

APPENDIX K

LAND USE

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Land Use – Regulatory Context

Charles M. Schulz – Sonoma County Airport

EIR Evaluation

Federal Government Policies

Federal airport land use compatibility policies are mainly concerned with noise issues. Several statutes deal specifically with aircraft noise. These statutes are implemented through regulations and policies of individual federal agencies including the Federal Aviation Administration (FAA), U.S. Environmental Protection Agency (EPA), Department of Housing and Urban Development (HUD), Department of Defense Air Installations Compatibility Use Zones (AICUZ) Program and Department of Defense Joint Land Use Study (JLUS) Program. See **Appendix M** for noise regulations. Guidance with regard to safety is primarily limited to FAA regulations concerning airport design and protection of navigable airspace¹.

Federal Aviation Regulations (FAR) Part 77, Objects Affecting Navigable Airspace—FAR Part 77 establishes standards for determining obstructions to navigable airspace and the effects of such obstructions on the safe and efficient use of that airspace. The regulations require that the FAA be notified of proposed construction or alteration of objects, whether permanent, temporary, or of natural growth, if those objects would be of a height that would exceed the FAR Part 77 criteria. The height limits are defined in terms of imaginary surfaces in the airspace extending about two to three miles around airport runways and approximately 9.5 miles from the ends of runways having a precision instrument approach. Imaginary airspace surfaces are established with relation to each runway of an airport. There are five types of surfaces: (1) primary; (2) approach; (3) transitional; (4) horizontal; and (5) conical.

When notified of a proposed construction, the FAA conducts an aeronautical study to determine whether the object would have a substantial adverse effect on air navigation.. Simply because an object (or the ground) would exceed an airport's airspace surfaces established in accordance with FAR Part 77 criteria does not imply that the object would be considered a hazard. Various factors, including the extent to which an object is shielded by nearby taller objects are taken into account. The FAA may recommend marking and lighting of obstructions.

The FAA has no authority to remove or to prevent construction or growth of objects deemed to be obstructions. Local governments having jurisdiction over land use are typically responsible for establishing height limitation ordinances that prevent new, and enable removal of existing, obstructions to the FAR Part 77 surfaces. Federal action in response to new airspace obstructions is primarily limited to three possibilities:

- for airports with instrument approaches, an obstruction could necessitate modification to one or more of the approach procedures (particularly greater visibility and/or cloud ceiling minimums) or even require elimination of an approach procedure;

¹ Navigable Airspace is the airspace at and above the safe flight level, including airspace needed for safe takeoff and landing. McGraw-Hill Dictionary of Scientific & Technical Terms, 6E, Copyright © 2003 by The McGraw-Hill Companies, Inc.

- airfield changes such as displacement of a landing threshold could be required (especially at airports certificated for commercial air carrier service); and
- the owner of an airport could be found in noncompliance with the conditions agreed to upon receipt of airport development or property acquisition grant funds and could become ineligible for future grants (or, in extreme cases, be required to repay part of a previous grant).

FAA Order 8260.3B, United States Standard for Terminal Instrument Procedures (TERPS)—FAA Order 8260.3B contains criteria that must be used to formulate, review, approve, and publish procedures for instrument approach and departure of aircraft to and from civil and military airports. These criteria are for application at any location over which the Federal Aviation Administration (FAA) or Department of Defense (DoD) exercises jurisdiction. TERPS surfaces are different than FAR Part 77, Subpart C, imaginary surfaces that surround an airport. The TERPS surfaces can extend beyond the FAR Part 77 surfaces and establish height criteria lower than the FAR Part 77 used by the FAA in evaluating airspace obstructions.

FAA Advisory Circular 150/5300-13, Airport Design—The primary function of FAA Advisory Circular 150/5300-13 (Advisory Circular) is to establish standards for dimensions and other features of airport runways, taxiways, and other aircraft operating areas. For the most part, these airport components are all on Airport property. One component not always entirely on Airport property is the runway protection zone (RPZ). RPZs are trapezoidal-shaped areas located at ground level beyond each end of a runway. The Advisory Circular describes their function as being “to enhance protection of people and property on the ground.” The dimensions of RPZs vary depending upon:

- the type of landing approach available at the airport (visual, non-precision, or precision); and
- characteristics of the critical aircraft operating at the airport (weight and approach speed).

Ideally, each RPZ should be entirely clear of all objects. The Advisory Circular strongly recommends that airports own this property outright or, when this is impractical, to obtain easements sufficient to control the land use. Acquisition of this property is eligible for FAA grants (except at some small airports which are not part of the national airport system). Even on portions of the RPZs not under airport control, the FAA recommends that churches, schools, hospitals, office buildings, shopping centers, and other places of public assembly, as well as fuel storage facilities, be prohibited. Automobile parking is considered acceptable only on the outer edges of RPZs (outside the extended object free area).

