. The Air Trade Area's unemployment rate is projected to continue to be lower than those of the State of California yet higher than those of the Nation. For the purposes of this forecast, we assumed the Air Trade Area's unemployment rate will continue this same trend.



**Table 4****Unemployment Rates**

Year	Unemployment Rates		
	Air Trade Area	State of California	United States
Historical			
2006	4.7%	4.9%	4.6%
2007	4.9%	5.4%	4.6%
2008	6.3%	7.2%	5.8%
Projected			
2009	10.6%	11.2%	8.8%
2010	10.7%	11.6%	9.0%

Sources: Congressional Budget Office; U.S. Department of Labor, Bureau of Labor Statistics; University of the Pacific, Business Forecasting Center, April 2009.

Prepared by: Ricondo & Associates, Inc., May 2009.

## Air Carrier Activity Projections

To forecast future enplaned passengers at SJC, the historical relationship of enplanement growth and several socioeconomic variables were quantified. The socioeconomic variables tested were Air Trade Area population, Air Trade Area employment, Air Trade Area personal income, and per capita personal income of the Air Trade Area. However, the ability of an econometric (regression) model to closely predict the historic data to which it is calibrated does not guarantee its future forecasting accuracy. In this case, the historic relationship of San Jose enplanements to the above variables may change over the forecast period. As a result, the forecasts resulting from the regression analysis of the socioeconomic variables will inevitably be less than perfect. Given this uncertainty, it is appropriate from a planning standpoint to develop alternative scenarios to bracket the range of likely future outcomes.

With this in mind, four forecast scenarios were developed – Scenario 1 (Regression Model), Scenario 2 (Decelerated Market Recovery), Scenario 3 (Accelerated Market Recovery), and Scenario 4 (Moderate Market Recovery). Enplanements for each scenario were projected until each scenario reached a level of 17.6 million enplaned passengers (horizon). The following section describes each scenario and the underlying long-term forecast assumptions used for each scenario in more detail:

- Scenario 1 (Regression Model) assumes enplanement levels will recover at the same pace with long-term socioeconomic projections. Despite near-term economic recovery and long-term population growth, this scenario assumes that lost passengers will not return to the Airport in the near-term. However, Scenario 1 assumes normal enplanement growth from a new lower enplaned passenger base. Scenario 1 was derived from a regression analysis based on socioeconomic projections. Socioeconomic data for population, employment, total income, and per capita personal income, both historic and projected, was obtained from National Planning Association, Inc. for the Air Trade Area. Scenario 1 is considered to be the base-case forecast. The resulting compounded annual growth rates of enplanements between FY 2008 and FY 2030 from regression analyses based upon population, employment, total income, and per capita personal income, are 2.3, 2.5, 3.0, and 2.8 percent, respectively. In addition to the regression analyses, a trend analysis was also performed to project enplanements to FY 2030. The trend analysis forecast was developed by applying a simple regression model of annual enplanements as a linear function of time. It is an appropriate technique as it can often meet or exceed other more sophisticated approaches in terms of forecasting accuracy because enplanements often exhibit a strong correlation to time. The

resulting compounded annual growth rate of enplanements from the trend analysis was calculated to be 2.4 percent between FY 2008 and FY 2030.

- **Table 5** presents the total enplanements forecasted from each socioeconomic variable, the trend analysis, and the average of these forecasts. As shown, the average of the forecasts in Scenario 1 estimates that the Airport will reach 17.6 million enplaned passengers by FY 2029. Total enplanements resulting from the average of the various regression forecasts and the trend analysis are projected to grow at a compounded annual rate of 2.5 percent for the period between FY 2008 and FY 2029.
- Scenario 2 (Decelerated Market Recovery) assumes that the economy in Silicon Valley and the area surrounding the Airport will recover at a slower-than-predicted pace compared to the current Air Trade Area long-term socioeconomic and demographic projections that were used in Scenario 1. Scenario 2 assumes population, employment, total income, and per capita personal income growth rates for the Air Trade Area will be lower than those projected by National Planning Association, Inc. As a result, this scenario results in lower projected enplanement growth as compared to Scenario 1. A summary of the various assumptions used for Scenario 2 is presented in **Table 6**. Scenario 2 was derived from a regression analysis based on these alternative socioeconomic projections. Scenario 2 is considered to be the low-case forecast. The resulting compounded annual growth rates of enplanements between FY 2008 and FY 2030 from regression analyses based upon population, employment, total income, and per capita personal income, are 1.1, 1.6, 2.2, and 2.2 percent, respectively. In addition to the regression analyses, the trend analysis (presented earlier) was also used as part of this scenario. **Table 7** presents the total enplanements forecasted from each socioeconomic variable, the trend analysis, and the average of these forecasts. As shown, the average of these forecasts in Scenario 2 estimates that the Airport will reach 17.6 million enplanement passengers by FY 2034. Total enplanements resulting from the average of the various regression forecasts and the trend analysis are projected to grow at a compounded annual rate of 2.1 percent for the period between FY 2008 and FY 2034.
- Scenario 3 (Accelerated Market Recovery) assumes an immediate recovery of enplaned passenger levels back to the levels experienced in FY 2006 in the near-term. Scenario 3 assumes that the economy in Silicon Valley and the area surrounding the Airport will recover at a higher-than-predicted pace compared to the current Air Trade Area long-term socioeconomic and demographic projections used in Scenario 1. Population, employment, total income, and per capita personal income growth rates for the Air Trade Area were assumed to increase at an accelerated growth rate than those projected by National Planning Association, Inc. A summary of the various assumptions for Scenario 3 is also presented in **Table 6**. Scenario 3 was derived from a regression analysis based on these alternative socioeconomic projections. Scenario 3 is considered to be the high-case forecast. The resulting compounded annual growth rates of enplanements between FY 2008 and FY 2030 from regression analyses based upon population, employment, total income, and per capita personal income, are 2.3, 3.2, 5.8, and 4.2 percent, respectively. In addition to the regression analyses, the trend analysis was also used in developing enplanement projections for this scenario. **Table 8** presents the total enplanements forecasted from each socioeconomic variable, the trend analysis, and the average of these forecasts. As shown, the average of these forecasts in Scenario 3 estimates that the Airport will reach 17.6 million enplanement passengers by FY 2022. Total enplanements resulting from the average of the various regression forecasts and the trend analysis are projected to grow at a compounded annual rate of 3.9 percent for the period between FY 2008 and FY 2022.

Table 5  
Scenario 1 Enplaned Passenger Forecast

Fiscal Year	Population	Annual Growth	Total Employment	Annual Growth	Total Income	Annual Growth	PCPI	Annual Growth	Trend	Annual Growth	Scenario 1 Base Average	Annual Growth
Historical												
1999	5,469,727	--	5,469,727	--	5,469,727	--	5,469,727	--	5,469,727	--	5,469,727	--
2000	6,051,744	10.6%	6,051,744	10.6%	6,051,744	10.6%	6,051,744	10.6%	6,051,744	10.6%	6,051,744	10.6%
2001	6,937,377	14.6%	6,937,377	14.6%	6,937,377	14.6%	6,937,377	14.6%	6,937,377	14.6%	6,937,377	14.6%
2002	5,719,213	-17.6%	5,719,213	-17.6%	5,719,213	-17.6%	5,719,213	-17.6%	5,719,213	-17.6%	5,719,213	-17.6%
2003	5,204,987	-9.0%	5,204,987	-9.0%	5,204,987	-9.0%	5,204,987	-9.0%	5,204,987	-9.0%	5,204,987	-9.0%
2004	5,291,849	1.7%	5,291,849	1.7%	5,291,849	1.7%	5,291,849	1.7%	5,291,849	1.7%	5,291,849	1.7%
2005	5,345,633	1.0%	5,345,633	1.0%	5,345,633	1.0%	5,345,633	1.0%	5,345,633	1.0%	5,345,633	1.0%
2006	5,414,831	1.3%	5,414,831	1.3%	5,414,831	1.3%	5,414,831	1.3%	5,414,831	1.3%	5,414,831	1.3%
2007	5,318,859	-1.8%	5,318,859	-1.8%	5,318,859	-1.8%	5,318,859	-1.8%	5,318,859	-1.8%	5,318,859	-1.8%
2008	5,178,603	-2.6%	5,178,603	-2.6%	5,178,603	-2.6%	5,178,603	-2.6%	5,178,603	-2.6%	5,178,603	-2.6%
Forecast												
2009	4,425,900	-14.5%	4,425,900	-14.5%	4,425,900	-14.5%	4,425,900	-14.5%	4,425,900	-14.5%	4,426,000	-14.5%
2010	4,360,000	-1.5%	4,360,000	-1.5%	4,360,000	-1.5%	4,360,000	-1.5%	4,360,000	-1.5%	4,360,000	-1.5%
2011	4,519,729	3.7%	4,288,619	-1.6%	4,670,369	7.1%	4,645,809	6.6%	4,581,668	5.1%	4,541,000	4.2%
2012	4,617,063	2.2%	4,459,778	4.0%	4,849,579	3.8%	4,827,282	3.9%	4,695,202	2.5%	4,690,000	3.3%
2013	4,789,300	3.7%	4,644,395	4.1%	5,081,878	4.8%	5,056,353	4.7%	4,887,355	4.1%	4,892,000	4.3%
2014	4,930,710	3.0%	4,818,426	3.7%	5,282,616	4.0%	5,253,289	3.9%	5,051,953	3.4%	5,067,000	3.6%
2015	5,088,910	3.2%	4,991,456	3.6%	5,487,267	3.9%	5,450,527	3.8%	5,232,944	3.6%	5,250,000	3.6%
2016	5,247,249	3.1%	5,182,343	3.8%	5,696,493	3.8%	5,651,428	3.7%	5,413,145	3.4%	5,438,000	3.6%
2017	5,432,312	3.5%	5,400,212	4.2%	5,936,768	4.2%	5,881,726	4.1%	5,619,787	3.8%	5,654,000	4.0%
2018	5,597,643	3.0%	5,598,908	3.7%	6,157,293	3.7%	6,090,866	3.6%	5,804,461	3.3%	5,850,000	3.5%
2019	5,779,345	3.2%	5,796,164	3.5%	6,386,739	3.7%	6,304,887	3.5%	5,999,819	3.4%	6,053,000	3.5%
2020	5,968,317	3.3%	6,017,426	3.8%	6,632,943	3.9%	6,534,474	3.6%	6,200,477	3.3%	6,271,000	3.6%
2021	6,196,374	3.8%	6,260,704	4.0%	6,916,210	4.3%	6,797,320	4.0%	6,439,041	3.8%	6,522,000	4.0%
2022	6,410,702	3.5%	6,510,538	4.0%	7,195,034	4.0%	7,054,533	3.8%	6,660,399	3.4%	6,766,000	3.7%
2023	6,643,172	3.6%	6,757,334	3.8%	7,486,051	4.0%	7,319,969	3.8%	6,897,666	3.6%	7,021,000	3.8%
2024	6,872,887	3.5%	7,041,270	4.2%	7,792,827	4.1%	7,599,564	3.8%	7,126,313	3.3%	7,287,000	3.8%
2025	7,129,433	3.7%	7,311,624	3.8%	8,112,118	4.1%	7,886,001	3.8%	7,378,978	3.5%	7,564,000	3.8%
2026	7,389,170	3.6%	7,607,557	4.0%	8,447,092	4.1%	8,185,418	3.8%	7,630,157	3.4%	7,852,000	3.8%
2027	7,659,206	3.7%	7,914,359	4.0%	8,795,503	4.1%	8,494,179	3.8%	7,887,161	3.4%	8,150,000	3.8%
2028	7,941,217	3.7%	8,233,260	4.0%	9,159,231	4.1%	8,813,729	3.8%	8,151,184	3.3%	8,460,000	3.8%
2029	8,247,281	3.9%	8,553,871	3.9%	9,537,140	4.1%	9,139,740	3.7%	8,429,056	3.4%	8,781,000	3.8%
Compounded Annual Growth Rate												
2000-2006	-1.8%		-1.8%		-1.8%		-1.8%		-1.8%		-1.8%	
2006-2008	-2.2%		-2.2%		-2.2%		-2.2%		-2.2%		-2.2%	
2008-2009	-14.5%		-14.5%		-14.5%		-14.5%		-14.5%		-14.5%	
2008-2029	2.2%		2.4%		3.0%		2.7%		2.3%		2.5%	
2009-2011	1.1%		-1.6%		2.7%		2.5%		1.7%		1.3%	
2009-2020	2.8%		2.8%		3.7%		3.6%		3.1%		3.2%	
2009-2029	3.2%		3.3%		3.9%		3.7%		3.3%		3.5%	

Sources: Norman Y. Mineta San Jose International Airport. (historical SJC activity); Ricondo & Associates, Inc. (forecast Airport activity).  
Prepared by: Ricondo & Associates, Inc., July 2009.

**Table 6****Scenario Assumptions**

Compounded Annual Growth Rates	Scenario 1 Base Case	Scenario 2 Low Case	Scenario 3 High Case
Population Growth (2008 - 2030)	0.5%	0.1%	0.5%
Total Employment (2008 - 2030)	0.9%	0.6%	1.3%
Total Income (2008 - 2030)	2.5%	1.7%	5.5%
Per Capita Personal Income (2008 - 2030)	2.0%	1.4%	3.4%

Sources: Ricondo &amp; Associates, Inc.

Prepared by: Ricondo &amp; Associates, Inc., July 2009.

