

Santa Clara County Airports Business Plan

Reid-Hillview and San Martin Airports



San Martin Airport



Reid-Hillview Airport

County of Santa Clara Airports Business Plan

Table of Contents

Executive Summary	3
Introduction	5
Overview of the 2006 Airport Master Plans	8
Recent Trends in General Aviation	
Recent Trends at County of Santa Clara Airports	11
Airport Enterprise Fund Overview	12
AEF Revenues	12
AEF Expenditures	
RHV vs. E16	14
AEF Trend	14
Retained Earnings	15
Long-term Debt	15
Airport Capital Improvement Plans and Long Range Facility I	
ACIPs	16
Long Range Facility Planning	18
Schedule of Fees & Charges	21
A New Business Model for the AEF	22
RHV Non-Aviation Commercial Parcels	23
Existing RHV FBO Leaseholds	24
RHV/E16 Solar Farms	27
Existing E16 FBO Leasehold	27
Existing E16 Non-Aviation Parcel	27
Future Considerations for Community Benefitting Parcels	28

New Revenue Summary	29
Role of the Federal Airport Improvement Program (AIP)	31
Overview	31
History of AIP Funding and Future Need	31
Summary	33
APPENDICES	35
Appraisals	35
Airports Master Plan and Business Plan	35
Santa Clara County Airports Business Plan Updates	36
Long Range Facility Plan	36
FAA Grant Assurances	36

EXECUTIVE SUMMARY

The general objective of updating the 2006 Airport Business Plan for the Reid-Hillview and San Martin Airports is the need to provide a foundation for future policy decisions by the County of Santa Clara Board of Supervisors (BOS) regarding the two County-owned and operated airports. The updated Business Plan addresses the self-sustaining ability of the Airport Enterprise Fund, capital improvement programs, public and private development on the airports, including the use of properties for non-aviation commercial uses not needed for future aviation facilities.

The airports are federally designated reliever airports for the San Jose International Airport and are intended to provide additional capacity, or relief, for San Jose International Airport and to accommodate general aviation activity in the area. The airports primarily serve small, piston and propeller single-engine and twin-engine aircraft with limited use by turboprop and business jet aircraft.

The Airport Enterprise Fund (AEF) budget is currently about \$2.5 million per year. Historically, the AEF revenues have been sufficient to fund expenses and provide the local matching funds for Federal Aviation Administration (FAA) Airport Improvement Program (AIP) grants. The number of small, single-engine and twin-engine aircraft has been decreasing on a nationwide basis over many years. There were 777 based aircraft at County airports in 2006. In 2018 County airports had 627 based aircraft. The decreases in based aircraft at the Reid-Hillview Airport in particular have negatively affected the AEF and its ability to remain financially self-sustaining. These trends suggest that the County update its business model, which has historically relied on aircraft storage fees for over 75 percent of the total revenues, to a business model with a more diversified and higher-yielding revenue stream.

The major source of funding for capital improvement projects for the County airports has been from FAA Airport Improvement Program grants plus matching California Department of Transportation, Division of Aeronautics grants. The County has not accepted FAA Airport Improvement Program grants since 2011. The Airport Enterprise Fund has \$6.7 million in long-term debt: \$3.7 for the San Martin Airport Hangar Project completed in 2008 and a \$3 million loan from the County General Fund in 2017 to fund airfield pavement rehabilitation projects at both airports. The FAA has indicated that a portion of the \$3 million pavement projects can be retroactively reimbursed to the County if the County accepts FAA Airport Improvement Program grants. The projected Airport Enterprise Fund has an unencumbered retained earnings balance at the end of fiscal year 2018 of \$2.8 million that is equivalent to slightly more than one year of operating expenses.

Generating a more diversified and higher-yielding revenue stream will require putting the airports' real property assets to work by leasing certain parcels that are not required for aviation use for non-aviation commercial development and by restructuring the fixed base operator leaseholds at the Reid-Hillview Airport. Several parcels have been identified that could be developed for non-aviation commercial activities. It is estimated that developing these properties could add approximately \$3 million annually to the Airport Enterprise Fund revenues. FAA approval is required before the County can lease these properties for private development.

In all the report identifies about \$5 million in possible new revenue. Although some of the new revenues will items require policy decisions, lease negotiations, and business decisions that may involve risk.

This report identifies approximately \$20 million in capital and maintenance needs for both airports. These costs can be programmed over a 10 year period depending on the urgency of the need. Approximately \$10.7 million in airfield investment is needed, most of which would be eligible for FAA Airport Improvement Program grants. In addition, an estimated \$8.9 million in deferred maintenance needs have been identified for the existing buildings at both airports.

While some items can be deferred to later years, the existing condition of the administration/terminal building at RHV is described as critical in the consultant's report. Minor maintenance issues were identified for the County-owned hangars at the San Martin Airport.

Over the long term, the Airport Enterprise Fund can generate sufficient revenue to fund anticipated operating and capital costs by leasing the airports' real property assets. Since it can take several years for the leasing process to begin producing revenue, a subsidy may be required in the short term. The Airport Enterprise Fund cannot remain financially self-sustaining unless the airports' real property assets are utilized to generate additional revenue.

The FAA Airport Improvement Program grants currently provide 90 percent of eligible project costs, providing leverage for use of Airport Enterprise Fund dollars. However, operating the airports without federal grant assistance going forward may afford the County more flexibility in some areas with respect to future airport operations beginning in 2031 when the County's existing federal grant obligations expire.

Introduction

The existing Business Plan for Reid Hillview Airport (RHV) and San Martin Airport (E16) was originally developed in conjunction with the Airport Master Plan updates in 2006 (Attachment). The Business Plan provides a comprehensive analysis of the airports' finances and outlines their respective business strategies.

Since that plan was approved, a number of significant events have transpired that warrant an update to the Business Plan.

- The economy experienced a deep recession and slow recovery;
- Palo Alto Airport was transferred to the City of Palo Alto and is no longer part of the County of Santa Clara's airport system;
- All nine of the Fixed Base Operator (FBO) leases at RHV were amended to synchronize their expiration dates to December 31, 2021;
- San Jose State University relocated its aviation program to RHV and Gavilan College relocated its aviation program to E16.

In addition, a long-running dispute with the Federal Aviation Administration (FAA) relating to skydiving at E16 was resolved. During the period that the dispute was active the FAA did not grant any federal monies to the County of Santa Clara Airports.

These events alone have enough effect on the Airports business model to warrant an update to the Business Plan. Staff is also concerned about the current state of the Airport Enterprise Fund (AEF).

