

PUBLIC SAFETY ELEMENT



Protecting the public's safety is the most critical mission of any local government. Most people are familiar with the police, fire and other emergency response personnel who typically are the first to respond to emergency circumstances. However, the City of Riverside also engages in many other less visible but no less important functions to protect people from natural and human-caused disasters. Building codes, insurance programs, airport plans and hazardous materials management efforts are all crucial programs that protect life and safety. The long-term objectives of the City's vision cannot be fully implemented unless public safety is assured.

This Public Safety Element identifies public safety issues and needs anticipated to be of ongoing concern to Riverside during the planning period. This Element describes the major hazards that might affect the City, as well as the resources available to respond when an accident or emergency occurs. The Element sets forth objectives and policies to address all foreseeable public safety concerns. The overall purpose of this Element is to ensure that the City takes all necessary proactive measures to reduce the risk of hazards and adequately, expediently and efficiently respond to immediate safety threats.

See the Public Facilities Element for information on the Planning Area's peak load water supply requirement.

A SAFE COMMUNITY FOR ALL

To better understand Riverside's approach to public safety, it is helpful to understand the hazards present in the City as a whole. Public safety concerns can typically be divided into two broad categories: natural hazards and human-caused hazards.

There are no identified geologic hazards pursuant to Government Code 65302 (g) in the Planning Area.

Like most Southern California cities, Riverside faces a diverse array of potential natural hazards. With the Santa Ana River nearby and numerous arroyos traversing the City, flood risk is a real concern. The City's undeveloped hillsides are visually appealing but can provide fuel for a wildfire or mudslides in heavy rains. Like all California cities, Riverside is also susceptible to earthquakes. Although no known faults traverse the City or its sphere of influence, regional faults have the potential to threaten health and safety.

Many hazards created by the activities of businesses, and other urban activities, present potential public safety hazards as well. The City's transportation network of roads, freeways, rail lines and airports provide crucial mobility to Riversiders, but each transportation mode comes with associated risk. And, unfortunately, Riverside is not immune to personal or property crime.





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Riversiders' sense of security directly impacts how the quality of life is perceived. How individual cities respond to the particular hazards shapes a city's image in the minds of its residents and visitors. For Riverside to continue its image as a desirable place to live and to offer an attractive location for new business growth the City must continue to comprehensively address the public safety needs and concerns of the City must continue to comprehensively address the public safety needs and concerns of its residents, businesses, institutions and visitors.

This Public Safety Element sets forth a proactive and coordinated program of protection for all foreseeable natural and human-caused hazards. The Element addresses reducing the risk of geologic and flood hazards, managing hazardous materials, improving transportation-related safety, fire prevention and response, providing adequate police services, reducing crime through environmental design and how Riverside's public safety providers can best coordinate their activities to ensure the public's safety.

UNDERSTANDING GEOLOGIC AND SEISMIC HAZARDS

The State of California has legislation by which cities must act to protect its citizenry.

ALQUIST-PRIOLO EARTHQUAKE FAULT ZONING ACT

See the introduction under "State of California Plans and Programs" for more information on Alquist-Priolo Earthquake Faults.

The Alquist-Priolo Earthquake Fault Zoning Act requires the State Geologist to identify earthquake fault zones along traces of both recently and potentially active major faults. Cities and counties that contain such zones must inform the public regarding the location of these zones, which are usually one-quarter mile or less in width. Proposed development plans within these earthquake fault zones must be accompanied by a geotechnical report prepared by a qualified geologist describing the likelihood of surface rupture. As a matter of information, there are no such zones within the City or its Sphere of Influence.

SEISMIC HAZARDS MAPPING ACT

See the introduction under "State of California Plans and Programs" for more information on the Seismic Hazards Mapping Act.

Pursuant to the Seismic Hazards Mapping Act, the State Geologist prepares maps identifying seismic hazard zones. Development in seismic hazard areas is subject to policies and criteria established by the State Mining and Geology Board. In addition, approval of development on a site within a seismic hazard area requires the

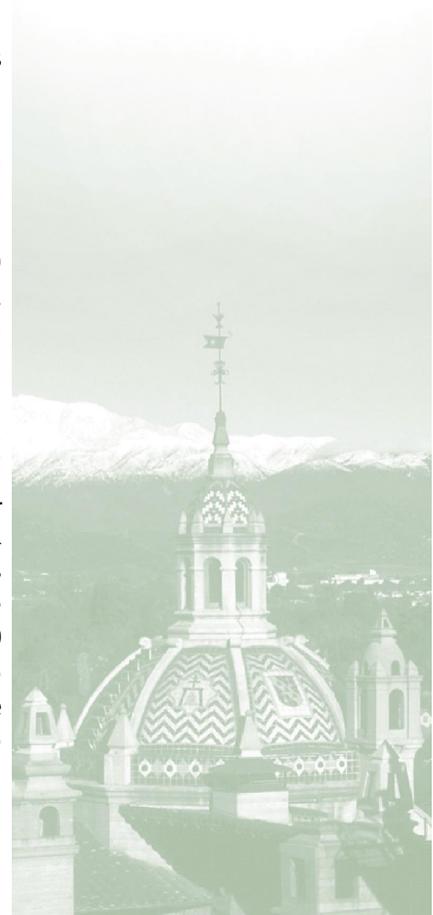


preparation of a geotechnical report and local agency consideration of the policies and criteria set forth by the State Mining and Geology Board (Public Resources Code Section 2690 et. seq.).

SEISMICITY AND FAULTING

While no known faults traverse the General Plan area, several faults in the region have the potential to produce seismic impacts within the City and its sphere of influence. Three significant faults, shown in Figure PS-1 (Regional Fault Zones), pass within twenty miles of Riverside.

- ❖ The **San Andreas** fault is at its closest point eleven miles from Downtown Riverside, abutting the San Bernardino Mountains. The San Andreas fault extends six hundred miles from Eureka in Northern California's Humboldt County south to the Mexican border. The San Andreas fault is estimated to have the capability of producing up to an 8.3 magnitude (M) earthquake. One of the more direct impacts that an earthquake of this magnitude could have on the City of Riverside is the disruption of potable water supplies to the City. The City's primary water supplies come from a series of wells located north of the City, with the water lines from these sources running directly across segments of the San Andreas fault.
- ❖ The **San Jacinto** fault runs as close as seven miles from Downtown. This fault runs more than 125 miles, from northwest of El Centro in Imperial County to northwest of San Bernardino, passing through the intersection of Interstates 10 and 215, the city of Loma Linda and the Box Springs Mountains. This fault has the capability of producing up to a 7.0M earthquake.
- ❖ The **Elsinore** fault passes within thirteen miles of Downtown, extending approximately four miles west of Lake Mathews and Corona and south into the city of Lake Elsinore. This northwest-southwest trending fault has the capability of producing up to a 6.0M earthquake. Northwest of Corona, the Elsinore fault splits into two segments and form the two upper strands of the Elsinore fault. The southwestern strand becomes the 40 kilometer-long Whittier fault, with the capacity of producing up to a 7.2M earthquake, and the northeastern strand becomes the 21 kilometer-long Chino fault, with the capacity of producing up to a 7.0M earthquake.





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Although no Alquist-Priolo fault zone or active or potentially active fault has been mapped at the surface within Riverside, one northwest southeast trending unnamed fault (identified as County Fault in Figure PS-1) is projected toward the southwest corner of the sphere of influence boundary south of Lake Mathews.¹

Magnitude and intensity measure different characteristics of earthquakes. Magnitude measures the energy released at the source or epicenter of the earthquake with the use of a seismograph. Intensity measures the strength of shaking produced by the earthquake at a certain location and is determined from effects on people, human structures and the natural environment. Table PS-1 (Magnitude and Intensity Scale of Earthquakes) correlates magnitude (Magnitude Scale) ranges to the intensities (Mercalli Scale) typically observed at locations near the epicenter of earthquakes. The estimated maximum earthquake event would generate site intensities in the range of VI to IX in Riverside.

SEISMIC-RELATED HAZARDS



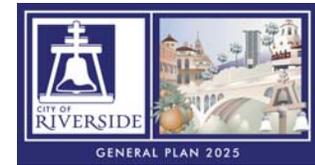
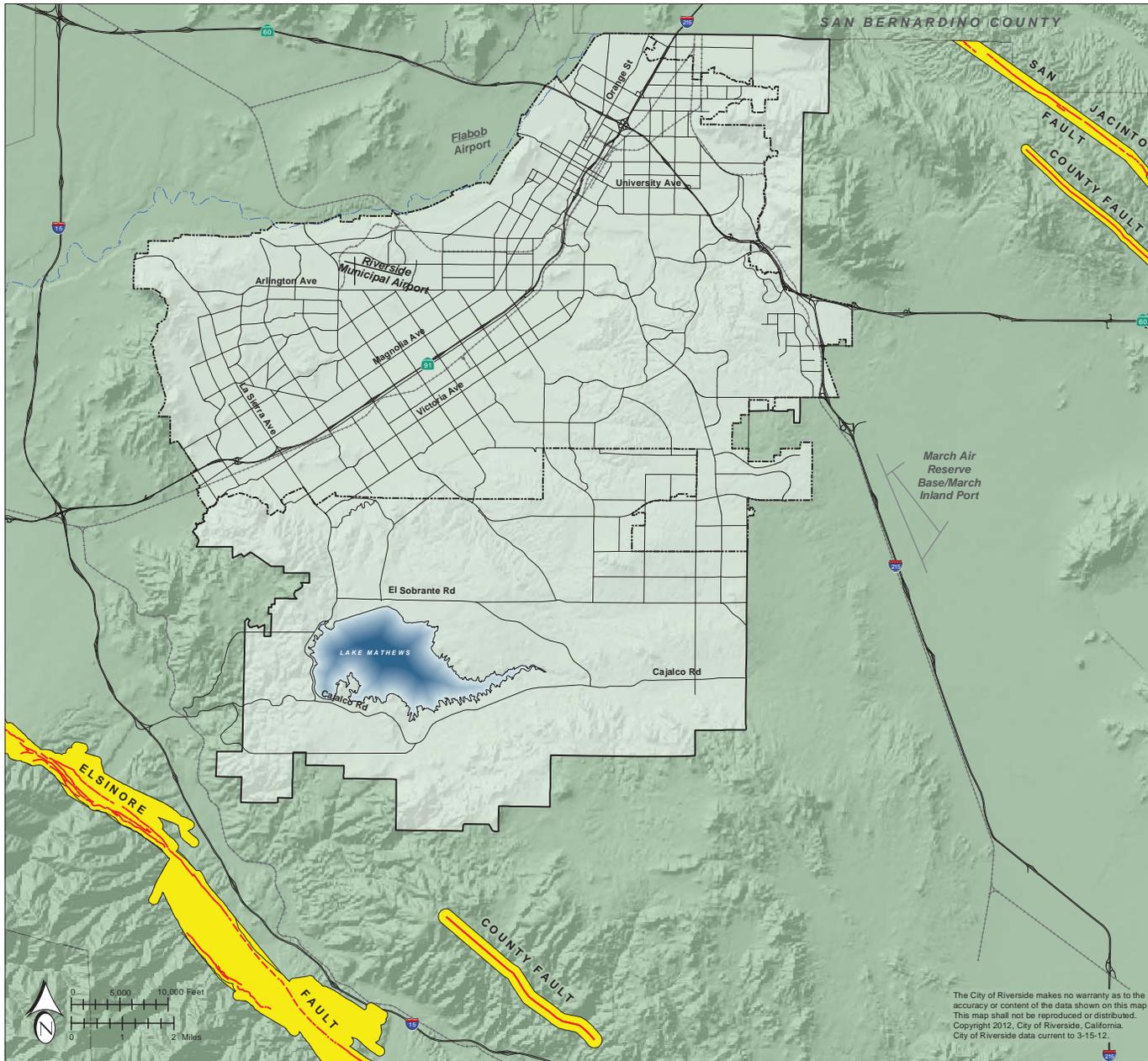
Riverside strives to minimize damage to structures from groundshaking and other seismic hazards.

Because of the topography and the nature of the geologic formations present in Riverside, other seismic-related geologic hazards are less severe than would be expected in cities with extensive steep hillside terrain. Ground shaking, which can seriously affect the integrity of structures, is an important consideration in the General Plan area due to the proximity of major faults and the preponderance of loose alluvial soils.

Other geologic hazards associated with ground shaking include liquefaction and ground failure. Liquefaction occurs when ground shaking causes water-saturated soils to become fluid and lose strength. Liquefaction historically has been responsible for significant damage, creating problems with bridges, buildings, buried pipes and underground storage tanks. Liquefaction hazards are particularly significant along watercourses, a significant concern in the City given its proximity to the Santa Ana River and its numerous arroyos. Figure PS-2 (Liquefaction Zones) illustrates the areas within the City with a high potential for liquefaction.

¹Geologic and Seismic Technical Background Report for Riverside, California, Wilson Geosciences, Inc.