State of California Policies

Unlike with federal government policies that are merely advisory as airport land use compatibility planning guidelines, some elements of state policy are regulatory in nature.

The California State Aeronautics Act—Division 9, Part 1 of the California Public Utilities Code (commencing with Section 21001), provides the policy guidance most directly relevant to compatibility planning. Three portions of the act are of particular interest. The first, beginning with Section 21670, establishes requirements for airport land use compatibility planning around each public-use and military airport in the state and the creation of an airport land use commission in most counties. Next, Section 21669, requires the State Department of

Transportation to adopt, to an extent not prohibited by federal law, noise standards applicable to all airports operating under a state permit (see **Appendix M**). Finally, a third provision (Section 21659) effectively makes FAR Part 77 a state law.

Airport Land Use Commission (ALUC) Statutes—Although numerous changes have been made to the ALUC statutes over the years, the basic requirements for the establishment of ALUCs and the preparation of airport land use compatibility plans have been in place since the law's enactment in 1967. The fundamental purpose of ALUCs – to promote land use compatibility around airports – has remained unchanged. As expressed in the present statutes, this purpose is:

“...to protect public health, safety, and welfare by ensuring the orderly expansion of airports and the adoption of land use measures that minimize the public's exposure to excessive noise and safety hazards within areas around public airports to the extent that these areas are not already devoted to incompatible uses.”

As noted in the introduction to this section, the focus of the ALUC statutes is compatibility planning. Compatibility criteria are not defined. Rather, reference is made to other sources of compatibility criteria, specifically:

- the preamble to the law indicates that one of the purposes is “to promote the overall goals and objectives of the California airport noise standards adopted pursuant to Section 21669” (*i.e.*, the California Airport Noise Regulations);
- Section 21674.7 requires that, when adopting or amending a compatibility plan, ALUCs “be guided by” information contained in the *California Airport Land Use Planning Handbook*².

With respect to the compatibility planning process, two sections of the law are particularly significant to local land use agencies:

- Section 21670(a)(2) indicates that ALUC authority is limited to “areas not already devoted to incompatible uses.” This phrase is generally taken to imply that ALUCs have no authority over existing land uses. However, changing an incompatible land use in a manner that would make it more incompatible is considered to be within the jurisdiction of ALUCs.
- Section 21676 describes the types of land use actions that must be submitted to an ALUC for review. These actions include adoption or amendment of a general plan or zoning ordinance. Section 21676.5 indicates that until such time as a local agency's general plan has been made consistent with the ALUC's plan, the ALUC may require the local agency to submit all “actions, regulations, and permits” for review. After the agency's general plan has been deemed consistent, then these additional actions are not subject to ALUC review unless agreed upon between the agency and the ALUC.

Regulation of Obstructions—Section 21659 gives the state authority to enforce the standards set by FAR Part 77. No structure or tree is permitted to reach a height that exceeds FAR Part 77 obstruction standards unless the FAA has determined that the object would not constitute a hazard to air navigation or create an unsafe condition for flight.

² State of California, Department of Transportation, Division of Aeronautics, *California Airport Land Use Planning Handbook*, 2002.

Other State Regulations

Additional state regulations having a bearing on airport land use compatibility planning include the following:

Real Estate Disclosure Laws—State legislation that took effect in January 2004 (Business and Professions Code Section 11010 and Government Code Sections 1103 and 1353) requires that the presence of an airport nearby be disclosed as part of many residential real estate transactions. This requirement applies within the airport influence area as defined by the airport land use commission in the county. The law provides the following specific language to be used in the disclosure:

“This property is presently located in the vicinity of an airport, within what is known as an airport influence area. For that reason, the property may be subject to some of the annoyances or inconveniences associated with proximity to airport operations (for example: noise, vibration, or odors). Individual sensitivities to those annoyances can vary from person to person. You may wish to consider what airport annoyances, if any, are associated with the property before you complete your purchase and determine whether they are acceptable to you.”³

State Education Code—Provisions of the Education Code applying to elementary and secondary schools (Section 17215) and community colleges (Section 81033) require the California Division of Aeronautics to review proposals for acquisition of a school site situated within two miles of an existing or planned airport runway. The Division must then investigate the proposed site and report back to the Department of Education its recommendations as to whether the site should be acquired for school purposes. The Division is also required to establish criteria to be used in this review process.

General Plan Guidelines—Section 65302(f) of the California Government Code, requires that a noise element be included as part of local general plans. Airports and heliports are among the noise sources specifically to be analyzed. To the extent practical, both current and future noise contours (expressed in terms of either CNEL or DNL) are to be included. See Chapter 3.10 and **Appendix M** for definitions of CNEL and DNL. The noise contours are to be “used as a guide for establishing a pattern of land uses... that minimizes the exposure of community residents to excessive noise.”