The AEF by County Policy is required to be a stand-alone, self-sufficient fund that generates enough revenue to pay for all operating expenses. The following two figures compare revenue and expenses at the airports for the past ten years. Figure 1 is inclusive of capital projects and FAA AIP funding while Figure 2 has removed capital projects and FAA AIP funding to more clearly depict the general operating budget.

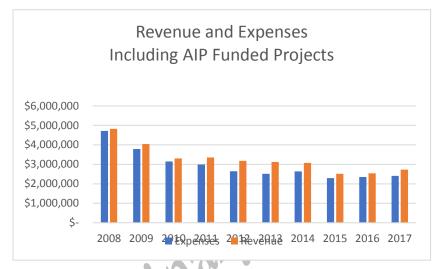


Figure 1: Revenues and Expenses Including AIP Funded Projects by Fiscal Year

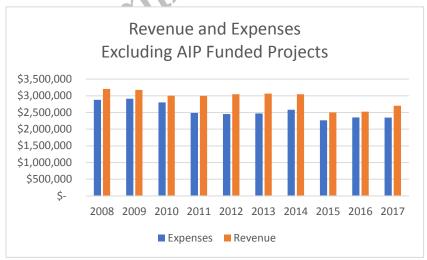


Figure 2: Airport Enterprise Fund Revenues and Expenses Excluding AIP Funded Projects by Fiscal Year

All fees charged for use of the airports are published in the *Schedule* of Fees and Charges for Santa Clara County Airports. Most of those fees are indexed to the Bay Area Consumer Price Index. The AEF has

benefited from this annual adjustment. In addition, cost savings efforts including staff reductions have kept expenses below revenues. Forward-looking projections that take into account expected increases in operational costs and continued decrease in demand for aircraft storage however indicate the AEF is quickly reaching the intersection point of revenues and expenses. Figure 3: 2018-2025 Projected Revenues and Expenses by Fiscal Year depicts revenues and expenses projected to 2025 with the following assumptions:

- Annual 3.0% increase in expenses and revenues which is the average annual CPI increase for the preceding 15 years; and,
- New solar revenues (discussed on page 27) begin to accrue in FY 2019; and,
- FY 2020, the AEF begins making \$200,000 annual principal payments on the General Fund loan for the 2018 pavement reconstruction project at RHV and E16; and,
- 1.5% annual decrease in based aircraft.



Figure 3: 2018-2025 Projected Revenues and Expenses by Fiscal Year

In light of the aforementioned information, the County of Santa Clara Board of Supervisors directed staff to update the Airports business plan and approved the scope to include:

• Performing a fresh analysis of the AEF overall, as well as the individual airport's finances;

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¹ Average annual decrease in county tie-down, hangar and shelter occupancy over the past ten years.

- Examining the interrelationship between the AEF operating budget and capital budget;
- Developing long-range facilities plans (LRFP) for the airports' infrastructure, including associated cost estimates;
- Reviewing the Airports Capital Improvement Plans (ACIP) including associated cost estimates;
- Determining the additional revenue necessary to fund the airports' projected operating and capital expenses going forward;
- Identifying ways to diversify the airports' existing revenue streams as well as identifying potential cost-saving measures;
- Reexamining the airports' Schedule of Fees and Charges and recommending changes accordingly;
- Determining the optimal re-leasing strategy for the airports' FBO leasehold areas;
- Determining the optimal leasing strategy for the areas identified in the RHV Master Plan for non-aviation commercial development;
- Determining the appropriate role of federal Airport Improvement Program (AIP) grants to fund eligible capital improvement projects.

OVERVIEW OF THE 2006 AIRPORT MASTER PLANS

In 2018, the master planning process sought to define the role of each county airport, in terms of both its purpose with respect to the overall transportation network as well as its function with respect to accommodating the projected growth in the number of airport-based aircraft. Once the airport's role was defined, the consultant team then determined the facilities necessary to implement that role.

The Board adopted the following principles to guide development of the Master Plan (MP) and Business Plan for each County airport:

- Meet the needs of the aviation community.
- Preserve the quality of life for residents living near the airports.

- Maintain the integrity of the airport safety zones.
- Ensure that the AEF is self-sustaining without subsidy from the County General Fund. (Discussed in more detail below).

Based on existing demand and projected future growth in the San Jose – Gilroy corridor over the Master Plan lifespan, the MP recommended that E16 be developed to accommodate regular use by business jets. E16 was also designated to accommodate the majority of the projected countywide growth in airport-based aircraft.

As a result, the E16 MP proposed that the existing 3,100 foot runway be extended to 5,000 feet on its current alignment and be widened from 75 feet to 100 feet. Corresponding non-airfield improvements included construction of additional aircraft storage hangars², more transient aircraft parking and a second FBO as well as a new terminal building, maintenance building and vehicle parking.

With respect to RHV, the MP recommended maintaining the airport's existing role as serving primarily small piston-propeller aircraft and proposed a minimal increase in basing capacity. The RHV MP focused on airfield improvements that would enhance safety and provide for more orderly aircraft ground movements. Proposed improvements related to these goals included expanding the Runway Safety Areas (RSA) and Object Free Areas (OFA) at the south end of the existing parallel runways to meet current FAA design standards as well as constructing a west side parallel taxiway.

RECENT TRENDS IN GENERAL AVIATION

The term "General Aviation" (GA) encompasses a wide range of aeronautical activities and types of aircraft including business jets, piston-propeller aircraft, light sport aircraft, fixed-wing turbine-powered aircraft, rotorcraft, and other similar aircraft. The relative strength of these various segments of GA business can differ substantially, thus, when citing GA statistics it is essential to avoid generalizations and to cite statistics appropriate to the particular segment being considered. It is also important to note that local conditions may differ substantially from nationwide trends. Since all but a very small percentage of aircraft based at the County airports are

² In addition to the 100 hangars that were already under construction at the time the Draft Master Plan was completed.

³ General aviation is defined by the FAA as all civil aviation not classified as air carrier, commuter/air taxi or military.

piston-propeller aircraft, this section focuses on the piston-propeller segment of GA.

By most metrics, the piston-propeller segment of GA has contracted nationwide since the completion of the BP in 2006, which also coincided with the start of the Great Recession⁴:

- Average annual U. S. manufactured GA piston-propeller airplane shipments dropped 60% in the eight-year period between 2009 and 2016 (751 annually) compared to the immediately preceding eight-year period between 2001 and 2008 (1,865 annually).
- The number of total active U. S. General Aviation and On-Demand Federal Aviation Regulations Part 135⁵ piston aircraft declined by 16% from 2008 to 2016 and is predicted to continue to decline by about 1% annually through 2025. According to the FAA Aerospace Forecast Fiscal Years 2017 2037, "Unfavorable pilot demographics, overall increasing cost of aircraft ownership, coupled with new aircraft deliveries not keeping pace with retirements of the aging fleet are the drivers of the decline."
- The total number of estimated hours flown by these piston aircraft declined by over 27% during this same time period and is predicted to continue to decline by 1.4% annually through 2025.
- The total number of U. S. General Aviation operations declined by 12% from 2008 to 2016.
- The number of active FAA certificated pilots declined from 827,000 in 1980 to 584,000 in 2016.
- The average number of original private pilot certificates and student pilot certificates issued annually in the seven-year period between 2009 and 2015 dropped by 24% and 14%, respectively, compared to the immediately preceding seven-year period between 2002 and 2008.

