



# 11. Airport Element

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# Chapter 11. Airport Element

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## INTRODUCTION

Airports dramatically influence how communities grow. From a physical standpoint, they create significant noise and safety impacts. From an economic development perspective, they can have both positive and negative effects. Airports often stimulate adjacent commercial development and services, from hotels, restaurants and shipping and distribution facilities. The traffic and noise they generate, however, can have negative impacts on existing uses. From an aesthetic standpoint, airports can stimulate significant opportunities for urban design improvements, including gateway development, entry features and corridor enhancement.

In close proximity to two airports, the San Bernardino International Airport (SBIA) and the Redlands Municipal Airport (RMA), Highland must carefully address the safety issues posed by the facilities, the planning and circulation issues involved, and the economic potential presented. The benefits for the City include better access for businesses to people and goods, multimodal transportation opportunities, new employment and increased visibility for the Highland community.

Air transportation also creates land use compatibility concerns identified by State law including noise, safety, overflight concerns and airspace protection. Continued population growth in the Inland Empire will most likely require the expansion of existing aviation facilities or the addition of new ones. As such, airport land use compatibility will continue to be an important issue in Highland and, for this reason, has been given greater attention in this update to the General Plan. Furthermore, any expansion of SBIA, including a new terminal entrance will have an impact on circulation and traffic in the City, as well as an impact on the development of land uses along transportation corridors that lead to the airport.

### **Purpose, Function and Related General Plan Elements**

Due to the importance of airports to the present and future development of Highland, it was decided that this optional Airport Element would be included as part of the General Plan. Airport operations and facility improvements have a significant role in the implementation of the



*Inside hangars at the San Bernardino International Airport.*



General Plan because of safety, noise and other considerations that affect land use and circulation patterns in the City. Although this element provides more detailed background on airport planning and land use compatibility, other elements contain related specific goals and policies. For those goals and policies, please refer the following elements:

- Land Use Element
- Circulation Element
- Public Health and Safety Element
- Noise Element

### **Related Plans, Regulations and Responsible Agencies**

The City has no direct authority over surrounding airports. As such, the plans created by airport authorities and other agencies, as well as federal and state regulation of aircraft activity, are important to land use planning in Highland. The State Aeronautics Act of the California Public Utilities Code establishes statewide requirements for the airport land use compatibility planning and requires nearly every county to create an Airport Land Use Commission (ALUC) or other alternative. San Bernardino County opted for an alternative to the ALUC and delegated responsibility to prepare an Airport Land Use Compatibility Plan to each airport proprietor. Other public agencies also provide policy guidance or promulgate standards that address regional transportation and safety issues related to airport land use compatibility planning. A brief description of these agencies, plans and regulations are provided below as a regulatory framework for this Element.

#### ***Federal Aviation Administration***

The basic responsibilities of the Federal Aviation Administration (FAA), under the U.S. Department of Transportation, are the regulation of civil aviation to promote safety, airspace and air traffic management; and the regulation of commercial space transportation. The Code of Federal Regulations (CFR) contains standards for aircraft noise emission levels

#### ***Community Noise Equivalent Level***

The California Airport Noise Regulations in accordance with the State Aeronautics Act of the California Code of Regulations delineates parameters for aircraft noise and land use compatibility. The California Airport Noise Regulations state that the level of noise acceptable for persons residing in the vicinity of an airport is established as a Community Noise Equivalent Level (CNEL) value of 65 decibels (dB). “Noise problem” airports, as declared by the County Board of Supervisors, shall not operate in a “noise impact area” unless a variance to the noise regulations is obtained.



For designated noise problem airports, the noise impact area is the area within the contour of the 65 dB CNEL value containing incompatible land uses. Incompatible land uses include residences of all types; public and private schools; hospitals and convalescent homes; and churches, synagogues, temples and other places of worship. These uses may be considered compatible if certain mitigation measures are taken, such as airport acquisition of an aviation easement for aircraft noise and acoustical insulation that reduces the interior CNEL of habitable rooms to 45 dB or less. The California Building Code (CBC) contains related standards for allowable interior noise levels associated with exterior airport noise sources.

The CNEL metric used in California is equivalent to the Day-Night Average Sound Level (DNL) metric used elsewhere in the U.S., but adds the evening weighting not included in DNL.

