

Report on Community Outreach Effort

regarding the
Palo Alto Airport Master Plan Update

Commissioned by
The Palo Alto Airport Joint Community Relations Committee

Submitted
December 9, 2003

Prepared by:
S. Daisy Pistey-Lyhne
Consultant

Table of Contents

Overview.....	3
Development at the Airport.....	5
Land Use.....	5
Construction of Airplane Storage Facilities.....	6
Hangar Location	
Site Design	
Increased Storage/Usage.....	7
Relocation of the Terminal Building.....	8
Siting	
Land Swap.....	11
Terminal Functions.....	12
Baylands Welcoming Center	
Gift Shop	
Eating Facilities	
Observation Deck/Crow’s Nest	
Meeting Space	
Renewable Energy Usage.....	16
Design Specifications.....	18
Berms.....	19
Landscaping.....	20
Along Embarcadero	
At possible new terminal building	
Along the runway	
Burrowing Owl Habitat Creation.....	22
Treated Wastewater.....	22
Stormwater Run-off.....	23
Requirements for new development	
Fueling	
Storm drains	
Water treatment	
Fuel-check excess disposal	
Rooftop rainwater collection	
Integrated Pest Management.....	26
Permeable Concrete.....	26
Parking and Transportation.....	26
Parking	
Transportation	
Traffic Concerns	
San Francisquito Creek Flood Control Projects.....	28
205 Project	
206 Project	
Planning possibilities and flexibility	
Alternate Futures for the Airport.....	32
Other Comments/Issues to be Addressed.....	32

Appendixes:

Appendix A – Contact Information.....	35
Appendix B – Organizations to contact about educational display help.....	41
Appendix C – Organizations to contact about native plant landscaping.....	41
Appendix D – Further information on Stormwater and Run-off management....	42
Appendix E – A list of some green architecture firms.....	43
Appendix F – Renewable energy pamphlets.....	44
Appendix G – Maps.....	44

Overview

This report was commissioned by the Palo Alto Airport Joint Community Relations Community (JCRC) as a means of community outreach about proposals for development at the Airport. The Palo Alto Airport (PAO) is currently in the process of updating its Master Plan, in conjunction with Santa Clara County's on-going development of an update to its own Airports Master Plan. These master plans will dictate land use and development decisions for the airports into the future. As Palo Alto is one of three airports run by Santa Clara County, it is necessary for the PAO to go through its own update process in the current time period, in order to stay in alignment with plans being made both by the County and the City of Palo Alto.

The PAO Master Plan will take into account some proposals for development at the Airport. In accordance with Recommendation M of the City of Palo Alto Baylands Master Plan Amended Summary Report of 1988, the Palo Alto Airport is investigating the possible relocation of the terminal building. This would result in the construction of a new facility to house terminal operations, as well as any other appropriate activities that the community deems necessary. As well, the construction of new airplane storage facilities (hereafter referred to as "hangars") has been identified by the Airport as a need in the aviation community, and opinions about this possibility were also solicited within the outreach process.

In proposing these developments, the JCRC has been aware of the extreme environmental-sensitivity of the surrounding Baylands area, and hopes to integrate these concerns into the update of the Palo Alto Airport Master Plan (hereafter referred to as "the Master Plan") by becoming one of the most environmentally-sensitive airports in the country. The Airport was interested in collecting the opinions of the surrounding community, so that they might better understand what the Master Plan should include in order to gain the support of the community. The combination of these ideas was the focus for this outreach effort, in which information was gathered on community interests, concerns, questions, and opinions about these possible developments, and their effects on the community.

The outreach effort consisted of face-to-face interviews with multiple groups and individuals concerned with activities at the Palo Alto Airport (hereafter referred to as "the Airport"), the Palo Alto Baylands (hereafter referred to as "the Baylands"), and the surrounding areas. Interviews were conducted from June 2003 through November 2003 by an independent consultant, contracted by the Airport Joint Community Relations Committee (hereafter referred to as "the JCRC"). Interviewed parties included pilots' associations, birding societies, neighborhood associations, city government departments, environmental education organizations, regional environmental regulatory bodies, and recreational clubs. A list of contacted parties is attached in Appendix A.

The below effort is a compilation of opinions collected through the course of these interviews. The outreach was done in order to understand the full range of opinions regarding both broad and specific questions about development at the Airport. The report, while qualitative in nature, attempts to present the full range of opinions expressed while highlighting the most common sentiments and concerns. All information presented was objectively collected during the outreach process, and is presented here purely. Any opinions expressed are those of one or more respondents.

Any further questions about the process of data collection or in regards to the information in general may be directed to:

S. Daisy Pistey-Lyhne
1215 Emerson St.
Palo Alto, CA 94301
(650) 804-5966
daisypl@stanfordalumni.org

The Joint Community Relations Committee for the Palo Alto Airport:

Email list: pao-jcrc@zachary.com

City of Palo Alto Appointments

Peter Carpenter – Chair	Petercarp@aol.com
Nicholas Petredis – Past Chair	Nicholas@Petredis.com
David Creemer	david@Zachary.com
Glynn Falcon	GlynnF@aol.com
Curtis Weil	curt@weilcapital.com
William Fellman – City Staff Rep.	bill_fellman@city.palo-alto.ca.us

Santa Clara County Appointments

Pat Meza – FAA	pat.meza@faa.gov
Pat Roy	
John Stern	palocon@earthlink.com
Robert Lenox	Bob.Lenox@gte.net
Douglas Kelly	Doug@alloyventures.com
Larry Feldman – County Staff Rep.	lawrence.feldman@rda.co.santa-clara.ca.us

Development at the Airport

The idea of developing new areas of the Airport is a contentious issue, with groups on both sides having strong feelings. Many people across the broad range of interviewees have said that development of unpaved land is undesirable, and should be held to the minimum possible amount. Reasons cited for opposition to more hard surface ranged from the impact of increased stormwater run-off into the Baylands to visual/aesthetic concerns, from concerns over habitat destruction to worries about noise disturbance in residential areas due to increased air and ground traffic. Much concern was expressed that any development or construction in the area not harm any sensitive ecosystems or areas. Above all, the sentiment expressed was that of minimizing harm in all ways possible to the minimum.

Alternatively, some groups and individuals felt strongly that the Airport has a right to develop the land within its boundaries, set in the lease with the City of Palo Alto (hereafter referred to as “the lease”). These were advocates for the construction of both the terminal and hangar projects, as well as some other land use ideas concerning runway length and taxi-way widths, discussed below.

In general, the proposals for both a new terminal and hangars at the Airport was seen by most respondents to address a valid need, and at very least, was seen as a “necessary evil.” While many local residents are absolutely opposed to any increased construction at the Airport, development to meet the Airport’s most obvious and pressing needs would be supported by the vast majority of those interviewed, under the circumstances outlined below. However, if the main points are missing from the Master Plan update, it is unlikely to have the support of any but the staunchest development advocates. As one interviewee said, “The plan must strike a balance between Airport needs and community needs, and the community that they are surrounded by is a highly-sensitive wetlands area.”

Land Use

The most important issue for many people interviewed was minimization of the land area converted to impermeable surface. Any project that takes place which does not make obvious efforts to limit its land expansion to the smallest extent possible is likely to face a great deal of opposition from Baylands users, local residents, environmental organizations, and some pilots. Many have stated that despite all of the many appealing environmentally-friendly proposals, they would not support any development that does not take into account the amount of new land converted into developed area, and attempt to mitigate this in some way.

Also, some groups were extremely opposed to expansion of developed land at the Airport because they were concerned that expanded land would mean expanded operations, and increased air traffic at the Airport. They want to see no increases to traffic levels, either on land or in the air, and want to retain as much undeveloped land as possible in order to maintain these levels.

Concerns about the paving/covering of land stemmed from the negative environmental damage done by increased run-off, decreased water permeable surface, and the associated decrease in flood mitigation services. Also, concerns were expressed about the visual impact of development next to a pristine natural environment.

Construction of Airplane Storage Facilities

The construction of new airplane storage units (hitherto referred to as “hangars”), is of great importance to many pilots associated with the Airport, as well as the Airport itself. In the current time period, demand for hangar space has far outstripped its availability, and a long waiting list exists. As an income generator for the Airport, hangars could be lucrative, as well as provide a service that is in high demand.

The construction of hangars met with some opposition, as their development is being proposed in an extraordinarily environmentally-sensitive area. However, the amount of opposition to the construction of hangars alone was not extremely high. Objections mainly resulted from the idea that hangar construction would result in an expansion of land used for tie-downs, to make up for the necessary loss of storage spaces due to hangar configurations. If hangars were to be constructed without an expansion of tie-down space onto undeveloped land, it seems that there would be great deal less opposition.

Among respondents who do not use the Airport, there was a general empathy for the need for hangars – as a tool for economic improvement for the Airport, as well as for airplane owners to avoid costly damages associated with outdoor storage. Those who oppose a further expansion of tie-down space to accommodate spaces lost due to hangar construction view their position as a compromise, where the Airport increases its revenue and yet no new impermeable ground is created. Almost unanimously, respondents supported Airport-ownership of any new hangar space, if it is constructed, in order that its financial situation be improved.

Some pilots groups see great need for expanded airplane storage facilities, be they tie-downs or hangars. A City Council member pointed out that PAO is the only airport in the County that has a waitlist for tie-downs. However, some interviewees were skeptical about the long-term stability of demand for these spots. One pilot said that demand has fluctuated a great deal over the last 30 years, and that it just so happens that we are currently in a high point. Therefore, it must be determined whether hangar construction should be focused purely on revenue generation, or on also meeting the current, possibly unstable, demand for airplane storage at the Airport.

Some individuals and organizations suggested that a re-organization of the Airport’s tie-downs could possibly result in an increased number of storage spaces, construction of new hangars, and no need for new impermeable surface creation, all at once. This remains to be determined.

Hangar location

Site selection for possible hangars was based on many criteria. First, respondents said almost unanimously that they would like the hangars as far from the Baylands and runway as possible. This had to do with decreasing the negative environmental and aeronautic impacts of construction, as well as line-of-sight worries for pilots while taking-off and landing. Almost unanimously, people encouraged clustering of hangars into the already built-up area near the extant hangars in order to avoid visual abruptness and new hardtop creation. And few people were comfortable with the idea of hangars being built along Embarcadero (Area 2), even with visual screening options offered. Therefore, Areas 1, 5, and 6 seem to be the sites most likely to gain community support.

Construction of hangars along the border between the Golf Course and Airport was viewed mostly favorably, as it would provide protection for all planes, both inside

and outside of the hangars, from golf balls. Golfers would likely enjoy the hangars' effect of sheltering them acoustically and visually from the Airport. However, if a site were selected that was closer to the runway than Area 1, some pilots mentioned that hangars could negatively impact wind patterns along the runway, making take-offs and landings more difficult for novice pilots.

Though Area 1 encompasses what is currently a parking lot, some pilots who use the back lots say that there is rarely anyone parked there, and that changing the lot to a usage with higher demand would be welcome. However, not everyone feels this way. Members of the Civil Air Patrol unit at PAO are concerned about losing parking close to their meeting space. But even during their meetings, the lot closest to the golf course is almost empty.

Hangar design

In constructing hangars, there are a number of designs to choose from. There seemed to be little difference of opinion among non-pilots as to whether fully-closeable hangars or open, carport-style hangars were better. While pilots were glad to accept either kind, they tended to favor closed hangars, because they provide increased security for the planes and increased schedule flexibility for mechanic work, as tools and parts can be left out overnight.

Visual screening of hangars from nearly every directional view of the Airport was advocated for by many respondents. Trail users do not want to see increased development along the trails, nor do other Baylands visitors want to view tall hangars along Embarcadero as they enter the Baylands area. Physical clustering of hangars with other buildings, and use of visually-appealing architecture seem to be the most favored solutions. One respondent referred to the visual camouflaging that is used in urban areas on parking garages for some theme parks in the Los Angeles area, and suggested that the Airport look into paint jobs and exteriors that could minimize the visual impact of hangars, if they are constructed.