Guidance on the preparation and content of general plan noise elements is provided by the Office of Planning and Research in its *General Plan Guidelines* publication (last revised in 2003). This guidance represents an updated version of guidelines originally published by the State Department of Health Services in 1976. Included in the document is a table indicating noise compatibility criteria for a variety of land use categories. Another table outlines a set of adjustment or “normalization” factors that “may be used in order to arrive at noise acceptability standards which reflect the noise control goals of the community, the particular community’s sensitivity to noise, and their assessment of the relative importance of noise pollution.”

General Plan Consistency with Airport Land Use Plans—Section 65302.3 of the California Government Code requires that local agencies must either modify their general plans and any applicable specific plans to be consistent with the compatibility plan adopted by an ALUC or

³ California Business and Professions Code, § 11010(b)(13)(A).

take the steps prescribed in Public Utilities Code Section 21676 to overrule the ALUC. The local plans are to be amended within 180 days of when the ALUC plan is adopted or amended.

Airport Land Use Planning Handbook—Drawing from original research and a variety of other sources such as those described herein, the 2002 edition of the *California Airport Land Use Planning Handbook* (the “*Handbook*”) provides an extensive amount of information upon which local airport land use compatibility criteria can be based. Indeed, as noted earlier herein, local compatibility planning must “be guided by” the information in the *Handbook*. On most topics, the *Handbook* provides a significant degree of latitude in setting compatibility criteria to best suit the characteristics of a particular airport and its environs. Moreover, agencies can deviate from this guidance where there is strong rationale for doing so and compliance with the basic objectives of the statutes can still be demonstrated.

The *Handbook* discussion of compatibility issues is divided into chapters on noise and safety. The noise discussion includes overflight issues and safety includes airspace protection. A few highlights are worth noting.

- **Noise**—The *Handbook* notes that 65 dB CNEL is the maximum noise level normally compatible with urban residential land uses, but that this level is too high for many airports. The “normalization” process is cited as a means for adjusting this criterion to reflect community characteristics.
- **Overflight**—Overflight concerns are addressed in terms of the need for buyer awareness measures and avoidance of particularly noise-sensitive land uses.
- **Safety**—Safety compatibility guidelines in the *Handbook* utilize accident location data to identify the areas of greatest risk near runways. Several sample sets of safety zones are depicted along with suggested maximum residential density and nonresidential intensity criteria. Distinctions between rural, suburban, and urban settings are taken into account in these criteria.
- **Airspace Protection**—The criteria for this topic stem directly from FAR Part 77 standards for avoidance of airspace obstructions and other FAA regulations with respect to bird strike concerns and other hazards to flight.

Local Policies

Comprehensive Airport Land Use Plan (CALUP) for Charles M. Schulz - Sonoma County Airport—The Sonoma County Airport Land Use Commission (ALUC) adopted the CALUP in January 2001 and later amended it in October 2001. The CALUP establishes land use compatibility policies for six public-use airports in the County, including Charles M. Schulz - Sonoma County Airport. The purpose of the CALUP is to protect and promote the safety and welfare of residents near airports in Sonoma County, as well as airport users, while promoting the continued operation of those airports. Specifically, the plan seeks to

- protect the public from the adverse effects of aircraft noise;
- to ensure that people and facilities are not concentrated in areas susceptible to aircraft accidents; and
- to ensure that no structures or activities encroach upon or adversely affect the use of navigable airspace.

Implementation of the CALUP will promote compatible urban development and restrict new incompatible development in the vicinity of the public use airports in the County, thus allowing

for the continued operation of those airports. In accordance with state law, local agencies' general plans are required to be consistent with the provisions of this plan. Compatibility policies and criteria established for Charles M. Schulz - Sonoma County Airport include:

