

Appendix L: Implementation Materials

This appendix includes the following materials to aid implementation of the *Airport Land Use Compatibility Plan*:

- Application for Major Land Use Action Review
- Sample avigation easement
- Sample Deed Notice
- Guidance for Calculating Land Use Intensity
- General Plan Consistency Checklist

Additional information regarding this topic can be found on the Caltrans Division of Aeronautics website: http://www.dot.ca.gov/aeronaut/index.html

Application for Major Land Use Action Review

Sample Avigation Easement

This indenture made this	day of	, 20, between		hereinafter referred to as
Grantor, and the [Insert of Grantee.	County or City name], a p	political subdivision in the	State of California,	hereinafter referred to as
hereby grant to the Grant parcel of land in which th	tee, its successors and ass se Grantor holds a fee sim	signs, a perpetual and assi	gnable easement ov which is subject to the	ereby acknowledged, does ver the following described his easement is depicted as
[Insert legal description o	of real property]			
The easement applies to t	the Airspace above an ima	ginary plane over the real	property. The plane	is described as follows:
Aviation Regulations, and plane being based upon t (AMSL), as determined by	d consists of a plane [des he Airpo by [Insert name and Date	cribe approach, transition ort official runway end elev e of Survey or Airport Lav	n, or horizontal surf vation off yout Plan that dete	by Part 77 of the Federal ace]; the elevation of said feet Above Mean Sea Level ermines the elevation] the hereto and incorporated
The aforesaid easement a	and right-of-way includes,	but is not limited to:		
	ft, of any and all kinds nov			ermit the flight by any and or about any portion of the
surface of the hereinabounoise, vibration, currents	ve described real propert and other effects of air, il	y and any and all Airspace lumination, and fuel const	e laterally adjacent i umption as may be i	all space above the existing to said real property, such nherent in, or may arise or used, for navigation of or
any kinds, and of trees	or other objects, includings, trees, or other things	ng the right to remove on which extend into or abo	or demolish those pove said Airspace, a	tures, or improvements of portions of such buildings, nd the right to cut to the
- · ·	=	e to be marked or lighted rees or other objects, which		air navigation, any and all ove the Airspace; and
		gress from the hereinabo sonable times and after re		property, for the purposes
for the direct benefit of the Grantor, nor its successive.	he real property constitut essors in interest or assign	ing the ns will construct, install, er	Airport hereinal ect, place or grow in	sert County or City name], fter described, that neither n or upon the hereinabove tree or other object which

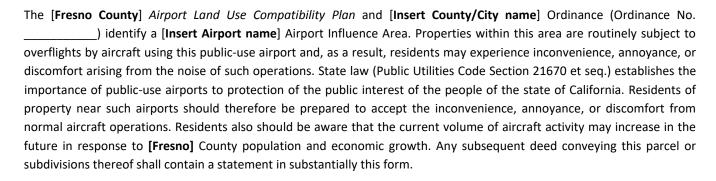
ent and rights-of-way herein	granted.
itutes the med in gross, being convey public who may use said ease	Il be deemed both appurtenant to and for the direct benefit of that Airport, in the [Insert County or City name], State of California; red to the Grantee for the benefit of the Grantee and any and all ement or right-of-way, in landing at, taking off from or operating such or in otherwise flying through said Airspace.
monetary damages or other lated with aircraft operation	assigns, hereby waives its right to legal action against Grantee, its redress due to impacts, as described in Paragraph (2) of the granted s in the air or on the ground at the airport, including future increases s.
facilities or establishment of a line airport role is in a fundamental manner than the air which results in a subset of the shall not operate to deprivate the depr	Ill have no duty to avoid or mitigate such damages through physical or modification of aircraft operational procedures or restrictions. It is or character of its usage (as identified in an adopted airport master which could not reasonably have been anticipated at the time of the estantial increase in the impacts associated with aircraft operations. We the Grantor, its successors or assigns, of any rights which may from erator for negligent or unlawful operation of aircraft.
or, and, for the purpose of the	and are binding upon the heirs, administrators, executors, successors his instrument, the real property firstly hereinabove described is the port is the dominant tenement.
_	
}	
ss	
}	
-	Notary Public in and for said County and State, personally appeared be the persons whose names are subscribed to the within instrument
ey executed the same.	
icial seal.	
	s-of-way herein granted shall itutes the

extends into or above the Airspace, or which constitutes an obstruction to air navigation, or which obstructs or interferes