Increased Storage/Usage

Goal T-10 of Chapter 3 of the Palo Alto Comprehensive Plan for 1998-2010 allows for the vitality of the Airport to improve, if done without increased intensity of operations. One way to ensure the vitality of the Airport is to increase the number of planes stored on its premises. However, expansion of tie-down space was one of the most contested issues explored. While the Airport and some pilots were very interested in increasing the number of storage spaces available at the PAO, the vast majority of respondents were opposed, for a variety of reasons. Some of their reasons were: opposition to construction on undeveloped land, not wanting increased flight traffic overhead, doubts about the long-term demand for storage at the Airport, concerns that increased environmentally-damaging commercial services will be needed, worries about increased run-off caused by expanded hard surface, worries that increased use will result in the construction of a second runway, distaste for airplane fumes, and increases in the number of bird strikes. Also, some local residents worry that an increase in the number of planes stored at the Airport could mean increased ground traffic along Embarcadero and other main arterials, with associated increased noise, smells, and congestion. Few people believed that increased storage would not result in increased usage, and thus there were strong objections expressed to increases in either.

As the above demonstrates, most people believe that increased numbers of planes stored on-site will result in more overall flights. Because of this, many people strongly objected to the noise that the possibility of increased flights would undoubtedly mean. Residents of neighborhood associations in Palo Alto and East Palo Alto were very concerned with overhead noise. Individuals who conduct classes and tours in the Baylands complain that planes already interrupt their educational talks, and that even *one* more plane flight overhead can adversely affect their ability to teach a lesson if it should pass at exactly the wrong moment.

Some people would support a modest increase in storage numbers if it were to have absolutely no negative effects on the Baylands ecosystem. The effects could be increased bird kills, problems due to noise levels, or expansion of storage area into land that holds ecological value for the Baylands. There is also some support for increased density of plane storage if it is built only atop already developed land, and is not associated with increased take-offs and landings.

Relocation of the Terminal Building

Goal T-58 of Chapter 3 of the City of Palo Alto 1998-2010 Comprehensive Plan encourages and plans for the relocation of the Airport's terminal building. However, the implementation of this relocation could take place in several ways. During the interviews, respondents were asked to suggest locations and functions for the possible terminal building, and were asked to express any concerns they had about possible impacts of the construction. Concerns expressed about choosing a site for a new terminal building were: maximum distance from the water of the Baylands, the minimization of possible environmental impacts, improved convenience for Airport users and traffic, accessibility, minimizing visual impact from road, making development compact and placed among extant buildings, and using already developed land if possible.

Siting

Multiple sites that met most of the above criteria have been suggested for the terminal building. Three main sites were named by most interviewees. These were:

- 1) the rear parking area near the Tower;
- 2) the grass area along Embarcadero, in the corner closest to the FBOs;
- 3) the area within the FBOs' leases, between the flying clubs.

The included map (Appendix G) shows the areas of reference, appropriately labeled. Opinions about each site are listed below.

- 1) The rear parking area near the Tower was suggested by interviewees interested in keeping any new construction from being visible from Embarcadero. The motive behind this placement is that it will be available to pilots and Airport users, while not encroaching on any currently undeveloped land. In addition, this site's distance from the Baylands means that its environmental impacts will hopefully be minimized. The parking lots in the rear have been said by many respondents to never be completely full, and it is likely that using this space for parking is inefficient.

However, the remoteness of this area has concerned many people. This site is about as far from the front of the Airport and the activity hub there as is the current terminal's location. Many pilots have complained about the ~1/4 mile walk they already have to make, and would like to see any new site selected decrease that distance. Some people are also concerned that for the same reason that the parking is underutilized (that of ignorance to its existence), the terminal would remain a distant outpost of the Airport, while the FBOs continued to be the point of entry for most visitors. Also, the absence of sewage lines in this area, as Patricia Roy pointed out, would mean higher development costs. Also, the terminal's presence in this area would create the need for more parking to accommodate visitors, thus making the covering of parking spaces a problem.

An argument against the remoteness factor was that "pilots can navigate fine. They should be able to navigate to the terminal if it's back there." Those who suggested this location felt that it would

- 2) The grass area along Embarcadero has been suggested as a prime location for the terminal building. The site would serve as an entry point for land traffic, and be central to the commercial activities on the FBOs' lease areas, convenient for Airport users. This would allow the County-run terminal to take over the provision of services that should rightfully take place there, rather than at the FBOs and flying clubs, where they currently are dealt with. As one of the last areas of undeveloped land within the Airport's lease, some people think it makes sense to use this for any proposed development. As well, the proposed corner of the grass it is a decent distance from the Baylands, thus hopefully reducing possible negative environmental impacts from development.

However, support for development at this site is dependent on the building's footprint not extending far down Embarcadero along the grass stretch, toward the Baylands. Development of the corner at Embarcadero's end is heavily opposed by most all groups. Keeping development isolated at the near end, closest to buildings and farthest from the water, is imperative to ensure community support.

According to many interviewees, development of this area may have minimized environmental impacts in comparison to development of other unpaved surfaces. This is due to it not being year-round habitat for any known animals. However, it is known seasonal nesting habitat for killdeer birds. Construction in this area would need to mitigate any impact on nesting patterns that might occur. In addition, this was burrowing owl habitat, historically, though it no longer has any owl residents.

Though most individuals knowledgeable about the Baylands believed that this area will not fall under the huge regulatory process for wetlands management, as it seems to be a seasonal upland grassland, it may be necessary to do a wetlands delineation to determine this for sure. Debra O'Leary, the Army Corps of Engineers liaison to the region, has offered her expertise in this area if the need should arise.

Many groups expressed concern with the development of this unpaved surface, particularly with regards to the increased run-off it would create. Most respondents would prefer that any development at the Airport take place on already paved surface. However, if this area were to be developed in conjunction with a land swap (detailed below), the majority of these individuals were willing to accept development on this site. If any development of hard surface on this land is to happen, a good-looking, environmentally-designed building would be preferred aesthetically over most other options.

Possible issues concerning future flood control measures and government requirements dealing with construction on undeveloped land would have to be dealt with at the site. These are explained below in the sections dealing with flood control and run-off.

- 3) The area between the large FBO commercial areas – that is, surrounded by the West Valley Flying Club, the Palo Alto Flying Club, and the large mechanics shop – was also suggested. This site has great potential to meet all of the demands of all groups, but possible complications could lie in the re-negotiation of the FBOs' lease agreements with the Airport.

This site provides easy-access from both Embarcadero and the airfield, and convenient access to the other commercial activities of the Airport. Its location here would create a community hub of activity. It would minimize the visual impact of new construction by being clustered in with other buildings, and would be constructed upon already paved surface. It is the farthest from the Baylands of the suggested sites. In addition, it would not cause problems for any likely flood control measures (outlined below). It was also suggested that any new building be constructed as an addition to another (i.e. the West Valley Flying Club or Airport Shoppe) in order to maximize sharing of resources.

Possible problems with this site could be associated with necessary re-negotiation of the FBOs' leases. Roy Aero Enterprises said it could be willing to re-negotiate its lease area to accommodate a building. Also, as the main gate for emergency service entrance onto the Airport would likely be blocked by construction on that site, re-designing/re-direction of emergency entrances might be necessary.

Extra parking beyond that already in this area would be needed. The obvious places to put this, depending on size, would be along the Airport's small parking lot currently off of Embarcadero, or possibly provided by striking a deal with the golf course for expansion of its lot to accommodate extra traffic. Other suggestions have been in the grass area to put it in Area 1. This could be done in a way to minimize run-off. However, there have been objections to the visual aesthetics of this idea.

It was suggested that a terminal building in this area could take a semi-circular shape, with the mouth of the U-shape facing out toward the Golf Course parking lot. This could maximize the feeling of openness when approached from the parking area.

Land Swap

The possibility of the development of currently unpaved surfaces at the Airport was extremely unpopular with some groups. Organizations dealing with the oversight of Baylands hydrology were unified in their opposition to any new impermeable surface being created in the Baylands area, as the Airport's existence in this area is already causing many undesirable problems. However, if the paving of new surface were to include the reversion of the site of the current terminal and the City's sandbag lot (Area 4 on the map) to natural habitat, it receives from tepid to fully-warm support from most groups and individuals interviewed. The restoration of this site would add another buffer area between the Airport and the environmentally-sensitive Baylands. However, some environmental groups and local residents still maintain a stance against any new development.

The Santa Clara Valley Urban Run-Off Prevention Pollution Program (SCVURPPP) has said that in their C.3 permit for the watershed, issued by the state, any creation of more than one (1) acre of hard surface will need to be mitigated through creation of an on-site run-off treatment facility. In April 2005, this limit will drop to 10,000 ft². This could be achieved by creating a constructed wetlands where run-off would be diverted, or using a small machine that would filter the run-off. However, it is possible that a land swap could be approved by the City as a waiver for this requirement.

It was suggested that this land restoration be done as an official, permanent easement, in order to allay any fears about future expansion into this area. It would be preferable that restoration of the City's sandbag lot would begin before construction, to ensure that mitigation actually takes place.

Some warned that the cost incurred to develop one area and undevelop another could be substantial, and lamented that the Airport cannot just use the already developed site of the current terminal building. This could significantly increase the cost of the whole development project. It will be necessary to rip up the concrete and break up the compacted soil in Area 4. It was suggested that the grass from the site to be built upon could be scooped up and moved to the restoration site, preserving it intact. The feasibility of this idea is unclear.

In choosing what type of habitat to create in the restoration area, hydrologic cycles of the area should be kept in mind. Wetlands are likely to be more "important" than grasslands (in habitat restoration hierarchy), but may be more expensive to create, and a bad choice for the site. Water will attract high-flying water fowl, likely to interfere with plane take-offs and landings and cause damage. However, it was pointed out that different types of water (standing, circulating, etc.) have different rates of waterfowl attraction, and that the runway is already directly adjacent to a wetlands area with low waterfowl presence. Therefore, wetlands might be possible at this site.

Pilots and bird-advocates alike were very concerned about the possibility of habitat restoration. Some suggested that ecological analysis might show that it would be better to create upland grass habitat, which could attract low-flying birds such as burrowing owls and killdeer. As killdeer don't nest in wetlands, but do nest in the grass area along Embarcadero, it may be valuable to re-create some habitat for them to offset any loss done by the terminal's construction. The Audubon Society may have small grants to create burrowing owl habitat, though the likelihood of these burrows becoming habituated without manual migration might be low.

Plantings of any tall trees along the edge of the wetlands is discouraged. In addition to being bad for planes, and unlikely to be approved within the FAA Safety

Zone, tall trees provide perches for raptors. With the visual acuity they can get from these vantage points, they can out-compete shorebirds, the natural predators in the wetlands ecosystem. Thus, providing these perches could dramatically disrupt the ecosystem's cycles and do much damage.

In the case of a "land swap", the San Francisquito Creek Joint Powers Authority would like to be included in the negotiations, as they have possible interest in this land for flood mitigation purposes. If this is the case, they may have some funds for the restoration project.

Regardless of what happens, there are still a few groups of people who absolutely don't like the idea of any new hard surface, even if it is mitigated. They are opposed to increased commercial activity, increased air and land traffic, and the accompanying noise and smells that will likely accompany any improvement in services of the Airport.