LEGEND

- FAULT LINES
- FAULT ZONES
- - - RIVERSIDE CITY BOUNDARY
- RIVERSIDE PROPOSED SPHERE OF INFLUENCE

SOURCE: RIVERSIDE COUNTY GIS DATA

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Figure PS-1
**REGIONAL
FAULT ZONES**



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TABLE PS-1
MAGNITUDE AND INTENSITY SCALES OF EARTHQUAKES

Magnitude	Descriptor	Intensity	Description
1.0 - 3.0	Very Minor	I	I. Not felt except by a very few under especially favorable conditions.
3.0 - 3.9	Minor	II - III	II. Felt only by a few persons at rest, especially on upper floors of buildings. III. Felt quite noticeably by persons indoors, especially on upper floors of buildings. Many people do not recognize it as an earthquake. Standing motor cars may rock slightly. Vibrations similar to the passing of a truck. Duration estimated.
4.0 - 4.9	Light	IV - V	IV. Felt indoors by many, outdoors by few during the day. At night, some awakened. Dishes, windows, doors disturbed; walls make cracking sound. Sensation like heavy truck striking building. Standing motor cars rocked noticeably. V. Felt by nearly everyone; many awakened. Some dishes, windows broken. Unstable objects overturned. Pendulum clocks may stop.
5.0 - 5.9	Moderate	VI - VII	VI. Felt by all, many frightened. Some heavy furniture moved; a few instances of fallen plaster. Damage slight. VII. Damage negligible in buildings of good design and construction; slight to moderate in well-built ordinary structures; considerable damage in poorly built or badly designed structures; some chimneys broken.
6.0 - 6.9	Strong	VIII - IX	VIII. Damage slight in specially designed structures; considerable damage in ordinary substantial buildings with partial collapse. Damage great in poorly built structures. Fall of chimneys, factory stacks, columns, monuments, walls. Heavy furniture overturned. IX. Damage considerable in specially designed structures; well-designed frame structures thrown out of plumb. Damage great in substantial buildings, with partial collapse. Buildings shifted off foundations.
7.0 - 7.9 8.0 and higher	Major Great	X - XII	X. Some well-built wooden structures destroyed; most masonry and frame structures destroyed with foundations. Rails bent. XI. Few, if any (masonry) structures remain standing. Bridges destroyed. Rails bent greatly. XII. Damage total. Lines of sight and level are distorted. Objects thrown into the air.

Source: United States Geological Survey (USGS) National Earthquake Information Center, (<http://neic.usgs.gov>), April 2001.



Within Riverside, the four primary liquefaction areas include the area along the Santa Ana River, a broad area south and west of the Riverside Municipal Airport, a portion in western Riverside spanning La Sierra Avenue and a smaller area along the City's southern boundary. Most of the sphere of influence area is not susceptible to liquefaction, except for alluvial drainages leading into Lake Mathews.

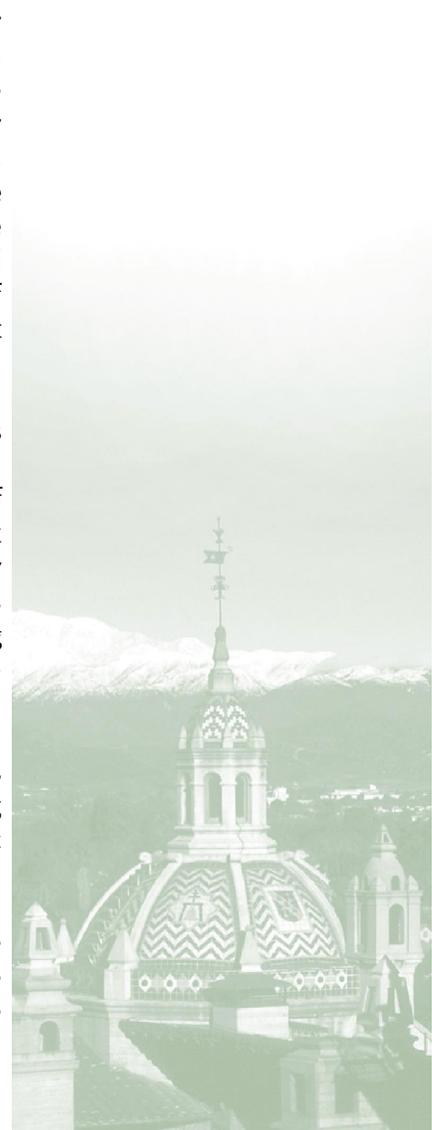
Another soils condition influencing development practices is so-called shrink-swell potential (Figure PS-3 – Soils with High Shrink-Swell Potential). This term refers to the change in soil volume which results from a change in moisture content. Soils with this potential occur primarily west of the Riverside Municipal Airport and within the Lake Mathews drainage area but can be found throughout the Planning Area.

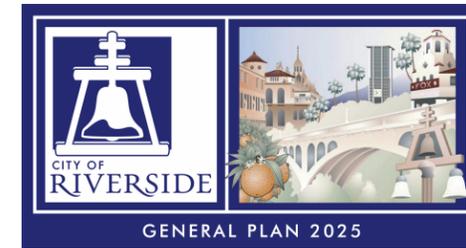
Steep slopes also can affect how and where development can occur within the hilly areas within and surrounding Riverside. The San Jacinto, San Bernardino and San Gabriel mountains provide a frame for the Inland Empire region, and a series of hills and smaller mountains surround Riverside itself. These include the La Loma Hills, Jurupa Mountains, Pedley Hills and La Sierra/Norco Hills. Within the City, surface elevations range from about seven hundred feet above mean sea level near the Santa Ana River to over fourteen hundred feet west of La Sierra Avenue. The highest point in the sphere of influence is Arlington Mountain, standing one thousand eight hundred fifty-three feet tall.

Within Riverside, most natural slopes are relatively flat, generally less than fifteen percent, with some slopes ranging from fifteen to in excess of thirty percent in the southeastern and western portions of Riverside. Steep topography, fractured and unconsolidated bedrock conditions and expansive soils make many hillside areas highly unstable. Principal areas of steep slopes include the Box Springs Mountains, Alessandro Heights, Hawarden Hills and the east-facing slopes of the Norco Hills. Many slopes in the sphere of influence are steeper than those within the City.

The portions of Riverside susceptible to landslides and rockfalls include areas in western and northeastern Riverside. Landsliding may result from heavy rain, erosion, removal of vegetation, seismic activity or combinations of these and other factors.

Required roads around structures subject to geologic hazards are required to meet the minimum roadway widths of Title 18, the Subdivision Code, and clearance around any structures will be reviewed on a case-by-case basis as part of the review of the project.

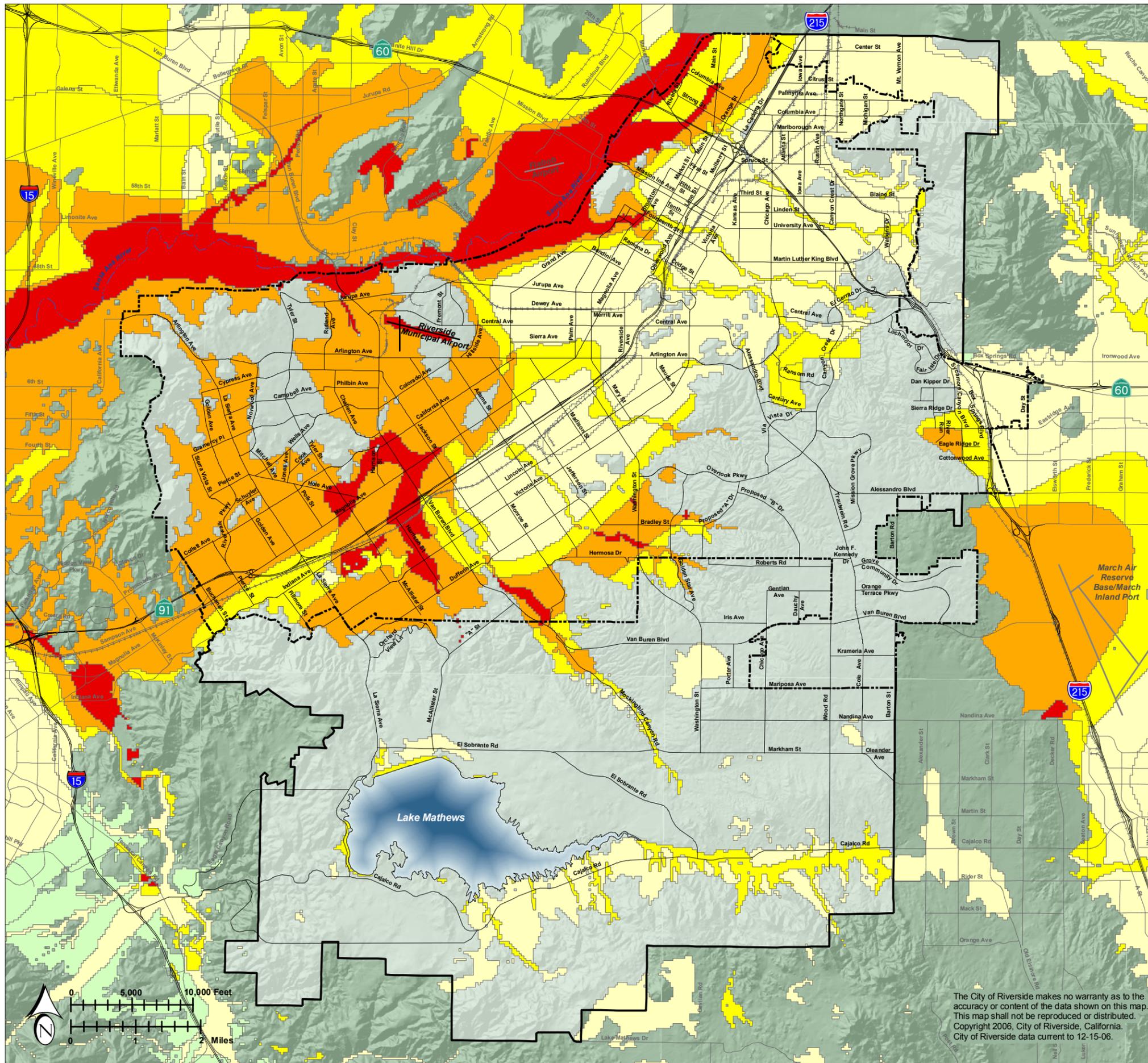




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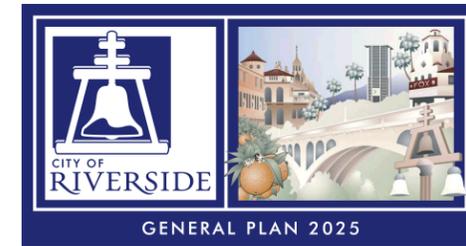
- VERY LOW
- LOW
- MODERATE
- HIGH
- VERY HIGH
- RIVERSIDE CITY BOUNDARY
- RIVERSIDE PROPOSED SPHERE OF INFLUENCE

SOURCE: TRANSPORTATION AND LAND MANAGEMENT AGENCY (TLMA) GEOGRAPHIC INFORMATION SERVICES COUNTY OF RIVERSIDE, JANUARY 1, 2005
<http://www.tlma.co.riverside.ca.us/index.html>



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Figure PS-2
LIQUEFACTION ZONES



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SOILS WITH HIGH SHRINK SWELL POTENTIAL

SOIL TYPES INCLUDED:

ALTAMONT: AaD, AaE2, AaF

AULD: AuD

BONSALL: BdC, BdD

BOSANKO: BfC, BfD

LAS POSAS: LaC, LaD2, LaE3, LcD2

MADERA: MaB2, MaD2, MbC2

PLACENTIA: PIB, PID, PmE

PORTERVILLE: PrD, PtB, PvD2

VALLECITOS, THICK SOLUM VARIANT: VeF2

YOKOHL: YbC, YbD2, YkE2

SOURCE: SOIL SURVEY OF WESTERN RIVERSIDE AREA, CALIFORNIA, NOVEMBER, 1971

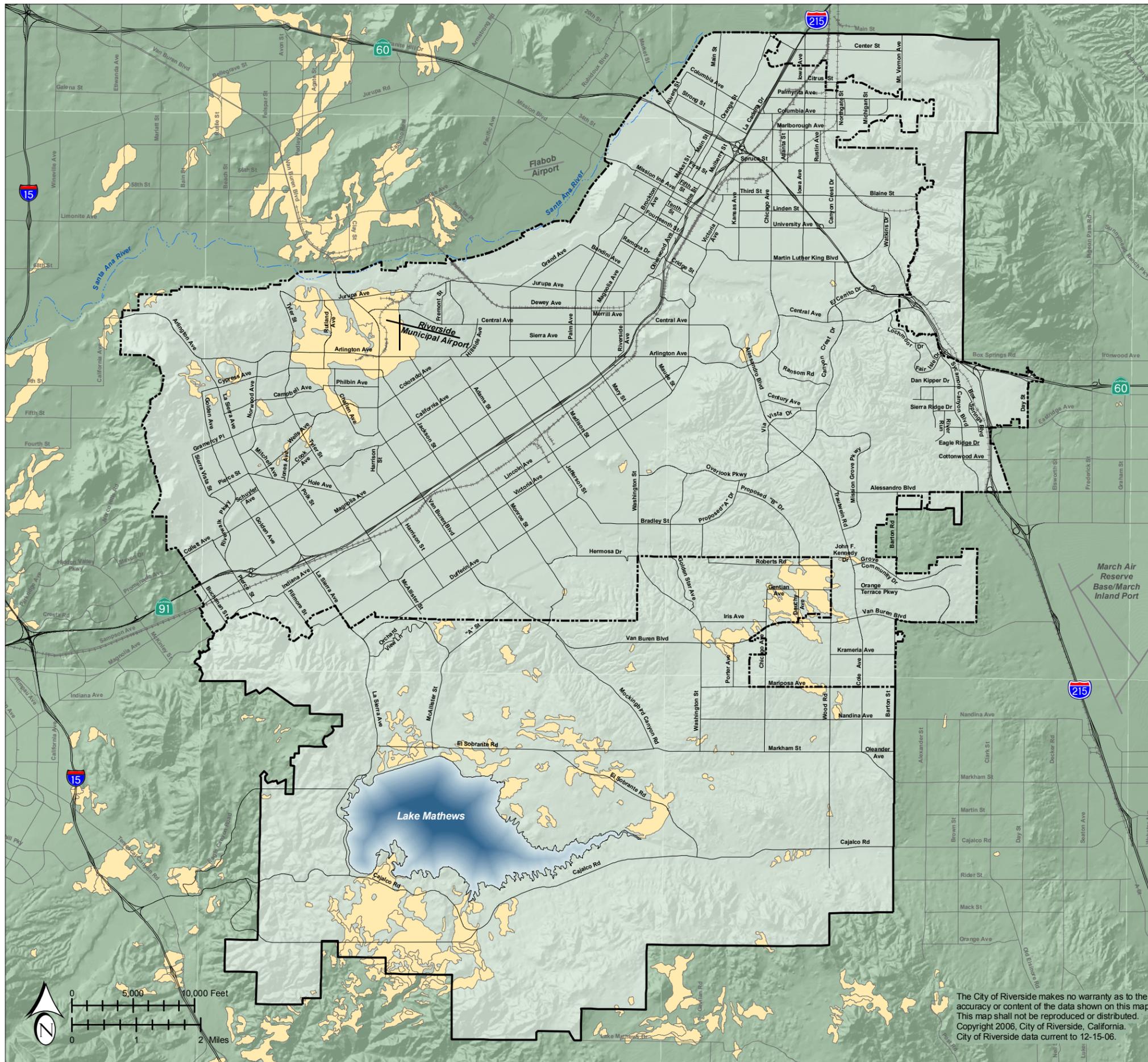


Figure PS-3
SOILS WITH HIGH SHRINK-SWELL POTENTIAL

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Objective PS-1: Minimize the potential damage to existing and new structures and loss of life that may result from geologic and seismic hazards.