Source: California Airport Land Use Planning Handbook (October 2011)

Sample Deed Notice

A statement similar to the following should be included on the deed for any real property subject to the deed notice requirements set forth in the [Fresno County] Airport Land Use Compatibility Plan. Such notice should be recorded by the county of [Fresno]. Also, this deed notice should be included on any parcel map, tentative map, or final map for subdivision approval.



Source: California Airport Land Use Planning Handbook (October 2011)

Guidance for Calculating Land Use Intensity

Following is guidance on how to calculate the intensity of land uses (the number of people-per-acre). The most difficult part about determining the intensity of a land use is estimating the number of people likely to use a particular facility. There are several methods which can be utilized, depending upon the nature of the proposed use:

- Maximum Occupancy- The California Building Code (CBC) can be used as a standard for determining the maximum occupancy of certain uses. The chart provided as Table L1 indicates the required number of square feet per occupant. The number of people on the site can be calculated by dividing the total floor area of a proposed use by the minimum square feet per occupant requirement listed in the table. The maximum occupancy can then be divided by the size of the parcel in acres to determine the number of people-per-acre. Surveys of actual occupancy levels conducted by various agencies have indicated that many retail and office uses are generally occupied at no more than 50 percent of their maximum occupancy levels, even at the busiest times of day. Therefore, the number of people calculated for office and retail uses should usually be adjusted (50%) to reflect the actual occupancy levels before making the final people-per-acre determination. Even with this adjustment, the CBC-based methodology typically produces intensities at the high end of the likely range.
- Parking Ordinance- The number of people present in a given area can be calculated based upon the number of parking spaces provided. Traffic studies can be used to develop an assumption regarding the number of people per vehicle. The number of people-per-acre can then be calculated by dividing the number of people on-site by the size of the parcel in acres. This approach is appropriate where the use is expected to be dependent upon access by vehicles. Depending upon the specific assumptions utilized, this methodology typically results in a number in the low end of the likely intensity for a given land use.
- Survey of Similar Uses- Certain uses may require an estimate based upon a survey of similar uses. This
 approach is more difficult, but is appropriate for uses which, because of the nature of the use, cannot be
 reasonably estimated based upon parking or square footage.

TABLE L1
Maximum Floor Area Allowances Per Occupant

Function of Space	Floor Area In Sq. Ft. Per Occupant	
Accessory storage areas, mechanical equipment room	300 gross	
Agricultural building	300 gross	
Aircraft hangars	500 gross	
Airport terminal	3	
Baggage claim	20 gross	
Baggage handling	300 gross	
Concourse	100 gross	
Waiting areas	15 gross	
Assembly		
Gaming floors (keno, slots, etc.)	11 gross	
Assembly with fixed seats	See Section 1004.7	
Assembly without fixed seats	000 000	
Concentrated (chairs only – not fixed)	7 net	
Standing space	5 net	
Unconcentrated (tables and chairs)	15 net	
Bowling centers, allow 5 persons for each lane including 15 feet	13 1100	
of runway, and for additional areas	7 net	
Business areas	100 gross	
Courtrooms – other than fixed seating areas	40 net	
Daycare	35 net	
Dormitories		
	50 gross	
Educational	20 not	
Classroom area	20 net	
Shops and other vocational room areas	50 net	
Exercise rooms	50 gross	
H-5 Fabrication and manufacturing areas	200 gross	
Industrial areas	100 gross	
Institutional areas		
Inpatient treatment areas	240 gross	
Outpatient areas	100 gross	
Sleeping areas	120 gross	
Kitchens, commercial	200 gross	
Library		
Reading rooms	50 net	
Stack area	100 gross	
Locker rooms	50 gross	
Mercantile		
Areas on other floors	60 gross	
Basement and grade floor areas	30 gross	
Storage, stock, shipping areas	300 gross	
Parking garages	200 gross	
Residential	200 gross	
Skating rinks, swimming pools		
Rink and pool	50 gross	
Decks	15 gross	
Stages and platforms	15 net	
Warehouses	500 gross	
For SI: 1 square foot = 0.0929 m ² .	1 200 8.000	

Example:

Proposed Development: Single-floor furniture store containing 20,000 sq. ft.