- Scenario 4 (Moderate Market Recovery) assumes a partial recovery of enplaned passengers back to FY 2006 levels in the near-term. Scenario 4 further assumes that there is a moderate recovery in air travel demand from FY 2011 to FY 2017. Forecast enplanement growth during this period is assumed to partially recover as the Bay Area economy recovers, but not as quickly to its previous levels. As such, enplanements at the Airport were assumed to recover at a higher rate through FY 2017, and then return to growth levels more consistent with the socioeconomic regression forecast thereafter. Scenario 4 was generally derived by averaging from the results of Scenarios 1 & Scenario 3 starting from FY 2012 on. For FY 2010 and FY 2011, the resulting enplanement projections were reduced from what the average produced due to the fact that the resulting growth rates would have suggested a more rapid recovery of enplanements than was considered realistic given the current economic recession. As a result, enplanement projections for FY 2010 and FY 2011 were assumed to grow at the same pace as those in Scenario 1. **Table 9** presents total enplanement projections under Scenario 4. As shown, Scenario 4 projections reach 17.6 million enplanement passengers by FY 2027, representing a compounded annual growth rate of 2.8 percent between FY 2008 and FY 2027. Growth is fastest in the near-term, averaging 4.8 percent from FY 2011 to FY 2017 as SJC benefits from a modest recovery period for air travel demand. As shown, the Airport is expected to recover to the annual level of total enplanements achieved in FY 2006 (i.e. 5.4 million) by the end of FY 2014. Annual compounded growth slows over the forecast period to 3.6 percent in the outer forecast years from FY 2018 to FY 2027.
- Table 10** presents the results of the various forecasts prepared for the Airport, as well as a comparison to the most recent TAF. As shown, the four forecasted scenarios project total enplanements will grow at the Airport at a compounded annual growth rate between 2.1 and 3.9 percent between FY 2008 and the future fiscal year the Airport reaches of a level of 17.6 million enplaned passengers. For comparison purposes, the TAF projects the Airport will reach 17.6 million enplaned passengers by FY 2029 or a compounded annual growth rate of 2.7 percent. The FAA's TAF is most comparable to the base-case (Scenario 1) forecasts. Scenario 4 varies from the TAF compounded annual growth rate between FY 2008 and FY 2027 by only 0.2 percentage points.

Table 7  
Scenario 2 Enplaned Passenger Forecast

Fiscal Year	Population	Annual Growth	Total Employment	Annual Growth	Total Income	Annual Growth	PCPI	Annual Growth	Trend	Annual Growth	Scenario 2 Base Average	Annual Growth
Historical												
1999	5,469,727	--	5,469,727	--	5,469,727	--	5,469,727	--	5,469,727	--	5,469,727	--
2000	6,051,744	10.6%	6,051,744	10.6%	6,051,744	10.6%	6,051,744	10.6%	6,051,744	10.6%	6,051,744	10.6%
2001	6,937,377	14.6%	6,937,377	14.6%	6,937,377	14.6%	6,937,377	14.6%	6,937,377	14.6%	6,937,377	14.6%
2002	5,719,213	-17.6%	5,719,213	-17.6%	5,719,213	-17.6%	5,719,213	-17.6%	5,719,213	-17.6%	5,719,213	-17.6%
2003	5,204,987	-9.0%	5,204,987	-9.0%	5,204,987	-9.0%	5,204,987	-9.0%	5,204,987	-9.0%	5,204,987	-9.0%
2004	5,291,849	1.7%	5,291,849	1.7%	5,291,849	1.7%	5,291,849	1.7%	5,291,849	1.7%	5,291,849	1.7%
2005	5,345,633	1.0%	5,345,633	1.0%	5,345,633	1.0%	5,345,633	1.0%	5,345,633	1.0%	5,345,633	1.0%
2006	5,414,831	1.3%	5,414,831	1.3%	5,414,831	1.3%	5,414,831	1.3%	5,414,831	1.3%	5,414,831	1.3%
2007	5,318,859	-1.8%	5,318,859	-1.8%	5,318,859	-1.8%	5,318,859	-1.8%	5,318,859	-1.8%	5,318,859	-1.8%
2008	5,178,603	-2.6%	5,178,603	-2.6%	5,178,603	-2.6%	5,178,603	-2.6%	5,178,603	-2.6%	5,178,603	-2.6%
Forecast												
2009	4,425,900	-14.5%	4,425,900	-14.5%	4,425,900	-14.5%	4,425,900	-14.5%	4,425,900	-14.5%	4,426,000	-14.5%
2010	4,156,268	-6.1%	4,132,830	-6.6%	4,434,608	0.2%	4,286,897	-3.1%	4,360,000	-1.5%	4,274,000	-3.4%
2011	4,246,982	2.2%	4,323,544	4.6%	4,531,651	2.2%	4,387,494	2.3%	4,581,668	5.1%	4,414,000	3.3%
2012	4,336,960	2.1%	4,578,649	5.9%	4,670,661	3.1%	4,535,109	3.4%	4,695,202	2.5%	4,563,000	3.4%
2013	4,424,466	2.0%	4,759,286	3.9%	4,783,100	2.4%	4,720,250	4.1%	4,887,355	4.1%	4,715,000	3.3%
2014	4,508,069	1.9%	4,883,625	2.6%	4,954,627	3.6%	4,904,234	3.9%	5,051,953	3.4%	4,861,000	3.1%
2015	4,593,364	1.9%	4,987,738	2.1%	5,116,860	3.3%	5,074,873	3.5%	5,232,944	3.6%	5,001,000	2.9%
2016	4,680,436	1.9%	5,113,369	2.5%	5,286,361	3.3%	5,252,188	3.5%	5,413,145	3.4%	5,149,000	3.0%
2017	4,769,460	1.9%	5,240,114	2.5%	5,461,114	3.3%	5,433,585	3.5%	5,619,787	3.8%	5,305,000	3.0%
2018	4,860,782	1.9%	5,384,010	2.7%	5,644,766	3.4%	5,626,847	3.6%	5,804,461	3.3%	5,464,000	3.0%
2019	4,959,302	2.0%	5,530,423	2.7%	5,835,974	3.4%	5,816,972	3.4%	5,999,819	3.4%	5,628,000	3.0%
2020	5,072,104	2.3%	5,681,503	2.7%	6,021,885	3.2%	6,011,099	3.3%	6,200,477	3.3%	5,797,000	3.0%
2021	5,187,970	2.3%	5,832,260	2.7%	6,221,453	3.3%	6,185,074	2.9%	6,439,041	3.8%	5,973,000	3.0%
2022	5,318,787	2.5%	5,991,119	2.7%	6,413,195	3.1%	6,388,941	3.3%	6,660,399	3.4%	6,154,000	3.0%
2023	5,452,711	2.5%	6,146,355	2.6%	6,617,623	3.2%	6,587,307	3.1%	6,897,666	3.6%	6,340,000	3.0%
2024	5,592,365	2.6%	6,314,458	2.7%	6,845,876	3.4%	6,791,803	3.1%	7,126,313	3.3%	6,534,000	3.1%
2025	5,735,586	2.6%	6,477,007	2.6%	7,072,635	3.3%	7,016,259	3.3%	7,378,978	3.5%	6,736,000	3.1%
2026	5,883,127	2.6%	6,648,828	2.7%	7,316,633	3.4%	7,247,701	3.3%	7,630,157	3.4%	6,945,000	3.1%
2027	6,034,827	2.6%	6,829,339	2.7%	7,564,779	3.4%	7,484,450	3.3%	7,887,161	3.4%	7,160,000	3.1%
2028	6,190,960	2.6%	7,011,603	2.7%	7,830,165	3.5%	7,735,875	3.4%	8,151,184	3.3%	7,384,000	3.1%
2029	6,356,315	2.7%	7,203,777	2.7%	8,092,538	3.4%	7,996,843	3.4%	8,429,056	3.4%	7,616,000	3.1%
2030	6,526,711	2.7%	7,397,556	2.7%	8,373,560	3.5%	8,269,532	3.4%	8,705,898	3.3%	7,855,000	3.1%
2031	6,701,675	2.7%	7,596,547	2.7%	8,664,340	3.5%	8,551,520	3.4%	8,991,832	3.3%	8,101,000	3.1%
2032	6,881,329	2.7%	7,800,891	2.7%	8,965,218	3.5%	8,843,123	3.4%	9,287,157	3.3%	8,356,000	3.1%
2033	7,065,800	2.7%	8,010,732	2.7%	9,276,544	3.5%	9,144,670	3.4%	9,592,181	3.3%	8,618,000	3.1%
2034	7,255,215	2.7%	8,226,218	2.7%	9,598,681	3.5%	9,456,500	3.4%	9,907,224	3.3%	8,889,000	3.1%
Compounded Annual Growth Rate												
2000-2006	-1.8%		-1.8%		-1.8%		-1.8%		-1.8%		-1.8%	
2006-2008	-2.2%		-2.2%		-2.2%		-2.2%		-2.2%		-2.2%	
2008-2009	-14.5%		-14.5%		-14.5%		-14.5%		-14.5%		-14.5%	
2008-2034	1.3%		1.8%		2.4%		2.3%		2.5%		2.1%	
2009-2011	-2.0%		-1.2%		1.2%		-0.4%		1.7%		-0.1%	
2009-2020	1.2%		2.3%		2.8%		2.8%		3.1%		2.5%	
2009-2034	2.0%		2.5%		3.1%		3.1%		3.3%		2.8%	

Sources: Norman Y. Mineta San Jose International Airport. (historical SJC activity); Ricondo & Associates, Inc. (forecast Airport activity).  
Prepared by: Ricondo & Associates, Inc., July 2009.



Table 8  
Scenario 3 Enplaned Passenger Forecast

Fiscal Year	Population	Annual Growth	Total Employment	Annual Growth	Total Income	Annual Growth	PCPI	Annual Growth	Trend	Annual Growth	Scenario 3 Base Average	Annual Growth
Historical												
1999	5,469,727	--	5,469,727	--	5,469,727	--	5,469,727	--	5,469,727	--	5,469,727	--
2000	6,051,744	10.6%	6,051,744	10.6%	6,051,744	10.6%	6,051,744	10.6%	6,051,744	10.6%	6,051,744	10.6%
2001	6,937,377	14.6%	6,937,377	14.6%	6,937,377	14.6%	6,937,377	14.6%	6,937,377	14.6%	6,937,377	14.6%
2002	5,719,213	-17.6%	5,719,213	-17.6%	5,719,213	-17.6%	5,719,213	-17.6%	5,719,213	-17.6%	5,719,213	-17.6%
2003	5,204,987	-9.0%	5,204,987	-9.0%	5,204,987	-9.0%	5,204,987	-9.0%	5,204,987	-9.0%	5,204,987	-9.0%
2004	5,291,849	1.7%	5,291,849	1.7%	5,291,849	1.7%	5,291,849	1.7%	5,291,849	1.7%	5,291,849	1.7%
2005	5,345,633	1.0%	5,345,633	1.0%	5,345,633	1.0%	5,345,633	1.0%	5,345,633	1.0%	5,345,633	1.0%
2006	5,414,831	1.3%	5,414,831	1.3%	5,414,831	1.3%	5,414,831	1.3%	5,414,831	1.3%	5,414,831	1.3%
2007	5,318,859	-1.8%	5,318,859	-1.8%	5,318,859	-1.8%	5,318,859	-1.8%	5,318,859	-1.8%	5,318,859	-1.8%
2008	5,178,603	-2.6%	5,178,603	-2.6%	5,178,603	-2.6%	5,178,603	-2.6%	5,178,603	-2.6%	5,178,603	-2.6%
Forecast												
2009	4,425,900	-14.5%	4,425,900	-14.5%	4,425,900	-14.5%	4,425,900	-14.5%	4,425,900	-14.5%	4,426,000	-14.5%
2010	4,693,101	6.0%	4,787,950	8.2%	5,148,873	16.3%	4,920,030	11.2%	4,360,000	-1.5%	4,782,000	8.0%
2011	5,078,289	8.2%	5,357,620	11.9%	6,134,547	19.1%	5,647,908	14.8%	4,581,668	5.1%	5,360,000	12.1%
2012	5,465,291	7.6%	5,814,087	8.5%	6,851,865	11.7%	6,178,556	9.4%	4,695,202	2.5%	5,801,000	8.2%
2013	5,727,576	4.8%	6,193,075	6.5%	7,469,569	9.0%	6,614,127	7.0%	4,887,355	4.1%	6,178,000	6.5%
2014	5,987,122	4.5%	6,558,999	5.9%	8,089,875	8.3%	7,056,643	6.7%	5,051,953	3.4%	6,549,000	6.0%
2015	6,238,447	4.2%	6,890,687	5.1%	8,646,132	6.9%	7,443,976	5.5%	5,232,944	3.6%	6,890,000	5.2%
2016	6,481,545	3.9%	7,173,001	4.1%	9,145,950	5.8%	7,768,176	4.4%	5,413,145	3.4%	7,196,000	4.4%
2017	6,681,937	3.1%	7,412,236	3.3%	9,630,806	5.3%	8,074,296	3.9%	5,619,787	3.8%	7,484,000	4.0%
2018	6,851,015	2.5%	7,623,227	2.8%	10,116,187	5.0%	8,329,923	3.2%	5,804,461	3.3%	7,745,000	3.5%
2019	6,982,096	1.9%	7,787,705	2.2%	10,591,211	4.7%	8,572,047	2.9%	5,999,819	3.4%	7,987,000	3.1%
2020	7,116,247	1.9%	8,024,204	3.0%	11,113,797	4.9%	8,886,646	3.7%	6,200,477	3.3%	8,268,000	3.5%
2021	7,253,858	1.9%	8,234,526	2.6%	11,660,033	4.9%	9,209,053	3.6%	6,439,041	3.8%	8,559,000	3.5%
2022	7,395,033	1.9%	8,449,413	2.6%	12,239,015	5.0%	9,553,398	3.7%	6,660,399	3.4%	8,859,000	3.5%
2023	7,533,662	1.9%	8,666,115	2.6%	12,836,789	4.9%	9,908,090	3.7%	6,897,666	3.6%	9,168,000	3.5%
2024	7,678,486	1.9%	8,887,494	2.6%	13,468,481	4.9%	10,278,284	3.7%	7,126,313	3.3%	9,488,000	3.5%
2025	7,821,137	1.9%	9,122,349	2.6%	14,128,175	4.9%	10,654,440	3.7%	7,378,978	3.5%	9,821,000	3.5%
2026	7,968,361	1.9%	9,363,356	2.6%	14,816,292	4.9%	11,051,477	3.7%	7,630,157	3.4%	10,166,000	3.5%
2027	8,119,974	1.9%	9,609,333	2.6%	15,547,465	4.9%	11,458,290	3.7%	7,887,161	3.4%	10,524,000	3.5%
2028	8,276,269	1.9%	9,860,104	2.6%	16,297,946	4.8%	11,884,327	3.7%	8,151,184	3.3%	10,894,000	3.5%
2029	8,435,104	1.9%	10,113,943	2.6%	17,077,428	4.8%	12,323,731	3.7%	8,429,056	3.4%	11,276,000	3.5%
2030	8,594,226	1.9%	10,379,691	2.6%	17,889,649	4.8%	12,780,215	3.7%	8,705,898	3.3%	11,670,000	3.5%
Compounded Annual Growth Rate												
2000-2006	-1.8%		-1.8%		-1.8%		-1.8%		-1.8%		-1.8%	
2006-2008	-2.2%		-2.2%		-2.2%		-2.2%		-2.2%		-2.2%	
2008-2009	-14.5%		-14.5%		-14.5%		-14.5%		-14.5%		-14.5%	
2008-2022	2.6%		3.6%		6.3%		4.5%		1.8%		3.9%	
2009-2011	7.1%		10.0%		17.7%		13.0%		1.7%		10.0%	
2009-2020	4.4%		5.6%		8.7%		6.5%		3.1%		5.8%	
2009-2022	4.0%		5.1%		8.1%		6.1%		3.2%		5.5%	

Sources: Norman Y. Mineta San Jose International Airport. (historical SJC activity); Ricondo & Associates, Inc. (forecast Airport activity).  
Prepared by: Ricondo & Associates, Inc., July 2009.