Terminal Functions

According to the lease, all construction and development at the Airport must be Airport related. Therefore, it follows that all activities taking place in the terminal must be Airport-related. Respondents were asked to list all possible activities that they would like to see housed in a new terminal building, to address both airport and community needs. Identified needs that could be met in a new terminal building are:

- Pilots lounge with couches for naps
- Chart-reading space with flight-planning, weather-checking
- A joint Baylands Welcoming Center
- Showers (for pilots and bikers)
- Clean, modern restrooms
- Telephones for calling taxi, car rental, arranging plane services
- County airport manager office
- A crow's nest/observation deck
- Informational facilities about Baylands area
- Transit information (bike routes, bus schedules, maps)
- "Yellow" bikes to borrow for trips to town, Baylands
- A meeting room for groups to use
- Rental car desk, or better access to agencies
- Refreshments/vending machines
- Small kitchenette, for meetings and stop-over
- A Baylands gift shop
- A café or restaurant
- New Civil Air Patrol meeting room, storage area, office, etc.

Some pilots have asked to have a full-time staff member at the desk to take care of transient pilot needs (such as ordering refuels, taxis, etc.). They would like an FBO to run an executive-class service desk. However, other pilots doubted whether this could be economically feasible, because of the infrequency of terminal usage.

Many non-Airport users were in support of a terminal building to meet the needs of pilots, and even the surrounding community. However, they emphasized that a true assessment must be done of what real needs are. Extant options for providing similar services should be evaluated, and changes should be made to improve them if they need it, rather than constructing much new area that only provide replicate services. Though some people would like the terminal to be luxurious, many believe that the Airport's

position in the Baylands must be taken into consideration. The philosophy for development that these people would approve of is the meeting of needs with the minimal necessary to make sure that they are met sufficiently. This can also be a positive reflection on the City and businesses in it as a whole, as the limited nature of resources is respected and not abused, but used to the best extent possible.

Baylands Welcoming Center

The idea of creating a terminal that jointly functions as a Baylands welcoming center was originally proposed by the JCRC. This would be a center for use by visitors of both the Airport and Baylands, in order to learn more about the area and get information necessary to fully appreciate the experience. The idea of a holistic approach to education about the Baylands area (encompassing the nature preserve as well as the Airport, golf course, wastewater treatment plant, and the landfill) appealed to many people, while to others it seemed nonsensical to focus on anything but Airport-related matters in the Airport's space. About one-third of interviewees disliked the idea for some reason. Some read the proposal as a political ploy by the Airport to gain support for a new terminal along Embarcadero. Some believed that housing two functions in one locale would inevitably result in both being badly done, so the terminal should just focus on servicing planes and passengers. They were concerned that it would be a poorly done waste of space and effort, and only replicate the information and function of the Baylands Interpretive Center. In addition, its distance from the actual wetlands would make it useless, and ensure that no one would stop by on their way to the Baylands.

Others had the opposite concerns. They wanted to make sure that any welcoming center would not become a tourist trap that would keep people from actually visiting the wetlands of the Baylands and experiencing them. They wanted to ensure that the displays were small, and emphasized connecting to the rest of the area. Others just didn't want a bunch of tourists wandering around the terminal. They were concerned that the convergence of pilots and Baylands enthusiasts could have negative results. But some people thought this would be a good service to the community, hopefully creating positive dialogue and understanding. But thought should be given to whether a welcoming center really could be integrated into the functions of a terminal.

Despite opposition, most reactions to the proposal for a welcoming center ranged from disinterested acceptance to delight and enthusiasm, rather than negativity. However, most people would like to keep area used for the displays rather small, as it is extraneous to the terminal functions. And if the terminal is constructed in Area 1, however, there is no support for a welcoming center, as the location is unlikely to draw Baylands traffic.

Environmental education groups tended to be the strongest supporters of this idea. Many groups offered their support in creating educational displays that would describe the cultural, environmental, and political interconnections between the Airport and the rest of the Baylands area. (See Appendix B) Displays about flight and fuel consumption could compare birds, insects, and planes. Suggested displays about aviation include great "WOW!" facts about planes that would spark interest in aviation for children, and an overview of the history and current usage of the Airport.

It was hoped that the welcoming center would serve as a place for holistic integration of information on the whole area. Therefore, the inclusion of information about "What's Next Door?", a look at the Baylands habitats and ecosystem. A description of the wastewater treatment plant could be included, with a comparison to the Baylands as nature's sponge/water treatment plant. Also, interest was expressed that the full extent

of the Baylands be publicized, as most people now only know about less than half of it. Signs and maps announcing the hiking trails through the park could help people come to understand the Baylands even more. Signs for other local attractions could be included as well, such as the duck pond and a bike path map. Some interest was expressed in the creation of a self-guided walking tour, going to all of the places in the area (water treatment plant, landfill, Byxbee Park, Interpretive Center, Airport, golf course), with information along the way. Also, the extension of a trail out to East Palo Alto would be highly appreciated by its residents.

Displays that could connect viewers daily lives back to the environment would help to spread support for environmental-sensitivity. Information could be included for pilots and visitors about how they can help to improve the environmental quality of the Baylands through individual steps (such as not pouring toxins down stormdrains). Inclusion of a watershed map of the South Bay region could demonstrate to parents and children how they are connected to the Bay where they live. A display of information on public transit to the area (Palo Alto's free Embarcadero Shuttle) could possibly stimulate ridership. And it was emphasized that all signs be in English and Spanish, as at the Baylands' Interpretive Center.

Many people (including many pilots) were enthusiastic about the chance to educate other pilots about the fragile ecosystem surrounding the Airport, and also about educating the public about the Airport and how it runs. Especially since most people expect that any new terminal building will be built using environmentally-sensitive guidelines, they look to it as a chance to educate the public about these designs and techniques.

Residents of communities from outside Palo Alto wanted to ensure that the center would be available for all communities, specifically for school groups from other cities. The Baylands Interpretive Center currently charges non-Palo Alto schools for visiting it, and residents of other towns would hope that the Airport's center would be available without cost to all school and youth groups.

*** (As a side note: In collecting these interviews, it became very apparent that most people knew very little about what happens at the Airport, how it works with its surroundings, and how land issues are dealt with. An educational center could be a valuable way of educating the surrounding communities about the Airport.)

Gift Shop

As well as an educational component to the welcoming center, the addition of a gift shop was suggested by Deborah Bartens, the City of Palo Alto Naturalist. The Interpretive Center does not currently have a gift shop, and she believes that there is a high demand for Baylands-related information and souvenirs. It could carry such things as field guides, binoculars, stuffed animals, videos, ecology books, and bird song CDs. She also suggested that there could be a place for people to sign up for the Adopt-A-Park program, where they could donate money to the Baylands Preserve. She believes that many people would be attracted by a gift shop, and that its existence would encourage people to stop at the Welcoming Center. She advocates that some portion of the proceeds be donated back to the Baylands preserve, and thinks that more people would be likely to buy items there if they knew that their purchase was helping to support the preserve.

For comparison, the Santa Clara Valley Audubon chapter has a 200ft², well-run gift shop in Cupertino, in a remote spot at a small birding preserve. They reap ~\$15,000 per year in profit. Their director said that birders call from as far away as Europe to time

their visits to the Baylands to see clapper rails, and would be likely to want memorabilia to bring back with them.

Eating facilities

Opinions on the necessity of a restaurant varied a great deal. Many people saw no point in opening another restaurant in the area when there were already so many options. They found that between the Abundant Air Café, the Golf Course Clubhouse, and Ming's Restaurant, their dining needs were covered while at the Airport.

Many people thought that instead of building a new restaurant in the area, the Airport should work with the Golf Course to improve the menu at the Clubhouse, and at the Abundant Air Cafe. This way, unnecessary expenditures and land use for a new facility could be avoided. This could be accompanied by signs and the construction of a path between the Golf Course and Airport, which would also facilitate overlap between users of the facilities. Also, making easy transportation available for short distances (such as bicycles) would make getting to Ming's easier.

Others thought that the hours at Abundant Air were unreliable, and would like an improvement in its services, or a new café or restaurant. Some people believed that a restaurant could attract significant business, and used the restaurants at San Jose International and San Carlos as examples. Birders and Baylands visitors could come to get coffee while waiting out the rain. Also, a couple groups thought it would nice to be able to use the facilities for gatherings and nighttime parties.

Placement of the restaurant/café on top of the terminal building, with an observation deck to sit on, was suggested. Using an observation deck for a proposed café/restaurant could decrease the square footage of the terminal's footprint, which most people are in favor of. This feature could bring in a great deal of customer traffic from all over. If a restaurant were a draw to bring people to Palo Alto by plane, they could be channeled into city center if there were proper transit available. This could increase commercial business for the city. However, many people, especially local residents and Baylands users, were concerned that this would mean increased air traffic, which is not looked upon positively by the majority of respondents. Also, the height of such a building might be unwelcome along Embarcadero.

A restaurant cannot be sustained by air traffic alone. Success would require ground traffic, which means increased congestion and an increased need for parking. The golf course parking lot is already full on weekends, so this may be a problem. City of Palo Alto Transportation Department commented that increased parking along Embarcadero due to a restaurant would not be welcome. Increased parking spaces would be necessary. Concerns also about increased traffic along Embarcadero. The corner of East Bayshore and Embarcadero is already congested. All developments must take traffic effects into account. Many local residents were concerned about the increased traffic flow in this area and how it would impact their daily lives.

Any increased food service at the Airport would have to be especially careful about food waste containment. Garbage cans left in the outdoors can attract rodents, foxes, feral cats, raccoons, etc. These predators are then likely to enter the Baylands and prey upon the endangered Clapper Rail. Therefore, special precautions would need to be taken to ensure that all waste disposal units were animal-proof. Also, making sure that no pets, such as cats, are kept on the site, and that no animals are purposefully attracted to the area by feeding them, in order to avoid this problem.

Observation Deck/Crow's Nest

Reviews were mixed as to how useful or interesting an observation deck would prove to be, depending on the location and orientation of the building that it would be on top of. Many people liked the idea of being able to watch planes take off and land from atop a building. They saw this as a way to publicize the Airport and get young people interested in planes. Among them were members of the Palo Alto City Council. Others were unsure that it would be worth the effort to build if it were to be in any of the three proposed places for the terminal building, as they may not get good views of the runway. However, almost no one was against the idea if it could provide a good view of the runway, and possibly the Baylands also. However, it was pointed out that the old Sea Scout building has a crow's nest, and affords a better view of both areas than any of the proposed terminal locations. If this building opens soon, an observation deck at the Airport might prove redundant.

In the case that an observation deck is constructed, some people suggested that there be a path with signs announcing its presence that leads from the Golf Course to the building, so as to form a closer tie between golfers and aviators. However, the platform is constructed, an important thing to note is that the platform will have to be handicapped-accessible, under the Americans with Disabilities Act.

Meeting Space

There is disagreement over whether a meeting space is necessary in this area. As the Airport is fairly remote from urban areas, it is somewhat inconvenient and meetings would bring in traffic from elsewhere. This was of concern to local residents and Baylands users. Also, it is possible that the old Sea Scout building will be opened in the near future, with a space for use by outside groups, making it unnecessary to replicate that function in the area.

Some groups said that they would like to have a space to use. This could be a community asset, as Palo Alto has a shortage of meeting space. Size estimates for need range from 40-150. Sizing it somewhere between the Palo Alto Arts Center Auditorium and the Baylands' Interpretive Center was given as a good estimate. Groups from East Palo Alto and elsewhere would like to have access to it, also.

If the terminal building is built in an environmentally-sensitive, "green" way, a meeting space/conference room would be a great place to put up informational displays about design specifications. Information should be provided to educate visitors/users as to how to properly operate and understand any heating/cooling or electrical systems that may be unfamiliar to most people.

Renewable Energy Usage

The possible use of some form of renewable energy in new and old buildings at the Airport is supported by most groups. However, a small number did not see the relevance of "green" energy use to the Airport's operations, and believed it to be a waste of money and effort. They did not comment on whether this would be their opinion still if renewable energy came at equal-cost or less-cost than power from the grid.

Possibilities exist for the purchase of solar panels, or of 100% wind-produced energy through the City of Palo Alto Utilities Department. Informational pamphlets about both of these options have been included as Appendix F. It might also be possible to do

energy-efficiency retrofits that could save the Airport a great deal of money while helping to create lower levels of energy consumption. A cost-benefit analysis of the possibilities should be done to determine which one would be a better option economically. Lindsay Joye of the Utilities Department offered her help for this.

