

SAFETY ELEMENT

ELEMENT DESCRIPTION FOR HOMEPAGE

The City of Upland is proud of its safe environment and is committed to the protection of life and property from the risks of natural and man-made hazards. Upland is susceptible to natural hazards such as earthquakes, flooding, and wildfires; and by man-made threats caused by exposure to harmful noise sources, hazardous materials, sickness and crime. Protection from natural and man-made hazards is essential in establishing a sense of well-being for residents and attracting new residents and quality businesses to the City that help to sustain a thriving economy. Upland will continue to collaborate with outside agencies and educate the community to ensure ongoing emergency preparedness, prevention and response in the event of a hazardous incident.

OVERARCHING GOAL

A community protected from natural and man-made hazards including noise, floods, earthquakes, fire, and hazardous materials, through prevention, preparedness, and emergency response.

GOAL AND POLICY SECTIONS

- Noise
- Flood Hazards
- Earthquakes and Geologic Hazards
- Wildland and Urban Fires
- Hazardous Materials
- Airports
- Preparation and Emergency Response

GENERAL PLAN FIGURES

- Figure SAF-1 (Faults and Fault Zones)
- Figure SAF-2 (100-Year and 200-Year Flood Zones)
- Figure SAF-3 (High Fire Hazard Zones)

BACKGROUND DOCUMENTS

- Upland General Plan Existing Conditions Report: Natural Environment

NOISE

Upland protects residents, the labor force and visitors from the harmful effects of noise by establishing exterior and interior noise standards. Higher exterior noise standards are permitted for mixed-use and residential infill projects, as long as the interior noise standard is maintained. Policies in this section help mitigate for noise by requiring the implementation of noise reduction techniques in site design and construction to ensure the compatibility of uses. Mobile sources of noise, such as vehicles and aircraft, are also regulated by the enforcement of Upland’s noise standards.

Goal SAF-1	Upland is protected from interior and exterior noise levels that cause harm to safety, health and well-being.
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Policies

Policy SAF-1.1 **Exterior Noise Standards.** Require noise mitigation for all development where the projected exterior noise levels exceed those shown in Table SAF-1, to the extent feasible.

Table SAF-1 Exterior Noise Compatibility Standards

Land Use Type	Highest Level of Noise Exposure that is Regarded as “Normally Acceptable” (Ldn of CNEL)
Residential – Low Density Single-Family, Duplex, Mobile Homes	60 dBA
Residential – Multi-Family	65 dBA
Mixed-Use	70 dBA
Transient Lodging – Hotels, Motels	65 dBA
Schools, Libraries, Churches, Hospitals, Nursing Homes	70 dBA
Auditoriums, Concert Halls, Amphitheaters	Mitigation based on site-specific study
Sports Arena, Outdoors Spectator Sports	Mitigation based on site-specific study
Playgrounds, Neighborhood Parks	70 dBA
Golf Courses, Riding Stables, Water Recreation, Cemeteries	75 dBA
Office Buildings – Commercial, Office/Professional	70 dBA
Industrial, Manufacturing, Utilities, Agriculture	75 dBA

Source: Governor’s Office of Planning and Research, State of California General Plan Guidelines 2003, 2003, pages 244-254.

Policy SAF-1.2 **Exterior Incremental Noise Standards.** Require noise mitigation for all development that increases existing noise levels by more than the allowable increment shown in Table SAF-4, to the extent feasible.

TABLE SAF-4 **EXTERIOR INCREMENTAL NOISE IMPACT STANDARDS FOR NOISE-SENSITIVE USES (DBA)**

Residences and Buildings Where People Normally Sleep		Institutional Land Uses with Primarily Daytime and Evening Uses	
Existing L_{dn}	Allowable Noise Increment	Existing Peak Hour L_{dn}	Allowable Noise Increment
45	8	45	12
50	5	50	9
55	3	55	6
60	2	60	5
65	1	65	3
70	1	70	3
75	0	75	1
80	0	80	0

Source: Federal Transit Administration, Transit Noise and Vibration Impact Assessment, 2006.