**Table 9**

**Scenario 4 Enplaned Passenger Forecast**

Fiscal Year	Scenario 1 Base Average	Annual Growth	Scenario 3 Total Enplanements	Annual Growth	Weighted Avg. Growth Rates	Scenario 4 Total Enplanements	Annual Growth
<b>Historical</b>							
1999	5,469,727	--	5,469,727	--	--	5,469,727	--
2000	6,051,744	10.6%	6,051,744	10.6%	--	6,051,744	10.6%
2001	6,937,377	14.6%	6,937,377	14.6%	--	6,937,377	14.6%
2002	5,719,213	-17.6%	5,719,213	-17.6%	--	5,719,213	-17.6%
2003	5,204,987	-9.0%	5,204,987	-9.0%	--	5,204,987	-9.0%
2004	5,291,849	1.7%	5,291,849	1.7%	--	5,291,849	1.7%
2005	5,345,633	1.0%	5,345,633	1.0%	--	5,345,633	1.0%
2006	5,414,831	1.3%	5,414,831	1.3%	--	5,414,831	1.3%
2007	5,318,859	-1.8%	5,318,859	-1.8%	--	5,318,859	-1.8%
2008	5,178,603	-2.6%	5,178,603	-2.6%	--	5,178,603	-2.6%
<b>Forecast</b>							
2009	4,426,000	-14.5%	4,426,000	-14.5%	-14.5%	4,426,000	-14.5%
2010	4,360,000	-1.5%	4,782,000	8.0%	-1.5%	4,360,000	-1.5%
2011	4,541,000	4.2%	5,360,000	12.1%	7.4%	4,681,000	7.4%
2012	4,690,000	3.3%	5,801,000	8.2%	6.0%	4,960,000	6.0%
2013	4,892,000	4.3%	6,178,000	6.5%	5.5%	5,234,000	5.5%
2014	5,067,000	3.6%	6,549,000	6.0%	4.9%	5,492,000	4.9%
2015	5,250,000	3.6%	6,890,000	5.2%	4.5%	5,740,000	4.5%
2016	5,438,000	3.6%	7,196,000	4.4%	4.1%	5,974,000	4.1%
2017	5,654,000	4.0%	7,484,000	4.0%	4.0%	6,212,000	4.0%
2018	5,850,000	3.5%	7,745,000	3.5%	3.5%	6,428,000	3.5%
2019	6,053,000	3.5%	7,987,000	3.1%	3.3%	6,638,000	3.3%
2020	6,271,000	3.6%	8,268,000	3.5%	3.6%	6,874,000	3.6%
2021	6,522,000	4.0%	8,559,000	3.5%	3.7%	7,130,000	3.7%
2022	6,766,000	3.7%	8,859,000	3.5%	3.6%	7,387,000	3.6%
2023	7,021,000	3.8%	9,168,000	3.5%	3.6%	7,654,000	3.6%
2024	7,287,000	3.8%	9,488,000	3.5%	3.6%	7,931,000	3.6%
2025	7,564,000	3.8%	9,821,000	3.5%	3.6%	8,219,000	3.6%
2026	7,852,000	3.8%	10,166,000	3.5%	3.6%	8,518,000	3.6%
2027	8,150,000	3.8%	10,524,000	3.5%	3.6%	8,828,000	3.6%
<b>Compounded Annual Growth Rate</b>							
2000-2006	-1.8%		-1.8%			-1.8%	
2006-2008	-2.2%		-2.2%			-2.2%	
2008-2009	-14.5%		-14.5%			-14.5%	
2008-2027	2.4%		3.8%			2.8%	
2009-2011	1.3%		10.0%			2.8%	
2009-2020	3.2%		5.8%			4.1%	
2009-2027	3.4%		4.9%			3.9%	

Sources: Norman Y. Mineta San Jose International Airport. (historical SJC activity); Ricondo & Associates, Inc. (forecast Airport activity).  
Prepared by: Ricondo & Associates, Inc., July 2009.

**Table 10**

**Comparison of San Jose Total Enplaned Passenger Forecasts**

Fiscal Year	Scenario 1 Forecast	Scenario 2 Forecast	Scenario 3 Forecast	Scenario 4 Forecast	FAA Terminal Area Forecast <sup>1/</sup>
Historical					
1999	5,469,727	5,469,727	5,469,727	5,469,727	5,502,165
2000	6,051,744	6,051,744	6,051,744	6,051,744	6,024,835
2001	6,937,377	6,937,377	6,937,377	6,937,377	6,317,616
2002	5,719,213	5,719,213	5,719,213	5,719,213	5,223,014
2003	5,204,987	5,204,987	5,204,987	5,204,987	5,135,709
2004	5,291,849	5,291,849	5,291,849	5,291,849	5,221,563
2005	5,345,633	5,345,633	5,345,633	5,345,633	5,294,385
2006	5,414,831	5,414,831	5,414,831	5,414,831	5,297,911
2007	5,318,859	5,318,859	5,318,859	5,318,859	5,296,175
2008	5,178,603	5,178,603	5,178,603	5,178,603	5,071,058
Forecast					
2009	4,426,000	4,426,000	4,426,000	4,426,000	4,626,665
2010	4,360,000	4,274,000	4,782,000	4,360,000	4,594,243
2011	4,541,000	4,414,000	5,360,000	4,681,000	4,755,122
2012	4,690,000	4,563,000	5,801,000	4,960,000	4,921,675
2013	4,892,000	4,715,000	6,178,000	5,234,000	5,094,105
2014	5,067,000	4,861,000	6,549,000	5,492,000	5,272,622
2015	5,250,000	5,001,000	6,890,000	5,740,000	5,457,441
2016	5,438,000	5,149,000	7,196,000	5,974,000	5,648,790
2017	5,654,000	5,305,000	7,484,000	6,212,000	5,846,899
2018	5,850,000	5,464,000	7,745,000	6,428,000	6,052,010
2019	6,053,000	5,628,000	7,987,000	6,638,000	6,264,371
2020	6,271,000	5,797,000	8,268,000	6,874,000	6,484,242
2021	6,522,000	5,973,000	8,559,000	7,130,000	6,711,892
2022	6,766,000	6,154,000	8,859,000	7,387,000	6,947,598
2023	7,021,000	6,340,000		7,654,000	7,191,647
2024	7,287,000	6,534,000		7,931,000	7,444,336
2025	7,564,000	6,736,000		8,219,000	7,705,978
2026	7,852,000	6,945,000		8,518,000	7,976,750
2027	8,150,000	7,160,000		8,828,000	8,257,037
2028	8,460,000	7,384,000			8,547,172
2029	8,781,000	7,616,000			8,847,502
2030		7,855,000			
2031		8,101,000			
2032		8,356,000			
2033		8,618,000			
2034		8,889,000			
Compounded Annual Growth Rate					
2000-2006	-1.8%	-1.8%	-1.8%	-1.8%	-2.1%
2006-2008	-2.2%	-2.2%	-2.2%	-2.2%	-2.2%
2008-2009	-14.5%	-14.5%	-14.5%	-14.5%	-8.8%
2008-Horizon	2.5%	2.1%	3.9%	2.8%	2.7%
2009-2011	1.3%	-0.1%	10.0%	2.8%	1.4%
2009-2020	3.2%	2.5%	5.8%	4.1%	3.1%
2009-Horizon	3.5%	2.8%	5.5%	3.9%	3.3%

Note:

1/ TAF projections are based on the federal fiscal year (12-month period ending September 30).

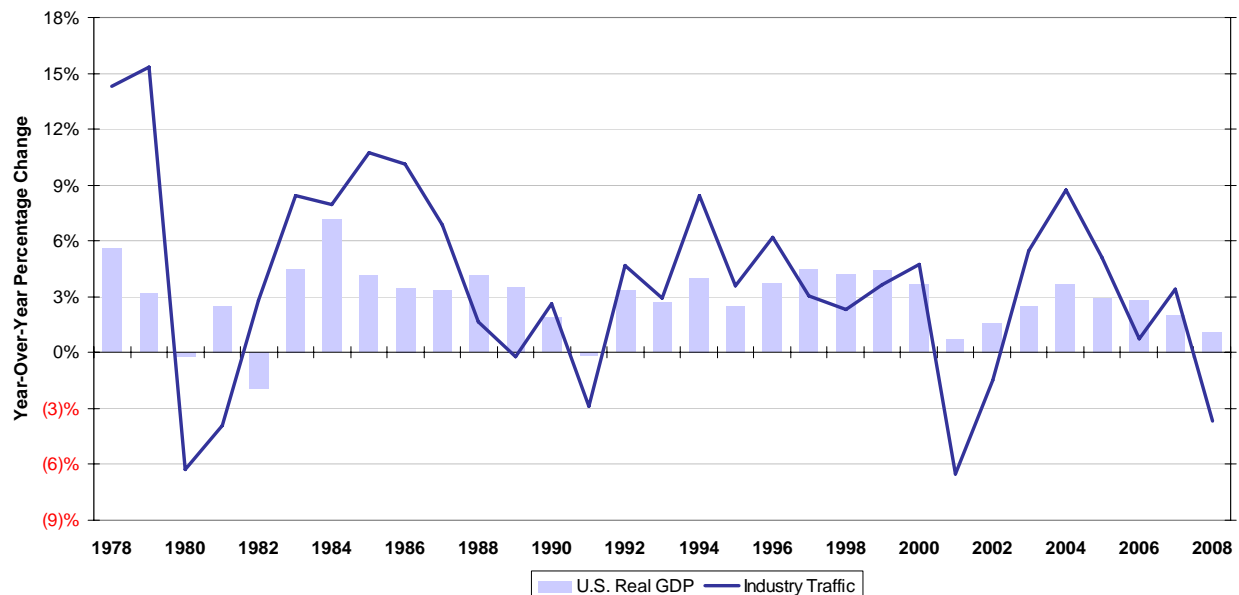
Sources: FAA Terminal Area Forecast, April, 2009; Norman Y. Mineta San Jose International Airport. (historical SJC activity); Ricondo & Associates, Inc. (forecast Airport activity).

Prepared by: Ricondo & Associates, Inc., July 2009.

- **Exhibit 7** illustrates the year-over-year percentage change of U.S. real GDP and total enplanements carried by U.S. air carriers since 1978. An examination of past recoveries in enplanements following a nationwide recession revealed that airport enplanements generally recovered by 2 to 8 percentage points in year 1 and 6 to 7 percentage points in year 2 following an economic recession. Based on this it is felt that Scenario 3, while possible, may be aggressive in the recovery of enplaned passengers of the Airport particularly in light of recent historical results at the Airport. Scenario 4, however, is believed to be representative of the level of recovery that the Airport may realistically experience following the economic recession which as presented earlier is expected to end sometime in late 2010.
- Scenario 4, projects total enplanements at the Airport will increase from 5,178,603 enplanements in FY 2008 to 8,828,000 enplanements in FY 2027, representing a compounded annual growth rate of 2.8 percent during this period. The higher annual growth rate at the Airport compared to Scenarios 1, 2, and the TAF is due to the assumption that the economy in Silicon Valley and the area surrounding the Airport will recover at a higher-than-predicted pace compared to the current Air Trade Area long-term socioeconomic and demographic projections. Also, as projected by Applied Geographic Solutions in Exhibits 1 – 6, Bay Area population growth over the next few years will be concentrated in the southern portion of the Bay Area and is projected to increase at higher annual growth rates when compared to other parts of the Bay Area.

#### Exhibit 7

U.S. Real GDP & Total Enplanements Carried By U.S. Air Carriers Percent Change (1978 - 2008)



Note: U.S. Real GDP seasonally adjusted at annual rate

Sources: US Department of Commerce; Bureau of Economic Analysis  
Prepared by: Ricondo & Associates, Inc., June 2009.

