



## 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 (CIP). 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 CIP for the 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 \$158 million). Federal funds would total about \$142 million with the Airport's contribution at about \$7 million. In this budget, the Airport's contribution includes funds generated from Passenger Facility Charges (PFC) (discussed below). Depending upon funding availability some of the short-range projects could slip into the mid-ranges.

The project costs listed in the CIP represent order-of-magnitude estimates in 2011-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 2011 dollars)		
		Total	Federal	County
<b>Short-Term Projects (within 5 years)</b>				
<b>2011-2013</b>				
1	Land Acquisition for RSA Improvements	\$ 2,500,000	\$2,375,000	\$125,000
2	Environmental Mitigation for RSA Improvements	\$8,600,000	\$8,170,000	\$430,000
3	Design RSA Improvements	\$2,000,000	\$1,900,000	\$100,000
4	Seal Coat Runway 1-19 and Lighting	\$1,200,000	\$1,140,000	\$60,000
5	Construct Taxiway V and Lighting	\$4,050,000	\$3,847,500	\$202,500
6	Construct Taxiway D at Runway 1	\$780,000	\$741,000	\$39,000
7	Construct Taxiway D at Runway 32	\$1,080,000	\$1,026,000	\$54,000
8	Overlay and Widen Taxiway B and Lighting	\$600,000	\$570,000	\$30,000
9	Extend Runway 19	\$2,160,000	\$2,052,000	\$108,000
10	Extend Runway 14	\$8,580,000	\$8,151,000	\$429,000
11	Construct Runway 14 Holding Apron	\$4,440,000	\$4,218,000	\$222,000
12	Construct Runway 1 Service Road	\$360,000	\$342,000	\$18,000
13	Construct Runway 14/19 Service Road	\$570,000	\$541,500	\$28,500
14	Construct Runway 32 Service Road	\$300,000	\$285,000	\$15,000
15	Relocate Localizer	\$750,000	\$712,500	\$37,500
<b>Subtotal</b>		<b>\$37,970,000</b>	<b>\$36,071,500</b>	<b>\$1,898,500</b>
<b>2014</b>				
16	ARFF Building Environmental	\$ 500,000	\$475,000	\$25,000
17	ARFF Building Design	\$ 750,000	\$712,500	\$37,500
18	Land Acquisition	\$2,500,000	\$2,375,000	\$125,000
<b>Subtotal</b>		<b>\$3,750,000</b>	<b>\$3,562,500</b>	<b>\$187,500</b>
<b>2015</b>				
19	Design/Construct Vehicle Parking Facility	\$2,500,000	\$2,375,000	\$125,000
20	ARFF Building Construction	\$7,000,000	\$6,650,000	\$350,000
<b>Subtotal</b>		<b>\$9,500,000</b>	<b>\$9,025,000</b>	<b>\$475,000</b>
<b>2016</b>				
21	Design/Construct Taxiway D and Runway 32 Run-up Apron and Demolish Taxiway Z	\$1,365,000	\$1,296,750	\$68,250
22	Design/Construct Apron C / Air Carrier Ramp	\$1,400,000	\$1,330,000	\$70,000
<b>Subtotal</b>		<b>\$2,765,000</b>	<b>\$2,626,750</b>	<b>\$138,250</b>
<b>TOTAL OF SHORT-TERM PROJECTS</b>		<b>\$53,985,000</b>	<b>\$48,560,750</b>	<b>\$2,699,250</b>

