State

2011 Caltrans Airport Land Use Planning Handbook

The Caltrans Division of Aeronautics is responsible for administering much of California State Aeronautics Act, pursuant to Public Utilities Code (PUC) Section 2199 et seq. The purpose of the Caltrans Airport Land Use Planning Handbook is to provide guidance to Airport Land Use Commissions (ALUC) for preparing airport land use plans and presents methods for ALUC's to review local actions near airports. The Caltrans Airport Land Use Planning Handbook presents criteria related to noise, safety, and land use compatibility that form the basis of policies adopted by local ALUC. CEQA Guidelines Section 21096 states that the Caltrans Handbook shall be used to assist in the preparation of EIR's for projects within the boundaries of a comprehensive airport land use plan or within two nautical miles of a public airport related to airport related safety hazards and noise problems.

The most recent version of the Caltrans Airport Land Use Planning Handbook was released in October 2011. The handbook is intended to provide information to ALUCs, their staff, airport proprietors, cities, counties, consultants, and the public; identify the requirements and procedures for preparing effective compatibility planning documents; and, define exceptions where applicable. The Caltrans Airport Land Use Planning Handbook applies to all ALUCs established pursuant to the State Aeronautics Act responsible for providing compatible land use planning in the vicinity of each existing and new public use airport within their jurisdiction.

While the Caltrans Airport Land Use Planning Handbook provides guidance for complying with baseline safety and compatibility requirements, ALUCs may choose to be more restrictive based on local conditions. The Caltrans Handbook suggested land use compatibility criteria for noise, overflight safety, and airspace protection, and these criteria indicate which land uses Caltrans suggests are compatible near airports.

Table X

Caltrans California Airport Land Use Planning Handbook Land Use
Compatibility Strategies

Compatibil ity Objective Concern		Measurement	Land Use Strategies	Basi s		
Noise	Minimize the number of people exposed to frequent and/or high levels of aircraft noise capable of disrupting noisesensitive uses.	Noise generated by the operation of aircraft is primarily measured in terms of the cumulative noise levels of all aircraft operations (i.e., CNEL)	Limit development of land uses which are particularly sensitive to noise.	The basic state guidance sets a 65 dB CNEL as the maximum noise level compatible with urban residential land uses.		
Safety	Minimize the risks associated with potential aircraft accidents by providing for the safety of people and property on the ground and enhancing the chances of survival of the occupants or aircraft involved	Measuring the degree of safety concerns around an airport involves determining the potential for an accident to occur. To do this, the variables of where an accident could occur and when an accident could occur must be considered.	Safety compatibility strategies focus on the consequences of risk assessment. Land use planning measures should be utilized to reduce the severity of an aircraft accident for both people on the ground and in an aircraft, by limiting the intensity and type of use in locations most susceptible to an off-airport aircraft accident.	Setting safety compatibility criteria presents the fundamental question of "what is safe?" or "what is an acceptable risk?" Safety criteria are set on a progressive scale with the greatest restrictions established in locations with the greatest potential for aircraft accidents.		

	in an accident.			
Safety		The Spatial Element describes where aircraft accidents can be expected to occur. Of all the accidents that occur in the vicinity of airports, what percentage occurs in any given area?	Density and Intensity Limitations: Establishment of criteria limiting the maximum number of dwellings or people in areas close to the airport is the most direct method of reducing the potential severity of an aircraft accident.	Established Guidance: Unlike the case with noise, there are no formal federal or state laws or regulations which set safety criteria for airport area land uses for civilian airports, except within Runway Protection Zones (RPZ). FM safety criteria primarily are focused on the runway and its immediate environment.

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Compatibility Strategies

Compatibili ty Concern	Objective	Measurement	Land Use Strategies	Basis
Safety		The Time Element adds a "when" variable to the assessment of accident frequency. In any given location around a particular airport, what is the chance that an accident will occur in a specific period of time?	High Risk Sensitive Uses: Certain critical types of land uses- particularly schools, hospitals, and other uses in which the mobility of occupants is effectively limited- should be avoided near the ends of runways regardless of the number of people involved. Critical public infrastructure and aboveground storage of large quantities of highly flammable or hazardous materials also should be avoided near airports.	

Safety	Open Land Requirements: Creation of requirements
	for open land near an
	airport addresses the
	objective of enhancing
	safety for the occupants of
	an aircraft forced to make
	an emergency landing
	away from a runway.

Table X

Caltrans California Airport Land Use Planning Handbook Land Use Compatibility Strategies

Compatibili ty Concern	Objective	Measurement	Land Use Strategies	Basi s
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Airspace Protection	Avoid development of land use conditions which, by posing hazards to flight, can increase the risk of an accident occurring.	Airspace Obstructions: The acceptable height of objects near an airport is most commonly determined by application standards set forth in FAR Part 77.	Airspace Obstructions: Buildings, antennas, other types of structures, and trees should be limited in height so as not to pose a potential hazard to flight.	Criteria for determining airspace obstructions and other hazards to flight are established in FAR Part 77 and other FAA regulations and guidelines. California's regulation of obstructions under the State Aeronautics Act (PUC Section 21659) is also based on FAR Part 77 criteria.
Airspace Protection		Wildlife and Other Hazards to Flight: The significance of other potential hazards to flight is principally measured in terms of the hazards' specific characteristics and their distance from the airport and/or its normal traffic patterns.	Wildlife and Other Hazards to Flight: Land uses that may create other types of hazards to flight near an airport should be avoided or modified so as not to include the offending characteristic.	Guidelines on the avoidance of developing wildlife attractants near airports derives from Advisory Circular 150/5200-338: Hazardous Wildlife Attractants on or Near Airports.