### ***Air Safety Zones***

The California Airport Land Use (ALCU) Planning Handbook provides planning guidance to ALUCs, airport proprietors, and counties and cities with jurisdiction over airport area land uses. The purpose of the Handbook is to support the State Aeronautics Act. The Handbook allows jurisdictions flexibility in determining air safety zones that represent areas of assumed accident potential.

### ***Southern California Association of Governments: Regional Transportation Plan***

The Southern California Association of Governments (SCAG) is required to develop, maintain and update a Regional Transportation Plan (RTP) every three years for the six-county region of Los Angeles, Orange, Ventura, Imperial, Riverside and San Bernardino. The RTP is a multi-modal plan that provides a basic policy and program framework for improving the balance between land uses and transportation systems including aviation. The San Bernardino International Airport is one of the airports evaluated in the RTP.

As part of the RTP, SCAG has proposed a Regional Aviation Plan that relies on the available capacity at airfields in the Inland Empire and north Los Angeles County to accommodate future air travel demand in those areas of the SCAG region.



### ***San Bernardino Association of Governments: Comprehensive Transportation Plan***

The San Bernardino Association of Governments (SANBAG) is the council of governments and transportation planning agency for San Bernardino County. SANBAG is responsible for cooperative regional planning and represents the county's interests on regional and sub-regional transportation matters. SANBAG is actively involved in the development of SCAG's Regional Transportation Plan and provides input to SCAG through a variety of planning activities including the development of a countywide Comprehensive Transportation Plan. The Comprehensive Transportation Plan is an evaluation of transportation needs in San Bernardino County.



*The San Bernardino International Airport Authority (SBIAA) and the Inland Valley Development Agency (IVDA) serve as master developers of the San Bernardino International Trade Center and Airport.*

### ***San Bernardino International Airport Authority and Inland Valley Development Agency***

The San Bernardino International Airport Authority (SBIAA) and Inland Valley Development Agency (IVDA) are regional Joint Powers Authorities and serve as master developers for the San Bernardino International Airport and International Trade Center. Members of the IVDA Board include San Bernardino County and the cities of San Bernardino, Colton and Loma Linda. The SBIAA Board is comprised of members from San Bernardino County and the cities of San Bernardino, Colton, Loma Linda and Highland.

### ***City of Redlands Municipal Utilities Department and Airport Advisory Board: Airport Master Plan***

The City of Redlands Municipal Utilities Department oversees the operation and administration of Redlands Municipal Airport and the Airport Master Plan. The Airport Advisory Board reviews and makes recommendations regarding the airport's administration, management and operation. Although Highland is not on the Board, it is an area of "special compatibility concern." This means that Redlands submits to it any airport-related master plans and land use compatibility plans prior to adoption.

### ***City of Redlands: Redlands Municipal Airport Land Use Compatibility Plan***

The Redlands Municipal Airport Land Use Compatibility Plan is a stand-alone document created by the City of Redlands for the purpose of establishing procedures and criteria by which the City can address, evaluate and review airport compatibility issues in the vicinity of the Redlands Municipal Airport. Another purpose of the Airport Land Use Compatibility Plan is to alert the City of Highland to the potential effects of air traffic from the Redlands Municipal Airport on land uses in



southern Highland. Any proposals to develop the Redlands Municipal Airport are reviewed for their compatibility with the policies of the Airport Land Use Compatibility Plan.

## Airport Operations at the San Bernardino International Airport

The SBIA and International Trade Center is a 2,100-acre airport located at the former Norton Air Force Base in the City of San Bernardino, just south of the western portion of Highland. The SBIA is proposed to be a public, full-service airport designed to serve the western United States, with capacity to provide regional air traffic for domestic and international service, both commercial and cargo, along with necessary support facilities for major and smaller airlines. The SBIA contains multiple uses including commercial and industrial properties and the 18-hole Palm Meadows Golf Course.

Evolving air transportation services in the City of San Bernardino have the potential to complement Highland’s economic growth and create competitive advantages for its businesses. Highland is a key participant in the industrial development of the East San Bernardino Valley through its involvement on the board of the San Bernardino International Airport Authority and SANBAG (San Bernardino Association of Governments). Limited industrial land west of Interstate 15 (I-15) is forcing industrial development to move eastward towards Highland. The anticipated expansion of the industrial base in the region surrounding Highland and the SBIA, combined with expansion of the SBIA, could result in positive fiscal impacts, especially new employment opportunities for the community.



