



IMPLEMENTATION

The previous chapters have presented discussions and plans for development of the airfield, terminal, and building areas at Sonoma County Airport. This chapter addresses how these plans might be implemented. The first section of this chapter presents a proposed Capital Improvement Program. Potential funding sources available for its implementation are also presented. Lastly, some of the actions required to be taken in conjunction with Master Plan approval are discussed.

CAPITAL IMPROVEMENT PROGRAM

The proposed 20-year Capital Improvement Program for Sonoma County Airport is set forth in Table 5-1. The listed projects include both proposed improvements, as described in previous chapters, and recommended major maintenance work for the airfield previously programmed. The total anticipated investment over the next 20 years would be approximately \$83.6 million. Federal funds would total about \$72.0 million with Sonoma County's contribution at about \$11.6 million. In this budget, the County's contribution includes funds generated from Passenger Facility Charges (discussed below). Depending upon funding availability some of the short-range projects could slip into the mid-ranges.

The project costs listed in the Capital Improvement Program represent order-of-magnitude estimates in 2007-dollar values and include design engineering and other related costs and contingencies. The estimates are intended only for preliminary planning and programming purposes. More detailed engineering design and, in some cases, market analyses should be performed before proceeding with the projects.

Financial Factors

Development Costs—Any development within the airport building area must be financially sound. The relative cost of one development alternative versus another is a major factor in the planning process. Cost calculations must consider not just construction costs, but also the revenues that would be lost—even if only temporarily—if new development eliminates existing revenue-producing uses.

		Estimated Costs (in 2007 dollars)		
		Total	Federal	County
Short-Range Projects (within 5 years)				
2007-2008				
1	EA/EIR for Airport Master Plan Adoption and Implementation	\$1,315,789	\$1,250,000	\$65,789
2	Land Acquisition Property ID #164-170-003	\$1,578,947	\$1,500,000	\$78,947
3	FAR Part 150 Study	\$394,737	\$375,000	\$19,737
4	New Passenger Terminal Design Study	\$1,266,666	\$950,000	\$316,666
5	ATCT Site Selection Study and Design	\$526,316	\$500,000	\$26,316
6	ARFF/Maintenance Building Design Study	\$175,000	\$157,500	\$17,500
7	Upgrade ILS to Special CAT II	\$50,000	\$0.00	\$50,000
8	Land Acquisition (Approach Protection)	\$2,000,000	\$1,900,000	\$100,000
9	Safety/Security Equipment Improvements	\$315,789	\$300,000	\$15,789
10	Airport Service Road (Rwy 32) Construction	\$473,684	\$450,000	\$23,684
11	Apron B/Taxiway Rehab. Design	\$157,895	\$150,000	\$7,895
12	Apron C Rehab. Design	\$157,895	\$150,000	\$7,895
13	Apron A Overlay Construction	\$789,474	\$750,000	\$39,474
Subtotal		\$9,202,192	\$8,432,500	\$769,692
2009				
14	Land Acquisition (Approach Protection)	\$2,000,000	\$1,900,000	\$100,000
15	Terminal Construction (Phase I)	\$6,666,666	\$5,000,000	\$1,666,666
16	Apron B Rehab. Construction	\$1,000,000	\$950,000	\$50,000
17	ARFF/Maintenance Bldg. Construction	\$1,700,000	\$1,190,000	\$510,000
18	Apron C Rehab. Construction	\$752,632	\$715,000	\$37,632
19	Taxiway Lighting Upgrades	\$500,000	\$475,000	\$25,000
20	Runway Extension Design Phase II	\$421,053	\$400,000	\$21,053
21	Runway 1-19 Lighting Installation	\$631,579	\$600,000	\$31,579
Subtotal		\$13,671,930	\$11,230,000	\$2,441,930
2010				
22	Land Acquisition (Approach Protection)	\$5,555,556	\$5,000,000	\$555,556
23	Runway Extension Construction (Phase I)	\$6,666,667	\$6,000,000	\$666,667
24	Terminal Construction (Phase II)	\$15,600,000	\$11,700,000	3,900,000
25	Taxiway D Extension Design	\$250,000	\$225,000	\$25,000
26	Apron F Overlay	\$600,000	\$540,000	\$60,000
27	Runway 1-19 Interior Parallel Taxiway Design	\$328,333	\$295,500	\$32,833
Subtotal		\$29,000,556	\$23,760,500	\$5,240,056