**Table 11** presents Scenario 4 projected enplanements at the Airport by air carrier classification (i.e., domestic mainline air carriers, domestic regional/commuters, and international), as well as total O&D and connecting types through FY 2027. As shown, between FY 2008 and FY 2027, domestic mainline air carriers, domestic regional/commuters, and international enplanements are projected to increase at compounded annual growth rates of 2.7, 2.2, and 9.4 percent, respectively. International enplanements are projected to increase at a higher compounded annual growth rate than domestic mainline air carriers and regional/commuters as it is assumed that trans-border U.S. market opportunities, specifically to/from Canada and Mexico, have a high likelihood of materializing in the near-term as well as potential return of some transoceanic service to Asia and Europe. On an absolute basis, it is anticipated that the majority of increased enplanements will be carried by mainline air carriers due to the high density nature of the short-haul markets on the U.S. West Coast. Domestic mainline enplanements are projected to increase from approximately 4.6 million in FY 2008 to approximately 7.7 million in FY 2027. Regional/commuter enplanements are projected to increase from 526,696 in FY 2008 to approximately 803,000 in FY 2027. The Airport primarily accommodates O&D passengers that originate or terminate their airline trip. In FY 2006, 95.9 percent of total enplanements were originating and 4.1 percent of total enplanements were connecting. The percentage of originating enplanements has increased over the recent years. In FY 2008, O&D enplanements accounted for 97.4 percent and connecting enplanements accounted for 2.6 percent. It is assumed that the Airport will continue its role of serving primarily O&D passengers and providing non-stop service to the majority of its major markets. However, it is also assumed that the percentage of connecting enplanements will return to a more normal level, equivalent to FY 2006, over the projected period. Connecting enplanements are projected to increase from 134,130 in FY 2008 to approximately 424,000 in FY 2027 or compounded annual growth rate of 6.2 percent over the same period.

## Passenger Aircraft Operations Projections

Passenger aircraft operations projections for domestic mainline air carriers, regional/commuter carriers, and international air carriers are found in **Table 12**, **Table 13**, and **Table 14**, respectively.

- Seat sizes for domestic mainline air carriers are projected to increase by 0.4 seats per year, which is consistent with the average annual increase between FY 2003 and FY 2007. Mainline air carrier operations are projected to increase from 95,358 in FY 2008 to 144,000 in FY 2027, representing a compounded annual growth rate of 2.2 percent during this period.
- Seat sizes for domestic regional/commuter carriers are projected to increase by 0.77 seats per year, which is consistent with the average annual increase between FY 2003 and FY 2007. Regional/commuter operations are projected to increase from 29,418 in FY 2008 to 32,400 in FY 2027, representing a compounded annual growth rate of 0.5 percent during this period.
- International operations are projected to increase from 1,588 in FY 2008 to 7,260 in FY 2027, representing a compounded annual growth rate of 8.3 percent during this period. Since international activity is a small portion of the Airport's overall total activity, new international air service additions to the Airport's flight schedule will result in a large percentage change in the Airport's international activity. As previously mentioned, it was assumed that trans-border market opportunities, specifically to/from Canada and Mexico, have a high likelihood of materializing in the near-term by foreign flag carriers primarily operating narrow-body mainline aircraft. Seat sizes for carriers operating international service are assumed to increase at a rate equal to domestic mainline air carriers, or 0.4 seats per year.



**Table 11**

**Breakdown of Selected San Jose (SJC) Enplaned Passenger Forecast by Type**

Fiscal Year	Domestic Mainline Air Carriers	Domestic Regional/Commuter	International Air Carriers	Total Enplanements	Percent O&D of Total	Percent Connecting of Total
Historical						
2006	4,705,820	571,957	137,054	5,414,831	95.9%	4.1%
2007	4,686,439	530,052	102,368	5,318,859	96.7%	3.3%
2008	4,584,448	526,696	67,459	5,178,603	97.4%	2.6%
Forecast						
2009	3,914,000	448,000	64,000	4,426,000	97.3%	2.7%
2010	3,815,000	478,000	67,000	4,360,000	97.2%	2.8%
2011	4,025,000	500,000	156,000	4,681,000	97.0%	3.0%
2012	4,268,000	524,000	168,000	4,960,000	96.9%	3.1%
2013	4,507,000	548,000	179,000	5,234,000	96.8%	3.2%
2014	4,731,000	570,000	191,000	5,492,000	96.6%	3.4%
2015	4,947,000	590,000	203,000	5,740,000	96.5%	3.5%
2016	5,152,000	608,000	214,000	5,974,000	96.4%	3.6%
2017	5,360,000	626,000	226,000	6,212,000	96.3%	3.7%
2018	5,549,000	642,000	237,000	6,428,000	96.2%	3.8%
2019	5,734,000	656,000	248,000	6,638,000	96.1%	3.9%
2020	5,940,000	673,000	261,000	6,874,000	95.9%	4.1%
2021	6,165,000	691,000	274,000	7,130,000	95.8%	4.2%
2022	6,389,000	709,000	289,000	7,387,000	95.7%	4.3%
2023	6,624,000	727,000	303,000	7,654,000	95.6%	4.4%
2024	6,867,000	745,000	319,000	7,931,000	95.4%	4.6%
2025	7,120,000	764,000	335,000	8,219,000	95.3%	4.7%
2026	7,381,000	784,000	353,000	8,518,000	95.2%	4.8%
2027	7,654,000	803,000	371,000	8,828,000	95.2%	4.8%
Compounded Annual Growth Rate						
2006-2008	-1.3%	-4.0%	-29.8%	-2.2%		
2008-2009	-14.6%	-14.9%	-5.1%	-14.5%		
2008-2027	2.7%	2.2%	9.4%	2.8%		
2009-2011	1.4%	5.6%	56.1%	2.8%		
2009-2020	3.9%	3.8%	13.6%	4.1%		
2009-2027	3.8%	3.3%	10.3%	3.9%		

Sources: Norman Y. Mineta San Jose International Airport. (historical SJC activity); Ricondo & Associates, Inc. (forecast Airport activity).  
Prepared by: Ricondo & Associates, Inc., July 2009.

**Table 12**

**Domestic Mainline Air Carrier Aircraft Operations Forecast**

Fiscal Year	Domestic Mainline Air Carrier Enplanements	Average Seats per Departure	Passengers per Departure	Load Factor	Departures	Operations	Annual Growth
<b>Historical</b>							
2000	5,808,992	137.1	94.1	68.6%	61,753	123,506	-
2001	6,626,137	138.7	88.8	64.0%	74,634	149,268	20.9%
2002	5,407,691	138.2	82.4	59.6%	65,646	131,291	-12.0%
2003	4,767,730	138.2	83.7	60.5%	56,978	113,956	-13.2%
2004	4,645,189	138.7	90.2	65.0%	51,502	103,004	-9.6%
2005	4,678,273	139.1	92.7	66.6%	50,472	100,944	-2.0%
2006	4,705,820	139.6	99.2	71.0%	47,440	94,880	-6.0%
2007	4,686,439	140.1	98.0	70.0%	47,812	95,624	0.8%
2008	4,584,448	139.6	96.2	68.9%	47,679	95,358	-0.3%
<b>Forecast</b>							
2009	3,914,000	138.7	93.0	67.0%	42,100	84,200	-11.7%
2010	3,815,000	138.2	93.0	67.3%	41,000	82,000	-2.6%
2011	4,025,000	138.6	93.8	67.7%	42,900	85,800	4.6%
2012	4,268,000	139.0	94.6	68.0%	45,100	90,200	5.1%
2013	4,507,000	139.4	95.3	68.4%	47,300	94,600	4.9%
2014	4,731,000	139.8	96.2	68.7%	49,200	98,400	4.0%
2015	4,947,000	140.2	96.8	69.1%	51,100	102,200	3.9%
2016	5,152,000	140.6	97.6	69.4%	52,800	105,600	3.3%
2017	5,360,000	141.0	98.3	69.8%	54,500	109,000	3.2%
2018	5,549,000	141.4	99.3	70.1%	55,900	111,800	2.6%
2019	5,734,000	141.8	99.9	70.5%	57,400	114,800	2.7%
2020	5,940,000	142.2	100.7	70.8%	59,000	118,000	2.8%
2021	6,165,000	142.6	101.6	71.2%	60,700	121,400	2.9%
2022	6,389,000	143.0	102.2	71.5%	62,500	125,000	3.0%
2023	6,624,000	143.4	103.0	71.9%	64,300	128,600	2.9%
2024	6,867,000	143.8	103.9	72.2%	66,100	132,200	2.8%
2025	7,120,000	144.2	104.7	72.6%	68,000	136,000	2.9%
2026	7,381,000	144.6	105.4	72.9%	70,000	140,000	2.9%
2027	7,654,000	145.0	106.3	73.3%	72,000	144,000	2.9%
<b>Compounded Annual Growth Rate</b>							
2000-2006	-3.4%	0.3%	0.9%		-4.3%	-4.3%	
2006-2008	-1.3%	0.0%	-1.5%		0.3%	0.3%	
2008-2009	-14.6%	-0.7%	-3.3%		-11.7%	-11.7%	
2008-2027	2.7%	0.2%	0.5%		2.2%	2.2%	
2009-2011	1.4%	0.0%	0.5%		0.9%	0.9%	
2009-2020	3.9%	0.2%	0.7%		3.1%	3.1%	
2009-2027	3.8%	0.2%	0.7%		3.0%	3.0%	

Sources: Norman Y. Mineta San Jose International Airport. (historical Airport activity); Ricondo & Associates, Inc. (forecast Airport activity).  
Prepared by: Ricondo & Associates, Inc., July 2009.

**Table 13**

**Domestic Regional/Commuter Aircraft Operations Forecast**

Fiscal Year	Domestic Regionals/Commuters Enplanements	Average Seats per Departure	Passengers per Departure	Load Factor	Departures	Operations	Annual Growth
<b>Historical</b>							
2000	66,114	41.4	25.8	62.1%	2,567	5,134	-
2001	97,125	41.7	38.1	91.4%	2,547	5,094	-0.8%
2002	160,648	44.3	30.9	69.8%	5,193	10,385	103.9%
2003	315,147	44.8	33.1	74.0%	9,516	19,032	83.3%
2004	512,484	45.8	33.0	72.1%	15,516	31,032	63.1%
2005	529,218	47.5	39.3	82.7%	13,481	26,962	-13.1%
2006	571,957	47.4	37.2	78.4%	15,378	30,756	14.1%
2007	530,052	48.2	36.8	76.4%	14,403	28,806	-6.3%
2008	526,696	48.8	35.8	73.4%	14,709	29,418	2.1%
<b>Forecast</b>							
2009	448,000	48.6	35.8	73.7%	12,500	25,000	-15.0%
2010	478,000	49.5	36.8	74.0%	13,000	26,000	4.0%
2011	500,000	50.3	37.3	74.3%	13,400	26,800	3.1%
2012	524,000	51.1	38.0	74.6%	13,800	27,600	3.0%
2013	548,000	51.8	38.9	74.9%	14,100	28,200	2.2%
2014	570,000	52.6	39.6	75.2%	14,400	28,800	2.1%
2015	590,000	53.4	40.4	75.5%	14,600	29,200	1.4%
2016	608,000	54.1	41.1	75.8%	14,800	29,600	1.4%
2017	626,000	54.9	41.7	76.1%	15,000	30,000	1.4%
2018	642,000	55.7	42.5	76.4%	15,100	30,200	0.7%
2019	656,000	56.4	43.2	76.7%	15,200	30,400	0.7%
2020	673,000	57.2	44.0	77.0%	15,300	30,600	0.7%
2021	691,000	58.0	44.9	77.3%	15,400	30,800	0.7%
2022	709,000	58.8	45.7	77.6%	15,500	31,000	0.6%
2023	727,000	59.5	46.3	77.9%	15,700	31,400	1.3%
2024	745,000	60.3	47.2	78.2%	15,800	31,600	0.6%
2025	764,000	61.1	48.1	78.5%	15,900	31,800	0.6%
2026	784,000	61.8	48.7	78.8%	16,100	32,200	1.3%
2027	803,000	62.6	49.6	79.1%	16,200	32,400	0.6%
<b>Compounded Annual Growth Rate</b>							
2000-2006	43.3%	2.3%	6.3%		34.8%	34.8%	
2006-2008	-4.0%	1.4%	-1.9%		-2.2%	-2.2%	
2008-2009	-14.9%	-0.3%	0.1%		-15.0%	-15.0%	
2008-2027	2.2%	1.3%	1.7%		0.5%	0.5%	
2009-2011	5.6%	1.7%	2.0%		3.5%	3.5%	
2009-2020	3.8%	1.5%	1.9%		1.9%	1.9%	
2009-2027	3.3%	1.4%	1.8%		1.5%	1.5%	

Sources: Norman Y. Mineta San Jose International Airport. (historical Airport activity); Ricondo & Associates, Inc. (forecast Airport activity).  
Prepared by: Ricondo & Associates, Inc., July 2009.

**Table 14**

**International Aircraft Operations Forecast**

Fiscal Year	International Enplanements	Average Seats per Departure	Passengers per Departure	Load Factor	Departures	Operations	Annual Growth
<b>Historical</b>							
2000	176,638	160.7	116.4	72.4%	1,518	3,036	-
2001	214,115	175.0	113.3	64.8%	1,889	3,778	24.4%
2002	150,874	195.6	111.5	57.0%	1,353	2,706	-28.4%
2003	122,110	192.1	114.9	59.8%	1,063	2,126	-21.4%
2004	134,176	189.7	124.2	65.5%	1,080	2,160	1.6%
2005	138,142	194.8	143.2	73.5%	965	1,930	-10.6%
2006	137,054	181.9	118.3	65.0%	1,159	2,318	20.1%
2007	102,368	151.6	103.8	68.5%	986	1,972	-14.9%
2008	67,459	143.0	85.0	59.4%	794	1,588	-19.5%
<b>Forecast</b>							
2009	64,000	142.9	85.3	60.0%	750	1,500	-5.5%
2010	67,000	142.0	85.9	60.6%	780	1,560	4.0%
2011	156,000	137.9	84.3	61.2%	1,850	3,700	137.2%
2012	168,000	138.3	85.7	61.8%	1,960	3,920	5.9%
2013	179,000	138.7	86.5	62.4%	2,070	4,140	5.6%
2014	191,000	139.1	87.6	63.0%	2,180	4,360	5.3%
2015	203,000	139.5	88.6	63.6%	2,290	4,580	5.0%
2016	214,000	139.9	89.9	64.2%	2,380	4,760	3.9%
2017	226,000	140.3	90.8	64.8%	2,490	4,980	4.6%
2018	237,000	140.7	92.2	65.4%	2,570	5,140	3.2%
2019	248,000	141.1	93.2	66.0%	2,660	5,320	3.5%
2020	261,000	141.5	94.2	66.6%	2,770	5,540	4.1%
2021	274,000	141.9	95.5	67.2%	2,870	5,740	3.6%
2022	289,000	142.3	96.7	67.8%	2,990	5,980	4.2%
2023	303,000	142.7	97.7	68.4%	3,100	6,200	3.7%
2024	319,000	143.1	98.8	69.0%	3,230	6,460	4.2%
2025	335,000	143.5	100.0	69.6%	3,350	6,700	3.7%
2026	353,000	143.9	101.1	70.2%	3,490	6,980	4.2%
2027	371,000	144.3	102.2	70.8%	3,630	7,260	4.0%
<b>Compounded Annual Growth Rate</b>							
2000-2006	-4.1%	2.1%	0.3%		-4.4%	-4.4%	
2006-2008	-29.8%	-11.3%	-15.2%		-17.2%	-17.2%	
2008-2009	-5.1%	-0.1%	0.4%		-5.5%	-5.5%	
2008-2027	9.4%	0.0%	1.0%		8.3%	8.3%	
2009-2011	56.1%	-1.7%	-0.6%		57.1%	57.1%	
2009-2020	13.6%	-0.1%	0.9%		12.6%	12.6%	
2009-2027	10.3%	0.1%	1.0%		9.2%	9.2%	

Sources: Norman Y. Mineta San Jose International Airport. (historical Airport activity); Ricondo & Associates, Inc. (forecast Airport activity).  
Prepared by: Ricondo & Associates, Inc., July 2009.

