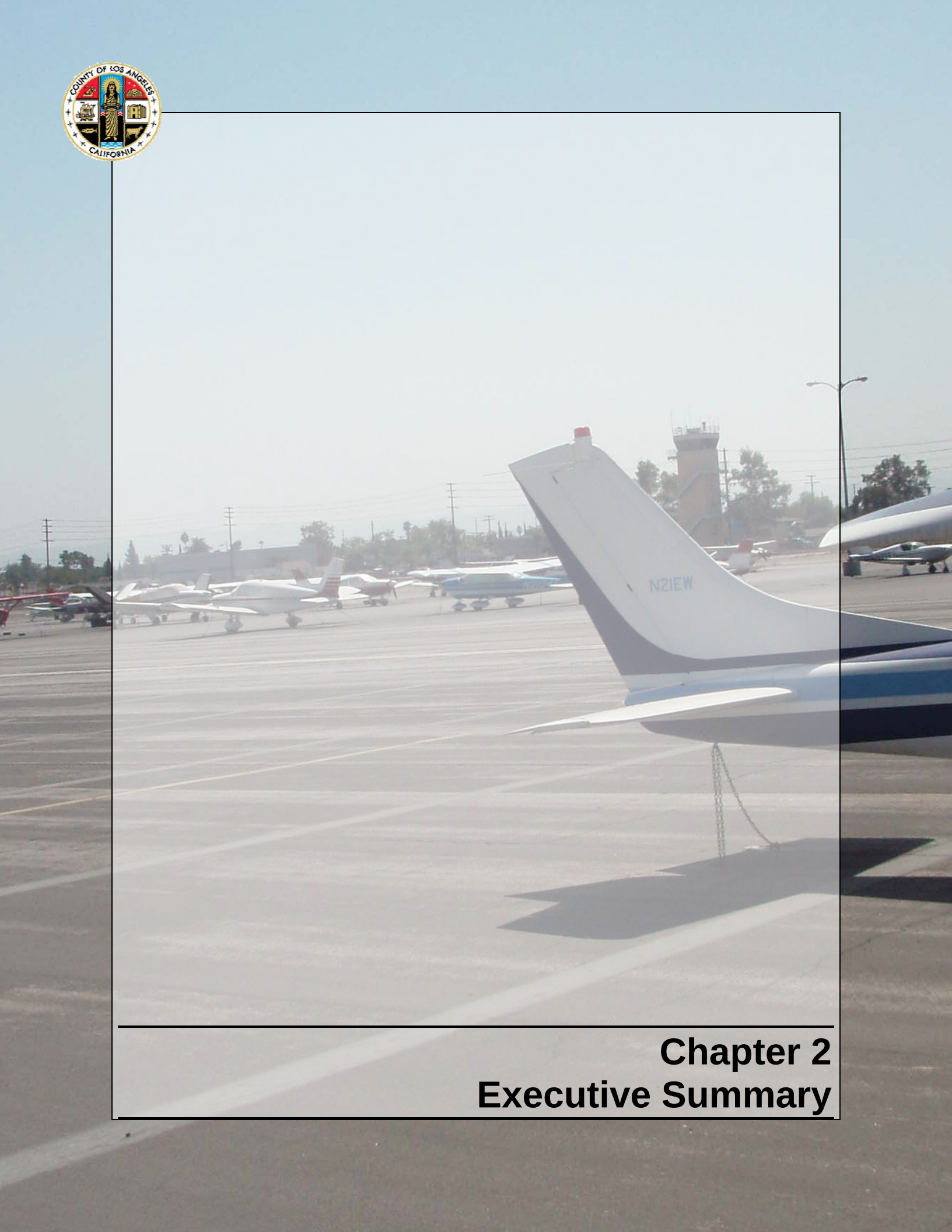

Chapter 2
Executive Summary

Chapter 2
Executive Summary

INTRODUCTION

The findings, conclusions, and development recommendations of the master plan are highlighted in this executive summary. It should be noted that the development recommendations contained in this report are based upon projected traffic levels and attainment of these levels. It cannot be overemphasized that where development is recommended based upon demand or traffic levels, it is ***actual***, not forecast, demand that dictates the timing of construction. However, for planning purposes, a schedule must be provided and this schedule is based upon the development concept requirements and the forecasts of traffic presented in Chapter 4.