These national trends indicate a decline in the GA market and in particularly the piston-propeller segment which is most prevalent at the County of Santa Clara airports.

⁴ Source: General Aviation Manufacturers Association (GAMA) 2016 General Aviation Statistical Databook & 2017 Industry Outlook

⁵ On-Demand FAR Part 135 operations include air taxi (i.e. charter), air tours, and airmedical operations.

⁶ An active pilot is defined as a pilot who holds a pilot certificate and a valid medical certificate (except for sport pilots, which comprise about 1% of the total number of pilots).

RECENT TRENDS AT COUNTY OF SANTA CLARA AIRPORTS

These overall trends negatively affected the County airports by reducing demand for aircraft parking. Use of County-owned hangars, shelters and tie-downs dropped from 319 in 2007 to 270 in 2017, a 15% decrease.

Conversely, the number of aircraft operations⁷ at RHV *increased* nearly 50% from 2010 to 2017. In 2010 RHV had approximately 110,000 operations and in 2017 it had about 163,000 operations. The significant factor in the increase in aircraft operations, despite a decrease in total based aircraft, is flight training.

The increase in the number of flight training operations has its roots in several commercial aviation trends that have increased demand for commercial and Airline Transport (ATP) rated pilots:

- Domestic commercial passenger enplanements are projected to increase steadily throughout the FAA's 20-year forecast period from 2017 2037; and,
- Airlines are embracing smaller, more efficient aircraft which allow more point-to-point flights; and,
- The number of GA business jets continues to grow; and,
- Use of the GA business jet fleet is projected to grow annually by 3%.

The increase in demand for commercial and ATP-certificated pilots is causing a commensurate increase in the demand for professional flight training. A number of flight training schools operate at RHV and attract students from all over the world, including Japan, China, India and Korea.

The FAA Air Traffic Control Tower (ATCT) tracks and categorizes all operations at an airport during the tower's operational hours. Of the many metrics used to categorize those flights, the itinerant and local⁸ categories are helpful to highlight the effect of flight training

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⁷ An operation is defined as a single take-off or landing.

⁸ (1) Local operations mean operations performed by aircraft which:(i) Operate in the local traffic pattern or within sight of the airport;(ii) Are known to be departing for, or arriving from flight in local practice areas located within a 20-mile radius of the airport; or(iii) Execute simulated instrument approaches or low passes at the airport.

on the operations level at Reid-Hillview Airport. A local flight is one that does not leave the general area around the airport, and thus is most likely the result of pilot training. For calendar year 2017, Reid-Hillview had approximately 163,000 operations with 45% of them categorized as itinerant and 55% of them categorized as local flights.

There are 518 airports nationwide that report operation statistics to the FAA. When ranking airports by the quantity of operations, RHV is ranked No. 73 nationally and No. 12 in California. When the operations numbers are refined to remove military and commercial aircarrier operations, leaving primarily GA operations, Reid Hillview is ranked No. 24 nationally and No. 7 among California airports.

The high number of flight training operations at RHV impacts the number of operations at E16 as well. San Martin airport is a short flight from RHV and provides a convenient location to practice pattern work without the congestion present at RHV and without the pressure of communicating with the Air Traffic Control Tower. This is especially beneficial for newer student pilots.

AIRPORT ENTERPRISE FUND OVERVIEW

AEF Revenues

AEF revenue is approximately \$2.7 million and is comprised of several categories whose relative contribution to total revenue has been consistent over time. For many years, approximately three-quarters of total AEF operating revenue has been generated from County-owned aircraft storage spaces (i.e. hangars, shelters and tie-downs). In FY 2017, this revenue source generated \$2.1 million (76% of total revenue). Revenue from the ten Fixed Base Operators (FBO) ground leases (nine at RHV and one at E16) comprises 10% of total revenue. All other miscellaneous revenue sources including property rental, fuel flowage fees, transient aircraft fees and interest income collectively generate about 14% of AEF revenues.

⁽²⁾ Itinerant operations mean all aircraft operations other than local operations. https://definitions.uslegal.com/a/aircraft-operations-aeronautics-and-space/

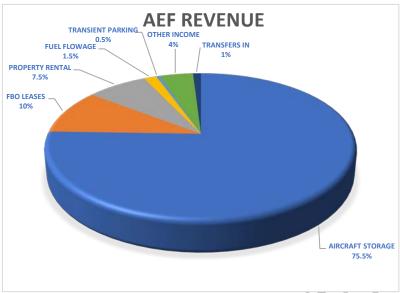


Figure 4: Fiscal Year 2018 Airport Enterprise Fund Revenue.

AEF Expenditures

Salaries and benefits comprise approximately 45% of total AEF expenditures. Debt service on bonds issued to fund the San Martin Airport Hangar project account for 15% of total airport expenses for FY 2018. The interest-only payment on the \$3,000,000 loan from the County General Fund to fund airfield pavement rehabilitation projects at both airports comprises 3% of AEF expenditures. Internal County charges account for 17% of total expenditures, facility maintenance 9%, utilities 6% and services/supplies 5%.

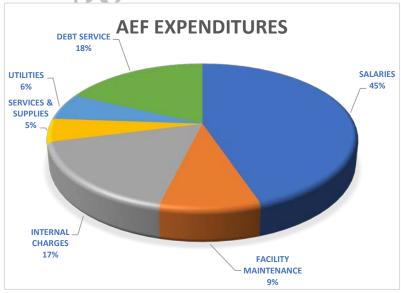


Figure 5: Fiscal Year 2018 Airport Enterprise Fund Expenditures.

RHV vs. E16

Although the AEF captures all airport finances in a single budget unit, the revenue and expenses associated with each of the two airports are tabulated for internal management and accounting purposes. Revenue and expenses directly attributable to each airport such as FBO lease revenue, aircraft storage space rental revenue, operations staff salaries, etc. are easily identified. General and administrative expenses (i.e. overhead) not attributable directly to an individual airport (insurance, management staff salaries, etc.) are captured in an expense pool and allocated to each airport based on a weighted formula that uses cost drivers such as the number of based aircraft, number of aircraft operations and number of major facilities.



