

**City of Hayward**  
**777 B Street**  
**Hayward, CA 94541**

**Council Airport Committee Meeting**  
**Thursday, October 28, 2010**  
**5:30 p.m.**  
**City Council Chambers**

**A G E N D A**

**5:30 p.m. Call to Order - Pledge of Allegiance**

Public Comments: (The PUBLIC COMMENTS section provides an opportunity to address the Committee on items listed on the agenda, as well as other items of interest. The Committee welcomes your comments under this section, but is prohibited by State law from discussing items not listed on the agenda. Your item will be taken under consideration and referred to staff.)

- 1. Approval of July 22, 2010 Summary Minutes**
- 2. Informational Update on the Alameda County Airport Land Use Commission's Draft Hayward Airport Land Use Compatibility Plan**
- 3. Future Agenda Items**

**Distribution:**

Mayor and City Council  
City Manager  
Assistant City Manager  
City Attorney  
Public Works Director

City Clerk  
FAA Tower Manager  
Airport Tenants  
FBO's

Interested Parties  
Daily Review  
Post

---

Assistance will be provided to those requiring accommodations for disabilities in compliance with the Americans with Disabilities Act of 1990. Interested persons must request accommodation at least 48 hours in advance of the meeting by contacting the Airport Manager at (510) 293-8678 or TDD (510) 293-1590.

---

**DATE:** October 28, 2010  
**TO:** Council Airport Committee  
**FROM:** Robert A. Bauman, Director of Public Works  
**SUBJECT:** Summary Minutes for July 22, 2010

**CALL MEETING TO ORDER**

Council Member Henson called the meeting to order at 5:31 p.m. with Council Members Quirk and Halliday present.

**City staff:** Robert A. Bauman, Director of Public Works  
Lloyd Partin, Airport Manager  
Brendan O'Reilly, Airport Operations Manager  
Noemi Dostal, Airport Administrative Analyst  
Amy Maloon, Airport Secretary  
Courtney Moreland, Airport Intern

**Members of the public present:**

Roger Bohl	Jim Bowers	Gary Briggs
Robert Coutches	David Cunningham	Ernest Delli Gatti
Ben Henderson	Shirley Hentz	Nathan Hofferber
Jacki Hoyt	Rolland Hoyt	Phil Johnson
Itzel Maciel	Norman Ramirez	May Shay

**PUBLIC COMMENTS**

There were no public comments.

**1. Approval of Summary Minutes – April 22, 2010**

Summary Minutes approved as submitted.

Council members Quirk and Halliday requested that the Airport provide a paper copy of future agendas instead of the electronic copies so that they can mark them up.

## 2. Report on Airport Website Change

Lloyd Partin, Airport Manager, presented four differing website layout options for the Committee's review and comment. This presentation was provided following Committee direction to staff to update the Airport website to better showcase the Airport and provide information in a more accessible format to those interested. Based on review of other general aviation airports of similar size, Airport staff determined that an update of the webpage should contain only information that best fits the Airport's continued commitment to General Aviation. The four templates presented to the Committee for review differed only slightly in the way content was displayed; the primary notable difference being different photos used as backdrops. Mr. Partin stated that staff's preferred design was template number four. Mr. Partin concluded his presentation with a request for comments from Committee and public present.

Council member Halliday indicated her preference for the fourth template, but with the photo of the Airport from template number two. Ms. Halliday inquired if the weather information displayed would be updated regularly. Mr. Partin responded, stating weather information would be updated automatically.

Council member Quirk commented that he would like the subheadings used in the other three templates incorporated into the fourth template. He asked for the opinions of the public in attendance.

Council member Henson also stated his preference for webpage template number four, with the preference of the Airport photo from template number two. Council member Henson commented on his endorsement of another General Aviation Airport's website, Centennial Airport, located in Denver, CO. Mr. Henson indicated that his endorsement of the Centennial webpage was due to the ease of access, quantity and quality of information presented, and the changing photos of the Airport at the top of the webpage. Mr. Partin stated that the information should be easily accessible, especially noise information, to provide information to transient aircraft operators prior to their coming to Hayward.

Council member Henson asked if the photo of the Airport could include the "HWD" that was painted at the north side of the runways. Mr. Partin responded that "HAYWARD" was removed at the request of the FAA and that it could not be added back to the Airport's paved areas. Mr. Partin stated that he would research the possibility of adding "HAYWARD" to one of the various building rooftops in the future.

*Public Comments* - Mr. Roger Bohl, AOPA Airport Support Network Representative, commented that he liked the information provided in webpage templates One and Two, but found them too cluttered. He suggested that the Airport select template four, but to have the sub-links pop up when you rollover the buttons. Mr. Bohl also suggested that Airport staff add a link to Air-Nav website, and to make sure the Hayward Executive Airport's link is also added the Air-Nav website.

Mr. Ben Henderson, representing MALTA, a non-profit aviation education corporation based in Hayward, stated that he liked how the noise abatement information was readily available on the

Centennial Airport website. In addition, he would like to see a “Latest Airport News” section added to the website, just as it is included in the Centennial Airport website.

Robert Bauman, Public Works Director, agreed with the suggestion by Mr. Bohl about making the sub-menus visible when the mouse rolls over the buttons in the website.