- Policy SAF-1.3 **Interior Noise Standards.** Require new development to include noise mitigation to assure acceptable interior noise levels appropriate to the land use type: 45 dBA L_{dn} for residential, transient lodgings, hospitals, nursing homes, and other uses where people normally sleep; and 45 dBA L_{dn} (peak hour) for office buildings and similar uses.
- Policy SAF-1.4 **Location of Noise-Sensitive Land Uses.** Prevent noise-sensitive land uses (schools, medical centers and hospitals, senior centers, and residences) from locating in areas with noise levels that exceed those considered normally acceptable for each land use unless measures can be implemented to reduce noise to acceptable levels.
- Policy SAF-1.5 **Noise Impact Study.** Require a noise impact study to evaluate impacts of projects that may exceed 65 L_{dn} as part of the design review process.
- Policy SAF-1.6 **Acoustical Study.** Require an acoustical study for all new residential developments that lie within the 65 L_{dn} noise contour on the Future Noise Contour Map, to ensure indoor levels will not exceed City standards. In addition, the City shall continue to enforce the California Building Code for indoor noise levels.
- Policy SAF-1.7 **Noise Reduction in Site Design.** Require measures that attenuate exterior and/or interior noise levels to acceptable levels to be incorporated into all development projects where current and/or future outdoor noise levels may be unacceptable. Require noise reduction features, the focus of which shall be on site design techniques, so long as they do not conflict with the goals of the Community Character Element. Techniques include:

- a. Designing landscaped building setbacks to serve as a buffer between the noise source and receptor.
- b. Placing noise-tolerant land uses such as parking lots, maintenance facilities, and utility areas between the noise source and receptor.
- c. Orienting buildings to shield noise-sensitive outdoor spaces from a noise source.
- d. Locating bedrooms or balconies on the sides of buildings facing away from noise sources.
- e. Utilizing noise barriers, such as landscaped berms, to reduce adverse noise levels in noise-sensitive outdoor activity areas, avoiding sound walls wherever possible.

- Policy SAF-1.8 **Vibration Screening Distances.** Require new residential and commercial projects located adjacent to major freeways, rail lines or other vibration sources to follow the Federal Transit Administration screening distance criteria.
- Policy SAF-1.9 **Alternative to Sound Walls.** Encourage the use of design strategies and other noise reduction methods along transportation corridors in lieu of sound walls to mitigate noise impacts and enhance aesthetics.
- Policy SAF-1.10 **Motor Vehicle Code.** Enforce California Motor Vehicle Code that prohibits amplified sound that can be heard 50 feet or more from a vehicle, and that addresses excessive exhaust noise.
- Policy SAF-1.11 **Construction Noise.** Require construction projects to adhere to the City’s construction hours and incorporate measures to minimize impacts.
- Policy SAF-1.12 **Operational Noise.** Require mixed-use, commercial, and industrial projects to mitigate operational noise impacts to adjoining sensitive uses to meet operational noise thresholds.
- Policy SAF-1.13 **Airport Compatibility.** Prohibit new residential development within the 60 dBA CNEL airport noise contour, and only approve noise-compatible land uses consistent with the ALUCP.
- Policy SAF-1.14 **Noise Level Reduction Near Airport.** Require new structures within any Airport Land Use Compatibility Zone except D or E to incorporate exterior-to-interior noise level reduction design features sufficient to meet the interior noise level criteria specified in the ALUCP.
- Policy SAF-1.15 **Coordination with Cable Airport.** Work with Cable Airport to monitor aircraft noise, implement noise-reducing operation measures (i.e., Fly Quiet, Fly Neighborly programs), and promote pilot awareness of noise sensitive land uses.

FLOOD HAZARDS

By understanding and anticipating potential risks, Upland can protect life and property from flooding hazards. Policies in this section protect Upland residents through interagency coordination in flood management, ensuring full compliance with national standards, and requiring maintenance of the City’s existing floodplain storage areas. The City will evaluate new development for potential flood hazards prior to

approval to minimize flooding risk and impervious surfaces. Upland will also educate the public and ensure evacuation procedures are in place in the event of the San Antonio Dam failure.