Of the respondents who viewed renewable energy favorably, most had little difference of opinion on solar panels versus wind energy. They seemed to think that whichever is more cost-effective should be used. But most people were very in favor of the use of renewable energy. One City Council Member said that he would like to make renewable energy, or more specifically solar panels, a requirement for any development in the Baylands area. If renewable energy is used, it should be highlighted with educational displays around the buildings where they are installed. There was some objection to wind power among birders, because of bird deaths associated with wind turbines, despite new designs being much more bird-friendly. Others saw wind as a better option than solar, due to lower environmental pollution created in the process of building wind turbines versus solar panels. Also, one pilot's association saw little reason to support solar panels, and less reason to support wind-power, as it has no immediate geographic link to the Airport, since Palo Alto buys wind-produced power from Northern California and Oregon.

The City of Palo Alto Planning Department was concerned about the aesthetics of solar panels being placed on hangar rooftops. They were worried that the reflectivity of their surface would be unappealing and seem harsh and unnatural in the natural landscape. If hangars are clustered together in one area, their concern may lessen. While lower-reflectivity panels exist (such as Uni-Solar peel-and-stick non-glaze panels), they create about one-half the amount of energy of other panels. Most respondents didn't seem to think that solar panels would be a problem for them visually. The reflectivity of a standard panel is about the same as glass or a pond. The effect of this reflection on birds was thought to be minimal. However, care should be taken to make sure that panels do not reflect light into the eyes of pilots who are flying overhead, especially in the direction of the runway. It does seem that the optimal solar orientation would face the panels the opposite direction from the runway anyhow.

Windpower purchased through the City would come at a rate of 1.5 cents/kWh more than the current low rate of 7 cents/kWh, or 8.5c/kWh. Because of rebate structure for solar panels, wind power may prove to be more cost-effective than solar. But, as Council Member Burch said, more is important than just dollars and cents.

Rebates are available for energy-efficiency retrofits through the City. It will pay for the first \$100,000 of a consultant. These retrofits would be good to showcase with educational displays.

Palo Alto doesn't have funding for large, commercial solar panel projects, but does have some funding for small solar projects. If panels are placed on County-owned hangars, rebates are available through the city for up to \$40,000, as a government project. There are other rebates available from the state- and federal-levels as well. FBOs could also be eligible for rebates if they were to buy solar panels. The Palo Alto Utilities Department is willing to help the Airport do a cost-benefit analysis of its yearly power consumption to help make its choice.

While most people were in favor of renewable energy, many made clear that it's inclusion in the development process will not make up for the conversion of large amounts of land, or ignoring pollution spilled into the Baylands. They view its proposal as a step in the right direction toward environmental-sensitivity, but are wary of it being

used as a political ploy to gain support for new construction in a highly-sensitive environment.

Design Specifications

Because of the extreme sensitivity of the wetlands to disturbance, opinions on the aesthetics and construction of any new buildings at the Airport were very strong. In general, every group supported architecture that would reflect the natural and unique environment of the Baylands, as well as make use of technologies that are environmentally-sensitive, thereby making the building's relationship to its surroundings more than superficial. Interviewees, from the City of Palo Alto Planning Department to members of the Civil Air Patrol to members of the Baylands Front Runners walking club suggested that the architecture form a juncture between the Airport's needs and environmental design. The use of appropriate materials is key. A set of Baylands Design Standards is currently under commission by the City of Palo Alto. These will outline what types of materials to use in construction, approaches to site selection, aesthetic appearance, etc.

It was emphasized by some individuals, experienced in the workings of the City of Palo Alto development process, that the Architectural Review Board will be very interested in making sure that any proposals have incorporated as many "green" techniques as possible. This can delay projects a great deal, and therefore they suggested designing green from the start in order to avoid this.

There was little objection expressed to environmental design. One of the few reasons given in objection were if there was to be an extreme difference in the cost of construction. However, when these opinions were expressed, usually someone among the group commented that environmental design tends to come at the same, or lower, price when looked at over the life of the building. Also that construction at the Airport is a long-term investment, extended over many years of payments, and therefore using this long-term financial view for analysis seemed most reasonable.

Others expressed concern that "green" architecture might not be able to meet their desire for a professional, modern-looking building. The vast majority of people understood the need for the exterior design of any building on the premises to be attractive and professional, so as to present a good first impression of Palo Alto to visitors. However, a large number of people expressed concerns that this be within reason, and believed that environmental design does in no way exclude attractiveness. In fact, they stated, by making the building an example of new technologies and environmental-design innovations, the first impression of Palo Alto could be one of innovation, forward-thinking, and environmental concern. Most people were assured that a design will be found that encompasses environmental-sustainability, natural aesthetics, and is attractive and modern.

The most important factor in making any building environmentally-sensitive is to assess the need for space, and to try to use it economically. Creating multi-purpose areas, and evaluating programmatic needs thoroughly can result in money saved on the costs of construction and maintenance, and also habitat preserved on the ground.

Many people believe that since the Airport is located in Silicon Valley – an area known for astounding technological advances – the Airport should make full use of the area's resources and create the best, "coolest" design local architects can imagine to meet environmentally-friendly qualifications. The building should be beautiful, somewhere between rustic and modern and appearance, and be attractive to business visitors, as well

as appealing to Baylands visitors. The region's brainpower should be utilized to imagine new ways to run an airport. It should be visionary. However, this does not necessarily mean grandeur. The building should be as small as possible, while accommodating all necessary activities. Land use and land coverage is still the primary concern of many groups, and no amount of "environmentally-friendly" design can make up for the unnecessary loss of land to development.

The incorporation of design measures such as passive cooling and heating, energy-efficient lighting, use of natural materials, multi-functional spaces, native landscaping, and re-use of treated wastewater for toilet flushing and landscape irrigation are all measures that are environmentally-friendly, as well as likely to decrease long-term costs of running the building in the future. They are also highly favorable to most all groups. The very few objections expressed to any of these were if they came at a much higher cost, or didn't work as effectively as standard systems. However, those knowledgeable of the most modern designs and systems seemed assured that these would not be problems.

For this very reason, an important part of building "green" is creating educational facilities within the building to inform visitors of unique technologies and designs that are in use. This provides information so that "green" design is better understood, and presents its strengths and weaknesses, at the same time as dispelling. This could be incorporated into educational displays about the surrounding area easily, as the Airport's impact on its natural environment begins with the selection of what materials and energies it uses on its grounds.

Examples cited by one interviewee of airport terminals that were whimsically attractive and blended with their environment were those of the airports in Nantucket, Massachusetts and Bar Harbor, Maine. She suggested using them as examples.

Based on the premise that any building that would possibly be constructed in eyesight of Embarcadero will be visually pleasing and blend with the natural beauty of the area, a few people said that they would prefer that any parking for the building be placed behind the building, so as to greeted by a visually-appealing entrance. However, this might be in conflict with the Airport's operations, or the Army Corps of Engineers' future plans for flood mitigation projects.

Berms

Upon questioning interviewees as to how best to manage visual issues related to any construction along Embarcadero Road, berms were the least favorite option. Few interviewees believed that these would be a good idea. Landscaping that begins at the road level, and provides screening through creatively using taller bushes and trees, was much preferred to earth mounds being placed along the road. Also, the integration of architectural design and landscaping into the surroundings, in order to create a aesthetically-appealing view from the road of any buildings placed along it, was preferred by many to berms. The placement of a visually-attractive, environmentally-responsive building with appropriate landscaping was the most amenable option to many people.

Some interviewees questioned whether berms would make sense, because of the large amount of space they would take up relative to their function. They felt that this space would be better used for either Airport functions or left to nature, and that attractive landscaping would be a more economical use of the land.

Landscaping

The types and placement of landscaping at the Airport attracted a large amount of interest from many groups and individuals. This was seen as one of the ways in which the large developed area of the Airport can more effectively mesh with its surrounding environment.

The use of native plants was emphasized a great deal. Many organizations, from Save the Bay to the San Francisquito Watershed Council, offered help in selection and planting of natives on Airport grounds. (See Appendix C) One individual mentioned that The City of Palo Alto has a list of appropriate plants for the Baylands area. Though it was unclear which department offered this, it seemed most likely to be the Planning Department.

Along Embarcadero

Many interviewees expressed great concern that the viewshed at the corner where Embarcadero dead-ends be maintained as open and natural. Any development in this area would be frowned upon, and any landscaping done in this corner should take into account the preservation of the “big, open, natural feeling”, as one interviewee put it. The City of Palo Alto Planning Department especially emphasized the importance of this viewshed.

Visual screening along Embarcadero was an important consideration to many people. The City of Palo Alto Planning Department is in favor of the use of creative techniques to minimize the visual impact of any development in this area. The current landscaping only provides patchy screening, has been taken over by weeds in some places, and is dying off in others, as was pointed out by Emily Renzel in a walk along this strip. To avoid this in the future, she stated, it is important and necessary to maintain the plants after they have been planted, up through weeding and irrigation. Maintenance is especially important in the early stages of growth, when plants are most susceptible to being out-competed. It is unclear whether the City of Palo Alto would be willing or able to put resources into this maintenance. This would need further investigation.

Also, Renzel advocated for the removal of plants that were not showing strong rates of survival, and replacement with plants that have been proven to do well in this area. In terms of wise investment strategies, it would make sense to use plants that have proven to be hearty and survive in this area, so as to receive the greatest long-term benefit from the costs of their purchase and planting. A combination of careful selection and maintenance should prove to create the best use of energy and money in this realm.

Despite the request for maintenance, these same people, and most others, believe that any landscaping should preferably look natural, not “managed-looking”. Some believed that no more should be done than would be required to create a natural look. As well, this area should serve as a visual transition zone between the green of the Golf Course and the brown of the Baylands. Mimicking the natural progression between grasslands and wetlands would be most appropriate here. The use of high shrubs and strong, small trees was encouraged. Eucalyptus, and other such tall, weak trees, were discouraged, due to their high rates of breakage under high winds, such as occur in the Baylands area.

At possible new terminal building

Landscaping at any possible new terminal building should be aesthetically pleasing and inviting for visitors. A commitment to native vegetation would be viewed positively by many community residents and environmental groups. Many groups would be interested in helping to select plants and help design this landscaping. Also, some people expressed the idea that an attractive building close to the road, with good vegetative screening, would be far more desirable than a building far from the road with a large parking lot between the road and the building.

Educational signs should be on display to label plants, and to explain the importance of using native plant species. The use of species native to the Baylands creates one more opportunity to educate visitors on the importance of the preservation of the Baylands.

The use of treated wastewater from the Palo Alto Wastewater Treatment Plant – located directly across Embarcadero Road from the Airport – for irrigation purposes gathered a great deal of support from interviewees. In fact, there were no objections, in the case that the Airport receives the water at no greater cost than potable, and very few objections even in the case that it was a slight increase.

The PASCO landfill near Byxbee Park creates and provides compost for landscaping projects from residential waste. This is available at no- or low-cost to Palo Alto residents and businesses. The use of this local resource would be one more small step toward environmentally-sustainable landscaping, and could also help to improve the longevity of the landscaping.

A few people suggested that trees be used to provide shade on any new hard surface that is constructed, in order to minimize the visual “hard-scape” effect, and decrease the localized temperature increase associated with hardtop surfaces. The use of tall trees close to the wetlands could have a negative impact on endangered bird species in the area, as it would give an advantage to raptors in visually-spotting clapper rails and other small mammals, and thus out-competing other birds of prey specific to the wetlands. However, if the terminal is located sufficiently far from the wetlands area, this should not prove to be a problem. This concern should be taken into account in areas where trees would provide line-of-sight views of the wetlands.