It is also important to point out that the schedule of improvements proposed in this plan is contingent upon the availability of Federal, State, and local funds and private investment. While improvements will eventually be scheduled for specific years in this master plan, it must be remembered that it is the programming of the Airport Improvement Program by the FAA that will determine the timing of projects eligible for FAA funding assistance. Development projects at Whiteman Airport must be reconciled with the development priorities of other airports in the region. In terms of projects not eligible for FAA monies, the implementation will depend on the availability of local funds and private sources. Thus, the implementation of the recommendations will depend upon FAA programming and funding availability, as well as the attainment of the projected traffic levels.

The following subsections highlight the forecast of aviation demand and the initial findings on required facilities. Details on the various master plan elements can be found in subsequent chapters of this report. Chapter 3 describes the existing airport and conditions. The forecast of aviation demand and the translation of the future demand into a list of required facilities can be found in Chapters 4 and 5, respectively. Appendix A contains the meeting minutes from the first tenant review meeting. To assist the reader, a glossary and list of abbreviations used in this report has been provided as Appendix B. Appendix C is a questionnaire that was distributed to owners of based aircraft at the airport.

AIRPORT ROLE

The airport will continue to serve in its present role as a general aviation (GA) airport and significant changes in the GA role are not expected. The airport will continue to primarily serve small, personal use aircraft and helicopters. This role was confirmed during the first Tenant Review meeting.

FORECASTS OF AVIATION DEMAND

Aviation demand forecasts are projections of air traffic levels at an airport. In the case of Whiteman Airport, a general aviation airport, the forecast used the FAA Terminal Area Forecast (TAF) as a basis of projects.

Historical and a range of projected based aircraft are graphically presented in Figure 2-1. A based aircraft is one that is permanently stationed at an airport, usually by some form of agreement between the aircraft

owner and the airport management. This forecast value is useful in developing projections of aircraft activity, as well as determining future needs of certain airport elements. As detailed in Chapter 4, three forecasts were developed: TAF, TAF Adjusted, and TAF Reconciled.

The TAF Adjusted and Reconciled forecasts were developed to compensate for the large difference in based aircraft noted in the TAF from existing conditions (the TAF noted an additional 110 based aircraft). TAF Reconciled shifts the entire forecast by 110 aircraft, the difference between the TAF and present day based aircraft levels. TAF Adjusted initially shifts the forecast to account for existing conditions, but also assumes that Whiteman will attract new based aircraft owners at a slightly accelerated rate.

For the purposes of this master plan, the TAF reconciled (which reconciled differences between the TAF forecast and existing conditions) was selected and is represented by the solid blue line in Figure 2-1.