Table 5-1

**Capital Improvement Program (CIP)  
Sonoma County Airport**

Mid-Term Projects		Estimated Costs (in 2011 dollars)		
		Total	Federal	County
<b>2017 - 2021</b>				
23	Design/Construct Runways, Parallel Taxiways and Taxiway D Seal Coat	\$1,550,000	\$1,472,500	\$77,500
24	Design/Construct Laughlin Road Realignment	\$3,500,000	\$1,425,000	\$75,000
25	Terminal Environmental	\$3,000,000	\$2,850,000	\$150,000
26	Terminal Design and Construction	\$45,000,000	\$42,750,000	\$2,250,000
27	Design/Construct Runway Visual Range Indicators	\$350,000	\$332,000	\$17,500
28	Design/Construct Centerline Lighting	\$1,500,000	\$1,425,000	\$75,000
29	Design/Construct Upgrade Electrical Vault	\$150,000	\$142,500	\$7,500
<b>TOTAL OF MID-TERM PROJECTS</b>		<b>\$55,050,000</b>	<b>\$50,397,000</b>	<b>\$2,652,500</b>
<b>Long-Term Projects</b>				
<b>(2022 – 2027)</b>				
30	Design/Construct Apron F Reconstruction	\$1,200,000	\$1,140,000	\$60,000
31	Design/Construct Apron F Expansion	\$7,000,000	\$6,650,000	\$350,000
32	Design/Construct Nob Hill Apron (Apron E)	\$3,500,000	\$1,425,000	\$75,000
33	Design/Construct Runway and Taxiway Overlay	\$12,000,000	\$11,400,000	\$600,000
34	Design/Construct Apron D Rehabilitation	\$2,000,000	\$1,900,000	\$100,000
35	Design/Construct Taxiway A Rehabilitation	\$870,000	\$826,500	\$43,500
<b>Subtotal</b>		<b>\$26,570,000</b>	<b>\$23,341,500</b>	<b>\$1,228,500</b>
<b>2028</b>				
36	ATCT Environmental	\$ 500,000	\$475,000	\$25,000
37	Design/Construct ATCT	\$9,000,000	\$8,550,000	\$450,000
38	Land Acquisition	\$2,500,000	\$2,375,000	\$125,000
39	Hangar Development	\$5,000,000	\$4,750,000	\$250,000
40	Design/Construct Ordinance Road Rehabilitation	\$ 750,000	\$712,500	\$37,500
41	Design/Construct Taxiway A Rehabilitation	\$1,000,000	\$950,000	\$50,000
42	Future Aeronautical Site Development	\$3,500,000	\$1,425,000	\$75,000
<b>Subtotal</b>		<b>\$22,250,000</b>	<b>\$19,237,500</b>	<b>\$762,750</b>
<b>TOTAL OF LONG-TERM PROJECTS</b>		<b>\$48,820,000</b>	<b>\$42,579,000</b>	<b>\$1,991,250</b>
<b>TOTAL OF ALL PROJECTS</b>		<b>\$157,855,000</b>	<b>\$141,536,750</b>	<b>\$7,343,000</b>

Source: Mead & Hunt (May 2011)

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 the 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 less than 1% 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.

**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 expired on September 30, 2007 and has been extended on short-term bills (20 as of June 2011). 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 service airport, the 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, the 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, the 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). The Airport qualifies for this program.

## 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 PFCs 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.

The Airport is ~~not~~ currently charging a PFC, for a variety of projects including: passenger terminal renovation, security upgrades, safety equipment, and reimbursement of the local share of previous grants. The Airport expects to continue using funds from this program to fund various CIP projects in the future.

## **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. An Environmental Impact Report (EIR) is being prepared to provide the data necessary to evaluate the environmental effects of the project under State law.

An Environmental Assessment (EA) is also being prepared under the provisions of the National Environmental Policy Act (NEPA). This EA will provide the FAA with the information required to

assess the environmental effects of the project. It is 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**

For reasons of consistency, the assumptions developed in the *Sonoma County Airport Master Plan* and the *Sonoma County General Plan 2020 Air Transportation Element (ATE)* must be the same. The ATE should be revised to ensure that any assumptions or other information projected to the year 2020 are consistent with the activity forecasts contained in this Master Plan. Additionally, definitions should be updated to reflect current aviation industry practices. Appropriate revisions to the ATE to provide the needed consistency have been developed during preparation of the EIR for the Master Plan. Adoption of the ATE revisions by the Board of Supervisors at the time that this Master Plan is approved would ensure consistency between the two documents.

## **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 the Airport. The safety zones in this plan were defined to encompass areas that are regularly overflowed 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 reevaluated by the ALUC. State ALUC law requires that the draft Airport Master Plan be reviewed by the ALUC for consistency with the CLUP. Because this Master Plan proposes changing the lengths of Runways 1-19 and 14-32, and new noise contours are available, the Airport Noise and Safety Zone Maps for the Airport should be revised.