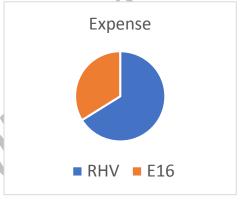


Figure 6: AEF Revenue by Airport

Figure 7: AEF Expense by Airport

RHV revenue generates approximately 72% of total AEF revenue and accounts for 64% of total expenditures (including allocated overhead). San Martin Airport generates approximately 28% of total AEF revenue and accounts for 37% of total expenditures. Thus, RHV currently subsidizes E16 to a slight degree.

AEF Trend

As mentioned above, the Board adopted principles to guide the development of the 2006 Airport Master Plan, including the following:

"The Airport Enterprise Fund should be self-sustaining without subsidy from the General Fund. Revenue from fees and charges, state and federal grants and other sources should be sufficient to fund operating and maintenance costs, capital improvements and an appropriate level of reserves."

Since the creation of the Roads & Airports Department, the AEF has generated sufficient operating revenue to fund operating expenses. Capital projects have been funded on a pay-as-you-go basis

using primarily federal and state grants when eligible. (The San Martin Airport Hangar Project mentioned earlier was ineligible for AIP funding and was bond-funded.) Therefore, the AEF had been self-sustaining financially prior to the Board's formal adoption of such a policy.

Due to a continual softening in demand for aircraft storage, revenue is rising slower than operating expenses, thereby putting pressure on the AEF operating budget. Staff has responded by cutting costs where possible, including reducing staffing to minimal levels. In light of the earlier discussion regarding trends in the piston-propeller segment of GA and RHV's emerging primary role as a flight training airport, it is clear that the AEF business model must adapt. **The AEF cannot continue to maintain financial self-sufficiency while relying on aircraft storage as its primary revenue source.** Under the current business model, the high number of aviation operations does not translate into revenue for the AEF. A key objective of this Business Plan is to identify a new business model going forward that comports with the airports' primary use as flight training airports while generating sufficient revenue.

Retained Earnings

The unencumbered portion of the AEF Fund Balance, referred to as Retained Earnings (RE) represents the AEF's "rainy day" fund and is one measure of the AEF's financial health. RE also serves to dampen the effect of irregular cash flow. A third function of RE is that it provides a place to accumulate an operating surplus, if any, for future capital project expenditures.

The projected AEF unencumbered Retained Earnings balance as of the end of the 2018 Fiscal Year is \$2.8 million, equivalent to slightly more than one year of operating expenses.

Long-term Debt

The AEF carries \$6,710,000 in long-term debt (projected as of June 30, 2018), \$3,710,000 of which is attributable to the San Martin Airport Hangar project completed in 2008 and \$3,000,000 of which is attributable to a loan from the County General Fund in 2017 to fund airfield pavement rehabilitation projects at both airports. The costs of the current pavement projects are eligible for retroactive reimbursement by the federal Airport Improvement Program (AIP) should the County resume accepting AIP grants, which is discussed in more detail below. The current long-term debt level is approximately 2.5 times annual revenue and 2.4 times the level of unencumbered Retained Earnings.

AIRPORT CAPITAL IMPROVEMENT PLANS AND LONG RANGE FACILITY PLANS

ACIPs

The Roads and Airports Department maintains six-year Airport Capital Improvement Plans (ACIP) for both E16 (*Table 1: E16 ACIP*) and RHV (*Table 2: RHV ACIP*). The ACIPs are documents submitted to the FAA each year and generally include only those projects eligible for FAA AIP funding. The main projects featured in the current RHV ACIP and not yet funded are identified as part of the master plan and include expanding the Runway Safety Areas (RSA) and Object Free Areas (OFA) at the south end of the existing parallel runways by shifting the runways 100 feet to the north to meet current FAA standards for airport design. Additional projects include constructing a west side parallel taxiway (estimated to cost \$2,480,000) and rehabilitating the perimeter fencing to enhance the airport's security and appearance (estimated to cost \$560,000).

The main projects featured in the current E16 ACIP and not yet funded include constructing an access road between the transient apron and the County-owned hangar area (estimated to cost \$720,000), installing a backup generator for the runway lighting and fire protection systems (estimated to cost \$110,000) and acquiring property at the south end of the airport for safety zones for the proposed runway extension (estimated to cost \$3,100,000).

Year	E16 Project Description	Cost
2019	Reimbursement for Pavement Rehabilitation	\$700,000
2020	ALP update with narrative and AGIS	\$250,000
2021	Prepare design, and bid documents for construction of access road between transient apron and hangar area	\$70,000
2021	Prepare Airport Pavement Management System	\$40,000
2022	Construction of access road between transient apron and hangar area	\$650,000
2022	Install backup generator for runway lighting and fire protection system.	\$110,000
2023	Prepare design and bid documents for construction of perimeter fencing	\$110,000
2023	Environmental assessment for property acquisition to protect approach for proposed runway extension	\$110,000
2024	Construction of perimeter fencing	\$400,000
2024	Property acquisition for safety zones and encroachment prevention	\$3,000,000
San Ma	artin Total	\$5,440,000

Table 1: E16 ACIP

Year	RHV Project Description	Cost
2019	Reimbursement for Pavement Rehabilitation ⁹	\$1,800,000
2020	ALP update with narrative and AGIS	\$250,000
2020	Reimbursement for Pavement Rehabilitation	\$166,667
2021	Prepare Airport Pavement Management System	\$45,000
2022	Prepare design and bid documents and perform Perimeter Fencing rehabilitation	\$560,000
2023	Prepare design and bid documents for shift of runways and construction of west side parallel taxiways and run-up ar- eas	\$280,000
2024	Perform shift of runways and construc- tion of west side parallel taxiways and run-up areas	\$2,200,000
Reid-H	fillview Total	\$5,301,667

Table 2: RHV ACIP

It must be noted that many of the projects on the ACIPs were originally identified over 12 years ago as part of the 2006 Master Plan process and should thus be reevaluated. For example, the project listed in E16 ACIP (Table 2) to acquire private property outside San Martin Airport to prevent future encroachment was envisioned in conjunction with a project to extend the runway to 5,000 feet. Although the property acquisition is still desirable, its necessity in the short term is questionable.

Long Range Facility Planning

The airports' utility and building infrastructure has a significant level of deferred maintenance and repair. In addition, a number of facility improvement projects have been identified as capital improvements.

⁹ This work was funded by a loan from the County General Fund but is eligible for reimbursement in the event the County resumes accepting AIP grants.

The County prepared a Long Range Facility Plan (LRFP) that identifies the airports' long-range facilities needs along with associated cost estimates. The LRFP is included in the Business Plan.