Goal SAF-2	A community protected from injury or loss of life and damage to property due to flood hazards.
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Policies

- Policy SAF-2.1 **Interagency Flood Management.** Continue to work with appropriate local, State and federal agencies to maintain the most current flood hazard and flood-plain information and use it as a basis for project review and to guide development.
- Policy SAF-2.2 **National Flood Insurance Program.** Continue to participate in the National Flood Insurance Program (NFIP) and ensure that City regulations are in full compliance with the standards adopted by the Federal Emergency Management Agency (FEMA).
- Policy SAF-2.3 **Floodplain Storage Maintenance.** Maintain and improve storm drainage infrastructure, including the City’s urban creeks, to maintain existing floodplain storage.
- Policy SAF-2.4 **Floodplain Requirements.** Regulate development within floodplains in accordance with State and federal requirements and maintain the City’s eligibility under NFIP.
- Policy SAF-2.5 **Flood Control Channels.** Maintain a healthy riparian corridor in City-maintained flood control channels to reduce the risk of flooding due to erosion, siltation, blockage and heavy undergrowth.
- Policy SAF-2.6 **Existing Development.** Minimize flood risks associated with existing development.
- Policy SAF-2.7 **New Development.** Require evaluation of potential flood hazards prior to approval of development projects.
- Policy SAF-2.8 **Construction Methods.** Identify construction or other methods to minimize damage if new development is located in flood hazard zones.
- Policy SAF-2.9 **Impervious Surfaces.** Minimize impervious surfaces to reduce stormwater runoff and increase flood protection.
- Policy SAF-2.10 **Development in the 100-Year Flood Zone.** Prohibit new development within the 100-year flood zone unless it can be shown that the development will not:
- a. Create danger to life and property due to increased flood heights or velocities caused by excavation, fill, roads and intended use.
 - b. Create difficult emergency vehicle access in times of flood.
 - c. Create a safety hazard due to the unexpected heights velocity, duration, rate of rise and sediment transport of the flood waters at the site.
 - d. Create excessive costs in providing governmental services during and after flood conditions, including maintenance and repair of public facilities.
 - e. Interfere with the existing waterflow capacity of the floodway.
 - f. Substantially increase erosion and/or sedimentation.

- g. Contribute to the deterioration of a watercourse or the quality of water in any body of water.
- h. Require storage of material, or any substantial grading or placement of fill.
- i. Change the water storage/volume capacity of the flood basin.

Policy SAF-2.11 **Flood Barriers.** Prevent the construction of flood barriers within the 100-year flood zone which will divert flood water or increase flooding in other areas.

Policy SAF-2.12 **Siting and Design of Essential Public Facilities.** Require that essential public facilities be located and designed to mitigate potential flood risk to ensure long term operation.

Policy SAF-2.13 **Dam Failure.** Plan for the evacuation of people from areas subject to inundation from San Antonio dam failure.

Policy SAF-2.14 **Public Education.** Promote public education on flooding hazards.

EARTHQUAKES AND GEOLOGIC HAZARDS

Upland is in an area susceptible to seismic and geologic hazards. The City protects the public from these hazards through the enforcement of safety standards, state-of-the-art site design and construction methods, and regulating the retrofitting of existing critical facilities.

Goal SAF-3	A community protected from earthquakes and other geologic hazards.
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Policies

Policy SAF-3.1 **Building Codes.** Enforce the building codes adopted by the State of California in all new construction and renovations.

Policy SAF-3.2 **Geologic Mapping.** Rely on the most current and comprehensive geological hazard mapping available to assist in the evaluation of potential seismic hazards to proposed new development.

Policy SAF-3.3 **Geotechnical Investigations.** Require site-specific soils and/or geologic reports for development in areas where potentially serious geologic risks exist. These reports shall address the degree of hazard, design parameters for the project based on the hazard, and the appropriate mitigation measures.

Policy SAF-3.4 **Mitigation Monitoring.** Monitor and enforce mitigation measures to reduce risks for projects where seismic and geological hazards can be mitigated.

Policy SAF-3.5 **Prohibiting Development.** Prohibit development in known areas where seismic and geological hazards cannot be mitigated.

Policy SAF-3.6 **Retrofit Critical Facilities.** Promote the upgrade, retrofitting, and/or relocation of all existing critical facilities (e.g., hospitals, schools, police stations, fire stations, water facilities, emergency operation centers, emergency access routes, public works yard,

public refuge areas) and other important public facilities that do not meet current building code standards and are within areas susceptible to seismic or geologic hazards.

Policy SAF-3.7 **Utility Lines.** Work with utility providers to ensure that utility lines are designed to withstand seismic forces, are accessible for repair, and are provided with safety features such as automatic shutoff valves, switches and expansion joints.

Policy SAF-3.8 **Future Decision-Making.** Continue to incorporate geotechnical hazard data into future land use decision-making, site design and construction standards.