Mr. Ernie Delli Gatti suggested that the noise abatement, including the pilot advisory frequency broadcasted on 122.85 MHz, be easy to find on the website. He also said that a list of outages that affect air traffic should be included. This would inform the public why the noisy aircraft are not following noise abatement procedures, for reasons such as weather or runway conditions.

Council member Halliday asked if the section on “Recent Airport News” is easy to update. Mr. Bauman responded that updates are easily made, just as changes are frequently made to the City of Hayward’s website.

Council member Quirk agreed with the need to highlight the noise information and pilot-specific information, such as runway and pavement maintenance.

### **3. Update on California Air National Guard Site**

Mr. Partin presented the staff report and latest news about the California Air National Guard (CANG) property. Since 2008, the CANG has been empty, except for a caretaker to maintain order and security. In February 2009, Airport staff met with the representatives for CANG and their environmental consultants to prompt a timeline for the turnover of the property. The timeline has remained elusive, due to difficulty determining a complete identification process and a plan to mitigate the effects of site contamination required by California’s Department of Toxic Substances Control (DTSC). In March 2010, the Air Force concluded a third environmental assessment report. The delays in getting to actual cleanup have contributed to expansion of contamination plumes beyond the leasehold property boundary.

In June 2010, representatives from CANG provided a verbal agreement to turn over 24 acres of the site (less the 3 acres of land the Army National Guard will keep) to the City of Hayward, and to accept full responsibility for cleanup of the former defense site. It is uncertain how the future clean-up activities will affect private development of the property. Mr. Partin stated that it remains uncertain how much additional development will be able to occur beyond the initial re-use of the former Air Guard site included in the proposed Phase I development. The CANG anticipates a site closure report by 2017. However, Mr. Partin remains skeptical how realistic that timeline is, due to clean-up and monitoring requirements.

Council member Halliday questioned the timeframe for the activities to begin Phase I and modifications to allow occupancy of the CANG hangar. Mr. Bauman replied that the planned activities would begin once the CANG provides either a full or an interim release of the site. Council member Halliday shared her desire the release would happen soon, so that development would stimulate the economy.

Council member Henson shared the same frustrations as Council member Halliday about the slow movement of the plans to develop the CANG. He then questioned why the CANG was not going to release the remaining 3 acres to the City and wondered if it had to do with environmental reasons. Mr. Bauman responded that the 3 acres was going to remain under Department of Defense use.

Council member Henson wanted to know how long the entire process was going to take. Mr. Bauman said that there is no definite period; the process can take a long time because of the amount of cleanup that will be required, once a plan is accepted by the agencies.

*Public Comments* - Mr. Delli Gatti, SLVHA representative, asked if the run-up pad and the quick check area the CANG pilots used were part of the areas under investigation. Mr. Bauman replied that these areas were under the investigation performed. Council member Halliday asked about the location Mr. Delli Gatti was referring. Mr. Partin responded that the run-up ramp and quick check are adjacent to the now closed taxi lane that angles toward taxiway Zulu from East to West. He further explained that DTSC has expressed an expanded interest in all areas used by the military, including sites no longer contained within the Airport boundaries.

Mr. Delli Gatti stated that in Merced, CA, redevelopment of Castle Air Force base, a site closed in 1995, has experienced continued delays due to the extensive amount of time it has taken to clean up the land, indicating the possibility of a parallel situation with the CANG site clean-up.

Mr. David Cunningham, President of the Local Chapter of the Tuskegee Airmen, asked if it would help if he were to write a letter to the DTSC and CANG. Mr. Bauman said that a letter from the Tuskegee Airmen might be helpful, and that Mr. Partin would provide Mr. Cunningham the names of the key people at both the DTSC and CANG.

#### **4. Future Agenda Items & Announcements**

- California Air National Guard site updates as conditions change

#### **ADJOURNMENT**

The meeting adjourned at 6:13 p.m.



CITY OF  
**HAYWARD**  
HEART OF THE BAY

DATE: October 28, 2010

TO: Council Airport Committee

FROM: Robert A. Bauman, Director of Public Works

SUBJECT: Informational Update on the Alameda County Airport Land Use Commission's Draft Hayward Airport Land Use Compatibility Plan

**RECOMMENDATION**

That the Committee reviews the County's Draft Airport Land Use Compatibility Plan for Hayward Executive Airport and provides comment.

**BACKGROUND**

The California Public Utilities Code requires that local jurisdictions adopt land use compatibility criteria to ensure the safety of flight and to mitigate aviation noise impacts in the vicinity of public use airports. Each county containing a public use airport is required to comply with this State law. Additionally, airport sponsors are bound by Federal grant assurances to protect those areas immediately surrounding the airport from incompatible development.

The majority of counties in the State of California accomplish these requirements with the establishment of a countywide Airport Land Use Commission (ALUC). The ALUC then establishes and adopts individual compatibility plans for each airport, referred to as an Airport Land Use Compatibility Plan (ALUCP). The ALUC also reviews plans, regulations, and actions of local agencies and airport operators to determine consistency with general plans, specific plans, zoning ordinances, and building regulations. Hayward Executive (HWD), Livermore (LVK), and Oakland International (OAK) airports fall under jurisdiction of the Alameda County ALUC, established in 1971.