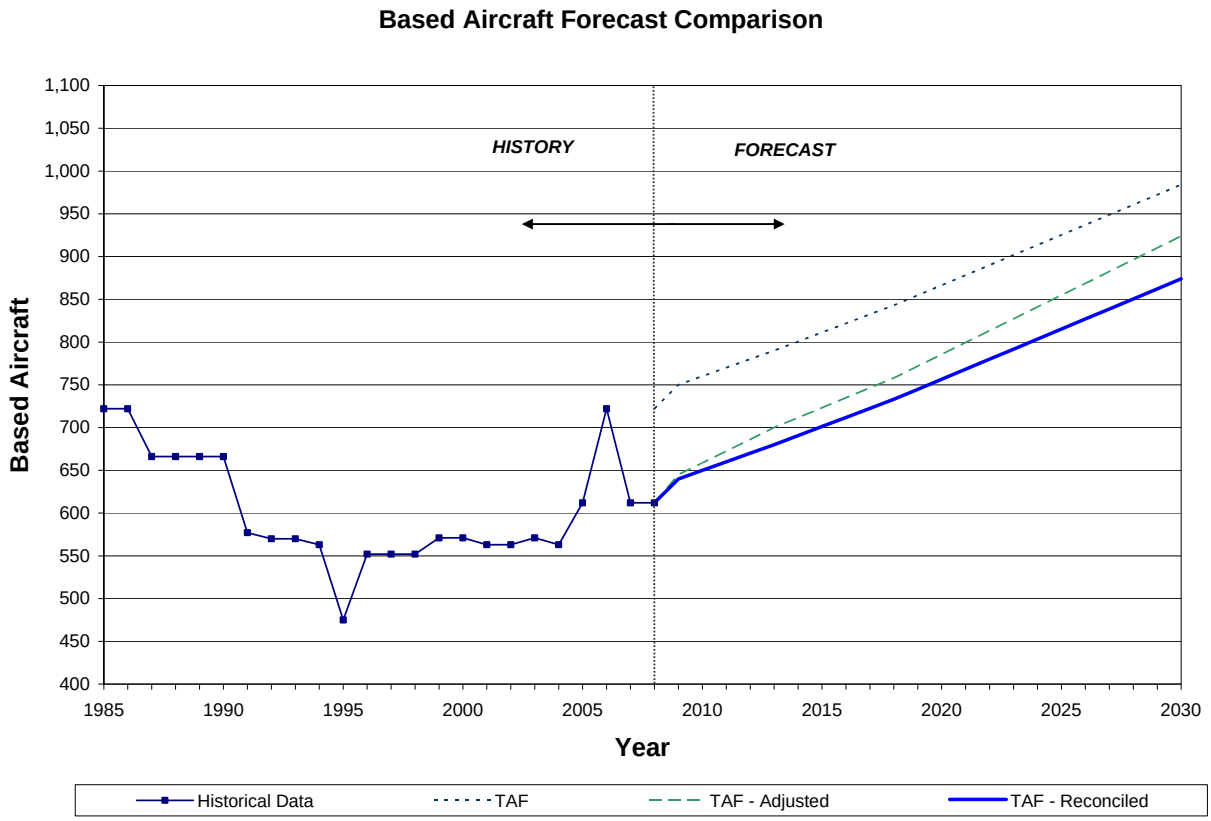

Figure 2-1
Historical and Forecast Based Aircraft

Table 2-1 provides based aircraft information (by aircraft type) for each phase of the master plan.

Aircraft operations are projected to increase from present levels of approximately 93,200 to 143,500 by the year 2030. Itinerant operations are projected to be slightly more than local operations, and account for approximately 55 percent of total operations. Table 2-2 presents the forecast of annual aircraft operations.

Table 2-1
FORECAST OF BASED AIRCRAFT

Aircraft Type	2008	2009	2013	2018	2030
Single Engine Piston	553	575	611	658	783
Multi-Engine Piston	34	35	37	40	48
Turboprop	10	13	14	15	17
Turbine Jet	3	3	3	4	7
Helicopter	13	13	15	15	18
Total	**612**	**640**	**680**	**733**	**874**

Source: DMJM Aviation analysis.

Table 2-2
FORECAST AIRCRAFT OPERATIONS

	Actual	Forecast		
Operations Category	**2007**	**2013**	**2018**	**2030**
Local Operations				
Single Engine Piston	36,970	46,600	49,200	56,520
Multi-Engine Piston	2,270	2,850	3,010	3,470
Turboprop	680	1,040	1,100	1,260
Turbojet	170	260	330	500
Helicopter	850	1,120	1,150	1,320
Itinerant Operations				
Single Engine Piston	47,060	54,710	60,140	71,930
Multi-Engine Piston	2,890	3,350	3,680	4,420
Turboprop	870	1,220	1,340	1,610
Turbojet	220	300	400	640
Helicopter	1,080	1,310	1,410	1,690
Military				
Local Operations	0	0	0	0
Itinerant Operations	140	140	140	140
Total Local Operations	40,900	51,900	54,800	63,100
Total Itinerant Operations	52,300	61,000	67,100	80,400
Total Operations	**93,200**	**112,900**	**121,900**	**143,500**

Source: DMJM Aviation analysis.

FACILITY REQUIREMENTS

Chapter 5 presents the projection of facility requirements deemed necessary to accommodate the forecast aviation demand through the year 2030. Listed below are the initial findings and conclusions of the analysis.