WILDLAND AND URBAN FIRES

The City of Upland provides for coordinated fire protection for all areas of the City to ensure that the level of response to fires is met through staffing, equipment and access to adequate water resources. Policies in this section ensure that Upland proactively educates and informs its residents and businesses about the potential risks of fire and fire prevention techniques, and the City will continue to work with developers to ensure that threats by fire are minimized in new projects.

Goal SAF-4	A community protected from loss of life, injury, damage to property and loss of natural resources caused by wildland and urban fires.
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Policies

Policy SAF-4.1 **Public Education.** Promote educational programs for the public related to fire safety and prevention.

Policy SAF-4.2 **Prevention Programs.** Participate in fire and life safety prevention programs with neighboring jurisdictions and other governmental agencies as needed.

Policy SAF-4.3 **Development.** Continue to require all development, new and existing, to provide necessary service, fire hydrants and road improvements consistent with the California Fire Code.

Policy SAF-4.4 **Development Review.** Include the Fire Department in the review of development proposals to ensure projects adequately address safe design and on-site fire protection and comply with applicable fire and building codes.

Policy SAF-4.5 **Fire Sprinkler Systems.** Promote the installation of fire sprinkler systems for both commercial and residential use and in structures where sprinkler systems are not currently required by the Municipal Code or California Fire Code.

Policy SAF-4.6 **High Fire Hazard Safety Zones.** Require all development in areas of potential wildland fire hazards, as shown in the High Fire Hazard Map, to include clearance around structures, fire-resistant ground cover and fire-resistant roofing materials.

Policy SAF-4.7 **City-Owned Property Maintenance.** Continue to remove excessive/overgrown vegetation and rubbish from City-owned property to prevent and minimize fire risks to surrounding properties.

- Policy SAF-4.8 **Private Property Maintenance.** Require property owners to maintain property in a manner that minimizes fire hazards through the removal of vegetation and hazardous structures, materials and debris.
- Policy SAF-4.9 **Landscaping.** Encourage the use of drought-resistant and fire-resistant plants in areas subject to wildland fires.
- Policy SAF-4.10 **Fire Services.** Ensure an acceptable level of fire safety and emergency medical services throughout the City.
- Policy SAF-4.11 **Water Supplies for Fire Suppression.** Ensure that adequate water supplies are available for fire-suppression throughout the City.

HAZARDOUS MATERIALS

Industrial uses within the City and proximity to major transportation routes by rail and truck make Upland susceptible to contamination from accidents involving hazardous materials. Upland protects its residents and businesses through the location and regulation of land uses and through the enforcement of County, State and federal requirements. Policies in this section continue practices for the documentation, monitoring, clean up, and re-use of hazardous materials and sites for the protection of Upland’s air and groundwater and for the reduction of greenhouse gases.

Goal SAF-5	A community protected from harmful effects of hazardous materials and waste.
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Policies

- Policy SAF-5.1 **Sensitive Uses.** Require adequate separation between areas where hazardous materials are present and sensitive uses such as schools, senior centers, hospitals and medical centers, residences and public facilities.
- Policy SAF-5.2 **Investigate Sites for Contamination.** Ensure buildings and sites are investigated for the presence of hazardous materials and/or waste contamination before development and periodically during operation for which City discretionary approval is required. The City shall ensure appropriate measures are taken to protect the health and safety of all possible users and adjacent properties.
- Policy SAF-5.3 **Transport of Hazardous Materials.** Ensure the safe transport of hazardous materials through Upland through implementation of the following measures:
- a. Restrict transport of hazardous materials within Upland to designated routes.
 - b. Prohibit the parking of vehicles transporting hazardous materials on City streets.
 - c. Require that new pipelines and other channels carrying hazardous materials avoid residential areas and other immobile populations to the greatest extent possible.
- Policy SAF-5.4 **Reduction of Hazardous Waste.** Work with households, businesses and others who generate hazardous waste to reduce overall hazardous waste in Upland.
- Policy SAF-5.5 **Green Building.** Encourage the use of green building practices to reduce the use of potentially hazardous materials in construction.