- Given the trend of increasing load factors experienced at the Airport and nationwide in recent years, aircraft load factors at the Airport are projected to increase moderately throughout the projection period. Passenger load factors at the Airport for domestic air carrier, regional/commuter, and international passenger air carriers are assumed to increase annually by 0.35 percent, 0.3 percent, and 0.6 percent, respectively.
- **Table 15** summarizes the passenger aircraft operations projected for the Airport for domestic mainline air carriers, regional/commuter carriers, and international air carriers. Between FY 2008 and FY 2027, total passenger carrier operations are expected to increase from 126,364 in FY 2008 to 183,700 in 2027, representing a compounded annual growth rate of 2.0 percent over the period.

## **Passenger Aircraft Fleet Mix Projections**

Specific fleet-mix forecast and landed weight projections for domestic mainline air carriers, domestic regional/commuter carriers and international carriers are found in **Table 16**, **Table 17**, and **Table 18** respectively. As shown, the aircraft types depicted on the tables are provided in either actual aircraft or physical seat-size equivalents.

## **Air Cargo Activity Projections**

Air cargo activity at the Airport is measured by the number of operations performed by dedicated all-cargo air carriers, as well as the cargo volume carried by the passenger air carriers serving the Airport. At San Jose International, cargo shipments are primarily carried by all-cargo carriers operating freighter aircraft or by passenger air carriers in the belly compartment of passenger-configured aircraft.

## **Cargo Tonnage Projections**

Historical and projected cargo volumes carried by all-cargo and passenger air carriers at the Airport are presented in **Table 19**.

- Total cargo tonnage carried decreased from 141,060 tons in FY 2002 to 80,521 tons in FY 2008, representing a compounded annual decline of 8.9 percent during this period. The decline in cargo tonnage carried during this period was primarily a result of the downturn in the regional and national economies and the elimination of service by ABX Air. Projected total cargo tonnage carried by all air carriers at the Airport is based on Boeing's projected North American growth rate provided within "World Air Cargo Forecast 2008 – 2009." As shown in the Boeing report for North America, air cargo traffic (measured in revenue tonne-kilometers) is expected to grow at 4.6 percent annually between 2008 and 2029. It is assumed that long-term demand for air cargo shipping at the Airport will increase at the same pace as Boeing's projected growth rate for the forecasted period. Total cargo volumes carried by all air carriers the Airport are projected to increase from 80,521 tons in FY 2008 to 189,700 tons in FY 2027, representing a compounded annual growth rate of 4.6 percent during this period.



**Table 15**

**Summary of Passenger Aircraft Operations Forecast**

Fiscal Year	Domestic Mainline Air Carriers	Domestic Regional/ Commuter	International	Total Passenger Aircraft Operations
<b>Historical</b>				
2000	123,506	5,134	3,036	131,676
2001	149,268	5,094	3,778	158,140
2002	131,291	10,385	2,706	144,382
2003	113,956	19,032	2,126	135,114
2004	103,004	31,032	2,160	136,196
2005	100,944	26,962	1,930	129,836
2006	94,880	30,756	2,318	127,954
2007	95,624	28,806	1,972	126,402
2008	95,358	29,418	1,588	126,364
<b>Forecast</b>				
2009	84,200	25,000	1,500	110,700
2010	82,000	26,000	1,560	109,600
2011	85,800	26,800	3,700	116,300
2012	90,200	27,600	3,920	121,700
2013	94,600	28,200	4,140	126,900
2014	98,400	28,800	4,360	131,600
2015	102,200	29,200	4,580	136,000
2016	105,600	29,600	4,760	140,000
2017	109,000	30,000	4,980	144,000
2018	111,800	30,200	5,140	147,100
2019	114,800	30,400	5,320	150,500
2020	118,000	30,600	5,540	154,100
2021	121,400	30,800	5,740	157,900
2022	125,000	31,000	5,980	162,000
2023	128,600	31,400	6,200	166,200
2024	132,200	31,600	6,460	170,300
2025	136,000	31,800	6,700	174,500
2026	140,000	32,200	6,980	179,200
2027	144,000	32,400	7,260	183,700
<b>Compounded Annual Growth Rate</b>				
2000-2006	-4.3%	34.8%	-4.4%	-0.5%
2006-2008	0.3%	-2.2%	-17.2%	-0.6%
2008-2009	-11.7%	-15.0%	-5.5%	-12.4%
2008-2027	2.2%	0.5%	8.3%	2.0%
2009-2011	0.9%	3.5%	57.1%	2.5%
2009-2020	3.1%	1.9%	12.6%	3.1%
2009-2027	3.0%	1.5%	9.2%	2.9%

Sources: Norman Y. Mineta San Jose International Airport. (historical Airport activity); Ricondo & Associates, Inc. (forecast Airport activity).  
Prepared by: Ricondo & Associates, Inc., July 2009

**Table 16**

**Mainline Air Carrier Aircraft Fleet Mix Projections**

Aircraft <sup>1/</sup>	Seats	Weight	2008		2027	
			Departures	Percent	Departures	Percent
Boeing 767-300/300ER	264	302	365	0.8%	2,160	3.0%
Boeing 757-200	183	197	1,184	2.5%	1,440	2.0%
Boeing 737-900	172	147	545	1.1%	2,160	3.0%
Boeing 737-800	153	145	1,848	3.9%	10,800	15.0%
Mcdonnell Douglas MD-90	150	142	440	0.9%	360	0.5%
Airbus Industrie A320	148	143	3,182	6.7%	7,920	11.0%
Boeing 737-400	144	140	1,078	2.3%	2,160	3.0%
Mcdonnell Douglas MD-80	140	140	3,426	7.2%	0	0.0%
Mcdonnell Douglas MD-83	140	140	1,564	3.3%	0	0.0%
Boeing 737-700	136	134	17,219	36.1%	29,520	41.0%
Boeing 737-300	135	116	13,249	27.8%	8,640	12.0%
Airbus Industrie A319	125	136	2,068	4.3%	3,960	5.5%
Airbus Industrie A318	120	126	611	1.3%	2,880	4.0%
Boeing 737-500	117	110	900	1.9%	0	0.0%
Total			47,679	100.0%	72,000	100.0%
Average Seats per Dept			139.6		145.0	
Landed Weight ('000s of Pounds)			6,150,239		9,819,732	

Note: Columns may not add to totals shown because of rounding.

1/ Denotes actual aircraft or physical equivalent.

Sources: Norman Y. Mineta San Jose International Airport. (historical Airport activity); Official Airline Guide; Ricondo & Associates, Inc. (projected Airport activity).

Prepared by: Ricondo & Associates, Inc., July 2009.

**Table 17**

**Regional/Commuter Aircraft Fleet Mix Projections**

Aircraft <sup>1/</sup>	Seats	Weight	2008		2027	
			Departures	Percent	Departures	Percent
Embraer 190	100	96	40	0.3%	810	5.0%
Bombardier CRJ-900	83	74	369	2.5%	810	5.0%
Embraer 170	76	72	111	0.8%	2,430	15.0%
De Havilland DHC8-400 Dash 8Q	74	61	943	6.4%	972	6.0%
Bombardier CRJ-700	69	67	1,013	6.9%	3,564	22.0%
Bombardier CRJ-100/200	50	47	1,877	12.8%	3,888	24.0%
Embraer 140	50	43	1,319	9.0%	2,754	17.0%
Embraer 145	44	41	7,385	50.2%	972	6.0%
Saab 340	34	26	0	0.0%	0	0.0%
Embraer 120 Brasilia	30	26	1,650	11.2%	0	0.0%
Total			14,709	100.0%	16,200	100.0%
Average Seats per Dept			48.8		62.6	
Landed Weight ('000s of Pounds)			656,298		952,696	

Note: Columns may not add to totals shown because of rounding.

1/ Denotes actual aircraft or physical equivalent.

Sources: Norman Y. Mineta San Jose International Airport. (historical Airport activity); Official Airline Guide; Ricondo & Associates, Inc. (projected Airport activity).

Prepared by: Ricondo & Associates, Inc., July 2009.

**Table 18****International Aircraft Fleet Mix Projections**

Aircraft <sup>1/</sup>	Seats	Weight	2008		2027	
			Departures	Percent	Departures	Percent
Boeing 777/787-200	247	459	0	0.0%	327	9.0%
Boeing 757-200	178	197	0	0.0%	0	0.0%
Airbus Industrie A320	150	143	617	77.7%	871	24.0%
Airbus Industrie A319	125	136	131	16.6%	1,561	43.0%
Airbus Industrie A318	100	126	45	5.7%	0	0.0%
Boeing 737-700	136	134	0	0.0%	871	24.0%
Total			794	100.0%	3,630	100.0%
Average Seats per Dept			143.0		144.3	
Landed Weight ('000s of Pounds)			108,616		586,515	

Note: Columns may not add to totals shown because of rounding.

1/ Denotes actual aircraft or physical equivalent.

Sources: Norman Y. Mineta San Jose International Airport. (historical Airport activity); Official Airline Guide; Ricondo & Associates, Inc. (projected Airport activity).

Prepared by: Ricondo & Associates, Inc., July 2009.

- Cargo volumes carried by all-cargo carriers decreased from 120,402 tons in FY 2002 to 75,528 tons in FY 2008 or compounded annual decrease of 7.5 percent. Projected cargo tonnage carried by all-cargo carriers was derived by applying assumed market share of cargo tonnage carried by all-cargo carriers at the Airport towards projected total cargo tonnage. It is assumed that all-cargo carrier market share would return to a level more representative of historical all-cargo carrier activity at San Jose International. All-cargo market share is assumed to decrease over the projected period from 93.8 percent in FY 2008 to 86.7 percent in FY 2027, which is the average market share of all-cargo carriers between FY 2002 and FY 2008. In the near-term (between FY 2009 and FY 2011), it is also assumed that as the U.S. and Air Trade Area economies recovers, cargo tonnage carried by all-cargo carriers will grow at a significantly higher rate than Boeing's long-term projection. As a result, cargo volumes carried by all-cargo carriers are projected to increase from 75,528 tons in FY 2008 to 164,400 tons in FY 2027.
- Cargo volumes carried by passenger air carriers decreased from 20,658 tons in FY 2002 to 4,993 tons in FY 2008. This decrease represents a compounded annual decrease of 21.1 percent during this period. Projected cargo tonnage carried by passenger air carriers was derived by applying assumed market share of cargo tonnage carried by passenger air carriers at the Airport towards projected total cargo tonnage. It is assumed that passenger air carrier market share would return to a level more representative of historical cargo activity by passenger air carriers. Passenger air carrier market share is assumed to increase over the projected period from 6.2 percent in FY 2008 to 13.3 percent in FY 2027, which is the average market share of all-cargo carriers between FY 2002 and FY 2008. Similar to all-cargo tonnage, cargo tonnage carried by passenger air carriers is assumed to rebound as the U.S. and Air Trade Area economies recovers. Cargo volumes by passenger air carriers are projected to increase from 4,993 tons in FY 2008 to 25,300 tons in FY 2027. This increase represents a compounded annual growth rate of 8.9 percent during this period.

**Table 19**

**Cargo Tonnage Forecast**

Fiscal Year	All-Cargo Carrier Cargo Volumes		Passenger Carrier Cargo Volumes		Total Cargo Tonnage
	Tonnage	% of Total	Tonnage	% of Total	
Historical					
2002	120,402	85.4%	20,658	14.6%	141,060
2003	106,291	85.8%	17,591	14.2%	123,882
2004	92,282	85.2%	16,080	14.8%	108,362
2005	82,485	84.0%	15,723	16.0%	98,208
2006	81,471	85.6%	13,685	14.4%	95,157
2007	77,907	91.2%	7,516	8.8%	85,423
2008	75,528	93.8%	4,993	6.2%	80,521
Forecast					
2009	62,000	94.4%	3,700	5.6%	65,700
2010	65,500	93.9%	4,200	6.1%	69,700
2011	82,900	93.5%	5,700	6.5%	88,600
2012	89,900	93.1%	6,700	6.9%	96,600
2013	93,600	92.7%	7,400	7.3%	101,000
2014	97,400	92.2%	8,200	7.8%	105,600
2015	103,300	93.5%	7,200	6.5%	110,500
2016	105,600	91.4%	10,000	8.6%	115,600
2017	109,900	90.9%	11,000	9.1%	120,900
2018	114,500	90.5%	12,000	9.5%	126,500
2019	119,200	90.1%	13,100	9.9%	132,300
2020	124,100	89.7%	14,300	10.3%	138,400
2021	129,200	89.2%	15,600	10.8%	144,800
2022	134,500	88.8%	17,000	11.2%	151,500
2023	140,100	88.4%	18,400	11.6%	158,500
2024	145,800	87.9%	20,000	12.1%	165,800
2025	151,800	87.5%	21,600	12.5%	173,400
2026	158,000	87.1%	23,400	12.9%	181,400
2027	164,400	86.7%	25,300	13.3%	189,700
Compounded Annual Growth Rate					
2002-2008	-7.5%		-21.1%		-8.9%
2008-2009	-17.9%		-25.9%		-18.4%
2008-2027	4.2%		8.9%		4.6%
2009-2011	15.6%		24.1%		16.1%
2009-2020	6.5%		13.1%		7.0%
2009-2027	5.6%		11.3%		6.1%

Sources: Norman Y. Mineta San Jose International Airport; Ricondo & Associates, Inc. (projected Airport activity).  
Prepared by: Ricondo & Associates, Inc., July 2009.