A. Calculation Based on Parking Space Requirements

Assume that local codes require 1 parking space per 1,500 square feet of use area for a furniture store. Next, assume 1.5 people per automobile for this type of use.

The usage intensity would be:

- 1) 20,000 sq. ft. bldg. / 1,500 sq. ft. (1.0 parking space per 1,500 sq. ft.) = 13 required parking spaces.
- 2) 13 parking spaces x 1.5 people per space = 20 people maximum on-site.
- 3) 20,000 sq. ft. bldg. footprint /43,560 sq. ft. per acre = 0.46 acre bldg. footprint.
- 4) Assuming a relatively balanced occupancy throughout the building and that outdoor uses are minimal, the usage intensity for a single acre would be estimated to be:

Building footprint < 1.0 acre; therefore, maximum people in 1 acre = bldg. occupancy = 20 people per single acre.

B. Calculation Based on California Building Code

For the purposes of the CBC-based methodology, the furniture store is assumed to consist of 50 percent retail sales floor (at 30 square feet per occupant) and 50 percent warehouse (at 500 square feet per occupant). Usage intensities would, therefore, be estimated as follows:

- 1) 10,000 sq. ft. retail floor area / 30 sq. ft. per occupant = 333 people maximum occupancy in retail area
- 2) 10,000 sq. ft. warehouse floor area / 500 sq. ft. per occupant = 20 people maximum occupancy in warehouse area
- 3) Maximum occupancy under CBC assumptions = 333 + 20 = 353 people
- 4) Assuming typical peak occupancy is 50 percent of CBC numbers = 177 people maximum expected at any one time

The two methods produce very different results. The occupancy area estimate of 30 square feet per person is undoubtedly high for a furniture store even after the 50 percent adjustment. On the other hand, the 20 people-per-acre estimate using the parking requirement methodology appears low, but it is probably closer to being realistic.

GENERAL PLAN CONSISTENCY CHECKLIST

This checklist is intended to assist local agencies with modifications necessary to make their local plans and other local policies consistent with the ALUCP. It is also designed to facilitate Airport Land Use Commission reviews of these local plans and policies.

General Plan Document

The following items typically appear directly in a general plan document. Amendment of the general plan will be required if there are any conflicts with the ALUCP

General Plan Item	Reference
Land Use Map—No direct conflicts should exist	
between proposed new land uses indicated on a	
general plan land use map and the ALUC land use	
compatibility criteria.	
Residential densities (dwelling units per acre)	
should not exceed the set limits.	
Proposed nonresidential development needs to be	
assessed with respect to applicable intensity limits.	
No new land uses of a type listed as specifically	
prohibited should be shown within affected areas.	
Noise Element—General plan noise elements typically	
include criteria indicating the maximum noise	
exposure for which residential development is	
normally acceptable. This limit must be made	
consistent with the equivalent ALUCP criteria. Note,	
however, that a general plan may establish a different	
limit with respect to aviation-related noise than for	
noise from other sources (this may be appropriate in	
that aviation-related noise is sometimes judged to be	
more objectionable than other types of equally loud	
noises).	

Zoning or Other Policy Documents

The following items need to be reflected either in the general plan or in a separate policy document such as a combining zone ordinance. If a separate policy document is adopted, modification of the general plan to achieve consistency with the ALUCP may not be required. Modifications would normally be needed only to eliminate any conflicting language which may be present and to make reference to the separate policy document.