For an additional policy concerning geologic hazards see this Element Policy PS-9.8.

Policy PS-1.1: Ensure that all new development in the City abides by the most recently adopted City and State seismic and geotechnical requirements.

Policy PS-1.2: Locate important public facilities of City importance outside of geologically hazardous areas.

Policy PS-1.3: Provide the public with information on how to be prepared for a seismic event, and minimize any related damage or threat to health and public safety.

Policy PS-1.4: Use open space easements and other regulatory techniques to prohibit development and avoid creating public safety hazards where geologic instability is identified and cannot be mitigated.

Policy PR-1.5: Coordinate efforts between public safety, building officials, communication staff and others to create innovative public awareness programs.

Policy PS-1.6: Coordinate with the City Building Official to explore and implement, where feasible, best practices and latest technologies to minimize damage to structures located in areas determined to have a high liquefaction potential during seismic activities.

GUARDING AGAINST FLOODING AND DAM INUNDATION

Perhaps surprising for a City with a very arid climate, Riverside is more susceptible to flood damage than it is to any other disaster.² Southern California's unpredictable seasonal ranges of rainfall, coupled with geographic and geologic conditions, make Riverside particularly vulnerable to flooding, especially during winter months. Increasing conversion of natural areas to pavement and less pervious ground covers makes the effects of storms more intense and potentially damaging. Flash floods, mudslides and creek flooding have all occurred

²City of Riverside Emergency Management Disaster Preparedness website, <http://www.riversideca.gov/fire/storms.html>.





in the City, claiming lives and damaging property. The impacts of flooding can also damage the drinking water supply, create power outages and damage homes and their contents. The City of Riverside has been included as part of four Presidential Disaster Declarations for heavy rains and flooding (2003, 2005, 2010 and 2011). These events caused damage to City infrastructure as well as homes and businesses.

The City's flood risk areas include the area adjacent to the Santa Ana River; lands alongside arroyos, washes and drainage channels; and lands in the vicinity of several dams, including the Harrison Dam, Woodcrest Dam, Mary Street Dam, Prenda Dam, Box Springs Dam, Mockingbird Canyon Dam, Alessandro Dam, Cajalco Dam, Fairmount Dam and Lake Evans Dam (See Figure PS-4, Flood Hazard Areas). Although dams can provide valuable flood control and water storage functions, areas near dams are considered to be at risk in the event of dam failure. The safety of all dams is the responsibility of the U.S. Army Corps of Engineers (ACOE), which conducts inspections on a regular basis.



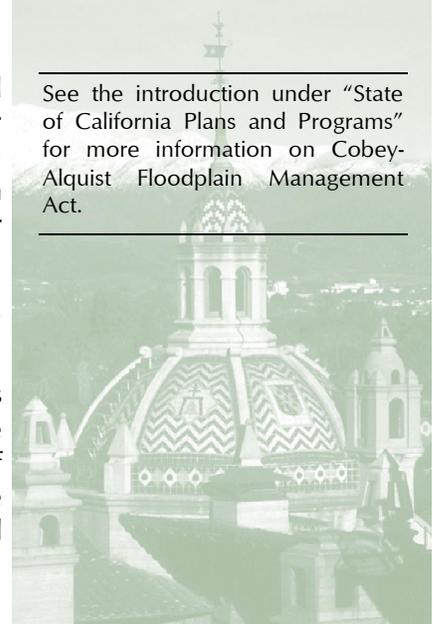
One of the largest river systems in Southern California, the Santa Ana River has largely been channelized, directed, and urbanized. However, portions of the river still retain a free flowing character and pose occasional flood risks.

Past dam failures in Southern California (Baldwin Hills and St. Francis) and near-failures (Von Norman) of Southern California dams point out the importance of ensuring dam safety. Dams may fail for seismic or geologic reasons. Riverside lies downstream from several dams and debris basins whose drainages ultimately flow into the Santa Ana River or its tributaries. Inundation hazards range from high to low with distance away from Lake Mathews and other reservoirs, such as Harrison and Mockingbird Reservoirs. Figure PS-4 (Flood Hazard Areas) illustrates potential dam inundation zones throughout the planning area.

The Cobey-Alquist Floodplain Management Act encourages local governments to plan, adopt and enforce land use regulations for floodplain management, in order to protect people and property from flooding hazards. The Act also identifies requirements which jurisdictions must meet in order to receive State financial assistance for flood control.

See the introduction under "State of California Plans and Programs" for more information on Cobey-Alquist Floodplain Management Act.

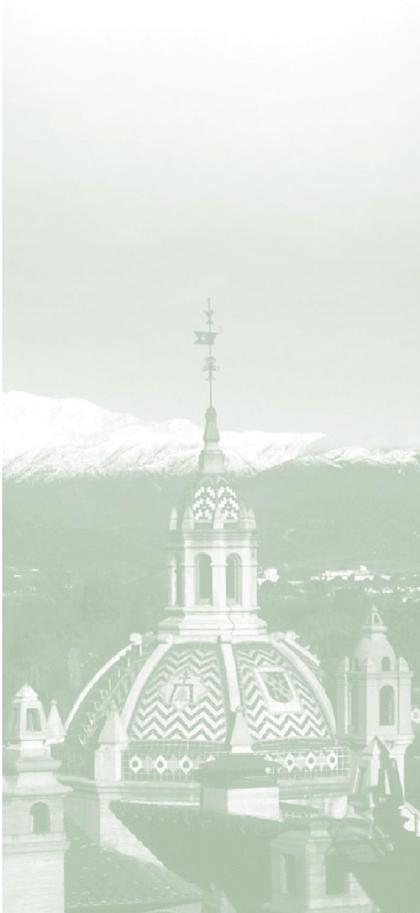
Riverside participates in the National Flood Insurance Program. Flood Insurance Rate Maps (known as FIRM maps) prepared by the Federal Emergency Management Agency, or FEMA, show potential flood areas with a 1% or greater chance of occurring annually, known as the "base flood" or 100-year flood zones, in addition to areas outside of the base flood zone that may be less susceptible to inundation but are still considered to be part of the floodplain (See Figure PS-4, Flood Hazard Areas).

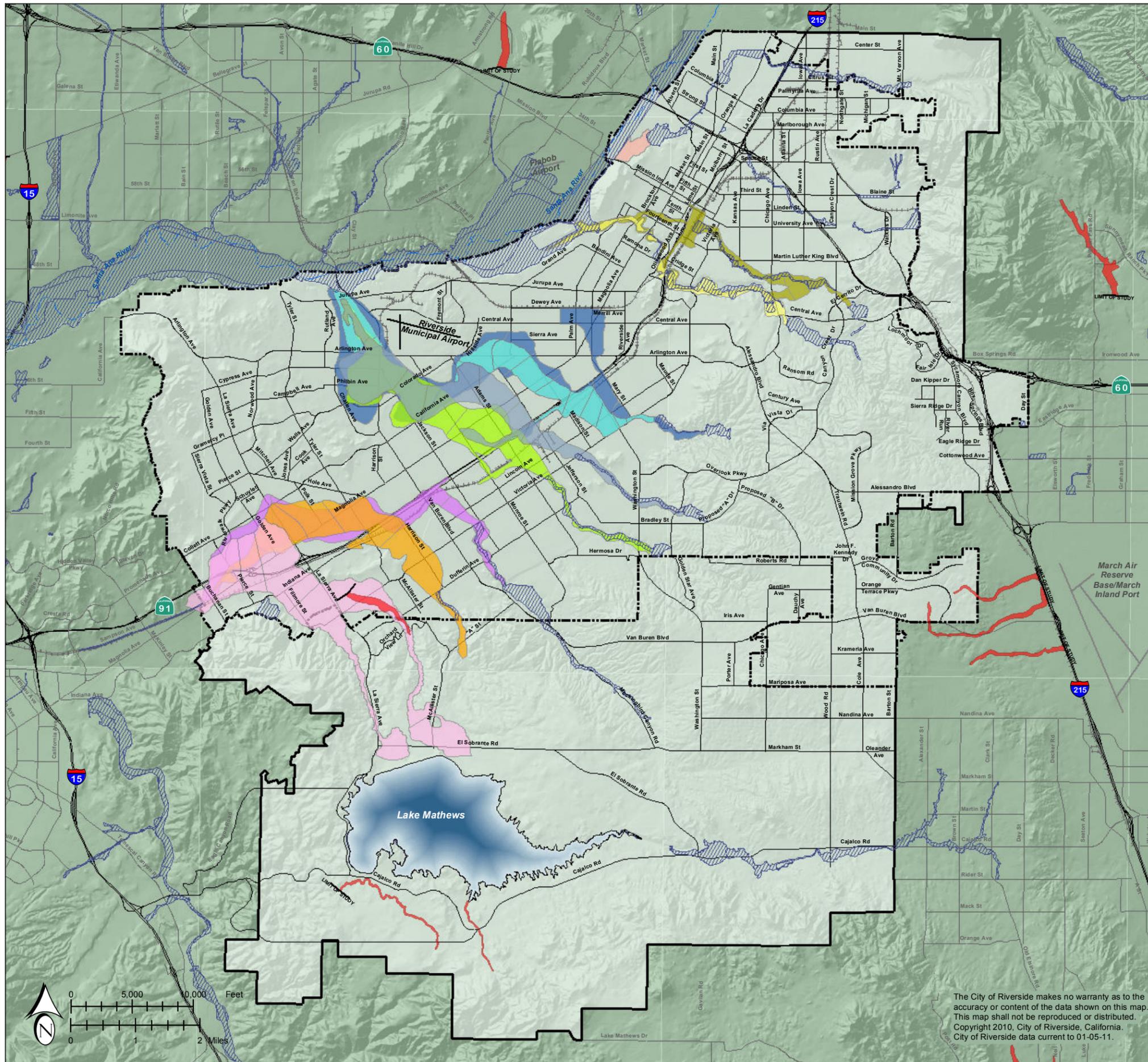
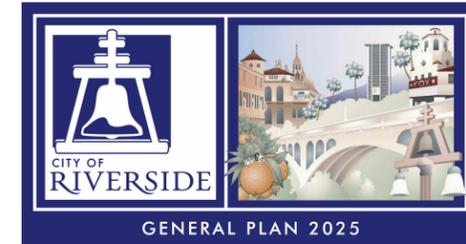




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Flooding, depending on its severity, can cause disruption of commerce and governmental services, extraordinary public expenditures for flood relief and impairment of the tax base. Flood risks are best avoided through proactive and preventative measures. Through the identification of potential flood hazard areas, the City can reduce the impact. Preventing the siting of certain types of facilities, specifically emergency or other critical facilities, in areas subject to inundation from dam failure or in designated floodplains can also mitigate flood hazards and guard against loss of life and property.





LEGEND

FLOOD HAZARD AREAS

- 1 % ANNUAL CHANCE OF FLOOD
- 0.2 % ANNUAL CHANCE OF FLOOD

DEPARTMENT OF WATER RESOURCES AWARENESS FLOODPLAIN

DAM INUNDATION AREAS

- SYCAMORE CANYON DAM
- BOX SPRINGS DAM
- PRENDA DAM
- WOODCREST DAM
- MARY ST DAM
- ALESSANDRO DAM
- LAKE MATHEWS DAM (FORMERLY CAJALCO DAM)
- HARRISON DAM
- MOCKINGBIRD CANYON DAM
- FAIRMOUNT DAM

RIVERSIDE CITY LIMITS

RIVERSIDE SPHERE OF INFLUENCE

NOTE: THE AREAS OF INUNDATION FROM FLOODING AND FROM DAM FAILURE HAVE BEEN DERIVED FROM MAPS OF VARIOUS SCALES, AND ARE ONLY APPROXIMATELY LOCATED ON THIS PLATE. FOR MORE PRECISE LOCATIONS THE READER SHOULD CONSULT THE STATE APPROVED INUNDATION MAPS AND THE FEDERAL INSURANCE RATE MAPS.

DAM INUNDATION AREAS ARE BASED ON THE ASSUMPTION OF INSTANTANEOUS FAILURE OF THE DAM WITH THE RESERVOIR FULL TO CAPACITY. THE AREA SHOWN IS THAT WHICH WOULD BE INUNDATED REGARDLESS OF DEPTH OF WATER OR VELOCITY OF FLOW.

SOURCE: FLOOD INUNDATION DATA FROM U.S.G.S. FLOOD HAZARDS MAP (1974), CORPS OF ENGINEERS (1969) AND 2008 FEMA DFIRM DATA.



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Figure PS-4
FLOOD HAZARD AREAS



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Although protection from flooding is critical to the City, flood protection measures need not pose or create negative environmental impacts. Flood-control measures and techniques should emphasize solutions that utilize or incorporate natural features and processes over concrete-only channels and detention basins.

Objective PS-2: Reduce potential flood hazards within Riverside.

See this Element and the Public Facilities Element under “Stormwater Control” for additional information on the topic of flood hazards.