Kitchell prepared the LRFP report (page 36) outlining the 10-year Capital Renewal Costs for the RHV Terminal, RHV Swift Avenue office and hangar building and county owned E16 Hangars. They are currently working on an LRFP for RHV hangars/shelters and E16 fire pump. Roads & Airports staff prepared corresponding estimates for the airport pavements.

Similar to the ACIPs, some of the identified costs relate to capital improvements that, although desirable, are not mission-essential and thus can be deferred. For example, nearly \$5.5 million of the costs identified for the RHV Terminal Building are for rehabilitating the long-vacant second floor including a new elevator and exterior stairs.

	100	Current
Uni-	Reid-Hillview Terminal	Cost With-
format		out
Code	Building System Class	Escalation
B1020	Roof Construction	\$272,800
B1080	Stairs	\$430,700
B2020	Exterior Windows	\$700
B3060	Horizontal Openings	\$3,300
C2030	Flooring	\$300
C2050	Ceiling Finishes	\$300
D1010	Vertical Conveying Systems	\$321,600
D2010	Domestic Water Distribution	\$18,500
D2030	Building Support Plumbing Systems	\$10,100
D3030	Cooling Systems	\$209,800
D3050	Facility HVAC Distribution Systems	\$3,700
D3060	Ventilation	\$4,500
D5020	Electrical Service and Distribution	\$70,800
D5030	General Purpose Electrical Power	\$11,700
D5040	Lighting	\$223,400
D7050	Detection and Alarm	\$151,000
F3010	Special Construction and Demolition ¹⁰	\$4,701,100
G2020	Parking Lots	\$24,700
G2030	Pedestrian Plazas and Walkways	\$4,100
	Totals	\$6,463,100

 $^{^{10}}$ This item is for construction necessary to convert the RHV terminal building 2^{nd} floor into a warm shell for potential restaurant and office.

Table 3: (source: Kitchell)

Moreover, the expenditure of \$2.1 million of AEF resources in the Swift Avenue office building may not be justified given that the facility is tenant-occupied and does not serve a mission-essential function at the airport. The current tenants in this building include San Jose State University and Palmetto Ranch. The Swift leases should be reviewed in light of the LRFP report to ensure the lease rates provide for full cost recovery and that the AEF is not subsidizing the lease.

Uni-	Swift Avenue Office and Hangar	Cı	ırrent Cost
format	Building	Without Escala-	
Code	Building System Class	tion	
B1020	Roof Construction	\$	502,400
B2010	Exterior Walls	\$	4,300
B2020	Exterior Windows	\$ \$	500
B2050	Exterior Doors and Grilles	\$	600
B3020	Roof Appurtenances	\$	1,300
B3060	Horizontal Opening	\$ \$ \$	3,300
C1010	Interior Partitions		300
C1030	Interior Doors	\$	2,100
C2030	Flooring	\$	51,900
C2050	Ceiling Finishes	\$	6,000
D2010	Domestic Water Distribution	\$	11,500
	Building Support Plumbing Sys-		
D2030	tems	\$	8,100
	Process Support Plumbing Sys-		
D2060	tems	\$	3,300
D3030	Cooling Systems	\$	121,300
D3050	Facility HVAC Distribution Systems	\$	8,100
D5020	Electrical Services and Distribution	\$	45,500
D5030	General Purpose Electrical Power	\$	12,900
D5040	Lighting	\$	401,400
D7050	Detection and Alarm	\$	162,400
E2010	Fixed Furnishing	\$	9,300
F1050	Special Facility Components	\$	370,300
G2020	Parking Lots	\$	372,900
G4050	Site Lighting	\$	4,100
Totals Table 4: (source: Kitchell)		\$	2,103,800

Table 4: (source: Kitchell)

Capital maintenance of the hangers at San Martin Airport are estimated to cost about \$335,000.

	•			
Uni-	San Martin County Owned		Current Cost	
format	Hangars		thout Esca-	
Code	Building System Class	lation		
B1020	Roof Construction	\$	300	
B2010	Exterior Walls	\$	700	
B2050	Exterior Doors and Grilles	\$	3,000	
B3020	Roof Appurtenances	\$	3,500	
C1010	Interior Partitions	\$	3,000	
D3060	Ventilating	\$	40,000	
D5020	Electrical Services and Distribution	\$	31,300	
D5040	Lighting	\$	234,200	
D7050	Detection and Alarm	\$	14,100	
G2020	Parking Lots	\$	4,900	
	Totals	\$	335,000	

Table 5: (source: Kitchell)

The current ACIP and estimated LRFP costs total approximately \$33 million¹¹. Staff's analysis indicates that approximately \$20 million of the \$33 million will need to be invested over the next 10 years (in current dollars) to fund mission-essential repairs and improvements to the airports' infrastructure. Of this amount, roughly half would be eligible for AIP funding.

SCHEDULE OF FEES & CHARGES

Aries Consultants Ltd. was retained to review the County airports' existing Schedule of Fees and Charges and recommend adjustments. Aries notes that the County's current rates for aircraft storage are near the high end of airports surveyed and recommends reductions in the rates for RHV tie-downs and E16 hangars to attract more tenants. The report does not estimate the change in total revenue that might result from the combination of lower prices and the higher occupancy that would presumably follow the price reduction. For total revenue to increase, the increase in occupancy must generate at least enough new revenue to compensate for the reduction in revenue from existing tenants.

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¹¹ Not including line items relating to reimbursement of costs for the 2017/2018 pavement projects, which were funded by a loan from the County General Fund and are thus already included in the calculation of Long Term Debt.

It is also important to note that FAA Grant Assurances place some restrictions on the level of fees charged for aviation services at obligated airports. For instance, fees may not be set at a level that would unjustly discriminate against a class of aviation user. The FAA recognizes the right of airport sponsors to set reasonable fees and charges to offset the cost of operating the airport, however, when a disagreement occurs over a fee, the FAA is the final arbitrator as to what constitutes a fair and reasonable fee.

One source of revenue that is generally not utilized at GA airports is a landing fee. Traditionally found at commercial service airports, a landing fee is levied, based on the aircraft takeoff weight, on a commercial operator once the aircraft lands. Where there are a large number of flight operations at an airport, there is a substantial administrative burden related to tracking and billing landing fees. The cost of administering a landing fee program, when taking into account the market for such fees and the pricing constraints applied through Federal grant assurances, makes the implementation of a landing fee program unpopular for GA airports.

The larger issue is the AEF's overreliance on revenue from aircraft storage and the aforementioned industry trends that have resulted in both airports having excess basing capacity. The modest growth in based aircraft predicted in the MPs not only failed to materialize, the number of based aircraft in County-owned spaces at RHV dropped by 15% from 2007 to 2017.