- Policy SAF-5.6 **Clean Industries.** Strive to maintain and attract clean industries to the City and discourage the expansion of businesses, with the exception of health care and related medical facilities, that require on-site treatment of hazardous industrial waste.
- Policy SAF-5.7 **Dry Cleaners.** Prohibit the use of Perchloroethylene (PERC) in new dry cleaning facilities and require that dry cleaners in mixed-use developments use clean technology.
- Policy SAF-5.8 **Household Hazardous Waste Collection Programs.** Continue to work with the San Bernardino County Fire Department Hazardous Materials Division to provide household hazardous waste collection programs for convenient access and the proper disposal of products containing hazardous materials or hazardous wastes.
- Policy SAF-5.9 **Storage of Hazardous Waste.** Work with the Upland Fire Department to monitor and regulate the storage of hazardous materials in conformance with the Uniform Fire Code.
- Policy SAF-5.10 **County Regulations.** Continue to work with the San Bernardino County Fire Department Hazardous Materials Division to ensure that businesses in Upland follow the hazardous materials regulations and guidelines outlined in the County of San Bernardino Hazardous Waste Management Plan.
- Policy SAF-5.11 **State and Federal Laws.** Continue to enforce State and federal laws and regulations pertaining to the reporting, clean-up, transport, and management of hazardous materials, including the guidelines and procedures mandated by the State legislature for evaluating hazardous waste facility applications.
- Policy SAF-5.12 **Emergency Response Plans.** Require applicants proposing to generate hazardous waste to submit emergency response plans to the Upland Fire Department and San Bernardino County Fire Department Hazardous Materials Division.
- Policy SAF-5.13 **Education.** Educate residents and businesses on how to reduce or eliminate the use of hazardous materials and products, and encourage the use of safer, nontoxic, environmentally friendly equivalents.

AIRPORTS

Upland benefits from the presence of Cable Airport, and from the proximity of Ontario International Airport, but the advantages also come with risks to public safety and nuisances such as noise. Airports present special constraints for nearby land uses and for emergency response capacity. Policies in this section support the local airports, while protecting surrounding land uses in accordance with policies set forth in the respective Airport Land Use Plans.

Goal SAF-6	Risks associated with aircraft operations at Cable Airport and Ontario International Airport are minimized.
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Policies

- Policy SAF-6.1 **Land Use Compatibility.** Evaluate the compatibility of proposed land uses within the influence area of Cable Airport and the Ontario International Airport in accordance with the policies set forth in the respective Airport Land Use Plans.

Policy SAF-6.2 **Development Restrictions.** Require all development in Upland to be consistent with the required setbacks and height restrictions for Cable Airport and the Ontario International Airport as determined by the Federal Aviation Administration and the respective Airport Land Use Plans.

PREPARATION AND EMERGENCY RESPONSE

Upland mitigates threats posed by a variety of natural and man-made hazards for the safety of Upland residents and businesses, including earthquakes, floods, fires, windstorms, and terrorist events. The City achieves this by promoting awareness in the community and by collaborating with outside agencies, cities, State and federal authorities that provide procedures for preparedness, response and recovery from disaster.

Goal SAF-7	Government, businesses and households protected from and prepared for natural or man-made disasters.
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Policies

Policy SAF-7.1 **Emergency Operations Plan.** Maintain, update and implement, as needed, the Emergency Operations Plan to address disasters such as earthquakes, flooding, dam failure, hazardous materials spill, epidemics, fires, extreme weather, major transportation accidents, and terrorism.

Policy SAF-7.2 **Department-Specific Emergency Operations Plans.** Ensure the maintenance of department-specific Emergency Operations Plans.

Policy SAF-7.3 **Staff Trainings.** Conduct periodic trainings with staff on emergency operations, based on the Emergency Operations Plan.

Policy SAF-7.4 **Mutual Aid Agreements.** Continue to participate in mutual aid agreements with Rancho Cucamonga, Ontario, Montclair, Claremont and surrounding jurisdictions to ensure adequate resources, facilities, and other support for emergency response.