In particular, review Policy PS-9.8 and Objective PF-4.

Policy PS-2.1: Reduce flood risks for residents and businesses within urbanized areas, as feasible.

Policy PS-2.2: Encourage flood control infrastructure that does not reduce the natural character or limit the use of the site.

Policy PS-2.3: Minimize additional flood risk exposure in developing areas.

Policy PS-2.4: Identify existing facilities located in the 1% annual chance of flood zone, particularly bridges and potential emergency access routes.

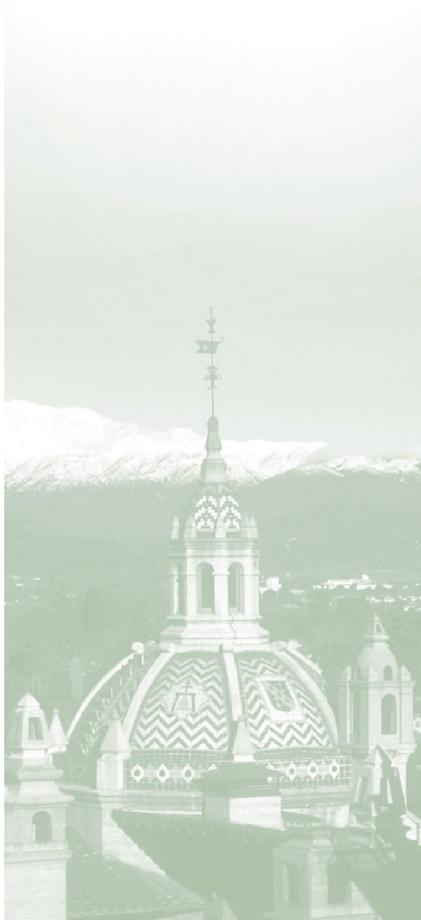
Policy PS-2.5: Encourage flood control techniques along the Santa Ana River that are harmonious with potential recreational uses in the area.

Policy PS-2.6: Create and maintain evacuation routes for areas that could be affected by flooding or dam failure, with special emphasis on critical and emergency facilities.

Policy PS-2.7: Minimize flood risks to the City’s agricultural greenbelt by working with the Riverside County Flood Control and Water Conservation District to identify and implement appropriate flood control measures where feasible.

MANAGING HAZARDOUS MATERIALS

A hazardous material is any material that because of its quality, concentration or physical or chemical characteristics, poses a significant potential hazard to human health or safety or to the environment. Hazardous materials are used in Riverside for a variety of purposes. The most common large users include manufacturers, medical clinics, agriculture, dry cleaners, pest controllers, film





processors and automotive related business. As of 2006, over six hundred thirty commercial businesses in the City were classified as small-quantity generators that produce hazardous waste and have business emergency plans for the chemicals they use.

Individual households utilize smaller amounts of hazardous materials, including batteries, household cleaners and paint. However, when the total number of households is considered, the aggregate amount of hazardous material can be staggering. When used and disposed of properly, many materials can provide needed or desired ends, but improper use as well as accidents materials can lead to health and safety risks. Such materials may be released through any spilling, pumping, pouring, emitting, emptying, discharging, injecting, escaping, leaching, dumping or disposing into the environment.



Hazardous materials generators in the City are routinely monitored for safety.

Large users and transporters of hazardous materials are monitored and regulated by the Federal Environmental Protection Agency (EPA) and other Federal, State and County regulatory agencies, such as the State Department of Toxic Substance Control and the Riverside Fire Department.

The EPA has identified a total of 29 sites in Riverside and within its sphere of influence on its 2007 Toxic Release Inventory (TRI) database. These are sites that are known to release toxic chemicals into the air. The EPA’s TRI reporting program closely monitors the emissions from these facilities to ensure that their annual limits allowed under Federal regulations are not exceeded and that public health and safety are protected.

See the Introduction under “Federal Plans, Programs and Legislation” for more information on the Toxic Release Inventory.

TRANSPORTATION CONCERNS

Hazardous materials pass through Riverside on local freeways, rail lines and surface streets. Notably, the City has no direct authority to regulate the transport of hazardous materials on Federal and State highways or rail lines, which are governed by regulations of the U.S. Department of Transportation and the California Highway Patrol. When transporting explosives, inhalation hazards or other potentially dangerous materials, and highway route-controlled quantities of radioactive materials, safe routing and safe stopping-places are required, and drivers are required to display warning placards or markings while hauling hazardous materials.



CONTAMINATED SITES

Although the use of hazardous materials is carefully regulated today, past activities have led to the contamination of several sites in the City. Contamination has resulted from leaking underground storage



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tanks, disposal of hazardous materials and various industrial practices. With the City's proximity to the Santa Ana River and given that the local groundwater basin supplies drinking water, improper use and disposal of hazardous materials pose real threats to the City's well-being.

More detail regarding water quality and the City's water supply can be found in the Public Facilities and Infrastructure Element.

As detailed in the Public Facilities and Infrastructure Element, Riverside Public Utilities (RPU) Department obtains all but a small portion of the water supply from groundwater basins in the area. Groundwater is exposed to elements that have potential to contaminate them. The water supplied by RPU typically meets or exceeds State and Federal water regulations and guidelines. RPU staff diligently monitors the quality of the water supply and complies with State and Federal regulatory activity requirements. Sources of possible contaminants include septic systems, composting activities and business practices.

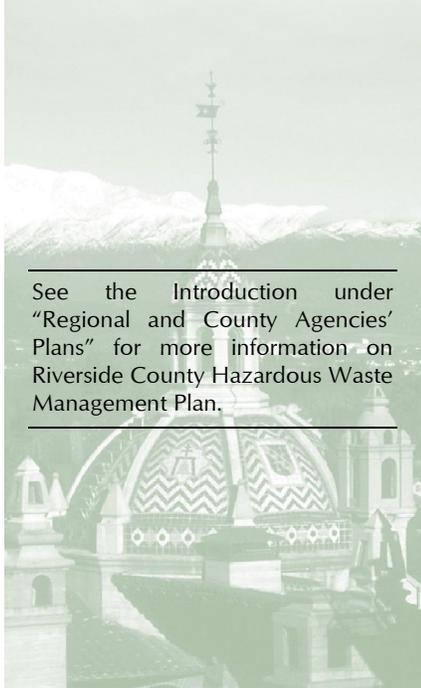
The contamination plumes in wells in the Bunker Hill Basin contain trichloroethylene (TCE), dibromochloropropane (DBCE) and perchlorate plumes. Prior DBCE contamination is primarily related to herbicide use in orange groves. As stated in the Public Facilities and Infrastructure Element, these contaminants are being mitigated through water treatment and other methods.

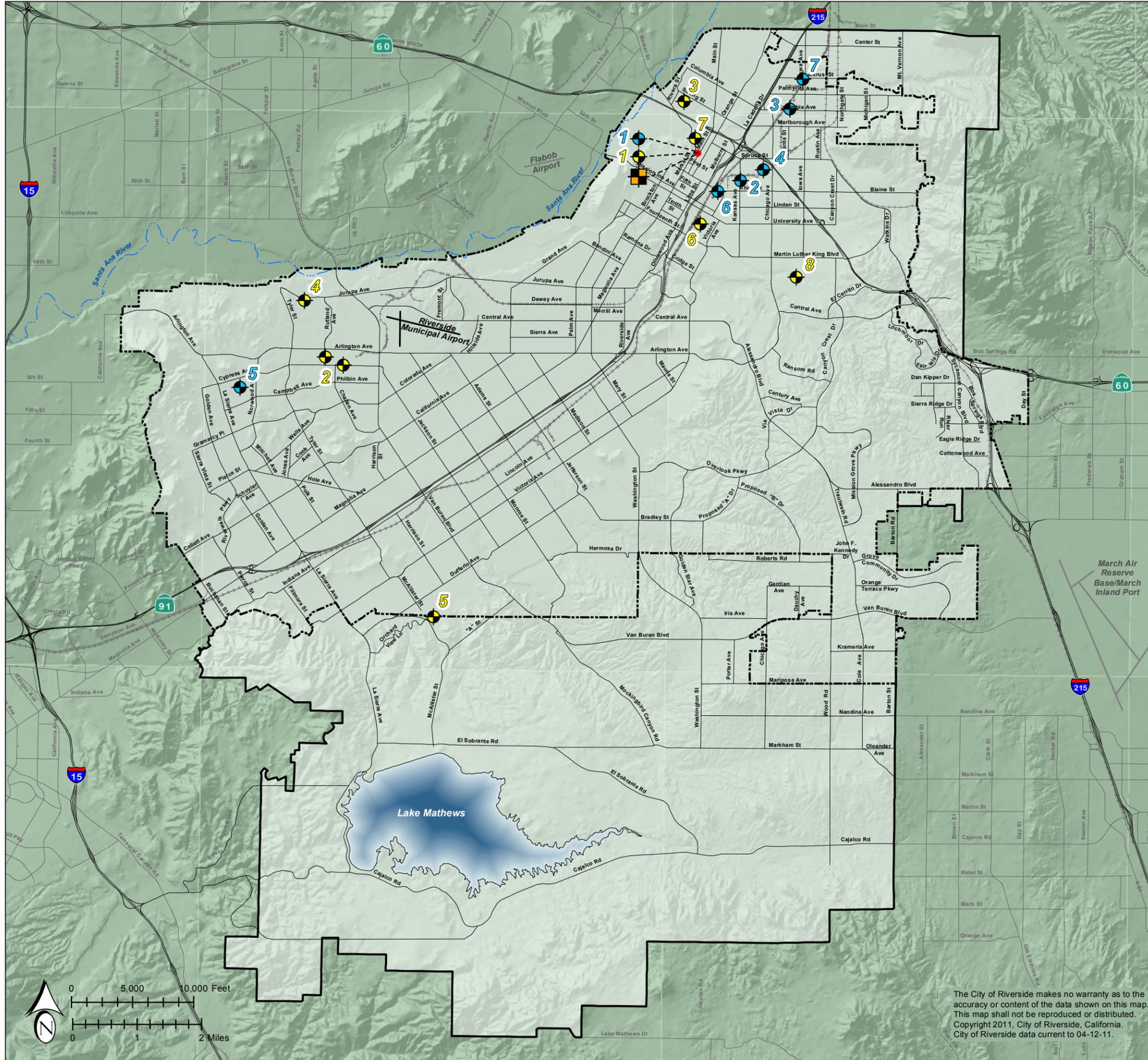
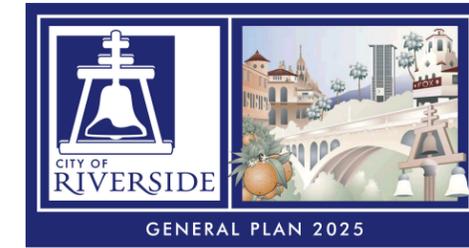
See the Introduction under "Federal Plans, Programs and Legislation" for more information on the Superfund Act.

The Superfund Act is a Federal law designed to protect the environment from risks created from previous disposal practices. Adopted by Congress in 1980, the law, also known as the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA), was created as a long-term trust to provide funding to remediate and prevent damage from improper hazardous materials disposal. One site within the City has been identified as a Superfund site under CERCLA. This site is Alark Hard Chrome at 2777 Main Street. This site is illustrated in Figure PS-5 (Hazardous Waste Sites). Over time, additional sites in the City may qualify for Superfund assistance.

See the Introduction under "Regional and County Agencies' Plans" for more information on Riverside County Hazardous Waste Management Plan.

To effectively manage hazardous materials and wastes by large users, the City has implemented applicable portions of the Riverside County Hazardous Waste Management Plan. The City's Household Hazardous Waste Collection program targets the appropriate disposal of household solvents, batteries and chemicals that require special disposal practices to prevent environmental damage. In addition to these programs, the Riverside Fire Department's Hazardous Materials Response Unit responds to incidents involving hazardous materials. The Department's Certified Unified Program Agency also regulates hazardous materials in the City. The Riverside Public Works Department monitors hazardous wastes entering the City's sewers.





LEGEND

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CERCLIS (Table 5.7-A of the EIR)
INVENTORY SITES - May 2007
 1. ALARK HARD CHROME
 2. ALCAN INC.
 3. ALUMAX MILL PRODUCTS INC.
 4. ICI PAINTS DEVOE COATINGS COMPANY
 5. MITCHELL AVE DRUG LAB
 6. RIVERSIDE FERTILIZER WORKS
 7. RIVERSIDE FOUNDRY

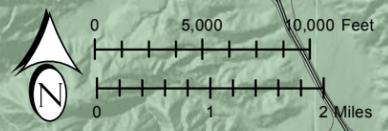
- TRI (Table 5.7-B of the EIR)**
FOR A LIST OF THE TOXIC RELEASE INVENTORY (TRI) AS OF MARCH 2007 SEE TABLE 5.7-B OF THE EIR OR VISIT THE U.S. E.P.A. TOXIC RELEASE INVENTORY PROGRAM WEBSITE

- 
DTSC EnviroStor (Table 5.7-C of the EIR)
ACTIVITY & LAND USE RESTRICTED SITES - MAY 2007
 1. ALARK HARD CHROME
 2. CAMP ANZA (Two Sites)
 3. PATRICIA BEATTY ELEMENTARY SCHOOL
 4. RIVERSIDE AGRICULTURAL PARK
 5. SIERRA CREEK ESTATE
 6. SO CAL GAS
 7. SYNDER TRUST PROPERTY
 8. UNIVERSITY OF CALIFORNIA RIVERSIDE

- 
SUPERFUND SITES
 1. ALARK HARD CHROME

-  RIVERSIDE CITY BOUNDARY
 RIVERSIDE PROPOSED SPHERE OF INFLUENCE

SOURCE: US EPA SUPERFUND (CERCLIS), MAY 2007, TOXIC RELEASE INVENTORY PROGRAM, MARCH 2007; CALIFORNIA DEPARTMENT OF TOXIC SUBSTANCES CONTROL ENVIROSTOR DATABASE, MAY 2007, URL - <http://www.envirostor.dtsc.ca.gov/public>



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Figure PS-5
HAZARDOUS WASTE SITES



PUBLIC SAFETY ELEMENT

The current regulatory environment provides a high level of protection from the hazardous materials manufactured within, transported to and stored in Riverside's industrial and educational facilities. By recognizing these hazards and ensuring that an educated public can work with City officials to minimize risks associated with hazardous materials in the urban environment, Riverside can maintain safe conditions citywide. The following objective and policies are put into place to minimize hazardous materials exposures.