The Alameda County ALUC is comprised of a seven member Commission, with two members appointed by the Board of Supervisors, two members representing cities and appointed by the Mayor's Council, one of which must be from a city abutting an airport, two members with aviation expertise appointed by a committee of airport managers, and, finally, one member representing the general public appointed by the other six members. Councilmember Henson is one of the two commissioners appointed by the Mayor's Council. Generally, there are two active airport managers and their designated alternates, serving as Commissioners on the Alameda County ALUC. Hayward Airport Manager Partin is presently an alternate for Leander Hauri, who is the Livermore Airport

Manager. Hayward Airport staff has been actively involved in the development of the Alameda County ALUCP for the Hayward Executive Airport since 2002, when the County began working to update the existing plan. The revised Hayward Executive Airport ALUCP will serve as the primary document used by the ALUC to promote compatibility between the airport and proposed new land uses in the vicinity.

## **DISCUSSION**

The Alameda County Land Use Commission approved the last version of the Land Use Policy Plan in 1986, which was the previous format/name for the Alameda County ALUCP. Since 2002, work has been ongoing to draft a complete revision of the document by preparing individual plans for each of the three County airports: Oakland, Hayward, and Livermore; the 1986 Land Use Policy Plan had incorporated all three airports into one single document. Many delays have occurred because of funding issues, changes in State law, and planning criteria.

By State law, an ALUC has no jurisdiction over the operations of any airport. An ALUC does, however, have the power and responsibility to review all Airport Master Plans, Airport Layout Plans, and City General or Specific Plans, to determine consistency with State Airport Planning Guidelines and the Commission's individual policies. A finding of inconsistency by the Alameda County ALUC would require the City to either revise the particular plan under review or to take a series of steps that would allow the City Council to override the determination made by the Alameda County ALUC. In 1988, Hayward made use of this "override" authority on an inconsistency determination by the Alameda County ALUC, because the 1986 Land Use Policy Plan did not acknowledge that the City's updated 1984 General Plan was consistent with the Alameda County ALUC's regulations.

In addition, the Alameda County ALUC does not have review authority over any existing land uses, even if such uses are inconsistent with the Alameda County ALUC's compatibility standards and policies. By law, the Alameda County ALUC can only take action with regard to new or expanded land uses when such expansion or new use becomes evident through City General Plan or Zoning Ordinance changes outside of the Hayward Airport boundaries. On September 23, 2010, when reviewing a Zone Change application that would adjust the zoning designations and boundaries of some of the Hayward Airport properties, the City's Planning Commission directed staff to submit the proposed zoning changes to the Alameda County ALUC for review. County staff subsequently confirmed that the Alameda County ALUC has no authority over such an action, because the proposed zoning changes were confined within the Hayward Airport boundary.

The draft 2010 ALUCP for the Hayward Executive Airport is comprised of five chapters, beginning with the Plan overview in Chapter One. Chapter Two contains County-wide policies, many of which are carried over from the 1986 Airport Land Use Policy Plan. Chapter Three contains policies specific to Hayward Executive Airport, including the scope of the plan, compatibility factors, and policies. Chapter Four describes the area surrounding the Hayward Executive Airport, including current and future existing airport activity and development. Chapter Five contains Appendices, including excerpts from the 2002 Airport Master Plan and Hayward City General Plan, with additional references from Federal Aviation Regulations and the California Public Utilities Code.

The draft 2010 ALUCP for the Hayward Executive Airport incorporates guidelines set forth in the 2002 Land Use Planning Handbook (Handbook), published by Caltrans Division of Aeronautics. While the Handbook does not constitute official State policy, the statutes say that ALUCs shall use it as a guiding document. The policies and maps contained in the revised ALUCP for the Hayward Executive Airport reflect the guidance provided by the Handbook. ALUCs are required by State law to evaluate potential safety hazards that would result from incompatible development in the airport vicinity. The safety compatibility guidelines for new development are presented in Table 2-3 of the draft 2010 Alameda County ALUCP for the Hayward Executive Airport (Attachment I). The safety compatibility of proposed uses within Hayward's AIA should be evaluated in accordance with the safety zones depicted on Figure 3-4 and the criteria listed in Table 3-2. (Attachment II - Figure 3-4, Attachment III - Table 3-2).

In addition to the basic safety compatibility guidelines Table 2-3, the Federal Aviation Administration (FAA) has recently required ALUCs to evaluate emissions and thermal plumes from power plants constructed in the vicinity of airports. New language in the 2010 draft Alameda County ALUCP for the Hayward Executive Airport identifies the types of actions that may be undertaken by the Alameda County ALUC in reviewing potential hazards to flight caused by thermal plumes, impaired visibility from smoke, steam, or other byproducts generated by power plants in the vicinity of airports.

The California Energy Commission (CEC) has approved construction of the Russell City Energy Center that will be situated within the Airport Influence Area (AIA), west of the Airport, along the shoreline. The CEC approved a mitigation plan to help prevent impacts by issuing Notices to Airmen (NOTAMS) that provide warnings to pilots that potential hazards caused by thermal plumes may exist in the vicinity of the power plant. The ALUC did provide input to the CEC review process for both of the power plant projects proposed for Hayward.