Regional

Los Angeles County Airport Land Use Plan

The project site is located approximately 1.5 miles east of the Los Angeles International Airport (LAX) and approximately 1.5 miles to the north of the Hawthorne Municipal Airport. Pursuant to Division 9, Part 1, Chapter 4, Article 3.5, Sections 21670 – 21679.5 of the California Public Utility Code, each county in California in which there is an airport served by a scheduled airline and each county with an airport operated for the benefit of the general public, with certain exceptions, is required to establish an airport land use commission (ALUC). Each ALUC must develop a plan for promoting and ensuring compatibility between each airport in the county and surrounding land uses. In Los Angeles County, the Los Angeles County Regional Planning Commission also acts as the ALUC. ALUC's purpose is to coordinate planning for the area around public airports to protect the public health, safety and welfare from land used that do not minimize the public's exposure to excessive noise and safety hazards. This is achieved through review of proposed development surrounding airports and through policy and guidance provided in the Los Angeles County ALUP, which was adopted on December 19, 1991. 1

In formulating the Los Angeles County ALUP, the ALUC establishes provisions to ensure safe airport operations, through the delineation of Runway Protections Zones (RPZs) and height restriction boundaries, and to reduce excessive noise exposure to sensitive uses through noise insulation or land reuse. The extent of the planning boundary designated for the airports in the Los Angeles County ALUP is determined by Community Noise Equivalent Level (CNEL) noise contours. Federal Aviation Regulations (FAR) Part 150, Airport Noise Compatibility Planning, sets forth the methodology and procedures to be followed when preparing aircraft noise exposure maps and developing airport /airport environs land use compatibility programs. FAR Part 150 studies typically consist of two primary components: (1) the Noise Exposure Map (NEM) report, which contains detailed information regarding existing and 5-year future airport/aircraft noise exposure patterns, and (2) the Noise Compatibility Program (NCP), which includes descriptions and an evaluation of noise abatement and noise mitigation options/programs applicable to an airport.² Per the FAR Part

Los Angeles County Airport Land Use Commission, Los Angeles County Airport Land Use Plan, prepared by the Department of Regional Planning, adopted December 19, 1991. Available: http://planning.lacounty.gov/view/alup/. Accessed September 2018.

² City of Los Angeles, Los Angeles World Airports, Noise Management LAX, LAX Part 150 Noise Exposure Map Update, https://lawa.org/en/lawa-environment/noise-management/lawa-noise-management-lax/lax-part-150-noise-exposure-map-update. Accessed September 2018.

150 Land Use Compatibility Guidelines, residential uses are identified as non-compatible land uses for parcels exposed to 65 dBA (CNEL) or higher. Commercial land uses are identified as compatible with 65 and 70 dBA CNEL noise levels.

The Los Angeles County Airport Land Use Commission Comprehensive Land Use Plan (CLUP) identifies compatible land uses within Airport Influence Areas based on community noise exposure. The Los Angeles County Airport Land Use Compatibility Chart is depicted below (Figure X)

Federal Aviation Administration, Land Use Compatibility and Airports. Available: https://www.faa.gov/about/office_org/headquarters_offices/apl/noise_emissions/planning_toolkit/media/III.B.pdf. Accessed September 2018.

	MPATIBILITY TABL Satisfactory Coulton, Review Noise Insulation Needs Avoid Land Use Unless Related to Airport Seri				
Land Use Category	Comr 55	nunity 60	Noise 65	2 Expc 70	osure 75
Residential					
Educational Facilities					
Commercial					
Industrial					
Agriculture					
Recreation					

Consider FAR Part 150 for Commercial and recreational uses above 75 CNEL.

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The Project site is located within the LAX airport influence area and the proposed Project uses will be evaluated for consistency with the CLUP. The project site is partially located within the Planning Boundary/Airport Influence Area for the LAX Airport as

designated within the Los Angeles County ALUP. As depicted in Figure 2-6 in Chapter 2, Project Description, the project site falls within the Airport Influence Area and Airport Compatibility Zone for LAX for the southern LAX runway. As shown, the majority of the project site is within the 65 dBA CNEL noise contour with a small amount of the southernmost portion of the project site within the 70 dBA CNEL noise contour. The project site is not located within the designated Airport Influence Area for the Hawthorne Municipal Airport. Additional discussion of the Los Angeles County ALUP, including consistency with policies related to noise and safety, are addressed in section 3.7, Hazards and Hazardous Materials and section 3.10, Noise and Vibration. The following policies from the Los Angeles County ALUP are applicable to the Proposed Project:

General Policies:

Policy G-1: Require new uses to adhere to the Land Use Compatibility Chart.

Policy G-2: Encourage the recycling of incompatible land uses which are compatible with the airport, pursuant to the Land Use Compatibility Table.

Policy G-4: Prohibit uses which will negatively affect safe air navigation.

Consistent with Policy G-1 and G-2, the Proposed Project would be designed in a manner that is consistent with the Los Angeles County ALUP Land Use Compatibility Chart. The Proposed Project does not include residential or other sensitive uses that are prohibited from the applicable designation. The project site is partially located within the Planning Boundary/Airport Influence Area for the LAX Airport. The project site falls within the Airport Influence Area and Airport Compatibility Zone for LAX for the southern LAX runway. Consistent with Policy G-4, the Proposed Project would be developed in accordance with the development guidelines and standards of the Los Angeles County ALUP and would not negatively affect safe air navigation. Potential inconsistencies with Policy G-4 is further discussed in section 3.7, Hazards and Hazardous Materials. Additional discussion of the Los Angeles County ALUP, including the Project's potential inconsistencies with the ALUP policies related to noise and safety, are addressed in section 3.7, Hazards and Hazardous Materials and section 3.10, Noise and Vibration.