A NEW BUSINESS MODEL FOR THE AEF

Given the downward trends in the piston-propeller segment of GA, the South Bay's high commercial land values, and trends at other airports, it makes sense to put the airports' available real property assets to work by leasing certain parcels for non-aviation commercial development and thereby generate a more diversified and higher-yielding revenue stream than the current business model. This section explores the following potential sources of additional revenue:

- Leasing RHV parcels suitable for non-aviation commercial development.
- Reconfiguring the existing RHV FBO leaseholds.
- Establishing solar farms at both RHV and E16.
- Reconfiguring the existing E16 FBO Leasehold.
- Leasing the parcel at 12415 Murphy Ave., San Martin

RHV Non-Aviation Commercial Parcels

The airport MP proposed leasing undeveloped airport parcels for compatible commercial uses to generate revenue to:

- Fund the operation and maintenance of the airport infrastructure;
- Fund projects that enhance the airport's physical security and compatibility with the surrounding community; and
- Reduce the Airport Enterprise Fund's reliance on aircraft storage revenue.

The concept of leasing undeveloped property at the airport is also a Board-approved recommendation of the Harvey Rose management audit of the airports conducted in 1999. The audit report states that non-aviation commercial development "is a sound direction for the Department to take. It would provide a new source of revenue for the Fund without increasing air traffic and it would diversify and stabilize the Division's revenue sources in the event of a downturn in the general aviation market."

The following parcels have been identified for lease for non-aviation commercial uses:

- 1. An undeveloped 8.6-acre parcel in the southeast corner of the airport at the Capitol Expressway/Tully Road intersection.
- 2. A 4.65-acre parcel located at the intersection of Cunningham Avenue and Swift Avenue (currently used for Little League baseball fields).
- 3. An undeveloped 3.75-acre parcel located on Swift Avenue.
- 4. An undeveloped 2.4-acre parcel located between the southernmost row of hangars and the Capitol/Tully parcel listed above (currently rented by the Roads Dept. as a material laydown area).

Valbridge Property Advisors was retained to prepare an appraisal for each of the aforementioned parcels. According to the Valbridge appraisals, the AEF could realize a total of approximately \$2.3 million annually in ground lease revenue from the four parcels. 12 It is important to note that commercial property leasing can be speculative and that these revenue assumptions may not be realized.

¹² The estimated annual lease revenue reflects market conditions as of early 2018 and is therefore subject to change.

It is essential that the future development of these parcels be compatible with the operation of the airport. It is also essential that the future developments be independent of the operation of the airport. In order to generate the maximum revenue consistent with the above criteria, staff recommends that the marketplace be allowed to determine each parcel's highest and best use through a Request for Proposal (RFP) process and the parcels leased to the prospective lessee(s) offering the best financial terms. These lease returns may be affected by any business or use conditions the County, FAA, City of San Jose, or Santa Clara County Land Use Commission places on the properties.

Existing RHV FBO Leaseholds

There are nine FBO leaseholds at RHV (Figure 8) occupying a total of 18 acres in the northeast corner of the airport. In 2016, as the FBO master leases approached the expiration of their 50-year terms, they were amended to synchronize their expiration dates to December 31, 2021. Upon expiration of the leases, all leasehold improvements will revert to the County.



Figure 8: Existing FBO Leasehold Configuration

Valbridge appraised the annual bare-dirt lease rate for the 18-acre FBO area at \$15,246 per acre. By contrast, the appraised annual lease rate for the Cunningham/Capitol parcel and the Tully/Capitol

parcel are \$137,258/acre and \$139,348/acre, respectively. Therefore, leasing property for non-aviation commercial development has the potential to generate nine times more revenue per acre than leasing property for FBO use.

Given the downward trends in the piston-propeller segment of General Aviation market discussed earlier, the high vacancy rate at the airport and the very large disparity between the expected lease rate for commercial development versus FBO use, staff recommends that the eastern half of the existing 18-acre FBO footprint (bordered by Ocala Ave. to the north, Cunningham Ave. to the south and John Montgomery Dr. to the east) be re-designated for non-aviation commercial development.

Only two of the nine leaseholds at RHV provide a full range of transient aircraft services, such as aircraft parking, aircraft service, fuel, pilots lounge and rental cars. These services are typically characteristic of FBO's¹³ as defined by the FAA. With the current leasehold configuration, RHV leasehold sizes of 1.0-2.7 acres are too small to provide transient aircraft parking along with the other services currently provide by the leaseholders.

Most RHV leaseholds are not true FBO's but are instead Specialized Aviation Service Operations (SASO¹⁴) which generally provide one or two aviation services (e.g. flight training, fueling, aircraft maintenance, aircraft rental, avionics sales and repair, aircraft sales).

By reducing the number of leaseholds with a corresponding increase in leasehold size, future FBO leaseholders will have the space necessary to provide a full-service FBO. New leases will include "Minimum Standards", each leaseholder will be expected to provide. Typically this will include a bundle of services, such as flight training, aircraft maintenance, aircraft parking, fueling, etc. It is not expected that the leaseholder provide all of these services independently, as some of these services may be contracted out to existing SASO's, including the current leaseholders.

Minimum Standards are created to "promote safety in all airport activities, protect airport users from unlicensed and unauthorized products and services, maintain and enhance the availability of ade-

¹³ The FAA defines a FBO as "a commercial entity providing aeronautical services such as fueling, maintenance, storage, ground and flight instruction, etc. to the public". FAA Airport Compliance Manual (FAA, 2009)

¹⁴ Also known as single service provides or special FBOs.

quate services for all airport users, promote the orderly development of airport land, and efficiency of operations"¹⁵ Staff recommends developing minimum standards that would spell out expectations for all aviation businesses on the airport, including future FBO leaseholders.

With these changes it is expected that each of the leaseholders will be financially secure enough to reinvest in their leasehold as necessary. This will benefit both the aviation community through well maintained facilities, and the surrounding community, by eliminating the gradual decay that otherwise may occur.

To mitigate the loss of FBO area, staff also recommends expanding the remaining half of the FBO footprint by extending the existing western leasehold boundary further west (i.e. toward Runway 13L/31R) and dividing it to create two future FBO leaseholds of approximately seven acres each in place of the existing nine FBO leaseholds, which average two acres each.

Adopting Minimum Standards¹⁶ and re-leasing the reconfigured FBO footprint for two or more FBOs would ensure that a range of high-quality services (e.g. aircraft maintenance and repair, sales,



Figure 9: Future FBO Leasehold Reconfiguration

¹⁵ FAA Advisory Circular 150/5190-6

flight training and rental aircraft) remain available to based aircraft owners and flight training clients at an adequate level of competition.