*A cargo jet is loaded at the San Bernardino International Airport.*

## Airport Operations at the Redlands Municipal Airport

Redlands Municipal Airport (RMA) is a 180-acre facility in the City of Redlands located south of Highland near the Santa Ana Wash. RMA is classified by the FAA as a General Aviation airport. The airport is designed as a General Utility airport capable of accommodating small general aviation aircrafts for personal and business purposes as well as some air taxi type aircrafts. RMA has fixed base operators that provide a variety of services including fuel, flight training, repair and maintenance, hanger and tie-down rental, airplane rental and related services. The airport is also the international headquarters for Mission Aviation Fellowship, a private relief organization providing aviation, humanitarian and technological support to nearly 600 groups worldwide. A portion of eastern Highland is located in the RMA’s Airport Influence Area (AIA) and Area of Special Compatibility Concern (see Figure 6-7 in the Public Health & Safety Element).



*Aerial view of the Redlands Municipal Airport.*



## **Creating Airport Land Use Compatibility Policies**



*A view northeast of the City of Highland from the control tower of the San Bernardino International Airport.*

Combining all these impacts, regulations and agencies and groups can be a daunting task. However, there is a widely accepted airport planning process. Basically, the impacts and safety issues for any particular airport are carefully studied and then mapped. Compatibility maps—whether separate or composite—are related to local land use patterns. Although ALUC (airport land use compatibility) policies have no authority over airport operations, they do influence new development.

Because the City of Highland lies just north of the San Bernardino International Airport and within its “Airport Influence Area” and within an “area of special compatibility concern” for the Redlands Municipal Airport, it has the responsibility to regulate and develop its land uses in ways that protect the safety and quality of life of its citizens. At the same time, the City is working to provide opportunities for economic development. The following goals and policies, also delineated in other elements of this general plan, address noise, safety and land use issues related to its nearby airports.



## GOALS AND POLICIES

### Noise

Noise impacts on surrounding development are the most widespread effects of airport operations. According to the California Airport Land Use Planning Handbook, compatible land uses are those with the fewest people or those that generate significant noise levels themselves, such as transportation facilities and industrial uses. The number of people exposed to airport noise should be minimized by limiting the development of sensitive land uses—such as residences, hospitals, schools, and other community facilities—nearby airports. A primary concern is residential development in areas impacted by aircraft noise. Federal and state laws have established well-defined regulations for acceptable noise levels with the basic criterion set at a maximum 65 decibel (dB) Community Noise Equivalent Level (CNEL) value.

Overflight activities create another noise concern. An overflight is a distinctly visible and audible passage of an aircraft, although not necessarily one that is directly overhead. Overflights often extend past the boundary of the CNEL contour, creating an annoyance or sensitivity for those exposed. The SBIA and RMA have limited control of overflight impacts but provide policy guidance for minimizing these impacts in their master plans. The following goals and policies reinforce the type of measures that can be taken to minimize overflight impacts.

#### Airport Noise Contours

As of the writing of this General Plan, the Airport Master Plan for SBIA was in the process of being prepared. As a consequence, the precise noise contours were not available to include in this Plan. However, relative policies have been included in the General Plan. Upon adoption of the Airport Master Plan, the new noise contours will be incorporated into Figure 11-1 of this Element.

### GOAL 11.1

**Reduce exposure of people to aircraft noise and overflights, and ensure adequate public notification through buyer awareness measures.**

#### *Policies*

- 1) Limit the development of sensitive land uses located within the 65 decibel (dB) Community Noise Equivalent Level (CNEL) contour.
- 2) Require acoustical analysis and noise mitigation measures for sensitive land uses, especially residential uses, in areas significantly impacted by noise.
- 3) Ensure compliance of new development with noise standards in the Code of Federal Regulations and California Airport Noise Regulations.



- 4) Ensure adherence to standards in the California Building Code (CBC) that govern acceptable interior noise levels associated with exterior airport noise sources.
- 5) Participate in planning activities relative to the location and activity of airports and minimize negative impacts on economic development objectives and quality of life in the City.

**Actions**

- 1) Disseminate the latest information on noise mitigation through site planning review and construction techniques.
- 2) Review and respond aggressively to any proposals involving new flight patterns, more intense operations over the City, or relocation or extension of runways that would create the potential for noise impacts on sensitive land uses within the City.
- 3) Work with the San Bernardino International Airport Authority to encourage restrictions on hours of operation to minimize noise impacts.