In addition to safety policies, airspace protection is another subject area with specific language inserted into the new Alameda County ALUCP for the Hayward Executive Airport. The draft 2010 ALUCP for the Hayward Airport repeats the FAA requirement that the City evaluate all objects within the AIA that exceed 200 feet in height; a process currently in place. The FAA will perform a full review of airspace penetrations by objects that will be constructed that might pose a potential hazard to aircraft that fly through the area.

Under airspace protection policies, the draft 2010 ALUCP for the Hayward Airport requires the City to establish avigation easements as condition of approval for new residential and non-residential development within safety zones 1-6 (Attachment IV Figure 3-6). Avigation easements place restrictions on the maximum allowable structure heights within the arrival and departure zones of the airport, as well as granting from the property owner to the Hayward Airport the right to subject the property to impacts of aircraft overflight activity. As previously noted, the issue of acquiring avigation easement for existing development was discussed with FAA during the ALP update development and will be formally addressed during the next Airport Master Plan revision.

For those areas outside zones 1-6, in what is identified as the Overflight Notification Zone, the City is required to include, as a condition of approval for any new residential development, the recording of a deed notice that the property is subject to overflight by aircraft using the Hayward Airport.

Sample formats for both avigation easements and the overflight deed notice are included in Appendix E to the ALUCP.

Staff has reviewed the draft 2010 ALUCP for the Hayward Executive Airport and found it to be generally consistent with direction provided in the State of California's Airport Land Use Planning Handbook. Because the process has been ongoing for at least four years, staff will have some specific wording comments to provide the Alameda County ALUC. Staff has made specific requests to County staff to include the updated Hayward Airport Layout Plan (ALP) that was approved by this Committee in April of this year, rather than use the old ALP drawing, and to insert a brief narrative describing the recent change in airport category from Category B-II to Category C-II. County staff is concerned that the ALP has not yet been officially signed by the FAA. However, City staff believes that because the 2010 ALUCP for the Hayward Executive Airport is going to be in use for many years, it does not make sense to not reference the most recent changes and ALP associated with the Hayward Airport.

On October 20, the Alameda County ALUC held a workshop to discuss the Draft ALUCPs for Hayward and Oakland airports. City staff formally requested a delay in processing the Plan to allow revisions to be made that would include Hayward's updated ALP. City staff has received assurances from FAA that it will be officially signed by the end of this month.

The Alameda County ALUC's primary concerns were how much revision was necessary and how work would be funded because it has no additional funds. Staff pointed out to the Commission and its consultant the limited amount of additional work required, the City's commitment to aid the process by providing marked up revisions. Staff also indicated a commitment to fund reasonable costs of the consultant. The Commission directed County staff to have the consultant provide its assessment of costs and time to make the required changes.

No one commented on the Oakland Airport ALUCP, although staff has noted a need to review it for consistency with our General Plan, since the southern portion of the Oakland AIA does cover a portion of Hayward. The Commission also indicated that Livermore Airport's draft ALUCP will be distributed in the near future.

One of the requirements in State law is that the City must amend as necessary its General Plan and other documents, such as our Airport Approach Zoning Regulations, to be consistent with the ALUCP for the Hayward Airport, within 180 days of the Alameda County ALUC's adoption of the new ALUCP. Since our Airport Approach Zoning Regulations were last updated in 1964, staff expects to take this opportunity to update that part of the City's regulations. Airport staff is also working with City Planning staff to identify how to best meet the General Plan consistency requirement. As with amending the Airport Approach Zoning Regulations, such consistency action will require approval by City Council.

Environmental Science Associates completed an Initial Study confirming that no environmental categories would be significantly affected by the adoption of this document. The Initial Study indicates that the ALUCP for the Hayward Executive Airport is regulatory in nature, and, as such, adoption of that document would not lead to any physical changes in the Hayward Airport AIA. While some review of the Initial Study by the ALUC's consultant will be appropriate because of the

changes needed to include our updated ALP, city staff does not foresee any real change to the document. Council Airport Committee members were provided complete copies of the draft ALUCP and the Initial Study. Alameda County placed copies for review in the Hayward Library, and copies are available for public review at Airport offices.

## **PUBLIC CONTACT**

For more information please contact Cindy Horvath, Senior Transportation Planner, County of Alameda, at (510) 670-6511.

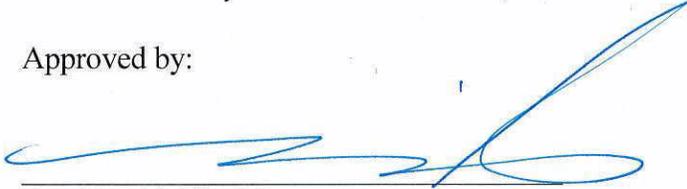
## **NEXT STEPS**

The 2010 Draft ALUCP for the Hayward Executive Airport was originally released with 45 days for public review and comment from September 27 through November 17, 2010. However, based on the City's request at the October 20, 2010 ALUC meeting, the timeline for final approval is now somewhat uncertain and additional public review time may be required. The schedule will depend in part on the amount of time the consultant will take to implement the City's requested changes. Final adoption of the Hayward Airport's ALUCP is now not expected until sometime in early 2011.