Airside

- For this master plan the airport is designated as airport reference code (ARC) B-I, small aircraft exclusively. This is consistent with the forecast and is the airport reference code that is reflected on the current Airport Layout Plan. This will ensure that general aviation aircraft that currently use the airport will be provided adequate facilities.

- Airfield capacity is sufficient to accommodate forecast operations. However, the master plan should consider capacity enhancements in the ultimate layout of the airfield where practical.

- The existing runway provides 99.66 percent coverage for a 10.5 knot (12 mph) crosswind and 99.82 percent for a 13 knot (15 mph) crosswind which exceeds the FAA recommendation of 95 percent wind coverage.

- The runway safety area (RSA) is non-standard as it is traversed by Pierce Street (Runway 12), Osborne Street (Runway 30), and local residential areas. Deficiencies are mitigated through the application of declared distances.

- Pierce Street and Osborne Street traverse the runway obstacle free zones of Runway 12 and 30, respectively. Obstacle free zone is provided through the application of declared distances.

- Pierce and Osborne Streets also obstruct the runway object free areas of Runway 12 and 30. Residential areas are also contained within the extended runway object free areas. Declared distances provide full runway object free area.

- The Runway 12 protection zone (RPZ) includes portions of Sutter Avenue, Jouett Street, Carl Street, Hoyt Street, and industrial uses. Runway 30's RPZ includes Wingo Street, San Fernando Road, Correnti Street and Bromwich Street. Both RPZs include residential development.

- Pavement maintenance will be needed throughout the planning period. The County is planning an apron slurry seal project in the short-term.

- Declared distances are currently applied to the airport. Declared distances are not typically found at a general aviation airport and consideration should be taken to eliminate them.

Landside

- The existing terminal facilities are not adequate for forecast demand. Approximately 7,920 total square feet may be needed in 2030. In addition, it is recommended that a 4,000 square foot restaurant be accommodated at the airport in 2030.

- The existing parking apron is not capable of meeting requirements for based aircraft and transient tie-downs in the year 2030. Forecasts for 2030 indicate the need for 290 based aircraft tie-downs that require an additional 78 tie-downs. In 2030, 34 total transient tie-downs are required. Currently there are eight transient tie-downs, resulting in an additional 26 required by 2030.

- New individual hangars should be provided for based aircraft. Based on the forecast, this results in the need for 147 new individual hangars; however, existing hangars that are in poor condition should also be replaced by new hangars.

- Additional rectangular/conventional hangar space (fixed wing) of approximately 8,800 square feet is needed to meet long-term requirements. The master plan should also provide space for future development of conventional hangars by a Fixed Base Operator (FBO), or other tenant.

- Based on the 2030 forecast, 6,480 square feet of rectangular/conventional hangar space for helicopters should be provided.

- The existing fuel storage capacity is adequate for the master plan period.

Table 2-3 summarizes the landside facility requirements.

Table 2-3
SUMMARY OF LANDSIDE FACILITY REQUIREMENTS

Item	Existing	2013	2018	2030	Additional Facilities (2030)
GA Terminal (SF)	2,800	6,270	6,710	7,920	5,120*
Transient Apron (number of aircraft/area in SY)					
Single engine/Multi-engine	8/5,340	24/7,737	27/8,299	32/10,295	24/5,045
Turboprops/Small jets	1 acft.	1/1,600	1/1,600	2/3,200	1/1,600
Individual hangars (spaces)	407	432	465	554	147
Conventional Hangar Space (SF) (fixed wing)	36,865	33,275	36,475	45,690	8,825
Rectangular/Conventional Hangar Space (SF) (helos)	8,100	12,150	12,150	14,580	6,480
Based Aircraft Tie-downs (number of aircraft)	212	227	244	290	78
Auto Parking (spaces)	152	186	199	234	82
Airport Maintenance (acres)	0.5	0.5	0.5	0.5	0
Fuel Storage (gallons)					
Avgas	20,000	20,000	20,000	20,000	0
Jet A	20,000	20,000	20,000	20,000	0

* Including meeting rooms and office spaces
SF = square feet, SY = square yards
Source: DMJM Aviation.

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