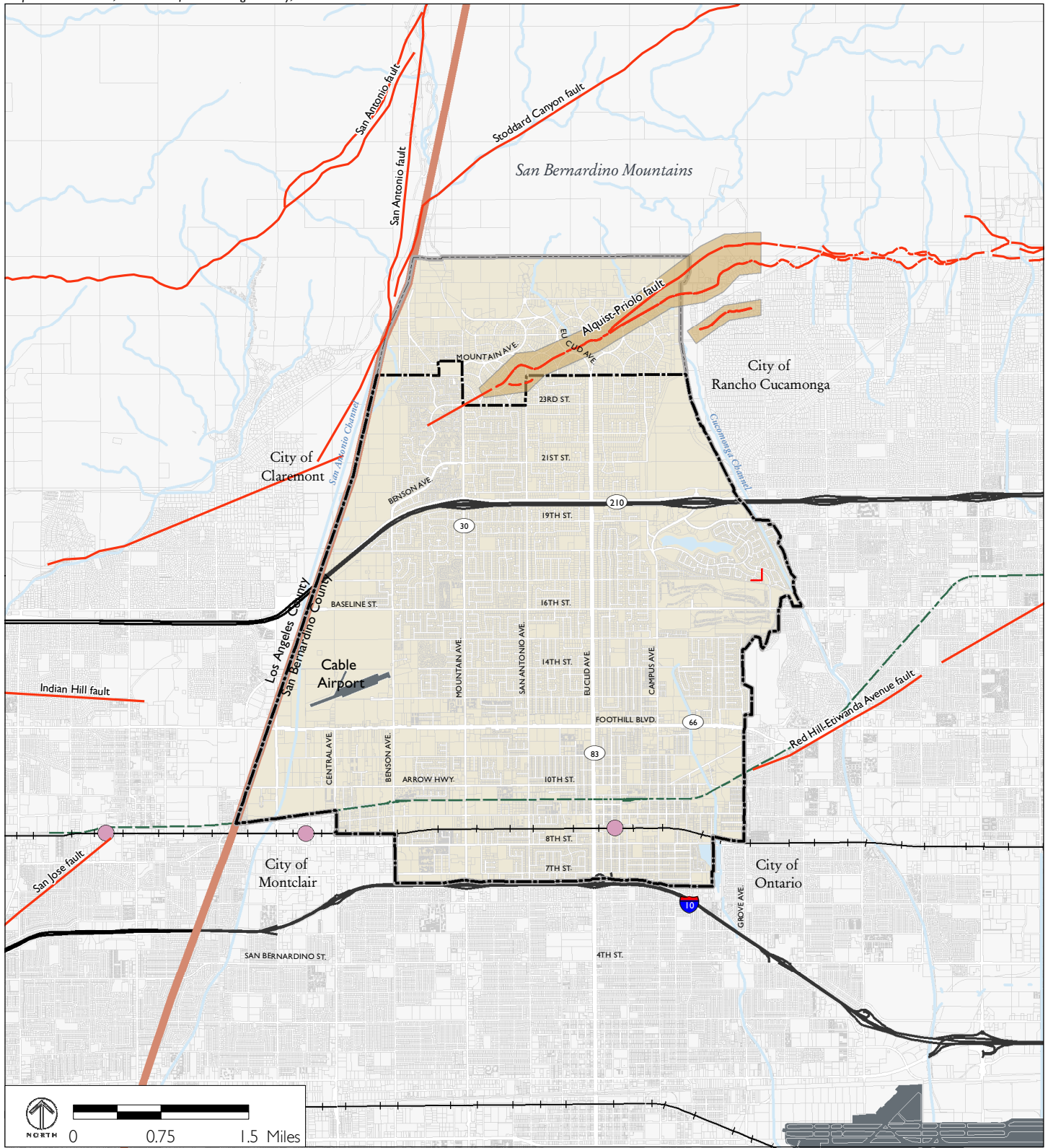
Policy SAF-7.5 **Collaboration with Agencies and Businesses.** Work with other agencies and businesses within the City to assist and support their disaster preparedness efforts.

Policy SAF-7.6 **Post-Disaster Response.** Plan for the continued function of critical facilities following a major seismic or geologic disaster to help prevent major problems during post-disaster response such as evacuations, rescues, large numbers of injuries, and major clean-up operations.

Policy SAF-7.7 **Infrastructure.** Regularly review the adequacy of local infrastructure to withstand a hazardous event.

Policy SAF-7.8 **Public Education.** Continue to provide information to residents and businesses on emergency preparedness, such as preparing emergency kits, developing a communications plan, implementing evacuation procedures and updating emergency plans.