The aircraft currently based on the existing FBO footprint could all be accommodated by the new FBOs and/or in vacant County-owned tie-downs.

Finally, the County should consider taking on the responsibility of managing the self-fueling island. The FBO's would retain the right to provide truck-based fueling services. However, by taking over self-service fueling the AEF could realize approximately \$100,000 in additional annual revenue.

RHV/E16 Solar Farms

Development of solar farms at both RHV and E16 is well under way as part of a larger County-wide effort led by the Santa Clara County Facilities and Fleet Department to promote renewable energy by establishing solar farms on suitable County properties. Annual revenue from the solar farms escalates each year for the duration of the 25-year term of the agreement with the solar provider. Total net AEF revenue expected over the 25-year term is \$11,849,618. During the first 14 years of the agreement, average annual income for the AEF will be approximately \$160,000. Revenue jumps dramatically in years 15-25 once the installation costs have been amortized, averaging \$873,000 annually.

Existing E16 FBO Leasehold

The existing FBO leasehold at E16 expires on December 11, 2020. Upon expiration of the lease, ownership of all improvements on the 10.3-acre site will revert to the County, including 56 aircraft hangars and an office/maintenance hangar facility. Appraisals prepared by Valbridge indicate the County could expect \$600,000 in annual lease revenue if the 10.3-acre site were to be re-leased in its entirety, and \$220,000 in annual lease revenue if just the portion of the leasehold excluding the hangars were leased. In that case, the County would assume management of the hangars and realize the revenue therefrom, which staff estimates at approximately \$550,000 annually. Staff recommends this latter scenario, which would result in total annual revenue of \$770,000 to the AEF.

Existing E16 Non-Aviation Parcel

The 4.64-acre parcel on the west side of Murphy Ave. adjacent to Llagas Creek has been leased to the Lions Club for the past several years at \$100 per month. The Santa Clara Valley Water District is currently in the process of acquiring, from the County, a 1.87-acre undeveloped portion of this site abutting Llagas creek for a flood

control project. An appraisal prepared by Valbridge indicates the County could expect \$57,600 in annual lease revenue for the remaining 2.77 acres of the site.

The increase in revenue from the FBO lease, hangars, Murphy Ave. parcel and the solar farm would ensure that San Martin Airport is financially self-sustaining.

Future Considerations for Community Benefitting Parcels

It is understood that the Lions Club use allows for a tangible community benefit. Because the San Martin community lacks a community center, the Lions Club has allowed their facility to be used in that manner, holding various community meetings weekly.

Likewise, Eastridge Little League provides an opportunity for residents of the surrounding neighborhoods to learn sportsmanship, engage with similarly-minded individuals and enjoy an outdoor activity.

However, by Board Policy, the AEF should be self-sufficient. Continuing the use of these properties without fair market financial benefit to the AEF (Eastridge Little League pays \$1.00 per year and the Lions Club pays \$1,200 per year) hinders the airport's ability to comply with Board policy.

For example, the County has paid the fair market rent for the St. Francis Assisi animal clinic, which is located on the San Martin Airport property to the AEF. A similar agreement could be considered in which the County make annual rental payments to the AEF for the Lions Club and Little League fields, in recognition of the community benefit these organizations provide.

NEW REVENUE SUMMARY

The following table summarizes the potential new revenue sources outlined in the preceding sections. Figure 10 and Figure 11 Summary are airport maps depicting each of the areas mentioned in the following table.

Source		Est. Anni	ual Revenue
1.	RHV Tully/Capitol Lease (8.6 ac)	\$ 1	,198,400
2.	RHV Cunningham/Capitol Lease (4.65 ac	:) \$	638,250
3.	RHV Swift Ave. Lease (3.75 ac)	\$	285,600
4.	RHV Laydown Yard Lease (2.4 ac)	\$	205,100
5.	RHV NE Corner Lease		TBD
6.	RHV FBO Leases (14.8 ac)	\$	280,526
7.	RHV Fuel Sales	\$	100,000
8.	RHV/E16 Solar Farms (avg.)	\$	160,000
9.	E16 FBO Lease/Hangars	\$	770,000
10.	E16 Murphy Ave. Lease (2.77 ac)	\$	<u>57,600</u>

TOTAL \$ 3,695,476

It is important to note that it will take a significant amount of time to bring the lease-based revenue sources online. Moreover, the existing grant obligations require the County to obtain approval from the FAA to use airport property for non-aviation commercial development ("property releases"). Under ideal circumstances, if a property release were approved by the FAA, it could take up to two years.

A request to release the Tully/Capitol parcel has been denied previously by the FAA despite the fact that the parcel is identified on the FAA-approved Airport Layout Plan (ALP) for future non-aviation commercial development.



Figure 10: E16 Revenue Property Summary



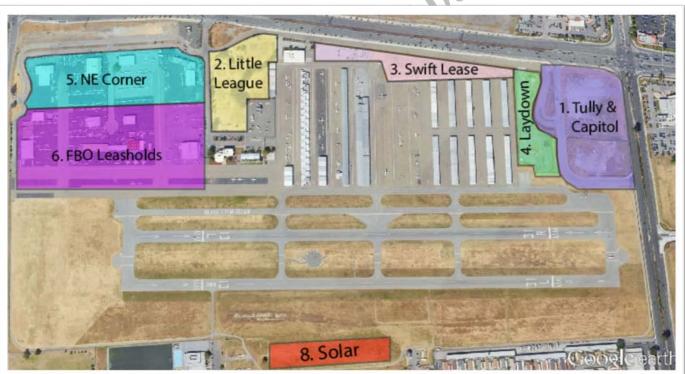


Figure 11: RHV Revenue Property Summary

ROLE OF THE FEDERAL AIRPORT IMPROVEMENT PROGRAM (AIP)

Overview

The FAA AIP (codified under Title 49, United States Code) has existed, under various names, since the end of World War II for the purpose of developing a system of airports to meet the nation's needs. To be eligible for funding, projects must advance the basic goals and objectives of AIP policies, which generally include promoting airport safety, security and capacity, complying with FAA standards, preserving airport infrastructure, protecting the environment, minimizing airport noise impacts, and conducting airport planning.

Currently, AIP-eligible projects approved by the FAA receive 90% federal funding and are also eligible for an additional 5% state match, subject to availability of funds. Therefore, the local match required for AIP projects can be as low as 5% ¹⁷. Experience indicates, however that limitations on reimbursement for some tasks such as construction inspection, coupled with the Bay Area's high labor costs typically push the total local contribution closer to 20%.