- The trend at San Jose International is similar to the national market where all-cargo carriers accommodate approximately 71.3 percent of air cargo, and are projected by the FAA to account for 73.3 percent of the nation's air cargo in 2025.<sup>1</sup> For the Airport, however, as all-cargo carrier share of total tonnage has historically been above 80 percent, it is assumed to continue to remain higher than the FAA's nationwide projected share.

## **Air Cargo Aircraft Operations Projections**

Historical and projected all-cargo aircraft operations at the Airport are presented in **Table 20**.

- As shown, the Airport's all-cargo aircraft operations decreased from 5,815 in FY 2002 to 3,140 in FY 2008, representing a compounded annual decline of 9.8 percent during this period. All-cargo tonnage per operation has increased from 20.7 tons per operation in FY 2002 to 24.1 tons per operation in FY 2008. The growth in cargo tonnage per operation during this period is due primarily to the consolidation of operations that occurred at the Airport when mergers took place between DHL and Airborne Express and between UPS and Emery. Projected all-cargo operations are prepared using the tonnage per operation methodology. Between FY 2008 to FY 2027, all-cargo tonnage per operation is expected to remain consistent at 24.1 tons per operation. Operations by all-cargo aircraft are projected to increase from 3,140 in FY 2008 to 6,830 in FY 2027, representing a compounded annual growth rate of 4.2 percent during this period.

## **Air Cargo Aircraft Fleet Mix Projections**

Specific fleet-mix forecast and landed weight projections for air cargo carriers are found in **Table 21**. As shown, the aircraft types depicted on the tables are provided in either actual aircraft or physical seat-size equivalents.

- Consistent with the Boeing's Current Market Outlook, 2009 – 2028 and the fleet plans of the carriers serving San Jose International, it is assumed that all-cargo carriers will replace their aging narrow-bodies (B727s and DC-8s) with medium wide-bodies such as the A300-600 and the B767. These aircraft retirements lead to an increase in average all-cargo aircraft capacity and is expected to contribute to increases in cargo volumes carried in the future.

## **General Aviation Activity Projections**

Several steps were involved in forecasting general aviation activity at the Airport. First, the number of based aircraft at the Airport was projected using a market share methodology approach. Second, forecasted general aviation operations were derived using the Operations per Based Aircraft (OPBA) method. The final step in developing the forecast of general aviation activity was projecting a fleet mix. Based aircraft fleet mix was projected by examining historical trends, as well as using national trends identified by the FAA for general aviation aircraft.

---

<sup>1</sup> FAA Aerospace Forecast Fiscal Years 2009 – 2025.

**Table 20**

All-Cargo Aircraft Operations

Year	Airport All-Cargo			Airport All-Cargo Annual Tonnage	All-Cargo Tonnage per Operation
	Departures	Operations	Growth		
Historical					
2002	2,908	5,815	-6.4%	120,402	20.7
2003	2,318	4,636	-20.3%	106,291	22.9
2004	1,793	3,586	-22.6%	92,282	25.7
2005	1,639	3,278	-8.6%	82,485	25.2
2006	1,732	3,464	5.7%	81,471	23.5
2007	1,694	3,388	-2.2%	77,907	23.0
2008	1,570	3,140	-7.3%	75,528	24.1
Forecast					
2009	1,290	2,580	-17.8%	62,000	24.1
2010	1,360	2,720	5.4%	65,500	24.1
2011	1,725	3,450	26.8%	82,900	24.1
2012	1,870	3,740	8.4%	89,900	24.1
2013	1,945	3,890	4.0%	93,600	24.1
2014	2,025	4,050	4.1%	97,400	24.1
2015	2,145	4,290	5.9%	103,300	24.1
2016	2,195	4,390	2.3%	105,600	24.1
2017	2,285	4,570	4.1%	109,900	24.1
2018	2,380	4,760	4.2%	114,500	24.1
2019	2,480	4,960	4.2%	119,200	24.1
2020	2,580	5,160	4.0%	124,100	24.1
2021	2,685	5,370	4.1%	129,200	24.1
2022	2,795	5,590	4.1%	134,500	24.1
2023	2,910	5,820	4.1%	140,100	24.1
2024	3,030	6,060	4.1%	145,800	24.1
2025	3,155	6,310	4.1%	151,800	24.1
2026	3,285	6,570	4.1%	158,000	24.1
2027	3,415	6,830	4.0%	164,400	24.1
Compounded Annual Growth Rate					
2002-2008	-9.8%	-9.8%			
2008-2009	-17.8%	-17.8%			
2008-2027	4.2%	4.2%			
2009-2011	15.6%	15.6%			
2009-2020	6.5%	6.5%			
2009-2027	5.6%	5.6%			

Sources: Norman Y. Mineta San Jose International Airport; Ricondo & Associates, Inc. (projected Airport activity).  
Prepared by: Ricondo & Associates, Inc., July 2009.

**Table 21**

**Air Cargo Aircraft Fleet Mix Projections**

Aircraft <sup>1/</sup>	Weight	2008		2027	
		Departures	Percent	Departures	Percent
Mcdonnell Douglas MD-11	482	27	1.7%	85	2.5%
Mcdonnell Douglas DC-10-30	421	216	13.8%	171	5.0%
Mcdonnell Douglas DC-10-10	364	216	13.8%	137	4.0%
Boeing 767-300/300ER	326	268	17.1%	1,451	42.5%
Airbus Industrie A300-600/R/CF/RCF	309	32	2.1%	1,537	45.0%
Boeing 767-200/ER/EM	285	211	13.4%	0	0.0%
Mcdonnell Douglas DC-8-73F	275	60	3.8%	0	0.0%
Mcdonnell Douglas DC-8-73	275	46	3.0%	0	0.0%
Airbus Industrie A310-200C/F	271	186	11.8%	0	0.0%
Mcdonnell Douglas DC-8-71	258	183	11.6%	0	0.0%
Boeing 757-200	210	90	5.7%	0	0.0%
Boeing 727-200/231A	166	3	0.2%	0	0.0%
Boeing 727-100	150	0	0.0%	0	0.0%
Boeing 737-100/200	117	29	1.9%	0	0.0%
Mcdonnell Douglas DC-9-30	110	1	0.1%	0	0.0%
Mcdonnell Douglas DC-9-15F	82	1	0.1%	0	0.0%
Dassault-Breguet Mystere-Falcon	30	1	0.1%	0	0.0%
Cessna 208A/B	9	0	0.0%	34	1.0%
Total		1,570.0	100.0%	3,415.0	100.0%
Landed Weight ('000s of Pounds)		492,706		1,117,634	

Note: Columns may not add to totals shown because of rounding.

1/ Denotes actual aircraft or physical equivalent.

Sources: Norman Y. Mineta San Jose International Airport. (historical Airport activity); US DOT T100 Segment Database; Ricondo & Associates, Inc. (projected Airport activity).  
 Prepared by: Ricondo & Associates, Inc., July 2009.

## Based Aircraft Projections

- **Table 22** presents historical and projected based aircraft at the Airport and the State of California. As shown, the number of based aircraft for the State of California increased from 27,110 in FY 2002 to 27,629 in FY 2008 while the number of based aircraft at the Airport decreased from 218 in FY 2002 to 151 in FY 2008. The declining trend in based aircraft growth at the Airport compared to the State of California is mainly due to the limited availability of storage facilities at the Airport and a decline in the regional economy. General aviation storage facilities at the Airport have been historically constrained by the land area made available to general aviation. The number of based aircraft and general aviation operations has been declining in recent years due to the decommissioning of hangars, shelters, and tie-downs. A large portion of general aviation facilities at the Airport were eliminated due the extension of Runway 30R at the end of 2000. The historical decrease of general aviation activity is also due to changes in fleet mix, whereby business & corporate jets attracted to San Jose International's facilities and FBO services are displacing smaller aircraft leaving for less-congested or lower-cost airports. Projected based aircraft at the Airport were based on a market share methodology approach. The Airport's market share of Californian based aircraft declined from 0.804 percent in FY 2002 to 0.547 percent in FY 2008. It is assumed that the Airport's market share of Californian based aircraft will return to a level more reflective of general aviation activity, similar to the first half of this decade. The Airport's market share of Californian based aircraft is assumed to increase over the projected period from 0.547 percent in FY 2008 to 0.652 percent in FY 2027, which is the average market share of Californian based aircraft between FY 2002 and FY 2008. As a result, based aircraft at the Airport are forecasted to reach 209 aircraft in FY 2027. The growth in based aircraft at the Airport between FY 2008 and FY 2027 corresponds to a compounded annual growth rate of 1.7 percent during this period, higher than the growth rate projected by the TAF for based aircraft in the State of California.

## General Aviation Operation Projections

- Historical and projected general aviation operations at the Airport are presented in **Table 23**. As shown, total general aviation operations decreased from 78,618 in FY 2000 to 55,146 in FY 2008, representing a compounded annual decrease of 5.7 percent during this period. General aviation operations per based aircraft have varied over time and ranged from a high of 365 annual operations to a low of 327 annual operations per based aircraft during this same period. Forecasted general aviation operations are derived using the Operations per Based Aircraft (OPBA) method. The average number of annual operations, between FY 2004 and FY 2008, per based aircraft of 350 was used to project aircraft operations. As shown total general aviation operations are projected to increase from 55,146 in FY 2008 to 73,200 in FY 2027. The growth in total general aviation operations between FY 2008 and FY 2027 corresponds to a compounded annual growth of 1.5 percent during this period.
- As also shown in Table 23, general aviation operations are further broken out into itinerant and local operations. Itinerant operations account for the majority of the Airport's general aviation operations, accounting for 68.6 percent of general aviation operations in FY 2008. Since 2002, however, the percentage of local general aviation operations to total operations has increased steadily from 18.0 percent in FY 2002 to 31.4 percent in FY 2008. It is assumed that this trend will discontinue and reverse throughout the projection period due to assumed increases in corporate jets, which do not typically perform local operations. By FY 2027, local operations are projected to be approximately 15,830 (21.6 percent), while the remaining 57,370 (78.4 percent) are projected to be itinerant general aviation operations.



**Table 22**

**Based General Aviation Aircraft Forecasts**

Year	State of California Based Aircraft	Annual Growth Rate	Airport Share of CA Market	Airport Based Aircraft	Annual Growth Rate
<u>Historical</u>					
2002	27,110	0.2%	0.804%	218	-21.9%
2003	27,307	0.7%	0.699%	191	-12.4%
2004	27,379	0.3%	0.639%	175	-8.4%
2005	27,927	2.0%	0.659%	184	5.1%
2006	27,951	0.1%	0.615%	172	-6.5%
2007	27,656	-1.1%	0.600%	166	-3.5%
2008	27,629	-0.1%	0.547%	151	-9.0%
<u>Forecast</u>					
2009	27,835	-0.3%	0.542%	151	0.0%
2010	28,046	0.8%	0.549%	154	1.9%
2011	28,258	0.8%	0.555%	157	1.9%
2012	28,505	0.9%	0.561%	160	2.0%
2013	28,726	0.8%	0.567%	163	1.9%
2014	28,945	0.8%	0.573%	166	1.8%
2015	29,174	0.8%	0.579%	169	1.9%
2016	29,413	0.8%	0.585%	172	1.9%
2017	29,639	0.8%	0.591%	175	1.8%
2018	29,865	0.8%	0.597%	178	1.8%
2019	30,107	0.8%	0.603%	182	1.8%
2020	30,334	0.8%	0.609%	185	1.8%
2021	30,572	0.8%	0.615%	188	1.8%
2022	30,817	0.8%	0.622%	192	1.8%
2023	31,086	0.9%	0.628%	195	1.9%
2024	31,329	0.8%	0.634%	199	1.8%
2025	31,576	0.8%	0.640%	202	1.8%
2026	31,830	0.8%	0.646%	206	1.8%
2027	32,088	0.8%	0.652%	209	1.8%
<u>Compounded Annual Growth Rate</u>					
2002-2008	0.3%			-5.9%	
2008-2009	0.7%			0.0%	
2008-2027	0.8%			1.7%	
2009-2011	0.8%			1.9%	
2009-2020	0.8%			1.9%	
2009-2027	0.8%			1.8%	

Sources: Norman Y. Mineta San Jose International Airport; FAA Terminal Area Forecast (State of California: 1999 - 2025);  
 Ricondo & Associates, Inc. (projected Airport activity).  
 Prepared by: Ricondo & Associates, Inc., July 2009.