Objective PS-3: Minimize risks associated with the storage, transport and disposal of hazardous materials.

Policy PS-3.1: Ensure that hazardous materials used in business and industry are handled properly.

Policy PS-3.2: Provide the Fire Department with resources to ensure that hazardous materials used and generated by businesses are handled properly.

Policy PS-3.3: Work with responsible Federal, State and County agencies to identify and regulate the disposal of toxic materials.

Policy PS-3.4: Reduce the risks associated with ground transportation hazards, where feasible.

Policy PS-3.5: Encourage sewer service to minimize groundwater contamination.

GROUND AND AIR TRANSPORTATION

See the Land Use Element under "Relationships to Nearby Airports," the Circulation and Community Mobility Element under "Airports" and the Noise Element under "Minimizing Noise Impacts" for more information on Airports.

Riverside's multi-faceted transportation network — including its streets, freeways, rail lines, airport and other routes — provides much-needed mobility to citizens, visitors, businesses and the movement of goods. At the same time, all of these systems pose potential safety risks to users and those in the vicinity. This section details the potential risks of the various components of the Riverside travel network and identifies proactive and concrete measures the City will pursue to reduce and remove such risks.



AIRPORT OPERATIONS

Riverside Municipal Airport is an integral part of the local and regional air transportation system, providing private aviation services to Riverside and the surrounding area. The airport is situated on 451 acres in the northwest portion of Riverside, bordered by Arlington Avenue to the south, Hillside Avenue to the east and Van Buren Boulevard to the west. The airport is owned and operated by the City, with its operations overseen by the City of Riverside Airport Commission.

The other significant air facility that impacts the planning area is the approximately twenty-four-hundred-acre March Air Reserve Base (MARB). Located to the City's southeast, between Riverside and the City of Moreno Valley, MARB had earlier served as a United States Air Force base, where activities began in 1918. The Department of Defense redesignated the base as an air reserve base in 1996. A Joint Powers Authority (JPA), of which Riverside is a part, administers operations on the base. In addition to the air reserve activities, the JPA's long-range plan calls for the base to serve as an inland port, accommodating cargo in transfers between ground and air shipping.



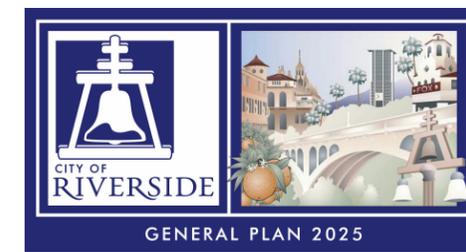
The Riverside Municipal Airport, a leading destination for corporate and business aviation in Southern California, will continue to regard safety as a priority.

Flabob Airport, located in the unincorporated community of Rubidoux just west of the Santa Ana River, is only two miles northwest of Riverside's Central Business District. Its influence in the City of Riverside, along with that of the Riverside Municipal Airport, is shown in Figure PS-6A (Riverside Municipal and Flabob Airport Land Use Compatibility Zones and Influence Areas).

The risk of aircraft crashes is an important consideration in planning around airports. In tandem with any aviation operation, "crash" zones for airports are a major safety issue. These zones establish areas where the risk of a crash are determined in relation to take off and landing patterns. Even though the MARB is not located within Riverside, flight patterns related to MARB impact the neighborhoods of Orangecrest, Mission Grove and Sycamore Canyon/Canyon Springs.

The Riverside County Airport Land Use Compatibility Plan designates zones of airport-influenced areas for airports in Riverside County, and establishes a series of policy and compatibility criteria that ensures both aviation activities and surrounding uses are compatible.

The Introduction covers Riverside County Airport Land Use Compatibility Plan (RCALUCP) and the Airport Land Use Commission (ALUC). Additional objectives and policies set forth in the Land Use and Urban Design Element focus on airport-influenced areas. The Noise Element references airport noise contours.



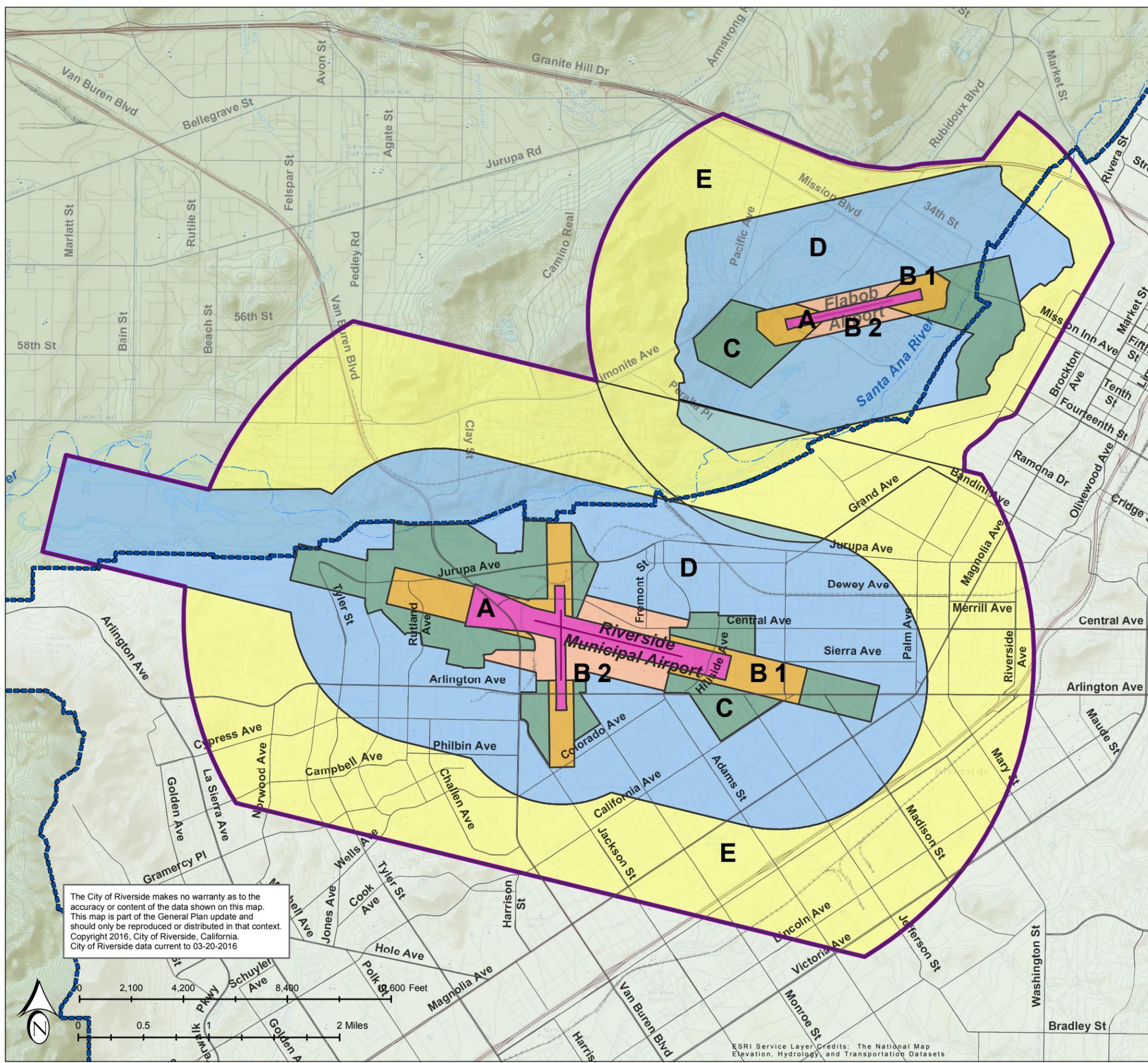
LEGEND
RIVERSIDE COUNTY AIRPORT
LAND USE COMPATIBILITY PLAN

- Riverside City Boundary
- Airport Influence Area
- Compatibility Zones**
- A- Clear Zone
- B1- Inner Approach/Departure
- B2- High Noise Zone
- C - Flight Corridor
- D- Flight Corridor Buffer
- E- Other Airport Environs

NOTE: SEE THE RIVERSIDE COUNTY AIRPORT LAND USE COMPATIBILITY PLANS FOR ASSOCIATED POLICIES

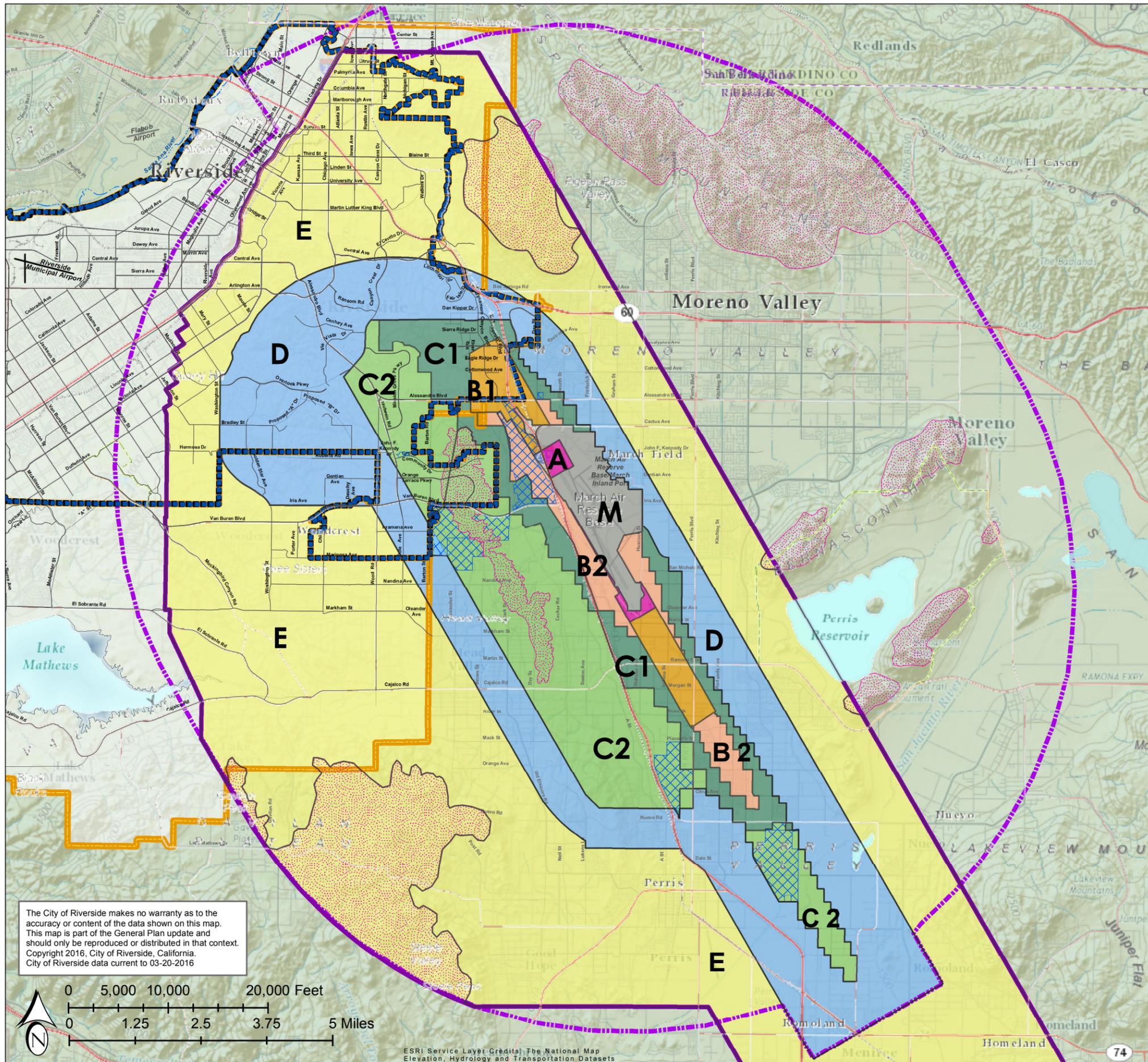
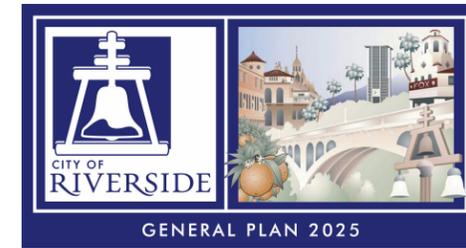
RIVERSIDE AIRPORT LAND USE COMPATIBILITY PLAN, ADOPTED DECEMBER 2004 FOR FLABOB AIRPORT AND MARCH 2005 FOR RIVERSIDE MUNICIPAL AIRPORT.