Table 5-1

Capital Improvement Program

Sonoma County Airport

		Estimated Costs (in 2007 dollars)		
		Total	Federal	County
2011				
28	Land Acquisition (Approach Protection)	\$5,555,556	\$5,000,000	\$555,556
29	Runway Extension Construction (Phase II)	\$5,555,556	\$5,000,000	\$555,556
30	Runway 14-32 Lighting Upgrades	\$555,556	\$500,000	\$55,556
31	Taxiway D Extension Construction	\$750,000	\$675,000	\$75,000
32	Runway 1-19 Interior Parallel Taxiway-Construction	\$1,055,556	\$950,000	\$105,556
33	Apron E Rehab. Design	\$222,222	\$200,000	\$22,222
Subtotal		\$13,694,446	\$12,325,000	\$1,369,446
2012				
34	Apron E Rehab Construction	\$666,667	\$600,000	\$66,667
35	Taxiway D Rehab Design	\$222,222	\$200,000	\$22,222
36	Taxiway D Lighting Rehab Design	\$166,667	\$150,000	\$16,667
37	Taxiway Y Overlay	\$833,333	\$750,000	\$83,333
38	Runway 1-19 Seal Coat	\$388,889	\$350,000	\$38,889
Subtotal		\$2,277,778	\$2,050,000	\$227,778
Total of Short-Range Projects		\$67,846,902	\$57,798,000	\$10,048,902
Mid-Range Projects (2013-2017)				
39	Design and Construct Air Cargo Facility	\$2,777,777	\$2,500,000	\$277,777
40	Taxiway Construction for New Hangars	\$1,000,000	\$900,000	\$100,000
41	Construct New ATCT and Infrastructure	\$5,000,000	\$4,500,000	\$500,000
Subtotal		\$8,777,777	\$7,900,000	\$877,777
Mid-Range Projects (2018-2022)				
42	Overlay Runway 14-32	\$5,000,000	\$4,500,000	\$500,000
Subtotal		\$5,000,000	\$4,500,000	\$500,000
Long-Range Projects (2023-2027)				
43	Overlay Runway 1-19	\$2,000,000	\$1,800,000	\$200,000
Subtotal		\$2,000,000	\$1,800,000	\$200,000
TOTAL		\$83,624,679	\$71,998,000	\$11,626,679

Source: Mead & Hunt (May 2007)

Table 5-1, continued

**Capital Improvement Program
Sonoma County Airport**

Development Increments—One means to help ensure financially sound development is to avoid constructing facilities too far in advance of the demand. As noted in Chapter 2, the growth in numbers of based and transient aircraft at Sonoma County Airport is expected to be moderate over the 20-year time horizon of the Master Plan. The growth rate for the principal measure of demand—the size of the airport’s based aircraft fleet—is expected to average 2.0% per year. The reality, though, is that increases in the fleet size are more likely to occur in larger increments than the two or three per year that this average growth rate would suggest. For example, at present an existing unmet demand for at least 10 to 20 additional hangar units appears to exist. One new hangar building thus might represent some five years growth.

Development Staging—The challenges to staging of development over an extended time period are twofold. One challenge is to minimize costly “phase one” construction that may not be fully utilized for many years. Balanced against this objective is the need to ensure that early development is not located in a manner that, while perhaps less expensive initially, hinders later phases of development. The goal is to have a plan that is flexible enough to adapt to changes in type and pace of facility demands, is cost-effective, and also is functional at each stage of development.