Along the runway

Possibilities that were proposed for landscaping along the runway were varied. Some people tended to think that this area, the site of the old-proposed second runway, should be left as it is, while others thought that improving the vegetation mix and coverage in this area would make it both more visually attractive and better possible habitat for some Baylands animals. If landscaping is done in this area, making it reflect the natural aesthetics of the other, Baylands side of the levy is important. The area will be difficult to maintain, as a good deal of weeds are constantly being blown in from both inland and the Baylands.

Among those who supported the landscaping of this area were some who would like to see it restored to its original state. As this area was initially part of the Baylands wetlands, some would like to see it restored to wetlands, or made into a transitional slope so that animals would have an area in which to escape from rising tide levels.

Burrowing Owl Habitat Creation

Some suggestions were made that the area along the runway be used to create habitat for burrowing owls. This area is apparently a former site of burrowing owl colonies, and some would like to see it return to this. Many opinions about burrowing owls were expressed, and some conflicting information was presented. What follows is unverified information.

In the last few years, burrows were created in Byxbee Park by local Boy Scouts, and were occupied successfully by both burrowing owls and ground squirrels. It is doubtful whether the inhabitation of burrows in this area would be as successful, however, as there are few to no pairs living relatively close enough to this area to find and inhabit new burrows.

Most respondents with knowledge of the birds' daily habits believed that the existence of owls living along the runway would be compatible with plane take-offs and landings. According to Deborah Bartens, the City of Palo Alto Naturalist, they would likely only hunt in the low, open area on the trail side of the airport. The low-flying hunting of the birds would most likely not interfere with runway functions. However, some concern was expressed that if any birds were to inhabit this area, they might move into any culverts in the area between the runway and taxiway, and could cause a problem there. Also, one individual reported hearsay of burrowing owls climbing into planes and getting caught in their engines.

It remains unclear, from comments and opinions collected in this time alone, what the actual outcome would be of burrowing owl habitat creation. However, the implications are worth investigating, as there could be positive ecological benefits to creating habitat for this species. Small grants may be available for habitat construction through the Audubon Society. And for another example of successful burrow creation, see Mission Community College's burrows in Santa Clara.

Treated Wastewater Use

Many reports have shown recently that the high influx of fresh water into the Bay has been shown to have decreased the saline content of the southern Bay to the extent that many endemic species' existence is being negatively affected. These studies have linked this freshwater to the expulsion of treated wastewater from regional treatment plants. They have also shown the adverse effects on the salinity content of Salt Marsh Harvest Mouse habitat. Because of these impacts, the government has been taking measures to mitigate the impacts of wastewater disposal. Due to this, the City of San Jose has recently had to begin re-using a greater portion of their wastewater.

Due to this knowledge, cited by residents of both Palo Alto and East Palo Alto, as well as many Bay-related non-profits, most respondents viewed re-use of treated wastewater by the Airport in a very favorable light. They were happy to see the Airport making an effort to directly decrease the impact of human development on the Bay and Baylands.

Treated wastewater coming from the Palo Alto plant could be used for a number of purposes in both new and extant development. It can be utilized for landscape irrigation, toilet flushing, runway and surface washing, and heating/cooling of buildings and equipment, and more. Its use for plane washing was investigated as well, with some mixed opinions.

Use of treated water for plane washing may be feasible, but not with certainty. Because treated water has slightly higher inorganic salt and saline content than fresh potable water, spotting may occur on some surfaces. However, because potable water for Palo Alto comes from the ultra-pure Hetch-Hetchy reservoir, even these levels in the Palo Alto treated wastewater are lower than in potable water coming from other regions, such as the mineral-rich Colorado River. Therefore, this alleged problem may not actually be a problem in practice. It could be investigated further for real results.

Treated wastewater has been used for irrigation for quite awhile now, and best practices have been fine-tuned. The City of Palo Alto already has begun to use wastewater for the irrigation of some public spaces. The Golf Course is currently using a 50/50 mix (50% wastewater/50% potable water). Greer Park uses a 90/10 mix. At the treatment Plant itself, treated wastewater is used in the air conditioning system and for cooling machinery. In all of these uses, the use of treated wastewater instead of potable water has created no problems, aside from some initial kinks with the Golf Course. These have since been worked out.

The Airport sits atop a layer of Bay Mud, which demonstrates poor levels of infiltration. Because of the saline content of the wastewater, and the unique infiltration properties of this area, some extra measures may be necessary to ensure that usage of this water for irrigation functions well. These were the same issues dealt with by the Golf Course in recent years, and they have created an irrigation management plan that works.

Methods for providing treated water to the Airport are possible. The rate for wastewater may prove to be lower than that for potable water. While potable water is billed by volume, wastewater is billed at a flat rate. This year's rate is \$17.50/month. Next year can expect a 20% increase in the rate, to \$21.00/month.

Infrastructure to deliver treated wastewater to the Airport could be dealt with between the Plant, the City of Palo Alto, the Airport, and the County of Santa Clara. A low-pressure pipeline already runs from the Plant to the Golf Course, and this could be tapped for water. However, a mechanism for keeping the pipe pressured would need to be put in place, as the pipe is currently only pressurized by pumps at the Plant on demand for the sprinklers at the Golf Course. Possible solutions could involved a small pump on-site at the Airport, a 100-gallon underground holding tank, or tapping into a pipeline that may be constructed to the duck pond in the near future.

Funding for infrastructure could likely be provided by the County, through wastewater usage program grants. Also, some state grants may be available from the California Water Quality Control Board. Other possible sources could come from Prop. 50 funding for environmental projects. The Plant staff is willing to work with the Airport to figure out a plan of action.

Stormwater Run-off

One of the issues that garnered the most concern among local residents, Baylands users, and environmental groups was the management of stormwater run-off into the Bay. Most respondents were concerned that the industrial nature of the Airport meant that discharge of extremely high levels of toxins directly into the Bay. While the Airport has adopted a stormwater run-off management plan, there are some upgrades that could be made to improve the environmental quality of the Airport's discharge into the Bay. Especially in regards to the expansion of impermeable surface at the Airport, run-off has the greatest potential to cause damage to the natural environment. As toxins released into wetlands can have widespread environmental effects, beyond the immediate point of

discharge, improvements to run-off water quality could have a positive impact on a very large area of the wetlands ecosystem.

Many people and groups expressed desire that the Airport use creative and innovative technologies and design to solve the problem of run-off pollution at the Airport. The creation of a constructed wetlands as an on-site treatment facility was heavily supported by some interviewees. Most supported a decrease in the amounts of toxins in run-off at the Airport, with costs not being outrageously high, and no one was in favor of an increase in toxin release. However, some Airport staff and users saw no need for increased mitigation measures, as they have already met governmental standards. But other respondents want the Airport not only to meet these standards, but exceed them, due to the extremely sensitive-nature of its location. They would like the Airport to become a model for all of Silicon Valley on how to manage run-off.

The Santa Clara Valley Urban Run-off Pollution Prevention Program had some recommendations for how run-off and toxins could be better managed at the Airport. While the Master Plan will likely only have to state that the Airport will comply with the SCVURPPP permit requirements, outlined below are some of the requirements of the permit that will have to be met for any developments.

Requirements for New Developments

Under the SCVURPPP C.3 permit (available on their website. See Appendix D) for regional wastewater management, creation of more than one acre of new impermeable surface requires on-site wastewater treatment. In April, 2005, the size threshold will drop, possibly to as little as 10,000 ft². Even if new construction is done in an already developed zone, and impermeable surface is torn up to put down another, this standard will still be in effect. The PA Planning Department knows about this and should include it in any plans that come before them.

A restoration project, such as the land swap suggested by many interviewees, might possibly count as a mitigation project that could gain the Airport a waiver for this. However, it was stated that the language of the permit is vague, and any project will have to be certified by the City as equivalent.

Various possible methods exist for meeting the on-site treatment requirement. One possibility could be the conversion of the site of the current terminal building (Site 4) to a constructed wetland, with various holding ponds for different stages of treatment. Another possibility is the construction of swales on the grass area along Embarcadero Road to accommodate run-off.

There is some concern about constructed wetlands being an attraction for waterfowl. Depending on what type of design the ponds have, and what water circulation patterns are like, this may or may not be a problem. However, it will require more investigation.

Fueling

Proper education for pilots on how to handle spills of toxins was emphasized. SCVURPPP suggested the placement of signs at all fueling locations that would explain "What to Do in Case of a Fuel Spill". Also, other educational signs that list "What You Can Do to Mitigate Toxin Run-off" could be placed around the Airport, and in any educational areas that are part of a possible Baylands Welcoming Center.

They advocated making it as easy as possible for individuals to manage their own waste. Making Quik-Sweep, or other spill management agent, readily available to all pilots, whether at a fueling station or at individual tie-downs, is an important part of making sure that all possible toxin releases are avoided. They also promote concrete over asphalt for fueling areas, as concrete is less absorbent and will allow for better clean-up of spills.

Storm drains

Currently, hay bales are used around stormdrains to avoid the loss of eroded soils. However, SCVURPPP pointed out that hay bales degrade over time, and that many new technologies are currently available that work much better. While the Airport's stormwater management plan seemed to indicate a very low level of erosion, these new technologies may have added benefits that make them more valuable. The main stormdrain representative of SCVURPPP can be consulted on this matter. See Appendix D for his contact information.

Plane Washing

SCVURPPP commended the use of biodegradable soap by plane washing units, and the efforts taken to ensure that water doesn't reach the storm-drains. The treatment of heavy metals from the wash racks was also seen as commendable. Because this is a better management principle for the heavy metals, they advocated that pilots be encouraged to use the wash rack more frequently than having on-site washing. This would minimize the accumulation of lead, etc. on the tarmac from washings, and thus the run-off of such toxins into the Baylands.

Water Treatment

It was unclear whether procedures for checking the pollution content of run-off at the on-site pumping station for storm-water actually resulted in improved water quality. Some organizations saw the centralized pumping station as a fabulous opportunity for the Airport to treat the run-off before it enters the Bay, thereby improving environmental quality. Suggestions for methods of treatment were: pumping the water to a constructed wetland, to swales, to the wastewater treatment Plant across Embarcadero Road, or through the installation of equipment at the pumping station.

Fuel-check excess disposal

While efforts by the West Valley Flying Club to education pilots about the negative effects of dumping the excess fuel from pre-flight fuel checks onto the tarmac are admirable, it may not be far-reaching enough. Some pilots objected to the practice of returning fuel to their planes, as containers used for pre-flight checks might contain impurities. Therefore, these pilots encouraged the Airport to place fuel disposal containers around the Airport premises. Some individuals mentioned that the US Environmental Protection Agency currently has a campaign underway to support airports in incorporating these flame-proof containers into their operations to avoid fuel leakage into the ground, and, in this case, fuel run-off into the Baylands.

Rooftop rainwater collection

One idea that emerged a few times from various groups was the collection of rainwater on building rooftops. This was suggested as both a means to avoid more run-off, and also a way to provide fresh water for Airport operations. Some pilots voiced support for the placement of rainwater catchment devices on hangar rooftops, if they were allowed to construct more hangars.

Integrated Pest Management

Another issue that was raised several times by different interviewees was pest control. Mainly, people were concerned that rodent-control poisons used at the Airport make it into the Baylands food chain, and have a negative impact on birds and larger mammal populations. They want to ensure that the Airport has an Integrated Pest Management plan in place that decreases the use of herbicides, insecticides, and other poisons, and tries to find natural alternatives to these problems.

Permeable Concrete

This idea was raised by the JCRC, as well as several interviewees. They hoped that the use of permeable concrete could lessen the negative impact of any construction of new hard-surface in this area. As land coverage is especially high on the priority list of actions to avoid for these respondents, this was proposed as a possible compromise.