Figure PS-6A
Riverside Municipal Airport
and FLABOB Airport
AIRPORT LAND USE
COMPATIBILITY ZONES
AND INFLUENCE AREAS



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LEGEND
RIVERSIDE COUNTY AIRPORT
LAND USE COMPATIBILITY PLAN

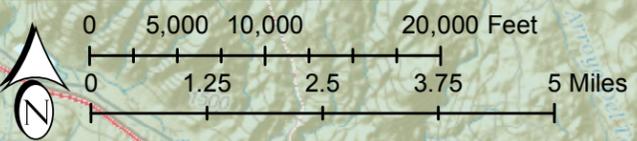
Compatibility Zones

- A- Clear Zone
- B1- Inner Approach/Departure
- B2- High Noise Zone
- C1- Primary Approach/Departure
- C2- Flight Corridor
- D- Flight Corridor Buffer
- E- Other Airport Environs
- Military Zone
- High Terrain Zones
- Site Specific Exceptions
- FAR Part 77 Notification Area
- Riverside Sphere of Influence
- Airport Influence Boundary
- Riverside City Boundary

NOTE:
SEE THE MARCH AIR RESERVE BASE
/ INLAND PORT AIRPORT
COMPATIBILITY PLANS FOR ASSOCIATED POLICIES
ALSO SEE MARCH ALUCP MAP MA-1
COMPATIBILITY MAP FOR MORE INFORMATION

Figure PS-6B
**March Air Reserve Base/
Inland Port Airport**
**AIRPORT LAND USE
COMPATIBILITY ZONES
AND INFLUENCE AREAS**

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PUBLIC SAFETY ELEMENT



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As shown on Figure PS-6A (Airport Land Use Compatibility Zones and Influence Areas), Riverside Municipal and Flabob Airports involve six zones of airport influence areas and land use compatibilities, as identified in the Riverside County Airport Land Compatibility Plan adopted by the Airport Land Use Commission (ALUC) in October 2004. As shown on Figure PS-6B (MARB/MIP Airport Land Use Compatibility Zones and Influence Areas), there are eight zones of airport influence and land use compatibilities, as identified in the March Air Reserve Base/Inland Port Airport Land Use Compatibility Plan (March ALUCP), which was adopted by the Riverside County Airport Land Use Commission (RCALUC) on November 13, 2014. Upon adoption, the March ALUCP became a part of the 2004 Countywide ALCUP.

The Compatibility Plan for March ARB/IPA is primarily based upon the U.S. Air Force’s 2005 Air Installation Compatible Use Zone (AICUZ) Study for the March Air Reserve Base. The compatibility zones and associated criteria set forth in the March ARB/IPA Compatibility Plan provide noise and safety compatibility protection equivalent to, or greater than, the Air Force recommended criteria presented in the AICUZ.

The Land Use Policy Map (Figure LU-10) in the Land Use and Urban Design Element has been developed to avoid allowing intensive new uses within the airport-influenced areas. These policies are buttressed by supportive zoning regulations in the form of an Airport Protection Overlay Zone. Development controls include limiting development within areas subject to high noise levels and limiting the intensity and height of development within aircraft hazard zones.

See the Introduction under Air Installation Compatible Use Zone Study, Land Use and Urban Design Element under “Relationships to Nearby Airports,” the Public Safety Element under “Ground and Air Transportation” and the Noise Element under “Minimizing Noise Impacts” for additional information on the Riverside Municipal Airport.

In particular review Objectives LU-22, LU-23, PS-4 and N-2.

RAILROAD OPERATIONS

Commuter rail and freight transit by rail creates safety concerns at roadway-rail grade crossings and along rail rights-of-ways. The numerous at-grade railroad crossings in Riverside pose concerns related to safety in addition to localized traffic congestion. In the United States as a whole, statistics show that a train accident involving death, personal injury or property damage occurs every two hours. Riverside experienced twenty-five unsafe incidents, though not accidents, between 2001 through 2003; this number is anticipated to grow with additional train usage and increased regional population and traffic growth. With its extensive network of freight trains and the growing popularity of commuter rail operations, Southern California as a region incurs train-related incidents at a disproportionately high rate.



New technologies are being explored to improve roadway-rail grade crossings in Riverside.



PUBLIC SAFETY ELEMENT

Train traffic is expected to increase in the future. In Riverside County, peak railroad traffic was eighty-five freight trains per day in 2000 with traffic expected to grow to one hundred sixty-nine trains per day in 2020. Train traffic will be increased further by additional freight airport cargo in the Inland Empire, specifically from the establishment of the March Inland Port, as well as the completion of the Alameda Corridor East project. The Alameda Corridor East project, which will improve the link between the Ports of Los Angeles and Long Beach with the Inland Empire region, will facilitate freight railway services, improve safety and reduce travel time for person movement.

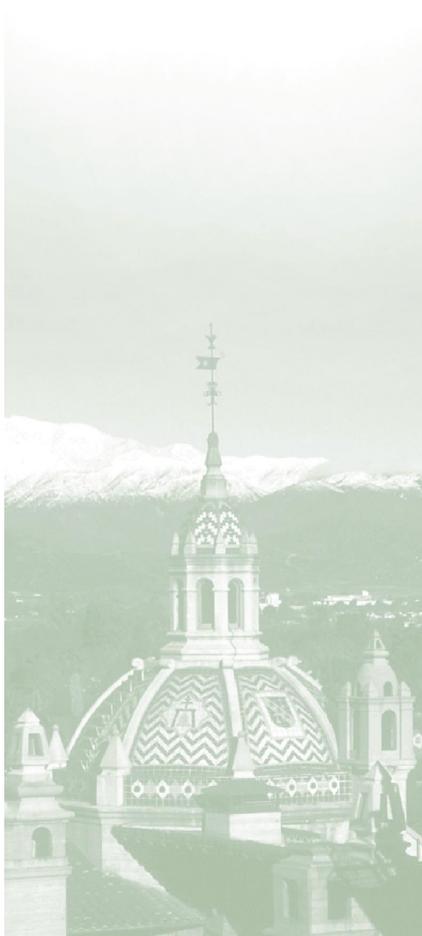
See the Circulation and Community Mobility Element under “Freight: Railways and Truck Movement” for more information on this topic.

Any attempt to reduce risks associated with trains must address several different groups of people: train operators, drivers and pedestrians. The City’s first priority is to create grade-separated rail crossings. Given the expense and time required to achieve grade separations, other measures will need to be pursued, including integrating roadway-rail traffic control systems and roadway traffic management systems, providing better information warning of trains to motorists and pedestrians, improving passive and active warning signs and signals for light rail and commuter rail transit, developing cost-effective off-track train presence detection systems (such as automated horn systems) and assessing safety data to determine target areas for technology. These new technologies will be demonstrated, evaluated and integrated for rail-transit system safety applicability on the City's roadways.

TRAFFIC HAZARDS

Vehicle travel, whether in a car, bus, truck or motorcycle, is the most common form of transportation within the City. Riverside has more than seven hundred fifty miles of surface streets and thirty miles of freeway lanes. Typical traffic pattern consist of early morning commuters from both Riverside and points east traveling westbound toward Los Angeles and Orange Counties. Early and mid-morning traffic backs up both directions going through the Downtown area and traveling westbound through the western portion of the City as the local work force begins to arrive. This pattern is reversed on typical weekday afternoons.

While sitting in traffic is an annoyance to most people, vehicle travel also poses safety risks due to potential accidents, driver impairment or behavior, dangerous road conditions or combinations of these factors. To reduce the risk of ground transportation hazards, the City has a multi-faceted response approach to preventing incidents from occurring and responding promptly when incidents do occur.





The Traffic Bureau of the Police Department both enforces traffic laws and responds to traffic incidents. Aggressive citation enforcement by the Traffic Bureau has proven to be an effective deterrent in reducing the number of collisions attributed to aggressive driving habits.

Proactive citation enforcement such as educational and interdictive methods of reducing aggressive driving is essential to the community's success in traffic enforcement. The Traffic Bureau also manages the Crossing Guard, Safe Streets and Traffic Education programs. These duties and programs are aimed at controlling and responding to traffic situations and preventing traffic incidents before they occur.

Objective PS-4: Protect the community from hazards related to air and ground transportation.

See the Land Use Element under "Relationships to Nearby Airports," the Circulation and Community Mobility Element under "Airports" and the Noise Element under "Minimizing Noise Impacts" for more information on Airports.

In particular, review LU-22, LU-23, CCM-11, N-2 and N-3.

AIR TRANSPORTATION

- Policy PS-4.1: Minimize the risk of potential hazards associated with aircraft operations at the Riverside Municipal Airport, March Air Reserve Base/March Inland Port and Flabob Airport through the adoption and implementation of the Airport Protection Overlay Zone, and the Riverside County Airport Land Use Compatibility Plan, which includes the March Air Reserve Base/Inland Port Airport Land Use Compatibility Plan.
- Policy PS-4.2: When planning for development near airports, anticipate possible increases in airport activity and expansion of airport facilities and services and the effects these changes may have on public safety.
- Policy PS-4.3: Encourage development in the vicinity of the Riverside Municipal Airport that would not cause land use conflicts, hazards to aviation or hazards to the public and that is in compliance with the Riverside County Airport Land Use Compatibility Plan for the airport.
- Policy PS-4.4: Maintain open space adjoining the Riverside Municipal Airport, March Air Reserve Base/March Inland Port and Flabob Airport as required for safety for both the present runway configurations and for possible future expansion as identified in the





PUBLIC SAFETY ELEMENT

Riverside County Airport Land Use Compatibility Plan, including the March Air Reserve Base/Inland Port Airport Land Use Compatibility Plan, and the Riverside Municipal Airport Master Plan.

Policy PS-4.5: Review the Riverside Municipal Airport Master Plan periodically to update operational and safety procedures, reflect State and Federal mandates, better utilize airport property and recommend land use capability standards for land surrounding the airport.

Policy PS-4.6: Ensure that development within airport influence areas is consistent with the Airport Protection Overlay Zone development standards and the Riverside County Airport Land Use Compatibility Plan, which includes the March Air Reserve Base/Inland Port Airport Land Use Compatibility Plan.

Policy PS-4.7: Ensure compatible land uses near March Air Reserve Base/March Inland Port through implementation of the March Air Reserve Base/Inland Port Airport Land Use Compatibility Plan, adopted in November, 2014.

GROUND TRANSPORTATION

See Policies CCM-12.5 and N-4.4 for additional information relating to road/rail grade separations.

Policy PS-4.8: Pursue grade-separated rail crossings as the first level priority for reducing street/rail conflicts.

Policy PS-4.9: Minimize the potential for accidents involving railways, automobiles, pedestrians and cyclists by working closely with the Riverside Police Department, RTA, California Highway Patrol and all applicable railroad companies to identify safety problems and implement corrective measures.

See the Circulation and Community Mobility Element under "Freight: Railways and Truck Movement" and the Air Quality Element under "Transportation" for more information on ground transportation.

Policy PS-4.10: Use technology to improve safety at grade crossings that cause the least environmental harm including Quiet Zone improvements such as upgraded and updated warning devices, additional gate arms, extended and raised medians, improved signage and coordinated traffic signals.

In particular, review Objectives CCM-12 and AQ-2.

Policy PS-4.11: Continue proactive programs aimed at improving drivers' behavior.



Policy PS-4.12: Implement roadway improvements identified in the Circulation and Community Mobility Element intended to improve roadway safety.

PEDESTRIAN AND BICYCLIST SAFETY

As the City looks to encourage increased pedestrian and bicycling activity to achieve its community mobility goals, pedestrian and bicyclist safety will require more focused attention. While vehicle transportation needs tend to get the most attention – or at least the greatest amount of pavement – walking and bicycling represent important travel modes that are more environmentally benign and offer opportunities for physical exercise. An environment safe for walking and bicycling is considered to be a key element of a successful Downtown, residential neighborhoods that link to commercial areas and a safe route to schools program, optimizing the goals set forth by the Healthy Cities Task Force created by Mayor Loveridge in 1998. The City does hold the title of a “California Healthy City.”

In much of Southern California, walking has been the forgotten mode of mobility. Yet walking is a critical component of our urban transportation system and a practical transportation choice with numerous health and environmental benefits for both individuals and their communities. Although Riverside as a whole has a wide dispersal of residential, employment and commercial centers, there are many opportunity areas within the City to foster improved pedestrian facilities. Above all, people need to feel safe in their neighborhoods if they are to use trails, paths, sidewalks and crosswalks. Better signage, targeted crossing guards, more police patrols and programs such as the Traffic Calming and Safe Routes to Schools Programs are just some of the resources the City has and will continue to use to increase pedestrian and bicycle safety. The benefits for increased walking are enormous.

Objective PS-5: Provide safe pedestrian and bicyclist environments Citywide.

Policy PS-5.1: Enhance and maintain pedestrian safety through the inclusion of well-designed streets, sidewalks, crosswalks, traffic control devices and school routes throughout the City. Reasonable means of pedestrian accessibility shall be an important consideration in the approval of new development.

More information on programs that increase safety on the streets, including the Traffic Calming Program, can be found in the Circulation and Community Mobility Element. The Safe Route to Schools Program is detailed in the Education Element. The Land Use and Urban Design Element contains information on bikeway and pedestrian safety.

See the Circulation and Community Mobility Element under “Alternative Modes of Transportation – Walking and Biking”, the Education Element under “Ensuring Safe Routes to Schools” and the Air Quality Element under “Transportation” for more information on safe pedestrian and bicyclist environments.

In particular review Objectives CCM-10, ED-4 and AQ-2.



PUBLIC SAFETY ELEMENT

The bikeway map is located in the Circulation and Community Mobility Element.

Policy PS-5.2: Develop objectives and detailed standards and guidelines for the treatment of public streetscapes to improve safety and walkability. Recommendations should address street trees, street lighting, street furniture, traffic calming and other pertinent issues. Establish funding sources and priorities and set forth a phased improvement program.

Policy PS-5.3: Prioritize locations for potential pedestrian safety enhancements, including modified signage, lighted crosswalks and other similar facilities.

Policy PS-5.4: Require that new development provide adequate safety lighting in pedestrian areas and parking lots.

Policy PS-5.5: Implement pedestrian and bicycle safety measures in any new grade separation project.

FIRE PREVENTION AND RESPONSE

FIRE HAZARDS

No part of Riverside is immune from fire danger. Structural and automobile fires represent the most common types of fire in urbanized areas and can be caused by a variety of human, mechanical and natural factors. Urban fires have the potential to spread to other structures or areas, particularly if not extinguished promptly. Proactive efforts, such as fire sprinkler systems, fire alarms, fire resistant roofing and construction methods, can collectively lessen the likelihood and reduce the severity of urban fires.