*Prepared by:* Lloyd Partin, Airport Manager

*Recommended by:* Robert A. Bauman, Director of Public Works

Approved by:



Fran David, City Manager

Attachments:

- Attachment I: Table 2-3 Basic Safety Compatibility Criteria & Supporting Information
- Attachment II: Figure 3-4 Safety Compatibility Zones
- Attachment III: Table 3-2 Safety Compatibility Criteria
- Attachment IV: Figure 3-6 Overflight Compatibility Zones

**TABLE 2-3  
BASIC SAFETY COMPATIBILITY CRITERIA AND SUPPORTING INFORMATION**

Zone	Location	Compatibility Qualities	Risk Factors / Runway Proximity
1	<b>Runway Protection Zone</b>	<ul style="list-style-type: none"> <li>• Prohibit all structures except those with aeronautical functions</li> <li>• Prohibit residential land uses</li> <li>• Prohibit objects exceeding Part 77 height limits</li> <li>• Prohibit storage of hazardous materials</li> <li>• Avigation easement dedication</li> </ul>	<ul style="list-style-type: none"> <li>• Very high risk</li> <li>• Runway Protection Zone is defined by FAA criteria</li> </ul>
2	<b>Inner Approach/Departure Zones</b>	<ul style="list-style-type: none"> <li>• Prohibit schools, day care centers, libraries, hospitals, nursing homes, and places of worship</li> <li>• Prohibit highly noise-sensitive outdoor nonresidential uses</li> <li>• Prohibit above ground storage or hazardous materials<sup>4</sup></li> <li>• Prohibit other hazards to flight</li> </ul>	<ul style="list-style-type: none"> <li>• Substantial Risk</li> <li>• RPZs together with inner safety zones encompass 30% - 50% of near-airport aircraft accident sites (air carrier and general aviation)</li> <li>• Encompasses areas overflown at low altitudes ( typically 200-400 feet above runway elevation)</li> </ul>
3	<b>Inner Turning Zones</b>	<ul style="list-style-type: none"> <li>• Prohibit critical infrastructure facilities</li> <li>• Limit residential uses to very low densities (if not deemed unacceptable because of noise)</li> <li>• Avoid non-residential uses having moderate or higher usage intensities (e.g., major shopping centers, fast food restaurants, theaters, meeting halls, buildings with more than three above ground floor are generally unacceptable.)</li> <li>• Prohibit children's schools, day care centers, hospitals, nursing homes</li> <li>• Avoid hazardous uses (e.g., aboveground bulk fuel storage)</li> </ul>	<ul style="list-style-type: none"> <li>• Zone primarily applicable to general aviation airports</li> <li>• Covers locations where aircraft are typically turning from the base to final approach legs of the standard traffic pattern and are descending from traffic pattern altitude</li> <li>• Zone also includes the area where departing aircraft normally complete the transition from takeoff power and flap settings to a climb mode and have begun to turn their en route heading</li> </ul>
4	<b>Outer Approach/Departure Zones</b>	<ul style="list-style-type: none"> <li>• In undeveloped areas, limit residential uses to very low densities (if not deemed unacceptable because of noise); if alternative uses are impractical, allow infill in urban areas</li> <li>• Prohibit children's schools, large day care centers, hospitals, nursing homes</li> <li>• Limit non-residential uses as in Zone 3.</li> </ul>	<ul style="list-style-type: none"> <li>• Situated along extended runway centerline beyond Zone 3</li> <li>• Approaching aircraft usually at less than traffic pattern altitude</li> <li>• Partially applicable for busy general aviation runways (because of elongated traffic pattern), runways with straight in instrument approach procedures, and other runways where straight-in or straight-out flight paths are common.</li> <li>• Zone can be reduced in size or eliminated for runways with very low activity levels.</li> </ul>

**TABLE 2-3  
BASIC SAFETY COMPATIBILITY CRITERIA AND SUPPORTING INFORMATION**

<b>Zone</b>	<b>Location</b>	<b>Compatibility Qualities</b>	<b>Risk Factors / Runway Proximity</b>
<b>5</b>	<b>Sideline Zones</b>	<ul style="list-style-type: none"> <li>• Avoid residential uses</li> <li>• Allow all common aviation-related activities provided that height criteria is met</li> <li>• Limit other non-residential uses similarly to Zone 3, but with slightly higher usage intensities</li> <li>• Prohibit children's schools, large day care centers, hospitals, nursing homes</li> </ul>	<ul style="list-style-type: none"> <li>• Encompasses close-in area lateral to runways</li> <li>• Area not normally overflowed; primary risk is with aircraft losing directional control on takeoff</li> <li>• Area is on airport property at most airports</li> </ul>
<b>6</b>	<b>Traffic Pattern Zone</b>	<ul style="list-style-type: none"> <li>• Allow residential uses</li> <li>• Allow non-residential uses; prohibit outdoor stadiums and similar uses with very high intensities</li> <li>• Avoid children's schools, large day care centers, hospitals, nursing homes</li> </ul>	<ul style="list-style-type: none"> <li>• Generally low likelihood of accident occurrence at most airports; risk concern primarily is with uses for which potential consequences are severe</li> <li>• Zone includes all other portions of regular traffic patterns and pattern entry routes</li> </ul>
<b>7</b>	<b>Other Airport Environs</b>	<ul style="list-style-type: none"> <li>• Prohibit hazards to flight</li> <li>• Allow residential uses</li> </ul>	<ul style="list-style-type: none"> <li>• All areas outside Zones 1 through 6, but within AIA boundaries</li> </ul>
<b>*</b>	<b>High Terrain</b>	<ul style="list-style-type: none"> <li>• Same as underlying safety zone</li> </ul>	

**NOTES:**

See Chapter 3 for airport-specific criteria, which may change or provide additions to these policies.