**Table 23**

**General Aviation Operations Forecast**

Year	Airport Based Aircraft	GA Operations per Based Aircraft	Total General Aviation Operations	Annual Growth	Itinerant GA Operations		Local GA Operations	
					Itinerant	Share	Local	Share
Historical								
2002	218	361	78,618	-35.8%	64,452	82.0%	14,166	18.0%
2003	191	327	62,510	-20.5%	49,933	79.9%	12,577	20.1%
2004	175	340	59,521	-4.8%	45,111	75.8%	14,410	24.2%
2005	184	346	63,708	7.0%	48,321	75.8%	15,387	24.2%
2006	172	360	61,907	-2.8%	43,754	70.7%	18,153	29.3%
2007	166	331	55,021	-11.1%	40,575	73.7%	14,446	26.3%
2008	151	365	55,146	0.2%	37,852	68.6%	17,294	31.4%
Forecast								
2009	151	350	52,900	-4.1%	36,600	69.2%	16,300	30.8%
2010	154	350	53,800	1.7%	37,500	69.7%	16,300	30.3%
2011	157	350	54,900	2.0%	38,500	70.2%	16,400	29.8%
2012	160	350	55,900	1.8%	39,500	70.7%	16,400	29.3%
2013	163	350	57,000	2.0%	40,600	71.2%	16,400	28.8%
2014	166	350	58,000	1.8%	41,600	71.7%	16,400	28.3%
2015	169	350	59,100	1.9%	42,700	72.2%	16,400	27.8%
2016	172	350	60,200	1.9%	43,800	72.7%	16,400	27.3%
2017	175	350	61,300	1.8%	44,900	73.3%	16,400	26.7%
2018	178	350	62,400	1.8%	46,000	73.8%	16,400	26.2%
2019	182	350	63,600	1.9%	46,900	73.8%	16,700	26.2%
2020	185	350	64,700	1.7%	48,400	74.8%	16,300	25.2%
2021	188	350	65,900	1.9%	49,600	75.3%	16,300	24.7%
2022	192	350	67,000	1.7%	50,800	75.8%	16,200	24.2%
2023	195	350	68,300	1.9%	52,100	76.3%	16,200	23.7%
2024	199	350	69,500	1.8%	53,400	76.8%	16,100	23.2%
2025	202	350	70,700	1.7%	54,700	77.3%	16,000	22.7%
2026	206	350	72,000	1.8%	56,100	77.9%	15,900	22.1%
2027	209	350	73,200	1.7%	57,400	78.4%	15,800	21.6%
Compounded Annual Growth Rate								
2002-2008	-5.9%		-5.7%		-8.5%		3.4%	
2008-2009	0.0%		-4.1%		-3.3%		-5.7%	
2008-2027	1.7%		1.5%		2.2%		-0.5%	
2009-2011	1.9%		1.9%		2.6%		0.3%	
2009-2020	1.9%		1.8%		2.6%		0.0%	
2009-2027	1.8%		1.8%		2.5%		-0.2%	

Sources: Norman Y. Mineta San Jose International Airport; Ricondo & Associates, Inc. (projected Airport activity).

Prepared by: Ricondo & Associates, Inc., July 2009.

## Based Aircraft Fleet Mix Projections

- Nationally, the FAA projects general aviation activity to decline in FY 2009, recover in FY 2010, and then grow steadily through FY 2025. While general aviation activity has declined slightly with the economic downturn, the FAA expects recovery due to the strength of business and corporate sector. Increased growth in fractional ownership companies and corporate flying has continued to expand the market for jet aircraft. The percentage of turbo-jet aircraft relative to total fixed wing aircraft for the Nation increased from 43.7 percent in FY 2006 to 45.7 percent in FY 2008. The FAA predicts the number of turbo-jet aircraft nationwide will further increase from 11,400 in FY 2008 to 25,165 aircraft by FY 2025, or at a compounded annual growth rate of 4.8 percent during this period. Additionally, long-term growth in the number of turbo-jet aircraft is expected to be higher than the growth of any other fixed wing aircraft.
- Similar to the national trend, the percentage of turbo-jet aircraft relative to total based aircraft at the Airport increased from 36.0 percent in FY 2006 to 38.4 percent in FY 2008. Consistent with FAA, it is assumed that turbo-jet aircraft at the Airport will continue to increase at the national rate of 4.8 percent over the forecasted period.
- **Table 24** presents historical and projected based aircraft fleet mix. In FY 2008, turbo-prop and turbo-jet aircraft combined accounted for 43.7 percent (5.3 + 38.4 percent); Single-engine and multi-engine aircraft combined accounted for 56.3 percent (47.0 + 9.3 percent) of the Airport's based aircraft. There were no helicopters based at the Airport at the end of the FY 2008. The Airport's based aircraft fleet mix was projected by examining historical trends, as well as using national trends identified by the FAA for general aviation aircraft. As shown in Table 24, the share of turbo-prop and turbo-jet aircraft combined are projected to increase between FY 2008 and FY 2027, while the share of single engine and multi-engine aircraft combined at the Airport are projected to decrease during this period. These trends are consistent with the nationwide forecast contained in the FAA's Aerospace Forecast, Fiscal Years 2009 – 2025. Helicopters are anticipated to have a marginal yet visible role at the Airport over the projection period and account for 2 percent of total based aircraft.

**Table 25** provides a forecast of general aviation operations by aircraft type.

**Table 24**

General Aviation Based Aircraft Fleet Mix Projections

Year	Single Engine	Percent of Total	Multi-engine	Percent of Total	Turbo-Prop	Percent of Total	Turbo-Jet	Percent of Total	Helicopter	Percent of Total	Total	Percent of Total
<b>Historical</b>												
2006	86	50.0%	10	5.8%	13	7.6%	62	36.0%	1	0.6%	172	100.0%
2007	79	47.6%	10	6.0%	16	9.6%	60	36.1%	1	0.6%	166	100.0%
2008	71	47.0%	14	9.3%	8	5.3%	58	38.4%	0	0.0%	151	100.0%
<b>Projected</b>												
2009	69	45.8%	14	8.9%	8	5.3%	60	39.9%	0	0.1%	151	100.0%
2010	68	44.5%	13	8.6%	8	5.3%	64	41.4%	0	0.2%	154	100.0%
2011	68	43.2%	13	8.3%	8	5.3%	67	42.9%	0	0.3%	157	100.0%
2012	67	41.9%	13	8.0%	8	5.2%	71	44.5%	1	0.4%	160	100.0%
2013	66	40.7%	12	7.6%	8	5.2%	75	46.0%	1	0.5%	163	100.0%
2014	65	39.4%	12	7.3%	9	5.2%	79	47.5%	1	0.6%	166	100.0%
2015	64	38.1%	12	7.0%	9	5.2%	83	49.0%	1	0.7%	169	100.0%
2016	63	36.9%	11	6.6%	9	5.2%	87	50.5%	1	0.8%	172	100.0%
2017	62	35.6%	11	6.3%	9	5.2%	91	52.0%	2	0.9%	175	100.0%
2018	61	34.3%	11	6.0%	9	5.1%	95	53.5%	2	1.1%	178	100.0%
2019	60	33.1%	10	5.6%	9	5.1%	100	55.0%	2	1.2%	182	100.0%
2020	59	31.8%	10	5.3%	9	5.1%	104	56.5%	2	1.3%	185	100.0%
2021	57	30.5%	9	5.0%	10	5.1%	109	58.0%	3	1.4%	188	100.0%
2022	56	29.2%	9	4.7%	10	5.1%	114	59.6%	3	1.5%	192	100.0%
2023	55	28.0%	8	4.3%	10	5.1%	119	61.1%	3	1.6%	195	100.0%
2024	53	26.7%	8	4.0%	10	5.0%	124	62.6%	3	1.7%	199	100.0%
2025	51	25.4%	7	3.7%	10	5.0%	129	64.1%	4	1.8%	202	100.0%
2026	50	24.2%	7	3.3%	10	5.0%	135	65.6%	4	1.9%	206	100.0%
2027	48	22.9%	6	3.0%	10	5.0%	140	67.1%	4	2.0%	209	100.0%

Sources: Norman Y. Mineta San Jose International Airport; Ricondo & Associates, Inc. (projected Airport activity).  
 Prepared by: Ricondo & Associates, Inc., July 2009.

**Table 25****General Aviation Aircraft Type Mix Projections**

Aircraft Type	2008		2027	
	Departures	Percent	Departures	Percent
Single Engine	12,965	47.0%	8,381	22.9%
Multi-engine	2,556	9.3%	1,098	3.0%
Turbo-Prop	1,461	5.3%	1,830	5.0%
Turbo-Jet	10,591	38.4%	24,559	67.1%
Helicopter	0	0.0%	732	2.0%
Total	27,573	100.0%	36,600	100.0%

Note: Columns may not add to totals shown because of rounding.

Sources: Norman Y. Mineta San Jose International Airport; Ricondo & Associates, Inc. (projected Airport activity).  
Prepared by: Ricondo & Associates, Inc., July 2009.

## Summary of Operations Forecasts

The growth in total operations is largely driven by passenger airline operations, which represent the largest portion of total aircraft activity at the Airport. **Table 26** summarizes historical and projected aircraft operations for domestic airline, international airline, total passenger airline, all-cargo carrier, general aviation, and military activity. Projections are based on historical operations, historical and scheduled departures, and our professional opinion.

- Based on passenger air carrier scheduled departures for FY 2009, domestic airline operations are projected to decrease 12.5 percent from 124,776 operations in FY 2008. Domestic airline operations for FY 2010 are expected to further decrease by 1.1 percent over FY 2009 with recovering beginning in FY 2011. Domestic airline operations are projected to increase from FY 2008 through FY 2027 at a compounded annual growth rate of 1.8 percent.
- International airline operations are projected to decrease 5.5 percent from 1,588 operations in FY 2008. However, international airline operations are estimated to recover faster than domestic air carrier operations as it is assumed that trans-border market opportunities, specifically to/from Canada and Mexico, have a high likelihood of materializing in the near-term by foreign flag carriers primarily operating narrow-body mainline aircraft. For FY 2010, international airline operations are projected to increase by 4.0 percent over FY 2009. From FY 2008 through FY 2027, international airline operations are projected to increase at a compounded annual growth rate of 8.3 percent.
- All-cargo operations are projected to increase from FY 2008 through FY 2027 at a compounded annual growth rate of 4.2 percent.
- General aviation operations are estimated to decrease to 52.9 thousand in FY 2009 from the 55.1 thousand operations reached in FY 2008. General aviation operations are forecasted to increase from 55.1 thousand in FY 2008 to 73.2 thousand operations in FY 2027, representing a compounded annual growth rate of 1.5 percent for the same period.
- Military operations are projected at 100 annual operations between FY 2008 and FY 2027, which is the average number of annual military operations between FY 2004 and FY 2008. Future military activity at the Airport will be influenced by U.S. Department of Defense policy, which largely dictates the level of military activity at an airport.

**Table 26**

Summary of Operation Forecasts

Year	Domestic Airline	International Airline	Total Passenger Airline	All-Cargo Carriers	General Aviation	Military	Airport Total
<b>Historical</b>							
2000	128,640	3,036	131,676	6,030	146,202	224	284,132
2001	154,362	3,778	158,140	6,212	122,435	233	287,020
2002	141,676	2,706	144,382	5,815	78,618	236	229,051
2003	132,988	2,126	135,114	4,636	62,510	132	202,392
2004	134,036	2,160	136,196	3,586	59,521	133	199,436
2005	127,906	1,930	129,836	3,278	63,708	94	196,916
2006	125,636	2,318	127,954	3,464	61,907	83	193,408
2007	124,430	1,972	126,402	3,388	55,021	103	184,914
2008	124,776	1,588	126,364	3,140	55,146	64	184,714
<b>Forecast</b>							
2009	109,200	1,500	110,700	2,580	52,900	100	166,280
2010	108,000	1,560	109,560	2,720	53,800	100	166,180
2011	112,600	3,700	116,300	3,450	54,900	100	174,750
2012	117,800	3,920	121,720	3,740	55,900	100	181,460
2013	122,800	4,140	126,940	3,890	57,000	100	187,930
2014	127,200	4,360	131,560	4,050	58,000	100	193,710
2015	131,400	4,580	135,980	4,290	59,100	100	199,470
2016	135,200	4,760	139,960	4,390	60,200	100	204,650
2017	139,000	4,980	143,980	4,570	61,300	100	209,950
2018	142,000	5,140	147,140	4,760	62,400	100	214,400
2019	145,200	5,320	150,520	4,960	63,600	100	219,180
2020	148,600	5,540	154,140	5,160	64,700	100	224,100
2021	152,200	5,740	157,940	5,370	65,900	100	229,310
2022	156,000	5,980	161,980	5,590	67,000	100	234,670
2023	160,000	6,200	166,200	5,820	68,300	100	240,420
2024	163,800	6,460	170,260	6,060	69,500	100	245,920
2025	167,800	6,700	174,500	6,310	70,700	100	251,610
2026	172,200	6,980	179,180	6,570	72,000	100	257,850
2027	176,400	7,260	183,660	6,830	73,200	100	263,790
<b>Compounded Annual Growth Rate</b>							
2000-2006	-0.4%	-4.4%	-0.5%	-8.8%	-13.3%	-15.3%	-6.2%
2006-2008	-0.3%	-17.2%	-0.6%	-4.8%	-5.6%	-12.2%	-2.3%
2008-2009	-12.5%	-5.5%	-12.4%	-17.8%	-4.1%	56.3%	-10.0%
2008-2027	1.8%	8.3%	2.0%	4.2%	1.5%	2.4%	1.9%
2009-2011	1.5%	57.1%	2.5%	15.6%	1.9%	0.0%	2.5%
2009-2020	2.8%	12.6%	3.1%	6.5%	1.8%	0.0%	2.8%
2009-2027	2.7%	9.2%	2.9%	5.6%	1.8%	0.0%	2.6%

Sources: Norman Y. Mineta San Jose International Airport; Ricondo & Associates, Inc. (projected Airport activity).  
Prepared by: Ricondo & Associates, Inc., July 2009.

- Total Airport operations for FY 2009 are projected to decline to 166,280 operations or a decrease of 10.0 percent over FY 2008. Total operations are estimated to marginally decline to 166,180 operations for FY 2010. It is expected that the decline in total operations will finally “bottom-out” in FY 2010 with total Airport operations beginning to recover by late FY 2010 to early FY 2011. Total operations at the Airport are forecasted to increase from 184,714 in FY 2008 to 263,790 in FY 2027, representing a compounded annual growth rate of 1.9 percent during this period.

## Summary of Airport Operations

**Table 27** provides FY 2027 daily operations by aircraft type.

## Total Airport Landed Weight

**Table 28** summarizes historical and projected landed weight for passenger air carriers and all-cargo carriers at the Airport.