CAPITAL FUNDING SOURCES

There are a variety of resources from which funding and financing for general and commercial aviation airport facilities and improvements can be obtained. These resources include federal grants, bonds, airport sponsor self-funding, and private investment.

Federal Aviation Administration Grants

Currently, the most common source of federal aid for airport facilities is the Airport Improvement Program (AIP) administered by the FAA. Reauthorized in 2004, the current AIP is the latest evolution of a funding program originally authorized by Congress in 1946 as the Federal Aid to Airports Program (FAAP).

The AIP is based upon a user trust fund concept, allocating aviation-generated tax revenues for specified airport facilities on a local matching share basis. The program currently provides for 95% federal participation and 5% local participation on eligible airport projects. However, this funding bill expires on September 30, 2007. Future authorizations may entail only a 90/10 percent split.

Under the AIP, there are both *entitlement* and *discretionary* grants. There are two types of entitlement grants in the current program. General aviation airports can qualify for up to \$150,000 annual entitlement. Commercial service airports in the “Primary” category qualify for large entitlement grants based upon the volume of passengers enplaned at the airport in the prior year. Discretionary grants are awarded on a competitive basis based upon need. As a commercial airport, Sonoma County Airport qualifies for both entitlement and discretionary funding.

State Aviation Grants

The State of California operates a grant program similar in concept to the Federal AIP program. As a commercial service airport, Sonoma County Airport is excluded from this program.

State Annual Grant

General aviation airports are eligible to receive a \$10,000 annual grant. These funds can be used for airfield maintenance and construction projects, as well as airfield and land use compatibility planning. It is possible to accumulate these funds for up to five years. As a commercial service airport, Sonoma County Airport does not qualify for these funds.

State Loan Program

The Caltrans Division of Aeronautics also administers a revolving loan program. Loans are available to provide funds to match AIP grants or develop revenue-producing facilities (e.g., aircraft storage hangars).

Other Grant Programs

Airport projects can also sometimes qualify for grant funding from nonaviation sources. Although not commonly available, airports have received grants from a variety of federal and state programs, including: economic development, community development, and rural infrastructure.

Bonds

Bond funds are a potential source of revenue to support development of larger projects. Given the high underwriting costs and availability of federal grant funds for most of the airport's projects, there is a limited potential for this type of funding be used. Those projects with a reliable revenue stream (e.g., paid parking lots and tenant space in the terminal) are the most likely candidates for bond funding. Where suitable projects exist, airports are sometimes able to participate in bonds being issued by county or regional agencies.

Airport Sponsor Self-Funding

At commercial service airports the size and character of Sonoma County, airport sponsor self-funding is principally provided by a combination of airport-generated income and retained earnings. Funding of airport improvements that are not grant eligible and providing the local matching share for grants-in-aid from these sources is the simplest and often most economical method because direct interest costs are eliminated. The special case of Passenger Facility Charges is discussed below.

Passenger Facility Charges

Since 1992, airports have been authorized to charge airline passengers a fee, known as a passenger facility charge, which the airlines collect as an add-on to the airfare. The maximum fee was originally set at \$3.00 per leg of a flight, up to a maximum of \$12.00. Beginning in 2000, Congress authorized an increase in the maximum PFC rate to: \$4.50 per segment, with a cap of \$18.00 for a roundtrip. Congress is currently considering raising the maximum PFC amount, but to what extent is not currently known. These taxes must be pledged to specific capital improvements that will: (1) preserve or enhance safety, capacity or security of the national air transportation system; (2) reduce noise; or (3) enhance competition between or among air carriers. Every PFC is tied to specific capital improvement projects that have been approved by the FAA. The fee expires when all of the money needed for the approved projects has been raised. However, new projects may be approved under a separate application.

Sonoma County Airport is not currently charging a PFC, but this could be a major source of funding for the required matching funds for AIP grants.