**DEFINITIONS:**

Allow: Use is acceptable.

Limit: Use is acceptable only if density/intensity restrictions are met.

Avoid: Use generally should not be permitted unless no feasible alternative is available.

Prohibit: Use should not be permitted under any circumstances.

Children's Schools: Through grade 12.

Large Day Care Centers: Commercial facilities as defined in accordance with state laws; for the purposes here, family day care homes and noncommercial facilities ancillary to a place of business are generally allowed.

Aboveground Bulk Storage of Fuel: Tank size greater than 6,000 gallons (this suggestion is based on the Uniform Fire Code criteria which are more stringent for larger tank sizes).

**SOURCE:**

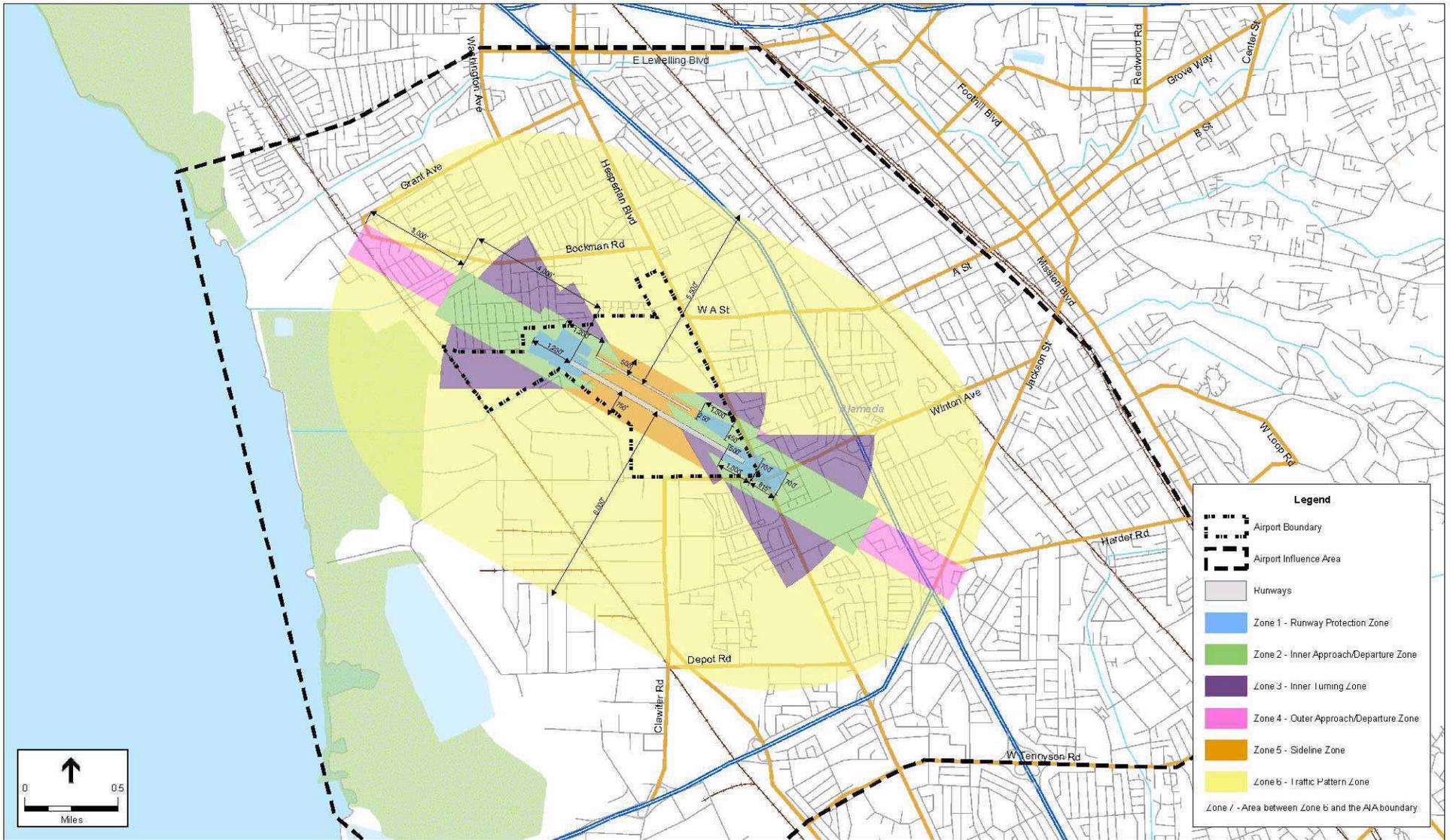
Caltrans, *California Airport Land Use Planning Handbook*, January 2002, Table 9B.