Areas of dense, dry vegetation, particularly in canyon areas and on hillsides, pose the greatest potential for wildfire risks. Urban/wildland interface fires occur when a fire burning in wildland vegetation gets close enough to threaten urban structures.

The major urban/rural interface areas of high-fire risk include Mount Rubidoux, the Santa Ana River Basin, Lake Hills, Mockingbird Canyon/Monroe Hills, Sycamore Canyon, Box Springs Mountain and La Sierra/Norco Hills. Figure PS-7 (High Fire Hazard Areas) identifies areas of urban/rural fire hazard areas. Introduction of residential development into this natural landscape will increase the potential risk of fire damage to people and personal property.



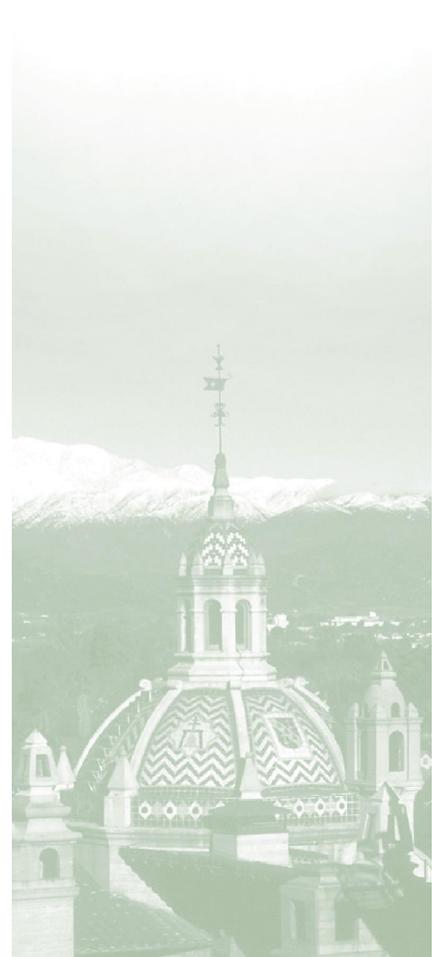
PUBLIC SAFETY ELEMENT

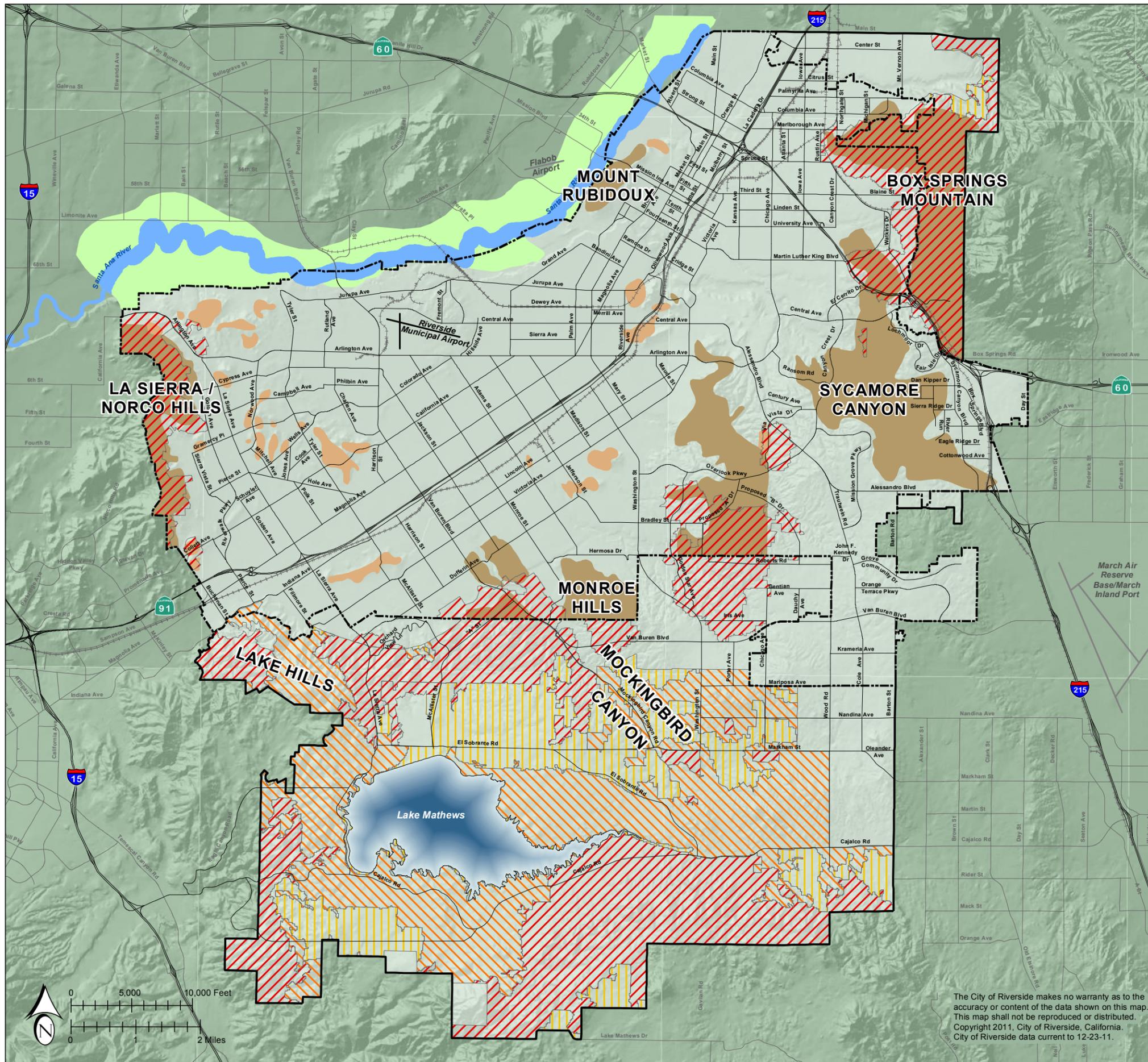
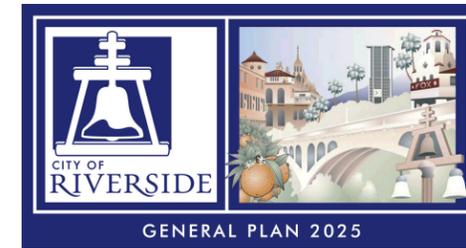


Approaches to wildfires have changed dramatically with greater understanding of the role of fire in natural processes. For many years, total fire suppression of brush and vegetation was the guiding principle of most areas of the western United States. Contemporary approaches recognize brush and other vegetation as potential fire "fuel" that must be managed in a holistic and ecologically sensitive way to reduce fire threats.



The Fire Department responds to emergencies with trained staff and reliable equipment.

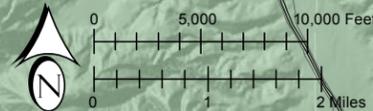




LEGEND

-  HILLS AND CANYONS
-  LOCAL HILLS
-  SANTA ANA RIVER WATERCOURSE
-  SANTA ANA RIVERBED
- HAZARD RATING**
-  VERY HIGH
-  HIGH
-  MODERATE
-  RIVERSIDE CITY LIMITS
-  RIVERSIDE SPHERE OF INFLUENCE

SOURCE: CAL FIRE, FIRE AND RESOURCES ASSESSMENT PROGRAM, FIRE HAZARD SEVERITY ZONES, SRA 2008, LRA 2010



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Figure PS-7
FIRE HAZARD AREAS



The City of Riverside Fire Department takes proactive and preventative measures to reduce fire risks and is a first responder to fire emergencies. The six divisions of the Fire Department consist of Administration, Fire Prevention, Operations, Special Services, Urban Search and Rescue and Training. The Fire Department utilizes a highly trained work force, progressive technology and responsible fiscal management to provide its diverse services to the community. The Department's major facilities include fire stations located throughout the City, Administration/Prevention offices and a Fire Training Center used for the advanced training of personnel. As part of the Riverside Renaissance Initiative, a new Fire Station 1 facility, which will also house the Public Safety Administration offices, is currently under construction and projected to be completed by August 2012. In addition, the Riverside County Fire Department and the California Department of Forestry and Fire Protection provide mutual aid to the City and fire protection to unincorporated territory within the City's sphere of influence.

See the Introduction under "Riverside Renaissance Initiative" for more information on this program.

The City's Fire Department Operations Division responds to more than twenty-five thousand calls for service annually. Average time for service calls is six minutes. The Fire Department arrives within seven minutes of dispatch over seventy percent of the time, remarkable for a city of Riverside's great geographic size, but slower than the five-minute response time that is generally preferred by fire officials. Ensuring that such a high level of service can be provided over the long term is a community goal.

Adopted by Riverside voters in 2003, Measure G provides financing to upgrade Fire Department Facilities to better meet anticipated needs.

For purposes of underwriting fire insurance, communities are classified with respect to their fire defenses and physical characteristics. These classifications are referred to as ISO (Insurance Services Office) ratings and range on a scale of 1 to 10. ISO rating 1 represents the highest level of fire protection and ISO rating 10 represents the lowest level of protection. A community's ISO rating takes into account water supply, fire department capabilities, communities, regulations, hazards and climate. The availability of an adequate water supply and delivery system is a major consideration. As of 2004, Riverside had a high ISO rating of 2. For more information on the City's peak load water supply requirements see the Public Facilities Element - Table PF-1 - RPU Projected Domestic Water Supply.

Required roads around structures subject to the fire hazards are required to meet the minimum roadway widths of Title 18, the Subdivision Code, and clearance around any structures will be reviewed on a case-by-case basis as part of the review of the project.





PUBLIC SAFETY ELEMENT

The level of hazard to life and property is affected not only by a fire in itself but also by road access for evacuation, the number of available firefighters, vegetation clearance around property, availability of water and water pressure and the effectiveness of building/fire codes and inspection of developments in areas of higher fire hazard. Riverside will reduce the destructive potential of fire by providing funding for the Fire Department so that it continues to provide adequate levels of fire protection and fire hazard education. The current California Fire Code will also be used to reduce structural fire hazards. These proactive measures lay out a blueprint to reduce the risks from all types of fires.

LOCAL PLANS

Office of Emergency Management (OEM) Strategic Plan

The Office of Emergency Management (OEM) Strategic Plan for Fiscal Years 2007–2010 identifies OEM’s key goals and objectives and articulates the agency’s core responsibilities, mission and guiding principles.

Riverside Operational Area – Multi-Jurisdictional Local Hazard Mitigation Plan (LHMP)

The Riverside Operational Area – Multi-Jurisdictional Local Hazard Mitigation Plan (LHMP) dated October 5, 2004 is Riverside’s commitment to reduce risks from natural and other hazards, and serves as a guide for decision makers as they commit resources to reducing the effects of natural and other hazards. It also serves as a basis for State OES to provide technical assistance and to prioritize project funding.

Emergency Operations Plan

The Emergency Operations Plan, approved in May 2002, addresses the City’s planned response to emergencies associated with natural disasters and technological incidents – including both peacetime and wartime nuclear defense operations.

Hazardous Materials Response Plan

The Fire Department has two levels of a Hazardous Materials Response Plan. The first level is for all responders and the second is specifically for the City’s Hazardous Materials Response Team. In addition, the County has a similar plan for multi-agency response.



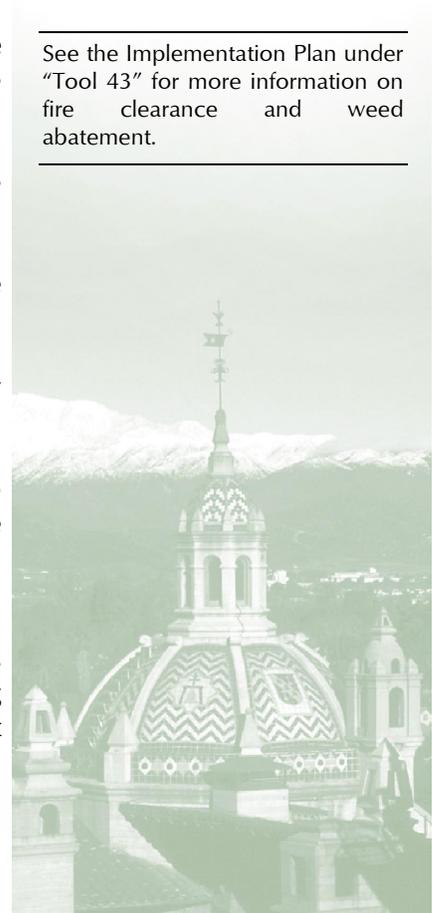


Objective PS-6: Protect property in urbanized and nonurbanized areas from fire hazards.

- Policy PS-6.1: Ensure that sufficient fire stations, personnel and equipment are provided to meet the needs of the community as it grows in size and population.
- Policy PS-6.2: Endeavor to meet/maintain a response time of five minutes for Riverside's urbanized areas.
- Policy PS-6.3: Integrate fire safety considerations in the planning process.
- Policy PS-6.4: Evaluate all new development to be located in or adjacent to wildland areas to assess its vulnerability to fire and its potential as a source of fire.
- Policy PS-6.5: Mitigate existing fire hazards related to urban development or patterns of urban development as they are identified and as resources permit.
- Policy PS-6.6: Continue to implement stringent brush-clearance requirements in areas subject to wildland fire hazards.
- Policy PS-6.7: Continue to involve the City Fire Department in the development review process.
- Policy PS-6.8: Pursue strategies that maintain and improve the City's Class 2 ISO rating.
- Policy PS-6.9: Provide outreach and education to the community regarding fire safety and prevention.
- Policy PS-6.10: Identify noncontiguous streets and other barriers to rapid response and pursue measures to eliminate the barriers.
- Policy PS-6.11: Promote the prevention, detection, investigation and prosecution of accidental and arson fires through coordinated investigative and training partnerships with fire and law enforcement agencies and prosecuting authorities.

For an additional Policy concerning fire hazards, see this Element under Policy PS-9.8.