However, many disadvantages to permeability for parking spaces were raised. The use of permeable concrete was discouraged by SCVURPPP for tie-down areas, as they are considered industrial. Permeability is a better idea in parking areas, except for the area's lack of infiltration, due to the layer of Bay Mud beneath the surface. Therefore, they suggested the use of impermeable surface for some parking, with run-off directed into grass or a swale. They suggested the use of concrete more than asphalt, because of its less absorbent nature. They also advocated that the parking area be minimized as much as possible – especially the paved area – and that a part of this area be left as bare dirt overflow parking for exceptionally full days, in order to allow for the absorption of rain.

One way to make the use of hard-top more environmentally-friendly is by re-using old roadbase. The PA landfill has concrete that can be reused as Class II roadbase or for foundations as a construction material. As the carbon-dioxide produced in the production of concrete makes up a huge percentage of all human-produced CO₂ each year, offsetting some of this and using a local material is a good move.

Parking and Transportation

Parking

The construction of a new terminal building will almost certainly need to incorporate parking into its surrounding area. At very least, if the land where the old terminal sits is restored to natural habitat or constructed wetland, the parking spots on this site will need to be made up for, at least partially, as they are used for both short-term visitor parking, and long-term parking for commuters.

Many visitors to the Airport park their cars in the Golf Course parking lot, due to lack of knowledge of distinction between Golf Course and Airport parking, overly full

convenient parking, or laziness. However, this trend reinforces the assumption that a new terminal should be positioned amidst the other buildings fronting Embarcadero Road, as it shows where the majority of visitors to the Airport enter the grounds. The Golf Course would like to see a decrease in the number of spots in its parking lot taken up by Airport patrons.

Also, increased visitor parking for any enhanced amenities included in the terminal building, such as a restaurant or welcoming center, will need to be accounted for. To many local residents and Baylands visitors, parking for these types of attractions, which could possibly draw more traffic than normal Airport operations alone, is a great concern. City Council members saw this as an obstacle to creating a welcoming center. Many are worried that parking alone will take up a great deal of land. Others are also worried about the visual blight of a parking lot along Embarcadero Road.

Some suggestions for creative ways to offset the aesthetic problem of a parking lot would be to place parking behind any building along Embarcadero, between the building and tie-down area. There was some question as to whether this might impose a security concern, as public parking might then end up inside of any security gate. This could be solved by splitting parking on either side of the building, with a small, 24-hour lot on the road side, and a larger lot in back with a closing time obviously posted.

Also, in terms of possible plans for future flood control projects by the Army Corps of Engineers, the placement of the building and parking lot may need to be negotiated so that the more easily dug-up parking lot could be atop the land where an underground overflow diversionary channel could be lain down.

The City of Palo Alto Transportation Department likes the idea of a welcoming center, but cautions that enough parking must be provided. Having visitors parked along Embarcadero Road would be undesirable, out of concerns for both aesthetics and bicyclist and pedestrian safety. The Transportation Department will help determine the placement of the curb cut for the parking lot entrance. This curb cut was of some concern to members of the Baylands Frontrunners Walking Club, whom walk and run along Embarcadero very frequently. They said that ideally there would only be the one curb cut already existent for Airport parking, as multiple entrances means more danger for pedestrians and bicyclists.

Also, a couple safety concerns related to parking at the Airport were expressed. Some pilots questioned whether encouraging pilots to park at the tie-downs might cause security problems for the Airport. Also, one individual said that the new 8-hour parking rule in the back parking lots (Area 1) is unnecessary and dangerous. It means that pilots might have to worry about receiving a parking ticket while on a flight if a situation becomes troublesome and they might otherwise choose to delay their return flight for safety reasons.

Transportation

A lack of connection to the larger regional transportation network was often cited as a problem by interviewees. A free shuttle, offered by Palo Alto, runs along Embarcadero and ends at The Harbor office complex. By offering some type of connecting transportation, Airport visitors could travel to Palo Alto without needing to call a cab or rent a car. Possible connecting transport options could be a golf cart taxi, a shuttle, or bicycles. These could be shared with the Golf Course, drawing more clientele and, thus, increasing the chance of economic feasibility.

A “yellow bike” system was suggested by some pilots who are regular visitors to the Palo Alto Airport as a simple way to provide transport options. This is an arrangement where bicycles would be available to borrow or rent, and could be used for whatever purpose. This would give visitors the freedom to visit Palo Alto, the Baylands, or other locations more quickly than on foot, and without the hassle of a rental car or taxi. Bike locks and appropriate safety gear (helmets, reflectors, front and back lights) could be provided, as well as the provision of a local bike route map, and the posting of a large informational sign describing the Baylands and program. These pilots expressed a desire to get to know the area surrounding the Airport, but didn’t have any transportation options with which to do so. Some people also suggested the creation of some sort of transportation link between the Airport and the Baylands Interpretive Center, if a welcoming center is part of any possible terminal building. This could avoid the need for additional car trips between the Airport and the Baylands.

Also, some individuals suggested that the Airport arrange deals with the nearby auto dealers to provide rental cars easily to visiting pilots. This could result in quicker arrival of a rental than does the current reliance on far-away rental companies or taxi services, some of which don’t even know where the Airport is located.

Traffic concerns

Residents living along the Embarcadero Road traffic corridor expressed some concern about increased ground and air traffic due to expansion that might be included in a new terminal building, such as the welcoming center and/or restaurant, or an increase in the number of planes stored at the Airport. Concerns that the East Bayshore/Embarcadero intersection is already becoming too congested, due to the recent opening of the Ikea store in East Palo Alto, were expressed.

Some respondents, both Airport and Baylands users, expressed a great deal of reservation about the arrival of more people that might accompany a welcoming center or restaurant. Though these concerns were only expressed by some respondents, it was said to be likely that these viewpoints would be echoed by a great deal of local residents, as those who expressed them were the majority of local inhabitants interviewed. Opposition is likely to be mounted against any amenities that will attract additional air and/or ground traffic. However, some people said that friendly visitors, whatever they’re visiting for, should not be a problem.

San Francisquito Creek Flood Control Projects

The Airport is situated along San Francisquito Creek, with the runway separated from the mouth of the creek by a levee, along which runs a path for bicycle and pedestrian use. The creek mouth area is currently under much scrutiny by both local and federal agencies as the focus for possible flood control measures. According to the local Army Corps of Engineers liaison, the extant levees are inadequate to meet the demands of “Hundred-Year Flood” levels, generally proving only 60-70% effective in these circumstances. Through the natural process of creekbed rise - whereby sedimentation fills in creek channels and makes them shallower over time - this effectiveness level is decreasing. Flooding along the creek basin has been a huge problem in the past, and flood control is currently a top priority for the cities of Palo Alto, East Palo Alto, and Menlo Park.

The San Francisquito Creek Joint Powers Authority (JPA), made up of these three municipalities, along with the Santa Clara Valley Water District and the San Mateo County Flood Control District, was created to deal with creek-related issues. Among the tasks which fall to them are: the planning of flood control measures for the creek's watershed, making recommendations for funding and alternatives for long-term flood control for members' consideration, coordinating emergency mitigation and response activities relating to the creek, and taking actions necessary to preserve and enhance environmental values and in-stream uses of the creek.

The Army Corps of Engineers is currently in the process of assessing alternatives for flood control projects in the area of the Airport. The Corps' liaison holds a position with the City of East Palo Alto, and also acts as the representative to the JPA. The JPA will be included in drafting plans and eventually implementing any projects that the Corps decides upon. The Corps is in the process of undertaking two projects that deal with flooding in the regional area.

Both Debra O'Leary, the Army Corps local liaison, and Cynthia D'Agosta of the JPA have offered to meet with the JCRC to discuss any of the projects, and to create solutions that will meet all of the needs of local interests. Their contact information is below.

205 Project

The so-called 205 Project focuses on flood control measures that can be implemented in the stretch of the creek between Highway 101 and the Baylands. The initial reconnaissance for the project began on October 5 of this year. This stage will be focused on determining whether there is enough economic benefit to the area of study to warrant the cost of the project. During this phase, the Corps will be interested in speaking with representatives from the Airport to understand the economic impact of flooding on the grounds. The Corps' liaison, when interviewed, stated that main impetus for pursuing a flood control project was to protect the economic vitality of the region, and the Airport is considered an important part of that. Their intent for the project is to pursue alternatives that will make sense for the creek and for everyone involved. While they realize that the considerable community benefits of flood control may take precedence over some commercial activity in the Baylands area, they are interested in meeting with the Airport to discuss alternatives that will be mutually agreeable. Maintaining the Airport's ability to conduct business will be taken into account in the planning process.

After this reconnaissance, which should last for about a year, there will be an alternatives feasibility study period, then environmental quality reports and the pre-design phase, followed by pre-construction preparation. All this will likely take 6-8 years to complete, before project construction actually begins.

Some solutions that have been proposed could possibly impact the Airport and any future development on the site. One such project could be the widening of the creek mouth by moving the levees outward. A representative from the JCRC has met with the Corps liaison to express concern about moving the levee on the Airport side. This would shorten the length of the runway, already considered by many pilots to be too short. The liaison said that this concern will be addressed in any planning. However, issues of environmental and social justice come into play with this plan, as East Palo Alto is considered by some to have already taken on much of the negative burden of Palo Alto's development. There also may not be enough solely on the East Palo Alto side of the creek to significantly decrease flooding. Furthermore, the area to the other side of the creek

mouth contains twenty-five percent of the South Bay's clapper rail population. This fact may hinder both this plan and/or an idea to demolish the levee on the other side completely, thus flooding the wetlands in that area.

Another possible alternative would be the heightening of the levees. This would also produce the effective shortening of the runway. While the liaison presented the idea as an alternative, she then pointed out this effect as one of the problems associated with it, and would like to make sure that any similar issues be addressed in the plan that will eventually be adopted.

Another proposal could be the widening of the levees upstream of the Airport and Golf Course area. However, this would be in a residential zone, and may be associated with a great deal of public outcry.

A likely proposal would be the use of parts of the Golf Course as a flood basin, with an overflow channel that would pass beneath the Airport in a pipe and discharge into the Baylands near the current site of the terminal building. This pipe would have a large enough capacity to handle the overflow produced by the most dramatic "Hundred-Year Flood" levels, so as to avoid any possible damage to Airport facilities.

If this alternative were to become part of the plan, a number of items in the Master Plan would have to be properly configured and/or aligned with this plan in order to maximize the integration of designs, and also to minimize unnecessary costs after construction.

The first item would be the siting of the terminal building. If a new terminal building is constructed, and it is sited along Embarcadero Road, the alignment of the building on the site plan will need to take into account the passageway of the pipe. As the timeline for terminal construction may be shorter than that of the 205 Project, it may be necessary for the pipeline to be placed into the ground after the terminal grounds are complete. If this alternative is chosen as part of the 205 Project, it will be important that the site design accommodate easy placement of the pipe. Making sure that the pipe's passageway is covered by an easy to tear up surface, as well as minimization of its replacement cost, would be desirable. If the terminal building itself were to be placed over the pipeline course, this would complicate the pipeline's construction immensely, and add a great deal to the budget for the project. It was suggested that the building be oriented parallel to the pipeline, and not on top of its course. Also, that the pipe's passageway be covered with an easily removed surface, such as an asphalt or dirt parking area.

The integration of the pipe's design requirements may be in some conflict with other interviewees' desires that the Embarcadero frontage be a pleasant view rather than a parking lot. It was suggested by some that the parking lot be placed behind an attractively-designed building that would integrate into the landscape. However, creative site design should be able to balance landscaping, parking and the siting requirements of this possible flood control alternative.

The JPA also expressed interest in the possibility of the restoration of the land on which the terminal building currently sits, should a new terminal building be constructed. The use of this area for the discharge of the flooding overflow pipe could be of interest to them. If this were the case, other concerns about the restoration of this area that were expressed by other respondents would need to be taken into account as well, such as concerns that the restoration of this area to wetlands might increase waterfowl presence in the flight path of the runway. However not all types of wetlands are likely to attract waterfowl. It will take proper selection of ecosystem type in this area to create a merger of all concerns.