**REFERENCES:**

The risk factors presented here are derived from the *California Airport Land Use Planning Handbook*, and are intended to demonstrate the need for the safety criteria provided in Chapters 2 and 3 of this ALUCP.

Height limits and the review of objects in airport airspace is determined under the guidelines of Federal Aviation Regulation (FAR) Part 77: *Objects Affecting Navigable Airspace*.

Hazards to flight would include tall objects, visual and electronic forms of interference, and land use development that would attract wildlife hazardous to aircraft operations.



SOURCE: ESA Airports, ESHI, City of Hayward GIS Department, California Airport Land Use Planning Handbook (Caltrans, 2002)

Hayward Executive Airport Land Use Compatibility Plan, 202229

**Figure 3-4**  
Safety Compatibility Zones

**TABLE 3-2  
SAFETY COMPATIBILITY CRITERIA**

Types of Land Use	Description of Occupancy	Safety Zones						Criteria for Conditional Uses
		1	2	3	4	5	6	
<i>Note: Multiple categories may apply to same project</i>								
<b>Maximum Nonresidential Intensity (People/Acre)</b>		10	60	100	100	150	No Limit	No Limit
<b>Required Open Land</b>		100%	25%	15%	15%	10%	0%	0%
<b>CBC Groups*</b>								
A-1	High capacity indoor assembly room (≥1,000 people): professional sports arena, concert hall, etc.							Zones 6, 7: Allowable if no other suitable site outside AIA is available.
A-2 - A-2.1	Medium to large indoor assembly room (≥300, <1,000 people): malls, theaters, meeting halls, etc. (approx. 15 s.f./ person)							
A-3	Low capacity indoor assembly room (<300 people) meeting rooms, college or university lecture halls, places of worship, etc. (approx. 60 s.f./ person)			0.14	0.14			Zones 3, 4: Floor area ratio as indicated
A-4	Large outdoor assembly area (>1,000 people): amusement park area, amphitheaters, stadiums, etc.							Zones 6, 7: Allowable if no other suitable site outside AIA is available.
	Medium outdoor assembly area (≥300, <999 people): fair grounds, etc.							Zones 3, 4, 6: Allowable if no other suitable site outside AIA is available.
	Small outdoor assembly area (>50, ≤299 people): camp ground, community pool, etc.							Zones 3, 4, 6: Allowable if no other suitable site outside AIA is available.
B	Office buildings (approx. 215 s.q./ person)		0.30	0.49	0.49	0.74		Zones 2, 3, 4, 5: Floor area ratio as indicated. Also see Policy 3.3.2.7(c)(3).
B	Small eateries/drinking establishments (approx. 60 s.f./ person)			0.14	0.14	0.21		Zones 3, 4, 5: Floor area ratio as indicated. Also see Policy 3.3.2.7(c)(3).
B	Misc. medium sized businesses (approx. 200 s.f./ person): salons, electronics stores, etc.		0.28	0.46	0.46	0.69		Zones 2, 3, 4, 5: Floor area ratio as indicated. Also see Policy 3.3.2.7(c)(3).
E-1 - E-2	Children's schools (K - 12)							
E-3	Commercial Daycare center (≥6 people)							

**TABLE 3-2  
SAFETY COMPATIBILITY CRITERIA**

Types of Land Use	Description of Occupancy	Safety Zones							Criteria for Conditional Uses
		1	2	3	4	5	6	7	
<i>Note: Multiple categories may apply to same project</i>		1	2	3	4	5	6	7	
<b>Maximum Nonresidential Intensity (People/Acre)</b>		10	60	100	100	150	No Limit	No Limit	
<b>Required Open Land</b>		100%	25%	15%	15%	10%	0%	0%	
F-1, 2	Manufacturing, research and development (300 s.f./ person) <sup>1</sup>			0.69	0.69	1.03			Zones 3, 4, 5: Floor area ratio as indicated. Also see Policy 3.3.2.7(c)(3).
H-1, 2, 3, 4, 5, 6, 7	Occupancies utilizing hazardous (flammable, explosive, corrosive, or toxic) materials								Zones 3 - 5: Special measures to minimize risk in the event of an aircraft accident to be determined by permitting agencies
I-1.1	Nurseries for full-time care of children (≤14 people)								
I-1.1 - I-1.2	Health care facilities: hospitals, health care centers, sanitariums, nursing homes for nonambulatory patients, etc. (approx. 250 s.f./ person)								
I-2	Congregate care facilities (>5 patients): nursing homes for ambulatory patients, assisted living facilities (approx. 240 s.f./ person)			0.55	0.55				
I-3	Jails, prisons, mental institutions, etc.								Zones 6, 7: Allowable if no other suitable site outside AIA is available.
M	Mixed use retail centers with restaurant facilities (approx. 110 s.f./ person)		0.15	0.25	0.25	0.38			Zones 2, 3, 4, 5: Floor area ratio as indicated
	Retail center with no restaurant facilities (approx. 170 s.f./ person)		0.23						Zone 2: Floor area ratio as indicated
R-1	Hotels, apartments, congregate residences for ≥10 persons (>14.0, ≤20.0 d.u./acre)								
	Hotels, apartments, congregate residences ≥10 persons (>18.0 d.u./acre)								
R-2.1-2.1.1	Residential care facilities for the elderly (<6, ≥6 non-ambulatory clients)								
R-2.2 - 2.2.1	Residential care facilities for the elderly (<6, ≥6 ambulatory clients)								
R-2.3 - 2.3.1	Residential-based hospice facilities (<6, ≥6 bedridden clients)								