Map Date: 06/21/12; Source: California Geologic Survey, USGS

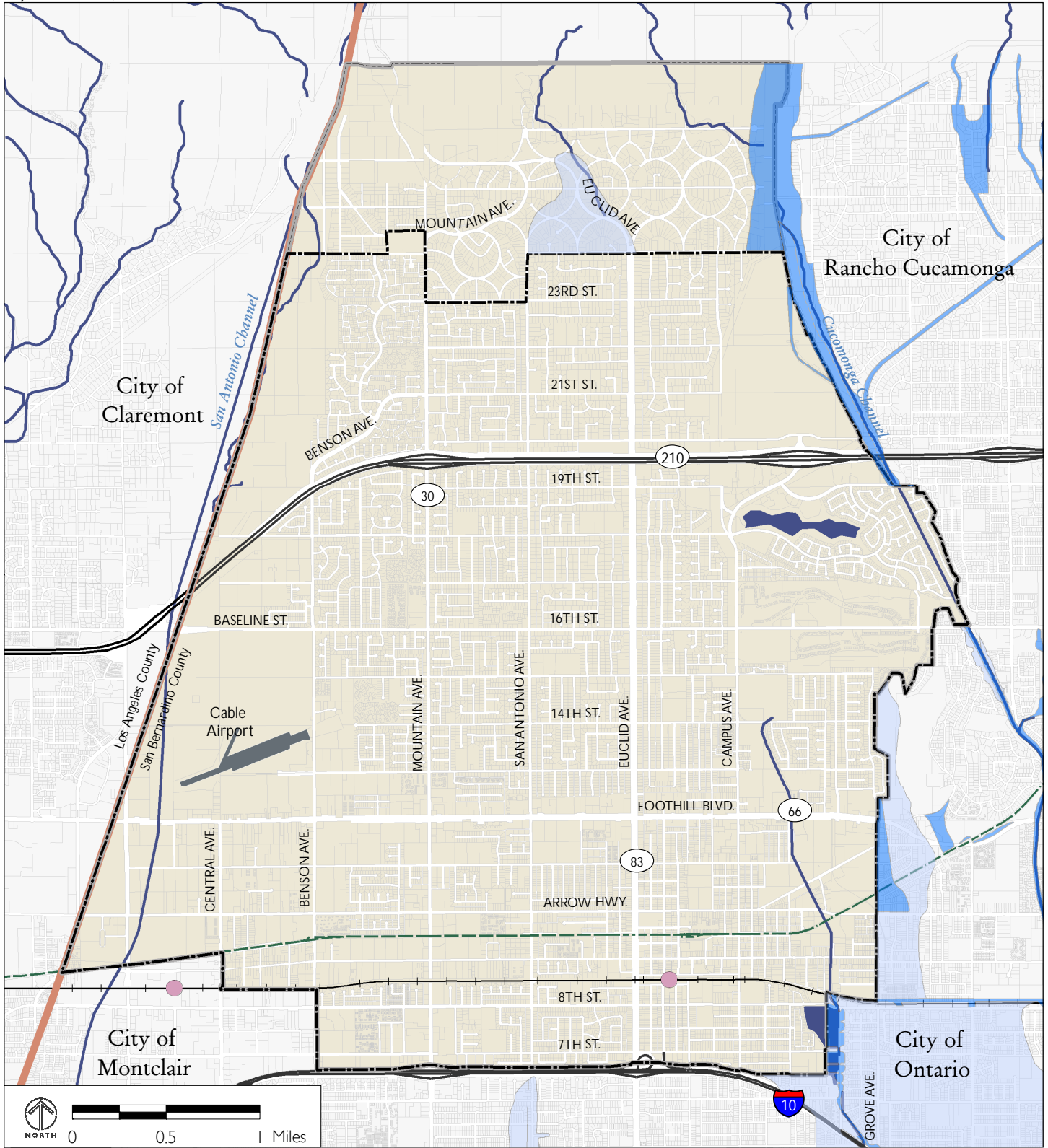


- City Limits
- Sphere of Influence
- County Boundary
- Upland Parcel
- Southern Pacific Trail
- Rail Line
- Metrolink Station
- Alquist-Priolo Earthquake Zones
- Fault Lines



**FIGURE SAF-1
FAULTS AND FAULT ZONES**

Map Date: 07/31/12; Source FEMA 2008



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|--|------------------------|--|----------------------|
| | City Limits | | 100-Year Flood Plain |
| | Sphere of Influence | | 200-Year Flood Plain |
| | County Boundary | | Water Feature |
| | Upland Parcel | | |
| | Metrolink Station | | |
| | Rail Line | | |
| | Southern Pacific Trail | | |