Generally, most airfield capital improvement and rehabilitation projects are AIP-eligible, including runway/taxiway/apron construction and rehabilitation, as well as airfield lighting, signage and drainage. Thus, all of the airfield projects identified in the current airport Master Plans are AIP-eligible. Moreover, some non-primary airports (such as RHV and E16) are eligible for funding for some other pavement *maintenance* projects. It is very important to note, however, that this is virtually the only exception to the rule that maintenance work is ineligible for AIP funding, due to the fact that maintenance is not "airport development" as defined by Title 49. Costs related to airport operations are likewise ineligible.

History of AIP Funding and Future Need

Over the last 20 years, the County has received approximately \$8.2 million in AIP grants. Of this, \$6.4 million was for projects at RHV and \$1.8 million was for projects at E16. This equates to an annual average of approximately \$400,000¹⁸. Relative to the AEF's small

¹⁷ The federal percentage is subject to change whenever the AIP is periodically reauthorized.

¹⁸ Beginning in 2012, the County was ineligible for grant funding due to an ongoing disagreement with the FAA over skydiving at E16. For the period between 1998 and 2011, the County was awarded an average of \$631,00 annually in grant funding. It is reasonable to expect the

operating budget, the AIP funding was important and enabled the completion of projects that otherwise would not have been possible financially.

When the MP updates were completed in 2006, the prospect of future funding from the AIP was essential to the County's ability to fund the improvement projects identified in the MPs. Large-scale projects such as extending the runway at San Martin Airport, acquiring surrounding property to prevent encroachment, and constructing a west side taxiway at RHV were deemed not possible without federal financial assistance. Events during the intervening 12 years, however, have reduced the need for some of these projects. Several of the improvement projects identified in the MPs can now be deferred indefinitely.

The need for additional investment of \$20 million in the airports' aging infrastructure over the next 10 years was discussed earlier. Approximately half this need would be eligible for AIP funding. It is anticipated that by carefully planning and applying for federal grants the County would be able to obtain approval for this funding.

AIP Grants and Santa Clara County Airports

Both RHV and E16 are currently federally obligated airports, meaning that the County is required to comply with a lengthy list of "Grant Assurances" that are part of the grant agreements the County and FAA executed when the County accepted federal AIP funds. The Grant Assurances regulate virtually all aspects of airport operations and management.

If the County declines to accept new AIP grants going forward, it will most likely be freed from the requirements of many grant assurances and regain some local control of the airport operations when the most recently accepted existing grant assurances expire in September, 2031. At a minimum, the expiration of the Grant Assurances would terminate the FAA's authority over **most** aspects of the operation and management of the airports, thus eliminating a regulatory burden on the County.

Over the long term, it is possible for the AEF to generate sufficient revenue to fund anticipated operating and capital costs without subsidy from the federal AIP or the County General Fund provided the County takes maximum advantage of the airports' real property assets through the recommended leasing strategies. Since it will take several years for the leasing process to begin producing revenue,

^{\$400,000} value referenced above would be considerably larger had the FAA not denied several grant requests due to the disagreement on skydiving.

however, a subsidy between \$500,000 and \$1,000,000 will be required annually in the interim period.

Operating the airports without federal grant assistance going forward would most likely afford the County much greater flexibility with respect to future use of its airport property beginning in 2031 when the County's existing federal grant obligations expire.

SUMMARY

- ➤ The AEF has been financially self-sustaining since at least the inception of the Roads & Airports Department. Operating revenue has been sufficient to fund operating expenses as well as the local match required for grant-funded capital projects, which have been implemented on a pay-as-you-go basis.
- The piston-propeller segment of GA is in decline, which has negative repercussions on the financial health of the AEF and its ability to remain financially self-sustaining. Nevertheless, the number of operations at the County airports is growing due to the demand for professional pilots and the associated flight schools required to train them. These trends dictate that the County change its longstanding business model, which relies on aircraft storage spaces for over 75% of total revenue, to a business model with a more diversified and higher-yielding revenue stream.
- The key to generating a more diversified and higher-yielding revenue stream is to put the airports' real property assets to work by leasing certain parcels for non-aviation commercial development and by restructuring the FBO leaseholds.
- The airports' infrastructure needs an additional \$20 million in investment over the next 10 years.
- Over the long term, the AEF can generate sufficient revenue to fund anticipated operating and capital costs by utilizing the airports' real property assets. Since it can take several years for the leasing process to begin producing revenue, a subsidy will be required in the short term. Under current conditions, the AEF cannot remain financially self-sustaining unless the airports' real property assets are employed to generate additional revenue.
- ➤ AIP grants currently cover 90% of eligible project costs and the state provides an additional 5% matching grant, providing leverage for use of AEF dollars. Operating the airports without this federal grant assistance going forward is likely

to afford the County greater flexibility with respect to future operations beginning in 2031 when the County's existing federal grant obligations expire.

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APPENDICES

Appraisals

All appraisal reports may be downloaded from the County Airports website, <u>www.countyairports.org</u>. Use the link below each title to go directly to the report.

- Reid-Hillview Airport FBO Land Cunningham Avenue
 San Jose, Santa Clara County, California 95148 goo.gl/Sa3Xr4
- Vacant Commercial Land Swift Avenue
 San Jose, Santa Clara County, California 95148 goo.gl/hncZ5g
- Little League baseball fields on Cunningham Avenue Cunningham Avenue
 San Jose, Santa Clara County, California 95148
 goo.gl/NuAooz
- NWC of Tully Road and Capitol Expressway San Jose, Santa Clara County, California 95122 goo.gl/XzyDNg
- Roads and Airports Laydown Yard NWC Swift Avenue and Swift Lane San Jose, Santa Clara County, California 95148 goo.gl/Lbf55a
- Lion's Club
 12415 Murphy Avenue
 San Martin, Santa Clara County, California 95037
 goo gl/6XVvvY
- San Martin Airport FBO
 13030 Murphy Avenue
 San Martin, Santa Clara County, California 95146
 goo.gl/Z3hqrB

Airports Master Plan and Business Plan

- The Master Plan containing the most recent Business Plan can be downloaded from our website (<u>www.countyairports.org</u>) or by using these links:
 - o Reid-Hillview goo.gl/jN4Ucj
 - o San Martin goo.gl/Expq4c

Santa Clara County Airports Business Plan Updates

The report from Aries can be downloaded from our website (www.countyairports.org) or by using the following link. goog.gl/AwirdW

Long Range Facility Plan

The report from Kitchell can be downloaded from our website (www.countyairports.org or by using the following link. goo.gl/kr2YFA

FAA Grant Assurances

The FAA grant assurances can be downloaded from the FAA website (www.faa.gov/airports/aip/grant_assurances/) or by using the following link. goo.gl/Zj1wm5