- Total landed weight at the Airport decreased from 8,550,327 thousand pounds in FY 2003 to 7,499,052 thousand pounds in FY 2006. This decrease represents a compounded annual decrease of 4.3 percent during this period. Total landed weight further decreased from 7,499,052 thousand pounds in FY 2006 to 7,407,859 thousand pounds in FY 2008. The decrease in total landed weight between FY 2006 and FY 2008 corresponds to a compounded annual decrease of 0.6 percent during this period.
- Between FY 2008 and FY 2027, mainline air carrier landed weight is projected to increase from 6,150,239 thousand pounds in FY 2008 to 9,819,732 thousand pounds in FY 2027, representing a compounded annual growth rate of 2.5 percent over the period. All-cargo carrier landed weight is projected to increase from 492,706 thousand pounds in FY 2008 to 1,117,634 thousand pounds in FY 2027, representing a compounded annual growth rate of 4.4 percent during this period. Total landed weight is projected to increase from 7,407,859 thousand pounds in FY 2008 to 12,476,577 thousand pounds in FY 2027, representing a compounded annual growth rate of 2.8 percent during this period. In general, the projected increase in landed weight is a result of anticipated use of larger aircraft and increased operations at the Airport during the projection period.

## Design Level Demand Projections

**Table 29** provides design level demand projections for the Airport. Specifically, the peak month, average day, peak hour (PMADPH) was calculated for enplanements and deplanements and passenger air carrier operations.

- The ratio of peak month passenger to annual passengers was computed. Using historical passenger data obtained from Airport records, August was determined to be the peak month of the year. Based on FY 2006 and FY 2008 enplanement data, approximately 9.6 percent of Airport enplanements occurred during the month of August. The same ratio was assumed for deplaned passengers. It was assumed that this ratio of peak month to annual activity will remain constant.
- The number of average day enplaned and deplaned passengers were calculated by dividing the monthly enplanements and deplanements by the number of days in the peak month (i.e. 31 days).

**Table 27**

**Summary of San Jose Average Aircraft Operations**

Aircraft Type	2008		2027	
	Average Daily Operations <sup>1/2/</sup>	Percent	Average Daily Operations <sup>1/2/</sup>	Percent
Airbus Industrie A300-600/R/CF/RCF	0.2	0.0%	8.4	1.2%
Airbus Industrie A310-200C/F	1.0	0.2%	0.0	0.0%
Airbus Industrie A318	3.3	0.7%	15.8	2.2%
Airbus Industrie A319	11.3	2.2%	30.3	4.2%
Airbus Industrie A320	17.4	3.4%	48.2	6.7%
Boeing 727-100	0.0	0.0%	0.0	0.0%
Boeing 727-200/231A	0.0	0.0%	0.0	0.0%
Boeing 737-100/200	0.2	0.0%	0.0	0.0%
Boeing 737-300	72.6	14.3%	47.3	6.6%
Boeing 737-400	5.9	1.2%	11.8	1.6%
Boeing 737-500	4.9	1.0%	0.0	0.0%
Boeing 737-700	94.4	18.6%	166.5	23.0%
Boeing 737-800	10.1	2.0%	59.2	8.2%
Boeing 737-900	3.0	0.6%	11.8	1.6%
Boeing 747-100	0.0	0.0%	0.0	0.0%
Boeing 757-200	7.0	1.4%	7.9	1.1%
Boeing 767-200/ER/EM	1.2	0.2%	0.0	0.0%
Boeing 767-300/300ER	3.5	0.7%	19.8	2.7%
Boeing 777/787-200	0.0	0.0%	1.8	0.2%
Cessna 208A/B	0.0	0.0%	0.2	0.0%
Dassault-Breguet Mystere-Falcon	0.0	0.0%	0.0	0.0%
Mcdonnell Douglas DC-10-10	1.2	0.2%	0.7	0.1%
Mcdonnell Douglas DC-10-30	1.2	0.2%	0.9	0.1%
Mcdonnell Douglas DC-8-71	1.0	0.2%	0.0	0.0%
Mcdonnell Douglas DC-8-73	0.3	0.1%	0.0	0.0%
Mcdonnell Douglas DC-8-73F	0.3	0.1%	0.0	0.0%
Mcdonnell Douglas DC-9-15F	0.0	0.0%	0.0	0.0%
Mcdonnell Douglas DC-9-30	0.0	0.0%	0.0	0.0%
Mcdonnell Douglas MD-11	0.1	0.0%	0.5	0.1%
Mcdonnell Douglas MD-80	18.8	3.7%	0.0	0.0%
Mcdonnell Douglas MD-83	8.6	1.7%	0.0	0.0%
Mcdonnell Douglas MD-90	2.4	0.5%	2.0	0.3%
Embraer 190	0.2	0.0%	4.4	0.6%
Bombardier CRJ-900	2.0	0.4%	4.4	0.6%
Embraer 170	0.6	0.1%	13.3	1.8%
De Havilland DHC8-400 Dash 8Q	5.2	1.0%	5.3	0.7%
Bombardier CRJ-700	5.6	1.1%	19.5	2.7%
Bombardier CRJ-100/200	10.3	2.0%	21.3	2.9%
Embraer 140	7.2	1.4%	15.1	2.1%
Embraer 145	40.5	8.0%	5.3	0.7%
Saab 340	0.0	0.0%	0.0	0.0%
Embraer 120 Brasilia	9.0	1.8%	0.0	0.0%
Single Engine	71.0	14.0%	45.9	6.4%
Multi-engine	14.0	2.8%	6.0	0.8%
Turbo-Prop	8.0	1.6%	10.0	1.4%
Turbo-Jet	58.0	11.5%	134.6	18.6%
Helicopter	0.0	0.0%	4.0	0.6%
Total Daily Operations	506.1	100.0%	722.7	100.0%
Annual Operations	184,714		293,790	

Note: Columns may not add to totals shown because of rounding.

1/ Operations include both landings and takeoffs.

2/ Daily operations equal annual divided by 365 days.

Sources: Norman Y. Mineta San Jose International Airport; Ricondo & Associates, Inc. (projected Airport activity).

Prepared by: Ricondo & Associates, Inc., July 2009.



**Table 28**

**Passenger Aircraft Landed Weight Projections**

Fiscal Year	Domestic			Air Cargo	Total Airport
	Mainline	Regional/Commuter	International		
Historical					
2003	7,210,908	400,596	290,418	648,405	8,550,327
2004	6,535,010	650,870	286,854	547,057	8,019,791
2005	6,220,194	646,713	262,300	531,843	7,661,050
2006	6,058,038	677,839	284,803	478,373	7,499,052
2007	6,174,914	638,531	176,089	511,763	7,501,296
2008	6,150,239	656,298	108,616	492,706	7,407,859
Forecast					
2009	5,446,970	567,071	102,563	427,455	6,544,058
2010	5,320,602	599,462	106,523	453,015	6,479,602
2011	5,583,858	627,915	247,019	575,486	7,034,278
2012	5,887,757	656,964	265,143	623,119	7,432,983
2013	6,193,369	681,776	283,652	647,339	7,806,136
2014	6,461,294	707,036	302,547	673,162	8,144,040
2015	6,730,697	727,760	321,828	712,203	8,492,488
2016	6,975,158	748,782	338,649	727,934	8,790,524
2017	7,220,942	770,103	358,666	756,875	9,106,587
2018	7,428,184	786,514	374,695	787,399	9,376,793
2019	7,649,842	803,075	392,480	819,500	9,664,897
2020	7,886,034	819,784	413,567	851,522	9,970,907
2021	8,136,876	836,643	433,529	885,112	10,292,160
2022	8,402,485	853,652	456,898	920,266	10,633,300
2023	8,669,494	876,392	479,141	956,976	10,982,004
2024	8,937,905	893,774	504,897	995,238	11,331,813
2025	9,221,276	911,305	529,528	1,035,045	11,697,154
2026	9,519,726	934,792	557,776	1,076,391	12,088,684
2027	9,819,732	952,696	586,515	1,117,634	12,476,577
Compounded					
Annual Growth Rate					
2003-2006	-5.6%	19.2%	-0.6%	-9.6%	-4.3%
2006-2008	0.8%	-1.6%	-38.2%	1.5%	-0.6%
2008-2009	-11.4%	-13.6%	-5.6%	-13.2%	-11.7%
2008-2027	2.5%	2.0%	9.3%	4.4%	2.8%
2009-2011	1.2%	5.2%	55.2%	16.0%	3.7%
2009-2020	3.4%	3.4%	13.5%	6.5%	3.9%
2009-2027	3.3%	2.9%	10.2%	5.5%	3.7%

Sources: Norman Y. Mineta San Jose International Airport; Ricondo & Associates, Inc. (projected Airport activity).  
Prepared by: Ricondo & Associates, Inc., July 2009.

**Table 29**

**Demand Level Forecasts**

	Historical			Forecast					
Enplaned Passengers	2006	2007	2008	2009	2010	2015	2020	2025	2027
Annual Enplanements	5,414,831	5,318,859	5,178,603	4,426,000	4,360,000	5,740,000	6,874,000	8,219,000	8,828,000
Peak Month (9.6% of Annual)	517,642	508,467	495,059	423,113	416,803	548,727	657,134	785,713	843,931
Average Day (31 Days)	16,698	16,402	15,970	13,649	13,445	17,701	21,198	25,346	27,224
Peak Hour (10.6 % of Avg Day)	1,767	1,735	1,689	1,444	1,422	1,873	2,243	2,681	2,880
Deplaned Passengers									
Annual Deplanements	5,414,831	5,318,859	5,178,603	4,426,000	4,360,000	5,740,000	6,874,000	8,219,000	8,828,000
Peak Month (9.6% of Annual)	517,642	508,467	495,059	423,113	416,803	548,727	657,134	785,713	843,931
Average Day (31 Days)	16,698	16,402	15,970	13,649	13,445	17,701	21,198	25,346	27,224
Peak Hour (8.1 % of Avg Day)	1,359	1,335	1,299	1,110	1,094	1,440	1,725	2,062	2,215
Aircraft Operations									
Domestic Mainline Air Carrier									
Annual	94,880	95,624	95,358	84,200	82,000	102,200	118,000	136,000	144,000
Peak Month (8.8% of Annual)	8,330	8,395	8,372	7,392	7,199	8,972	10,359	11,940	12,642
Average Day (Peak Month/31 Days)	269	271	270	238	232	289	334	385	408
Peak Hour (7.1 % of Avg Day)	19	19	19	17	16	21	24	27	29
Domestic R/C									
Annual	30,756	28,806	29,418	25,000	26,000	29,200	30,600	31,800	32,400
Peak Month (9% of Annual)	2,775	2,599	2,654	2,256	2,346	2,634	2,761	2,869	2,923
Average Day (Peak Month/31Days)	90	84	86	73	76	85	89	93	94
Peak Hour (11.4 % of Avg Day)	10	10	10	8	9	10	10	11	11
International Air Carriers									
Annual	2,318	1,972	1,588	1,500	1,560	4,580	5,540	6,700	7,260
Peak Month (9.6% of Annual)	222	189	152	143	149	438	530	641	694
Average Day (Peak Month/31 Days)	7	6	5	5	5	14	17	21	22
Peak Hour (25 % of Avg Day)	2	2	1	1	1	2	3	3	3

Sources: Norman Y. Mineta San Jose International Airport; Official Airline Guide; Ricondo & Associates, Inc. (projected Airport activity).  
 Prepared by: Ricondo & Associates, Inc., July 2009.

- Peak hour enplaned and deplaned passengers for the Airport were estimated based on an analysis of the Airport's scheduled departures/arrivals during an average day in August 2007. Scheduled seats for the Airport during this day were obtained from the Official Airline Guide (OAG). Based on this analysis, the peak hour for enplaned passengers (i.e. 6:00 – 6:59) accounted for 10.6 percent of the average daily departing seats, while the peak hour for deplaned passengers (i.e. 20:00 – 20:59) accounted for 8.1 percent of the average daily arriving seats. It was assumed that, over the planning period, these percentages of enplaned and deplaned passengers during the peak hour will remain constant.
- As presented in Table 29, peak-hour enplaned passengers are forecasted to increase from an estimated 1,689 in FY 2008 to 2,880 in FY 2027. Meanwhile, peak-hour deplaned passengers are forecast to increase from an estimated 1,299 in FY 2008 to 2,215 in FY 2027.
- August has historically been the peak month for scheduled mainline air carrier operations at the Airport. The percentage of peak month operations to annual operations for mainline air carriers was determined to be 8.8 percent during the period between FY 2006 and FY 2008.
- October has historically been the peak month for scheduled regional/commuter operations at the Airport. The percentage of peak month operations to annual operations for regional/commuter air carriers was determined to be 9.0 percent during the period between FY 2006 and FY 2008.
- December has historically been the peak month for scheduled international operations at the Airport. The percentage of peak month operations to annual operations for international air carriers was determined to be 9.6 percent during the period between FY 2006 – FY 2008.
- Average daily mainline air carrier, regional/commuter, and international operations were then calculated by dividing peak month data by the number of days in the peak months noted above (i.e. 31 days in August, October, and December).
- Peak hour mainline air carrier, regional/commuter and international operations for the Airport were estimated based on a review of the Airport's scheduled aircraft operations during an average day in the peak month. Scheduled hourly aircraft operations for the Airport were obtained from OAG. The peak period for scheduled domestic mainline air carrier operations was determined to be from 20:00 to 20:59, with 20 total operations (or 7.1 percent of daily mainline air carrier operations). The peak period for scheduled domestic regional/commuter operations was determined to be from 20:00 to 20:59, with ten total operations (or 11.4 percent of daily regional/commuter operations). The peak period for scheduled international operations was equal throughout the day, with two total operations.
- For scheduled domestic mainline passenger air carriers and regional/commuters, it was assumed that between FY 2008 and FY 2027, the percentage of scheduled airline operations during the peak hour will remain constant.
- For international operations, it was assumed that, between FY 2008 and FY 2011, the percentage of scheduled airline operations during the peak hour will decrease from 25.0 percent in FY 2008 to 15.0 percent in FY 2011 as new international air service additions would be scheduled throughout the day.