**TABLE 3-2  
SAFETY COMPATIBILITY CRITERIA**

Types of Land Use	Description of Occupancy	Safety Zones							Criteria for Conditional Uses
		1	2	3	4	5	6	7	
<i>Note: Multiple categories may apply to same project</i>									
<b>Maximum Nonresidential Intensity (People/Acre)</b>		10	60	100	100	150	No Limit	No Limit	
<b>Required Open Land</b>		100%	25%	15%	15%	10%	0%	0%	
R-3	Low density residential (0 – 5 d.u./ acre <sup>2</sup> )								See Policy 3.3.2.6 (b) (1) – (4)
	Medium density residential (7 – 10 d.u./ acre <sup>2</sup> )								See Policy 3.3.2.6 (b) (1) – (4)
	High density residential (9 – 16 d.u./ acre <sup>2</sup> )								See Policy 3.3.2.6 (b) (1) – (4)
S-1	Storage of hazardous materials: gas stations, etc.								Zone 3: See Policy 3.3.2.8 (e)(2).
S-2	Warehouses, distribution facilities (approx. 500 s.f./ person)		0.69	1.15					Zones 2, 3: Floor area ratio as indicated
S-3	Repair garages not requiring use of flammable objects								
S-4	Open parking garages								
U-1	Private garages, carports, and agricultural buildings								
U-2	Tanks, and towers								See Section 3.3.3 for airspace protection policies
<b>Other Types of Land Uses</b>									
Agriculture	Truck and specialty crops <sup>3</sup>								Zone 1: Not allowed in Object Free Area, and avoid crops that act as wildlife attractants
	Field and stalk crops (grains, rice, but no stalk crops) <sup>3</sup>								
	Field crops (corn and other stalk crops) <sup>3</sup>								
	Pasture and range land								
	Orchards and vineyards <sup>3</sup>								
	Dry farm and grain <sup>3</sup>								
	Tree farms, landscape nurseries, and greenhouses								
	Fish farms								
	Feed lots and stockyards								
	Poultry farms								
Dairy farms									
Natural Uses	Forest reserves								
	Fish and game reserves								

**TABLE 3-2  
SAFETY COMPATIBILITY CRITERIA**

Types of Land Use	Description of Occupancy	Safety Zones							Criteria for Conditional Uses
		1	2	3	4	5	6	7	
<i>Note: Multiple categories may apply to same project</i>									
<b>Maximum Nonresidential Intensity (People/Acre)</b>		10	60	100	100	150	No Limit	No Limit	
<b>Required Open Land</b>		100%	25%	15%	15%	10%	0%	0%	
	Land reserves and open space								
	Waterways (rivers, creeks, swamps, bays, lakes)								Zone 1: Not allowed in Runway Safety Area
<b>Recreation</b>	Golf courses <sup>3</sup>								
	Parks (playgrounds, picnic areas, athletic fields, tennis courts, etc.) <sup>3</sup>								Zones 2 – 4: See airspace protection policies in Section 3.3.3. Avoid vegetation and water uses that attract wildlife.
	Riding stables and trails								
	Marinas								
<b>Utilities</b>	Roadways								Zone 1: Not allowed in Object Free Area
	Reservoirs								Zone 1: Not allowed in Object Free Area
	Water treatment <sup>3</sup>								Mitigation required to prevent attraction of wildlife hazards
	Sewage disposal <sup>3</sup>								
	Electrical substations <sup>4</sup>								Zone 3: Allowable if no other suitable site outside AIA is available.
	Power plants <sup>4</sup>								Zones 6 and 7: Allowable if no other suitable site outside AIA is available. Also see Section 3.3.3.7(b)
	Power lines <sup>4</sup>								

	<b>Compatible:</b> Use is acceptable without conditional restraints (noise, airspace protection, and/or overflight limitations may still apply)
	<b>Conditional:</b> Use is considered acceptable if listed conditions are met
	<b>Incompatible:</b> Use should not be permitted under any circumstances

\* **CBC Groups:** Describes building occupancy types established by the California Building Code (see Appendix D)  
<sup>1</sup> These uses may generate dust, smoke, or other hazards to flight. Also see Section 3.3 for applicable policies.  
<sup>2</sup> Ranges for dwelling units per acre derived from ranges similar to zoning from jurisdictions within HWD AIA.  
<sup>3</sup> These uses may attract birds or other wildlife considered potentially hazardous to flight.  
<sup>4</sup> Power lines, smoke stacks, or other tall objects associated with these uses may be hazards to flight. Also see Section 3.3

Source: ESA, 2007; *California Airport Land Use Planning Handbook* (Caltrans, 2002); California Building Code, 2001.  
 Note: The layout of this table was created using the framework developed in previous compatibility plans (Mead & Hunt, 2006).