## Safety

Careful land planning is necessary for uses nearby airports to promote the safety of residents and passengers alike. Safety issues include off-airport aircraft accidents and airspace protection. Unlike aircraft noise, safety concerns are more difficult to address because of the unpredictability of accidents. There are no formal federal or state laws or regulations that set safety criteria for airport area land uses for civilian airports except within runway protection zones. The primary method, therefore, is to participate in Airport planning efforts to ensure plans are compatible with City economic development objectives and Highland's quality of life. Once Airport plans are established, the next step is to reduce the severity of off-airport aircraft accidents in Highland by limiting the intensity of use and the number of people in areas most susceptible to potential aircraft accidents.

### GOAL 11.2

**Reduce the risk to people and property by limiting the type and intensity of development in identified impact areas, ensuring adequate emergency response facilities within or adjacent to airport uses, and requiring adequate public notification of safety policies and procedures.**

#### *Policies*

- 1) Evaluate land use compatibility and safety issues in designated Airport Influence Areas (AIAs) by:
  - Coordinated planning with regional planning authorities
  - Compliance with applicable Airport Master Plans, Federal Aviation Administration (FAA) requirements and the California Airport Land Use Planning Handbook.
- 2) Limit the type and intensity of development in designated Airport Influence Areas (AIAs).
- 3) Avoid siting sensitive uses, especially residences, schools and hospitals, nearby airport runways or along approved flight paths.
- 4) Encourage the development of open space areas in Highland adjacent to designated airport safety zones.
- 5) Encourage notification requirements and establish a buyer awareness program for areas of Highland within established Areas of Special Compatibility Concern.



- 6) Work with the San Bernardino International Airport Authority to ensure that Airport Plans enhance economic advantage, minimize negative impacts to land values and protect Highland’s quality of life.

### **Actions**

- 1) Establish occupancy requirements (i.e., noise mitigation and height restrictions) within established airport easement or overflight areas as a condition of approval for new development.
- 2) Require letters of advisement incorporating information in Conditions, Covenants and Restrictions (CCRs) or Real Estate Disclosures, which report where projects occur within established 65 Community Noise Equivalent (CNEL) and an established Airport Influence Area (AIA).

## **Land Use Opportunities and Future Planning**

Highland’s proximity to the San Bernardino International Airport provides both opportunities and constraints. The Airport’s future Master Plan—a blueprint for its long term development—provides the context in which the City can best plan its future land uses.

For several reasons, Highland is well positioned to capture additional regional demand for business park, industrial and retail development. For one, a shortage of vacant land west of I-15 means that additional demand will move eastward towards Highland. Secondly, additional demand generated by airport expansion can be channeled into the southern areas of the City. Consequently, the City has designated most of its 5<sup>th</sup> Street Corridor area—strategically located between the airport and Interstate 210—as Business Park and Industrial uses.

### **Airport Background**

The Inland Valley Development Agency (IVDA) and San Bernardino International Airport Authority (SBIAA) are regional Joint Powers Authorities formed in 1990 and 1992 respectively. They were formed after closure of Norton Air Force Base in 1994 and their goal is to redevelop the properties and replace the 10,000 jobs that were lost.

The agencies serve as master developers of the 2100 acres of the former military property now known as the San Bernardino International Airport and Trade Center which includes a full-service airport, commercial, and industrial properties.

In addition to the 2100 acres of property, the IVDA redevelopment project area includes approximately 14,000 acres in a three-mile radius of surrounding property outside the base.

### **GOAL 11.3**

**Promote the development of the 5<sup>th</sup> Street Corridor as an attractive employment center and gateway to the San Bernardino International Airport.**

### **Policies**

- 1) Coordinate proactive airport planning efforts with the City of San Bernardino and the San Bernardino International Airport Authority.
- 2) Promote the 5<sup>th</sup> Street Corridor as a visually unified, business friendly employment center.



- 3) Provide adequate transitions and/or buffers between existing residential neighborhoods and industrial and other incompatible land uses.
- 4) Participate in Airport planning efforts to promote compatibility with the City's General Plan.
- 5) Ensure consistency with appropriate Airport Land Use Compatibility Plans, once adopted.
- 6) Encourage flexible development standards that account for changes in market demand related to airport cargo, storage and distribution.

### **Actions**

- 1) Develop a comprehensive gateway boulevard streetscape improvement plan for 5<sup>th</sup> Street.
- 2) Develop comprehensive design guidelines for the landscaping, architecture and streetscapes within the 5<sup>th</sup> Street Corridor.



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