Policy Item	Reference
Intensity Limitations on Nonresidential Uses—ALUCPs	
may establish limits on the usage intensities of	
commercial, industrial, and other nonresidential land	
uses. This can be done by duplication of the	
performance-oriented criteria—specifically, the	
number of people per acre—indicated in the ALUCP.	
Alternatively, ALUCs may create a detailed list of land	
uses which are allowable and/or not allowable within	
each compatibility zone. For certain land uses, such a	
list may need to include limits on building sizes, floor	
area ratios, habitable floors, and/or other design	
parameters which are equivalent to the usage	
intensity criteria.	
Identification of Prohibited Uses—ALUCPs may prohibit	
schools, day care centers, assisted living centers,	
hospitals, and other uses within a majority of an	
airport's influence area. The facilities often are	
permitted or conditionally permitted uses within many	
commercial or industrial land use designations.	
Open Land Requirements—ALUCP requirements, if	
any, for assuring that a minimum amount of open land	
is preserved in the airport vicinity must be reflected in	
local policies. Normally, the locations which are	
intended to be maintained as open land would be	
identified on a map with the total acreage within each	
compatibility zone indicated. If some of the area	
included as open land is private property, then policies	
must be established which assure that the open land	
will continue to exist as the property develops. Policies	
specifying the required characteristics of eligible open	
land should also be established.	
Infill Development—If an ALUCP contains infill policies	
and a jurisdiction wishes to take advantage of them,	
the lands that meet the qualifications must be shown	
on a map.	

Policy Item (Continued)	Reference
Height Limitations and Other Hazards to Flight—To	
protect the airport airspace, limitations must be set on	
the height of structures and other objects near	
airports. These limitations are to be based upon FAR	
Part 77. Restrictions also must be established on other	
land use characteristics which can cause hazards to	
flight (specifically, visual or electronic interference	
with navigation and uses which attract birds). Note	
that many jurisdictions have already adopted an	
airport-related hazard and height limit zoning	
ordinance which, if up to date, will satisfy this	
consistency requirement.	
Buyer Awareness Measures—Besides disclosure rules	
already required by state law, as a condition for	
approval of development within certain compatibility	
zones, some ALUCPs require either dedication of an	
avigation easement to the airport proprietor or	
placement on deeds of a notice regarding airport	
impacts. If so, local agency policies must contain	
similar requirements.	
Nonconforming Uses and Reconstruction—Local	
agency policies regarding nonconforming uses and	
reconstruction must be equivalent to or more	
restrictive than those in the ALUCP, if any.	

REVIEW PROCEDURES

In addition to incorporation of ALUCP compatibility criteria, local agency implementing documents must specify the manner in which development proposals will be reviewed for consistency with the compatibility criteria as outlined below.

Actions Always Required to be Submitted for Airport Land Use Commission Review—PUC Section 21676 identifies the types of actions that must be submitted for airport land use commission review. Local policies should either list these actions or, at a minimum, note the local agency's intent to comply with the state statute.

Other Land Use Actions Potentially Subject to Airport Land Use Commission Review—In addition to the above actions, ALUCPs may identify certain major land use actions for which referral to the Airport Land Use Commission is dependent upon agreement between the local agency and Airport Land Use Commission. If the local agency fully complies with all of the items in this general plan consistency check list or has taken the necessary steps to overrule the Airport Land Use Commission, then referral of the additional actions is voluntary. On the other hand, a local agency may elect not to incorporate all of the necessary compatibility criteria and review procedures into its own policies. In this case, referral of major land use actions to the Airport Land Use Commission is mandatory. Local policies should indicate the local agency's intentions in this regard.

Process for Compatibility Reviews by Local Agencies—If a local agency chooses to submit only the mandatory actions for Airport Land Use Commission review, then it must establish a policy indicating the procedures which will be used to assure that airport compatibility criteria are addressed during review of other projects. Possibilities include: a standard review procedure checklist which includes reference to compatibility criteria; use of a geographic information system to identify all parcels within the airport influence area; etc.

Variance Procedures—Local procedures for granting of variances to the zoning ordinance must make certain that any such variances do not result in a conflict with the compatibility criteria. Any variance that involves issues of noise, safety, airspace protection, or overflight compatibility as addressed in the ALUCP must be referred to the ALUC for review.

Enforcement—Policies must be established to assure compliance with compatibility criteria during the lifetime of the development. Enforcement procedures are especially necessary with regard to limitations on usage intensities and the heights of trees. An airport combining district zoning ordinance is one means of implementing enforcement requirements.