- **Noise**—Public uses (schools, libraries, hospitals) are unacceptable in areas exposed to noise above 60 CNEL. Residences, churches, auditoriums, and concert halls are unacceptable at noise levels above 65 CNEL. Between 55 and 65 CNEL, certain noise-sensitive uses are conditionally acceptable, subject to an outdoor-to-indoor noise level reduction of at least 25 to 30 decibels. Avigation easements and fair disclosure agreements are also required of new dwellings between 55 and 65 CNEL. The 2001 CALUP noise contours for Charles M. Schulz - Sonoma County Airport are based upon a forecast activity level of 225,000 annual aircraft operations by 2010.
- **Safety**—Six safety zones are established representing varying degrees of risk of an off-airport aircraft accident or emergency landing. Land use controls are applied within each safety zone and are more stringent in areas subject to greater potential risk. The safety criteria place limits on the number of people permitted in each zone by applying restrictions on residential densities and non-residential intensities. Additional restrictions are placed on risk-sensitive uses in which the occupants have reduced effective mobility or are unable to respond to emergency situations (schools, hospitals); uses which attract large concentrations of people (stadiums); public utilities or facilities (fire station, power plant), and other critical uses including those posing the risk of above-ground explosions or release of toxic materials.
- **Airspace Protection**—Airspace protection standards restrict the heights of proposed objects around airports in accordance with airspace protection standards established by Federal Aviation Regulation (FAR) Part 77, *Objects Affecting Navigable Airspace*. Additionally, no object or structure may be erected which, because of height or other factors, would result in an increase in the minimum ceiling or visibility criteria for an existing or proposed instrument approach procedure.
- **Overflight**—Overflight concerns are primarily addressed in the noise section of the CALUP. Additionally, the CALUP states that the airport influence area, or ALUC “Referral Area,” boundary encompasses areas which are either beneath or near to the typical aircraft flight tracks or are projected to be affected by future noise levels of 55 CNEL or greater. As stated above avigation easements and fair disclosure agreements are also required of new dwellings between 55 and 65 CNEL.

Sonoma County General Plan 2020—The Sonoma County Board of Supervisors adopted the General Plan 2020 in September 2008. The Air Transportation Element of the General Plan 2020 establishes compatibility policies and zones that coincide with those included in the 2001 CALUP addressing noise and airspace protection concerns. Safety and overflight concerns are addressed indirectly by means of using the 2001 CALUP Referral Area Boundary for Charles M. Schulz - Sonoma County Airport to inform property owners of and to apply the requirements of the CALUP to land uses surrounding the Airport (Policy AT-1j). Specific policies include:

- **Ultimate Airport Growth**—Provide for the protection of the approach zones at Charles M. Schulz - Sonoma County Airport and the area anticipated to be impacted by the airport's ultimate capacity (Policy AT-1f);
- **Noise**—Proposed development within a noise environment in excess of 55 dB CNEL shall comply with the noise criteria of the 2001 CALUP (Policy AT-1a). The Air Transportation Element utilizes the CALUP 2010 noise contours reflecting 225,000 annual operations;

- **Airspace Protection**—The Air Transportation Element implements the airspace protection criteria in the 2001 CALUP (Policies AT-1b, 1c, 2a). The airspace surfaces reflect the current runway configuration and instrument approach types; and
- **Safety**—Section 4.3 of the Air Transportation Element acknowledges that the ALUC establishes safety provisions by setting building coverage and height restrictions, land and residential density restrictions, and requirements limiting the intensity of building occupancy in runway approach areas. However, no additional policies are provided in the element.

Town of Windsor General Plan 2015— The Town of Windsor adopted the 2015 General Plan in March 1996, and revised the plan as recently as March 2009. The Public Health and Safety Element of the General Plan reflects the compatibility zones and policies established by the 2001 CALUP. The Town of Windsor also adopted an Airport Safety (AS) District (Chapter 27.16) to implement the policies of the 2001 CALUP. The AS zoning district applies to all lands within the ALUC Referral Area for Charles M. Schulz - Sonoma County Airport, as established in the 2001 CALUP.

- **Noise**—The Town should not permit residential development within the 60 dB CNEL contour of the Charles M. Schulz - Sonoma County Airport (Policy D.1.4). This criterion is more stringent than the 2001 CALUP criterion which indicates that residential uses are conditionally acceptable between the 60 and 65 CNEL. The 2015 General Plan references the CALUP 2010 noise contours reflecting 225,000 annual operations.
- **Safety**—The AS overlay zoning district indicates that the intensity of proposed uses within the “AS” overlay must comply with the CALUP criteria. Prior to issuance of any Building Permit on commercial properties in the AS overlay, the Town may require the property owner to execute and record an agreement or similar legal instrument limiting the number of employees and type of business to those allowed by the CALUP. (Zoning Code 27.16.030 E3)
- **Airspace Protection**—The “Airport Safety” (“AS”) overlay zoning district specifies that the height limits established by the CALUP apply if they are more restrictive than otherwise required by the Town. (Zoning Code 27.16.030 E1)
- **Overflight**—The “Airport Safety” (“AS”) overlay zoning district states that “Prior to the Town’s issuance of any Building Permit, the approval of a Tentative Map, or the approval of a land use permit in compliance with this Zoning Ordinance, the property owner shall enter into an agreement with the County of Sonoma granting any necessary aviation easements for aircraft overflight, and acknowledging and permitting the ongoing exposure of the site to aircraft noise. The property owner shall record the agreement/easements with the Sonoma County Recorder. (Zoning Code 27.16.030 E5)