Private Investment

Private sector investment is an important source of funding for some types of airport improvements. At Sonoma County Airport, private funding is most likely to be used to construct aircraft storage hangars and fixed base operator facilities.

The most common sources of funding for private sector development are commercial lending institutions and insurance companies. In the case of private development on public lands, these types of financing may be difficult and expensive to obtain because the borrower can encumber only the improvements as loan collateral, attention to leasing policies and tenant contract negotiations. It is essential that agreements be reached with the tenants that provide for adequate airport revenues and facility development, while encouraging private investment and satisfying tenants' borrowing requirements. Specifically, the lease term should be sufficient to allow reasonable investment amortization over the period of the agreement.

Those capital expenditures that are most appropriately constructed with private funds have been excluded from the list of proposed capital projects identified in this *Master Plan* (see Table 5-1).

NEXT STEPS

Environmental Review

Environmental review under the provisions of the California Environmental Quality Act (CEQA) will be required before this plan can be adopted. It is anticipated that an Environmental Impact Report (EIR) will be required.

It is also anticipated that an Environmental Assessment (EA) will need to be prepared under the provisions of the National Environmental Policy Act (NEPA), although it is also possible that an Environmental Impact Statement (EIS) may be required. This determination is up to the FAA.

Sonoma County General Plan 2020 Air Transportation Element (Draft)

Sonoma County is currently in the process of updating its County General Plan (“*Sonoma County General Plan 2020*”) to provide policy guidelines for the unincorporated areas of the county to direct growth and development to the year 2020. Included in the General Plan update process is an updated *General Plan Air Transportation Element* (ATE). A review of the Public Hearing Draft 2020 Air Transportation Element (undated) indicates that virtually all of the commuter and scheduled airline service assumptions, and the goals and objectives used in the 1992 ATE have been carried forward with the exception of the 2005 date, which has been changed to 2020.

Because the currently adopted ATE had projected certain activity levels for 2005 based on aircraft fleet mix and boarding load factors developed in 1992, and since then many things have changed in the airline industry, the ATE must be amended. For example, the 15-passenger commuter airliners and 50-passenger regional jets used as the bases for the ATE projections will not likely ever see substantial service at the Sonoma County Airport.

Similarly, the definition of a commuter airliner set forth in the ATE is not consistent with current terminology. The ATE classifies any commercial aircraft used in scheduled intrastate service as a commuter airline. This means that any aircraft, including those with as many as 135 passenger seats and capable of using the airport, used in intrastate service would be classified as a commuter airline. This definition also needs to be reevaluated.

For reasons of consistency, the assumptions developed in the Sonoma County Airport Master Plan Update and the 2020 Sonoma County General Plan Update must be the same. The ATE should be thoroughly reviewed to ensure that any assumptions or other information projected to the year 2020 are consistent with the operational realities of the Airport and current airline trends.

Comprehensive Airport Land Use Plan

In January 2001, the Sonoma County Airport Land Use Commission (ALUC) adopted the *Comprehensive Airport Land Use Plan Update* for Sonoma County. The plan presents noise, safety and airspace policies for the Sonoma County airports, including STS. The safety zones in this plan were defined to encompass areas that are regularly overflown at and below traffic pattern altitude. Noise policies were linked to the CNEL 55dB noise contour produced for the plan. Airspace policies were tied to the airspace surfaces defined in Federal Aviation Regulations Part 77.

The written policies in the Comprehensive Airport Land Use Plan Update are consistent with the guidance contained in the *California Airport Land Use Planning Handbook* (December 1993 edition). However, the Handbook was updated in 2002 and the safety zone configurations revised. For this reason alone the CLUP should be updated. State ALUC law requires that the draft airport

master plan be reviewed by the ALUC for a consistency determination. Because this Master Plan proposes changing the lengths of Runways 1-19 and 14-32, and the fact that the CLUP safety zones are outdated, the Airport Noise and Safety Zones Map for the Sonoma County Airport should be revised.