206 Project

The other project, the 206 Project, is a general investigation looking at the entire watershed of the creek. Based on the standards in the federal Water Resources Development Act, this project will be focused on flood control and environmental restoration. It will create solutions that span a broader geographic area than the 205 Project, encompassing the entire watershed of the creek. This project also has a wider temporal span than the 205, with a 25-50 year focus.

In speaking with both the JPA and Corps representatives, it was mentioned that the Airport land will be viewed in its regional context. This means that the land's value as part of the wetlands will be evaluated against the social benefit that the Airport offers to the regional transportation system. While the role PAO plays in the transportation infrastructure is currently valued, changes in the regional air transportation make-up (e.g. at SFO and Moffett Field) could cause the value of PAO in particular to relatively decrease within the regional context. This, combined with the possibility of a high valuation on the land for ecological and flood control reasons, could create the potential for reclamation of the Airport property as a result of the 206 Project. The culmination of this project could likely coincide with the current 2017 end to the Airport's lease from the City of Palo Alto. The lease end could be viewed as a prime opportunity for the Corps to obtain the land, if this were to be chosen as a plan.

Planning Possibilities and Flexibility

Some suggestions were made for how the Airport can best incorporate flood control possibilities into the Master Plan. Creating a plan that allows for some flexibility in the areas most likely to be affected would be the prime way to do this. Possible flood control plans could result in the necessary reconfiguration of Airport operations. Taking into account possibilities for both natural and engineered changes in the creek will likely result in long-term benefit for the Airport, by providing resilience that will support its continued successful operation.

As many flood control options include the potential for an adjustment to the levees along the mouth of the creek, flexibility in the location, configuration, and/or length of the runway may be necessary. It was suggested that at very least, the Airport consider whether there could be alternatives in this area so that they will be prepared to deal with any planning issues that should arise.

The area between the Golf Course and the Airport should also be reviewed in any analysis for potential flexibility planning. If the use of the Golf Course as a flooding overflow basin is pursued, it may be likely to construct a levee between the two entities in order to keep flood waters from reaching the Airport. While the construction of this levee would likely be done on Golf Course land, in this case, it is unclear what could happen to the border area as a result of this proposal.

Also, some parts of the Airport that lie along the Bayshore may fall under the jurisdiction of the Bay Conservation and Development Committee, a board that oversees the San Francisco Bay wetlands areas. Their jurisdiction generally runs from the shore to about 250 feet inland. A map of the BCDC's jurisdiction has been included. (see Appendix G) Palo Alto Mayor Dena Mossar is an alternate on the board, and can be consulted with any questions.

The JPA and Corps also mentioned an idea that is currently being discussed by a local joint transportation committee for the construction of a Dumbarton Bridge connection to Highway 101. This could possibly pass along the top of a Baylands levee, and could have effects on the Airport in some ways.

A suggestion made by the Golf Course was that flooding problems at the Airport be addressed through improved drainage. Currently, floodwaters are mingled between the Golf Course and Airport, and the redirection of floodwaters away from the Golf Course would be desirable.

Some groups have suggested the movement of the levee running parallel to the runway, in order to reclaim the space that was suggested for the rejected second runway. The Citizen's Committee to Complete the Refuge recalled that this area was originally taken from the Baylands in order to construct the second runway, and as this proposal failed, it seems to make sense to revert it to wetlands in order to help mitigate flooding.

Alternate Futures for the Airport

During the outreach process, some views were expressed about the future of the Airport. Among pilots' associations, the future proposed for the Airport was for the most part supportive of continued and improved operations, and even expansion of activities, though there were some concerns expressed that recent changes in the regional air transportation network would make PAO less relevant. Among most other groups, there was a variable amount of support, ambivalence, and distaste for the current operations of the Airport. However, there was a general consensus that expansion of the Airport beyond its current grounds would be undesirable for the community.

Some respondents questioned the future of the Airport's existence. Palo Alto City Council Member Burch questioned whether the economic base to support an airport would continue to exist in this area with the same strength that it does today. He distrusted the necessity of development and expansion of the Airport for this reason. Others questioned the need for an airport in this area if Moffett Field is opened to general aviation, as it was seen as a superior facility at a reasonable distance. The increase in numbers for storage space, if this should happen, might draw business away from PAO, thereby making expanded storage capacity unnecessary.

If the County of Santa Clara is unable to renew its lease from Palo Alto, it seemed unlikely to many that another entity would step up to take it over. A few were suggested, but the Palo Alto Planning Department expressed disinterest in the City's taking over Airport operations.

The most frequently expressed alternate use of the Airport's land was its conversion to natural wetlands habitat and/or the re-routing of the creek to its natural, historic path, which crosses through the Golf Course and Airport. This was expressed as a vague possibility by the JPA, Army Corps of Engineers, and a few other respondents. While this was an attractive idea to some, there was no certainty that this was a future possibility, for a variety of reasons, top among them being the importance of the Airport in the regional transportation network.

Other Comments/Issues to be Addressed

While the scope of this outreach effort was limited to certain questions about plans for land use and development at the Airport, during the course of the interviews, comments on other areas of Airport land use and operations were mentioned. These

remarks are provided here so that the Airport will have the fullest possible knowledge of issues that remain to be addressed.

Some problems with the current configuration of the runway have been voiced. Many pilots asked that the runway be lengthened to accommodate larger planes. However, they also realized that this would be a difficult proposal, as the runway is flanked by water on either end. Also, many local residents and Baylands interest groups spoke out against the increase in noise that would accompany larger plane sizes. Some pilots said that the taxiway and runway are too close together, resulting in problems when planes are waiting to enter onto the runway. Also, two individuals mentioned a bump on the runway, as well as excess gravel, that make take-offs and landings problematic. As well, pilots complained that the run-up area can at times be too crowded, and they would like to see the space expanded to accommodate more planes at once. The Golf Course also complained that the noise and exhaust smells from engine run-ups bothers golfers, and would like to see this area moved to the other side of the runway. However, this move would bother many Baylands visitors, as well as its potential to disturb wildlife. Also, some pilots would like to see the widening of some taxiways in the tie-down area, in order to accommodate the planes with wider wingspans that are becoming more common at the Airport. At the same time, however, they realized that this could possibly take away from the number of tie-downs at the Airport and were concerned about this. They hoped that there could potentially be a creative solution involving reorganization of the airplane storage space.

In terms of the Airport's integration into the surrounding area, some ideas have been proposed. Creating a path between the Golf Course and Airport with signs to direct visitors to each location would be useful in strengthening the understanding and connection between the users of the two facilities. This could also be useful to direct Airport visitors to the Golf Course Clubhouse restaurant in order to meet demand for dining options in the area. The integration of the Airport's main viewpoints and attractions should be integrated into the Baylands trail network in order to maximize the visual accessibility of the interesting parts of the Airport to Baylands visitors, and also minimize the unpleasant views from the trails.

Along with this, the Airport should address the issue of safety along the Airport's perimeter for Baylands visitors using the trail network. To some respondents, it seemed unclear what the top priority is for the Airport, as some safety features – such as fences, signs, and warning lights along the runway end – are not maintained well enough to be completely effective. The glass from lights broken at the runway end has proven hazardous to some joggers in the area, and they have asked that an alternate solution to glass light bulbs be looked for. And while safety has been increased with improved night lighting at the Airport, some respondents voiced concerns about the effect that the lights are having on Baylands-dwelling animals.

Education of many different groups was mentioned as well. Many Airport users requested an education campaign that would bring more local attention to the Airport's existence. They complained that everyone from Palo Alto residents to taxi drivers, to even the police department, have been unaware of the Airport's existence. This has resulted in some problems at times. Also, the Palo Alto Naturalist, as well as other Baylands users, called for an information campaign to explain to Airport users the importance of the Baylands – or “the patch”, as many pilots refer to the area - and the destruction they do to the wildlife when they leave their pattern to cut across “the patch” on landings.

Some individuals at the Airport had complaints about certain aspects of their location on the site. Airplane owners whose tie-downs run along the Golf Course pointed out that the net, which is meant to protect their planes from golf balls, tends to fall down frequently and not be re-hanged. Also in the same area, the Civil Air Patrol pointed out that the distribution of the new lamp posts left the post next to the CAP plane's tie-down awkwardly close to the plane when it is parked. When perfectly aligned, the wingtip of the plane is a mere 14 inches from the post. They were confused why the lamp post was put in this place, because it is out of alignment with the other posts in the same row as well as being problematic for them.

Some other operational suggestions that were made included the provision of a 24-hour self-service jet fuel pump and the more frequent changing of the security code on the perimeter gates. Stanford Hospital's Life Flight uses PAO for their refueling purposes during the day. But when the pump is closed in the evening, they must fly an extra 10 minutes round-trip to refuel at SJO. Being able to refuel at PAO would save them on operational costs. They can currently purchase jet fuel at night, but they must page a man out of bed, and the response time can be slow. They would need to be able to land a helicopter near the fueling pump in order to do this. However, when speaking with Patricia Roy of Roy-Aero Enterprises, it seems that there are some safety concerns with the handling of jet fuel that keep it from being self-serviceable. Proper technique in its handling is necessary, as it is more flammable than normal fuel. Safety was also the reason for concern about the low occurrence of gate code changes. A more frequent changing was suggested in order to keep unwanted nighttime visitors out.

A pilot at Life Flight also expressed the desire for the installation of an ASOS or AWOS 24-hour weather reporting system, so that they could have better information about current conditions when planning nighttime landings. The installation of this type of system could cost around \$30-40,000, but some airports of the same size as PAO, such as Watsonville, have these systems and are a great asset for the pilots who use them.

When asked what the best possible outcome of the Master Plan process could be, some groups were interested in possibly using space at the Airport for facilities that could benefit the community in various ways. One Palo Alto resident supported the idea of the placement of water rescue equipment somewhere in the Baylands area, possibly on the Airport grounds. This could make the response time for downed pilots quicker and easier when they crash into the water that surrounds most of the Airport. The ability to get a boat into the Bay instantly could be very important, especially if the proposed cross-Bay ferry to Moffett Field begins service.

The Palo Alto Parks and Golf Division of the Community Services Department would like to see playing fields for youth built on the Airport, specifically in Area 4 along Embarcadero. He stated that many airports around the country have nearby playing fields, and they seem to work quite well with the plane traffic. As playing fields are a scarce commodity in Palo Alto, this would be a great asset to the community.

As well, the San Francisquito Watershed Council expressed the desire for a native plant nursery site in the Baylands area. Though a nursery is likely to be constructed soon next to the Baylands Duck Pond, it will not provide adequate space for the Council's needs, in addition to the other groups who will be using the space. They also said that this site is too windy to be a good nursery environment. Though 5,000 ft² would be adequate, their ideal would be 8,000-10,000 ft² of space.

It was mentioned by an Airport user that the artistic chevrons placed in Byxbee Park as decoration can be problematic for pilots coming in for a landing, as it can misdirect them away from the runway. These chevrons were thought to be obtrusive and

unnecessary by individuals in the Palo Alto Planning Department as well, and it would seem likely that the possibility for their removal would be high.