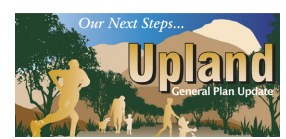
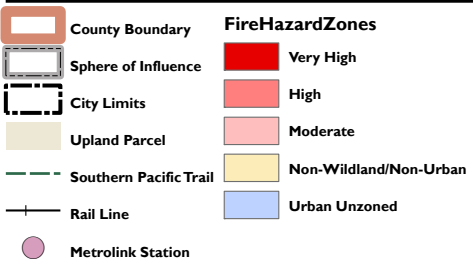
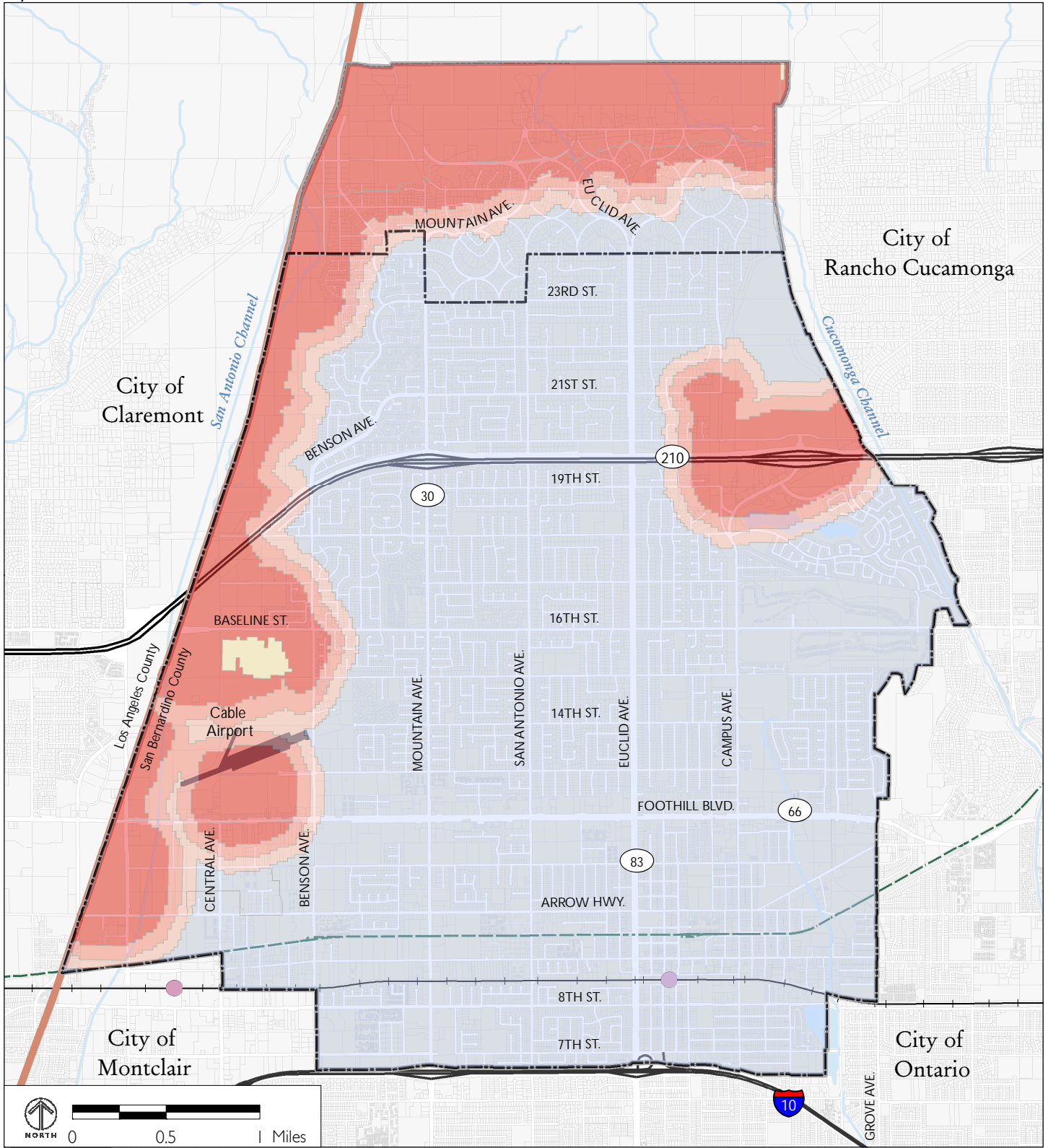


FIGURE SAF-2
100-YEAR and 200-YEAR FLOOD ZONES

Map Date: 07/31/12



**FIGURE SAF-3
HIGH FIRE HAZARD ZONES**