Appendix A – Contact Information

List of Interviewees

Palo Alto Public Works Dept, Regional Water Quality Control Plant

2501 Embarcadero Way, Palo Alto, CA 94303

William Miks, Manager

(650) 329-2243 (650) 329-2598 bill_miks@city.palo-alto.ca.us

Palo Alto City Council

Jim Burch, Member

177 Hemlock Ct., Palo Alto, CA 94306

(650) 858-2348

jimburch@earthlink.com

Judy Kleinburg, Member

judy@judykleinberg.org (650) 328-8212

Civil Air Patrol at PAO

(650) 856-6311

Mitch Richmond, President

(408) 735-1146 mitch@richwood-group.com

San Francisco Bay National Wildlife Refuge

1 Marshlands Road , Fremont, CA 94536

Mail address: PO Box 524, Newark, CA 94560-0524

Joy Albertson, Naturalist

(510) 792-0222

San Francisquito Creek Joint Powers Authority

www.city.palo-alto.ca.us/jpa/ sfcreek@menlopark.org

701 Laurel St, Menlo Park, CA 94025

Cynthia D'Agosta, Executive Director

cdagosta@menlopark.org

(650) 330-6765 cell: (650) 330-6769

Santa Clara Valley Urban Run-Off Pollution Prevention Program

www.scvurppp.org

699 Town & Country Village

Sunnyvale, CA 94086-6108

Jill Bicknell, Supervising Engineer

(408) 720-8811

jcbicknell@eoainc.com

Save the Bay

www.savesfbay.org

1600 Broadway, Suite 300

Oakland, CA 94612-2100

(510) 452-9621

Kimiya Mizany
kmizany@savesfbay.org
Marilyn Latta
mlatta@savesfbay.org

LifeFlight, Stanford Hospital Operations

300 Pasteur Drive, Room H1249
Stanford, CA 94305
Agripina Villegas, Operations Director
(650) 725-4831 avillegas@stanfordmed.org

Palo Alto Community Services, Open Space and Sciences Division

Greg Betts, Superintendent
1451 Middlefield Rd, Palo Alto, CA 94301
(650) 617-3112 gregory_betts@city.palo-alto.ca.us
Deborah Bartens, City Naturalist
2775 Embarcadero Rd, Palo Alto, CA 94303
(650) 329-2382 or (650) 329-2506 deborah_bartens@city.palo-alto.ca.us

Palo Alto Community Services, Parks and Golf Division

Paul Dias, Director
3201 East Bayshore Rd, Palo Alto, 94303
(650) 496-5916 paul_dias@city.palo-alto.ca.us

City of Palo Alto Parks and Recreation Commission

Ellie Gioumouis, Member
1305 Middlefield Road, Palo Alto, California 94301
(650) 463-4900 elliegms@uf.znet.com

Palo Alto Department of Transportation

(650) 329-2520 plandiv_info@city.palo-alto.ca.us
Joe Kott, Director
250 Hamilton Avenue, Palo Alto, CA 94301
(650) 329-2578

Palo Alto Department of Planning & Community Environment

250 Hamilton Avenue, Palo Alto, CA 94301
(650) 329-2441
Steve Emslie, Director
(650) 329-2354 steve.emslie@city.palo-alto.ca.us
Virginia Warheit, Senior Planner
(650) 329-2364 virginia_warheit@city.palo-alto.ca.us

Palo Alto Sanitation Company

3201 E. Bayshore, Palo Alto
Mike Jackson
(650) 496-6980

Palo Alto Utilities Department

www.cpau.com

250 Hamilton Avenue, Palo Alto, CA 94301

Lindsay Joye, Marketing Engineer, Administrative Services Division

(650) 329-2680 lindsay.joye@city.palo-alto.ca.us

East Palo Alto Office of the City Manager

2200 University Avenue, East Palo Alto, CA 94303

Debra O’Leary, US Army Corps of Engineers Liaison

(650) 853-3179 doleary@cityofepa.org

West Valley Flying Club

1901 Embarcadero Rd, Ste. 100, Palo Alto, CA 94303

Josh Smith, CFI

(650) 856-2030 (415) 860-0020

Santa Clara County Airmen’s Association

David Meinhardt, President

(650) 494-7797 davidmeinhardt@sbcglobal.net

Roy-Aero Enterprises

Patricia Roy, Owner

(408) 266-6666

Palo Alto Airport Association

Nancy Fouquet, Director

13470 Robleda Rd, Los Altos Hills

(650) 941-2111

Baylands Conservation Committee

Emily Renzel

1056 Forest Ave, Palo Alto, CA 94301

(650) 321-4165

Santa Clara Valley Audubon Society

22221 McClellan Road, Cupertino, CA 95014

(408) 252-3747 scvas@scvas.org

Craig Breon, Executive Director

craig@scvas.org

Citizens Committee to Complete the Refuge

Florence and Phil LaRiviere

453 Tennessee Lane, Palo Alto, CA 94306

(650) 493-5540 florence@refuge.org

Environmental Volunteers

www.EVols.org

3921 E. Bayshore Rd., Palo Alto, CA 94303-4326

(650) 961-0545

Allan Burkowitz, Director

Allan@EVols.org

Acterra

3921 E. Bayshore Rd., Palo Alto, CA 94303-4326

(650) 962-9876

San Francisquito Creek Watershed Council

Katie Pilat, Outreach Coordinator & Project Manager

KatieP@Acterra.org (650) 962-9876 ext.305

Phil Chang, Coordinator and Project Director

PhilC@Acterra.org (650) 962-9876 ext.304

Bay Area Bird Photographers

Peter LaTourrette – ex-Director of Committee for Green Foothills

(650) 961-2741 (home)

Baylands Front Runners Walking Club

PO Box 223, Cupertino, CA 95015

(408) 984-4076 FrontRunners@BayLands.org

Peter Sass, President

President@baylands.org

East Palo Gardens Block Neighborhood Club

Janice Mitchell, President

(650) 329-0822 janmitchell@earthlink.net

Denise Dade

Former Legislative Advocate for the Committee to Green the Foothills

earthyd@yahoo.com (650) 855-9908

Dale Friday, Local Resident and Windsurfer

dale@fridayconstruction.com (650) 320-8301

Libby Lucas

174 Yerba Santa Ave., Los Altos, CA 94022

650 948-3552 JLucas1099@aol.com

Lynn Chiappella

631 Colorado Ave., Palo Alto, CA 94303

Made contact, no meeting

Duveneck/St. Francis Neighborhood Association

www.dsfn.org

Karen White, President

494-7026 karenwhite4@sbcglobal.net

Spoke with Ms. White about what she perceived to be the main concerns for Association members, and included these in the report. However, due to the outreach effort being

conducted during the high season for Palo Alto politics, we were unable to schedule an Association-wide meeting.

Downtown North Neighborhood Association

www.WeMatter.com/dtnna

Dan Lorimer, President

322-5566 lorimer@meer.net

Spoke with Mr. Lorimer about what he perceived to be the main concerns for Association members, and included these in the report. However, was unable to schedule an Association-wide meeting, as he assumed lack of interest and time among members during the time-period of the outreach effort.

Palo Alto Chamber of Commerce

122 Hamilton Ave., Palo Alto, CA 94301

(650) 324-3121

Audrey Jacobs, Director of Government Relations

(650) 324-3124

Exchanged multiple messages with Ms. Jacobs, but was unable to schedule a meeting.

City of Cupertino/Santa Clara County Fire Dept

http://www.cupertino.org/emergency

10300 Torre Ave

Cupertino, CA 95014

Marsha Hovey, Emergency Services Coordinator

(408) 777-3335 MarshaH@cupertino.org

Attended a meeting of the Office of Emergency Services regional meeting. Distributed an sheet with information about the outreach project, and included my contact information. Received a response from Palo Alto Fire Chief Grijalva, but was unable to arrange a meeting with him.

Santa Clara Valley 99s

Candice Tuttle

1012 Henderson Ave., Menlo Park, CA 94025

Candice@LadyPIC.com

(650) 326-5214 cell: (650) 465-9487

Was unable to attend any meetings of the 99s, despite attempting to schedule in multiple of them. The timing worked out badly.

No comment

SF Bay Bird Observatory

SFBBO@aol.com (408) 946-6548

Was told that the SFBBO is a purely scientific organization, and that without up-to-date date on the conditions at the Airport, they did not want to comment.

South Valley Streams for Tomorrow

Keith Anderson

P.O. Box 1409, San Martin, CA 95046

streams42morrow@earthlink.net

Was told that their focus is on the South County, and they have no involvement in PAO topics.

Not talked to

Fish and Wildlife – Left messages; never returned

Aviation Management Group – Left messages; never returned

Victor Aviation Service – Left messages; never returned

Fire Chief Grijalva – Exchanged multiple messages; Chief was on vacation; never spoke

Red Cross – Left messages; never returned

Appendix B – Organizations to contact about educational display help

- Environmental Volunteers (see above)
- Deborah Bartens (see above)
- Santa Clara Valley Audubon Society (see above)
- Save the Bay (see above)

- Saul Chaikin

(408) 255-0722

schaikin@sbcglobal.net

As a pilot and environmentalist, Saul may be able to offer a cross-cultural perspective on the Baylands and the Airport's relation to it. Though he was not contacted in the outreach effort, due to limited time, he was mentioned multiple times as a good contact.

- Ken Gardner

No contact information; can be provided by Peter LaTourette

As an ex-flight instructor and one of the best bird flight photographers around, Ken could offer valuable knowledge to the creation of educational displays.

Appendix C – Organizations to contact about native plant landscaping

- Baylands Conservation Committee (see above)
- San Francisco Bay National Wildlife Refuge (see above)
- San Francisquito Creek Watershed Council (see above)
- Santa Clara Valley Audubon Society (see above)
- Save the Bay (see above)

Appendix D – Further information on Stormwater and Run-off management

Informational pamphlets

Five informational pamphlets have been attached. They are D.1-D.5:

- D.1 – Santa Clara Valley Water District: “Recycled Water”
- D.2 – Palo Alto Regional Water Quality Control Plant: Application for Reclaimed Water Use Permit
- D.3 – SCVURPPP: “Preventing Storm Drain Pollution”
- D.4 – Santa Clara Valley Nonpoint Source Pollution Control Program: “Best Management Practices for Industrial Storm Water Pollution Control”
- D.5 – Retail Gasoline Outlet Work Group: “Best Management Practice Guide: Retail Gasoline Outlets”

C.3 Permit Provision

Information about the C.3 permitting process, required by the SCVURPPP, is available at their website. <http://www.scvurppp.org> On the left is a link to “C.3 Submittals” which will direct the browser to information about the C.3 permit provision.

Websites on on-site wastewater treatment

More information about on-site wastewater treatment strategies can be found at the following links:

On-Site Wastewater Treatment Research Council <http://www.towtrc.state.tx.us/>

Fact sheet on various types of treatments <http://www.ci.austin.tx.us/wri/fact.htm>

National On-Site Wastewater Recycling Association <http://www.nowra.org/>

Presentations on On-Site Wastewater Treatment <http://ossf.tamu.edu/presentations.htm>

Ocean Arks International – Living Machines <http://www.oceanarks.org/>

Living Technologies Ltd. <http://www.ltluk.com/>

Further contacts for stormwater management

Joe Teresi, Senior Engineer, City of Palo Alto Public Works

Main storm-drain representative, and Public Work’s representative to SCVURPPP

(650) 329-2129

Roberto Medina

Palo Alto Stormwater Inspector at the wastewater treatment plant

(650) 329-2430

Appendix E - A list of some green architecture firms

Chris Morgan, AIA

<http://www.ecoarch.com/>
220 Bayside Road, Bellingham, WA 98225
(360) 756-1930

EHDD

<http://ehdd.com>
500 Treat Ave. #201
San Francisco, CA 94110
(415) 285-9193

Environ Design Collaborative

<http://www.environdc.com/>
P.O. Box 162
Charlottesville, VA 22902-0162
(804) 977-1910

Locus Architecture

<http://www.locusarchitecture.com/>
450 Geary St., 5th Flr.
San Francisco, CA 94102
(415) 474-5345
locus-sf@locusarchitecture.com

Paladino & Company, Inc.

<http://www.paladinoandco.com/>
110 Union St., Suite 400
Seattle, WA 98101-2028
(206) 522-7600

Siegel & Strain Architects

<http://users.lmi.net/~s8092/>
1295 59th Street
Emeryville, CA 94608
(510) 547-8092

Appendix F – Renewable Energy Pamphlets

Two pamphlets: F.1 and F.2 (see attached)

Appendix G - Maps

Two maps are attached: G.1 and G.2 (see attached)

G.1 – Map of Community Outreach Development Alternatives

G.2 - BCDC jurisdiction map