See the Implementation Plan under "Tool 43" for more information on fire clearance and weed abatement.





PUBLIC SAFETY ELEMENT

POLICE SERVICES

The mission of the Riverside Police Department is to provide a strong partnership between law enforcement and the community, focused on public safety that provides quality, responsive and effective services through valued employees. The Riverside Police Department is a highly valued, positive force in the community, providing effective safety and emergency response services, as well as proactive community programs and educational activities. The Police Department plays an important role in protecting residents and businesses from criminal activity and helping to educate the public about ways to reduce criminal activity.



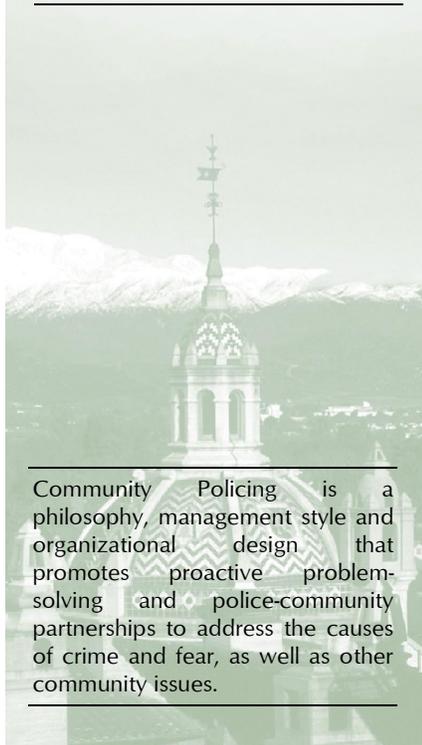
The Police Department is heavily involved in the community.

See the Introduction under "Riverside Renaissance Initiative" for more information on this program.

Historically, Riverside Police Department facilities have largely been centralized, with the headquarters building located at 4102 Orange Street in Downtown Riverside serving as the Department's administrative center and housing the office of the Chief of Police, the administrative division (personnel and training), the records branch, the Communications Bureau and the Community Services Bureau. The Magnolia Neighborhood Policing Center (NPC), opened in 2006 at 10540-B Magnolia Avenue, is the base of operations for Central and West NPC Field Operations, Central and Special Investigations, Special Operations, Community Policing, Training and the Records Bureau. The North and East NPC Field Operations are based at the Fairmount Station at 3775 Fairmount Boulevard. The RPD currently employs 367 sworn officers and 144 civilian personnel. As part of the Riverside Renaissance Initiative, a new Public Safety Administration building, 911 Dispatch and Data Center and Neighborhood Policing Center are proposed.

Additional police facilities are located throughout the City. The aviation building is adjacent to Riverside Municipal Airport at 7020 Central Avenue. The University Neighborhood Enhancement Team (UNET) is housed at 1201 University Avenue. UNET is a cooperative program between the Police Department and the University of California, Riverside (UCR) Police Department. The RPD's Internal Affairs office is located at 10540 Magnolia Avenue, and the Domestic Violence investigation team office is at the Family Justice Center at 4101 Almond Street. The Parole and Corrections Team (PACT) maintains offices at the Fairmount Station and Community Policing officers provide limited services from an office at the Galleria at Tyler.

The Field Operations Division is the largest division of the RPD. The Field Operations Division provides first response to all emergencies, performs preliminary investigations and provides basic patrol services to the City of Riverside. The RPD divides the City into 133 Reporting



Community Policing is a philosophy, management style and organizational design that promotes proactive problem-solving and police-community partnerships to address the causes of crime and fear, as well as other community issues.



Districts, grouped into four neighborhood policing centers, shown in Figure PS-8 – Neighborhood Policing Centers. Each of the four areas is assigned a lieutenant Area Commander to oversee the day-to-day policing needs of the community.

A precinct-based system will permanently assign officers to certain districts of the City, enabling officers to gain a better understanding of that particular areas of the community – and for the community to become more familiar with the officers assigned to them. This method of policing, also known as community policing, balances reactive responses to calls for service with proactive problem-solving in an effort to keep crime incidences from occurring.

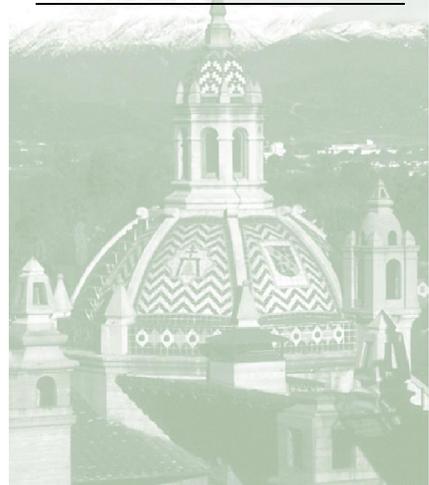
The Police Department sets two essential criteria for patrol response. The first criteria supports police officers' efforts to respond to the most urgent calls from citizens – Priority One calls – within seven minutes from the time calls for service are received. Priority One calls are typically of a life-threatening nature, such as a robbery in process or an accident involving bodily injury. Officers attempt to respond to Priority Two calls, which are less urgent, within twelve minutes. These types of calls are not life-threatening and are incidences such as past burglary, petty theft, shoplifting, etc.

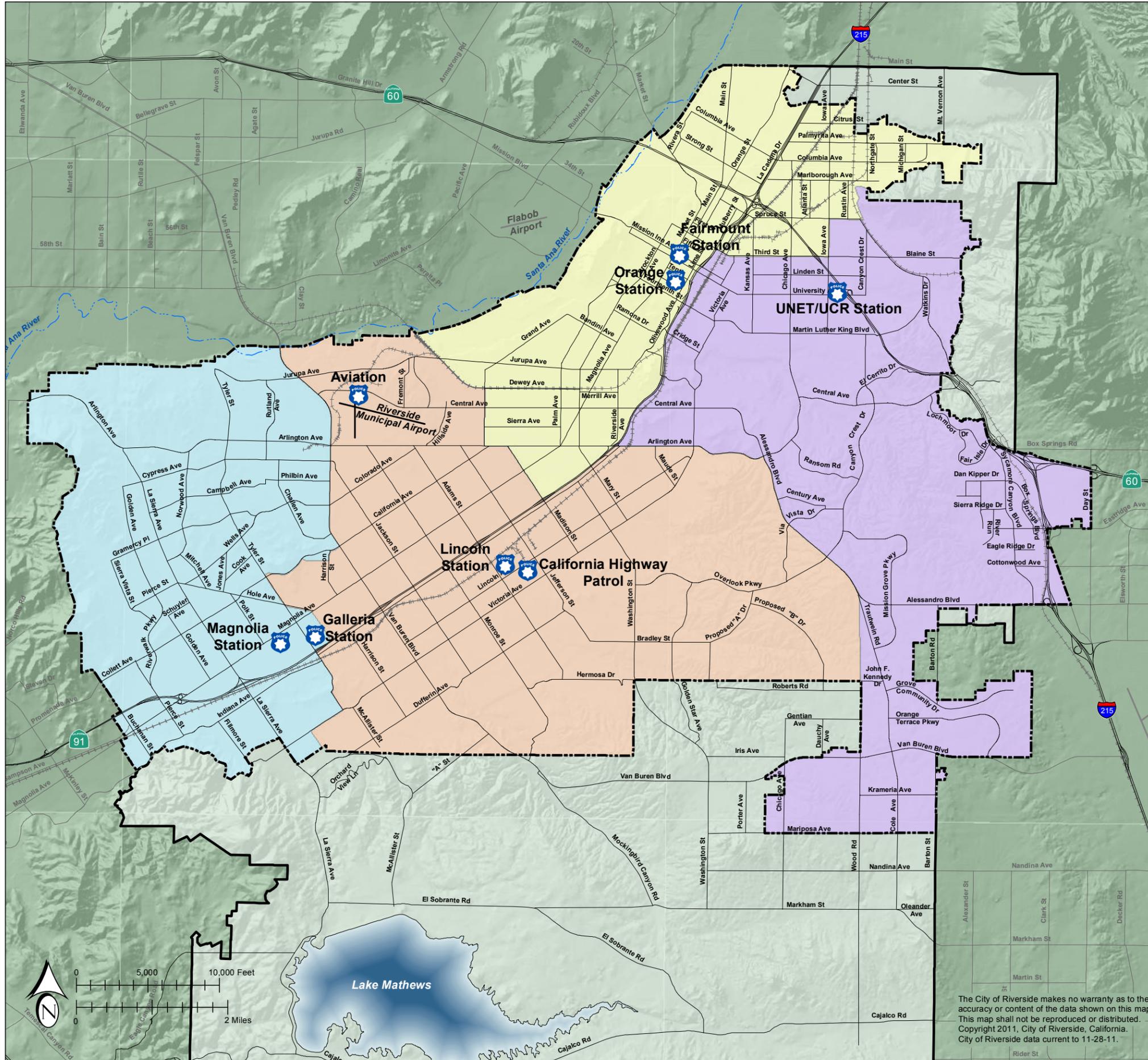
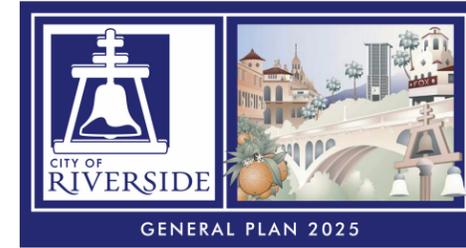
The Police Department will use the Strategic Plan process to implement department-wide objectives, goals and policies.

Objective PS-7: Provide high-quality police services to all residents and businesses in Riverside.

- Policy PS-7.1: Deploy human and financial resources to ensure adequate and equitable distribution of police services.
- Policy PS-7.2: Support the transition of the Riverside Police Department from a centralized agency to one built around precincts as a means of providing more rapid, equitable and proactive community policing services.
- Policy PS-7.3: Coordinate police services with college and university campus police forces and private security forces.
- Policy PS-7.4: Coordinate with the Riverside County Sheriff in its efforts to provide law enforcement services within Sphere of Influence areas.

See this Element under “Crime Prevention Through Environmental Design (CPTED)” for more information on Police Services.





LEGEND

POLICING CENTERS

- CENTRAL
- EAST
- NORTH
- WEST

- POLICE STATION
- RIVERSIDE CITY BOUNDARY
- RIVERSIDE PROPOSED SPHERE OF INFLUENCE

SOURCE: CITY OF RIVERSIDE



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Figure PS-8
**NEIGHBORHOOD
POLICING CENTERS**



Policy PS-7.5: Endeavor to provide minimum response times of seven minutes on all Priority 1 calls and twelve minutes on all Priority 2 calls.

Policy PS-7.6: Empower police, public safety personnel and residents to develop innovative methods to reduce or prevent crime.

Policy PS-7.7: Continue to implement and annually update the Police Department’s Strategic Plan by utilizing strategic planning and informed decision-making.

CRIME PREVENTION THROUGH ENVIRONMENTAL DESIGN (CPTED)

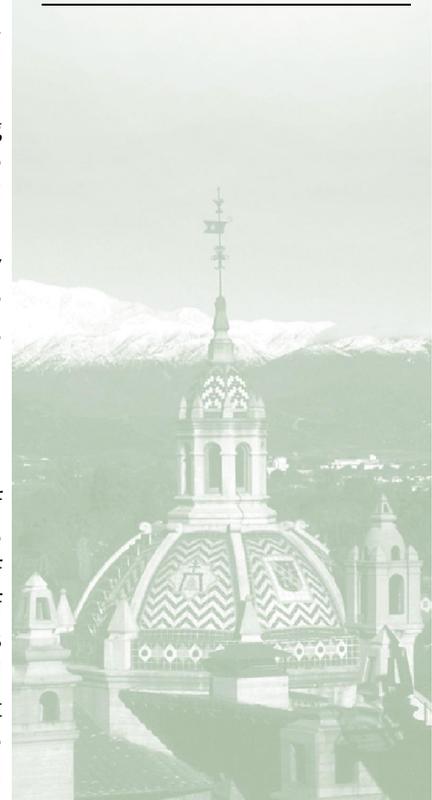
While many people think that crime prevention is strictly a job for police, community involvement can also play a role. Further, the design of a development can have a major impact on the future potential for crime to occur in the vicinity. Developments that promote natural surveillance reduce hiding places and otherwise promote defensible space can minimize criminal activity.

Recognizing the crime-reducing impact of project design, cities across the nation seek to prevent crime by implementing Crime Prevention through Environmental Design (CPTED) strategies. CPTED strategies focus on project design that reduces the potential for criminal behavior, in large part by encouraging people to keep an eye out for each other. CPTED approaches the problem of creating a defensible environment by addressing both the physical and the psychological aspects of design. Security concerns are addressed during the design stage of a project rather than added as a second thought after initial development. These concerns are normally addressed by the Planning Division, which seeks input from the Police Department on a case by case basis. CPTED incorporates several strategies to create a defensible space, such as:

❖ Surveillance

Surveillance is the principal weapon in the protection of defensible space by keeping intruders easily observable (the concept of keeping the eyes on the street). The ease of surveillance is promoted by features that maximize visibility of people, parking areas and building entrances. These features may include doors and windows that look out on to streets and parking areas, pedestrian-friendly sidewalks and streets, front porches and adequate nighttime lighting. Many of these features have the added potential to enrich and expand social

The Riverside Crime Free Multi-Housing Program is designed to help residents, owners, managers and anyone associated with rental properties keep illegal activity off their property.





PUBLIC SAFETY ELEMENT

networks within the community that helps bring about a greater sense of community cohesion.

❖ Territoriality

Fostering a sense of territoriality is important to support defensible space since it encourages individuals to take control of their environment and defend it against attack. Potential offenders recognize this sense of territory and are duly discouraged from engaging in criminal activities there. Territoriality is promoted by incorporation of design features that define property lines and distinguish private spaces from public spaces using landscape plantings, pavement designs, gateway treatments and fences.

❖ Natural Access Control

By clearly distinguishing public areas and private areas, access to potential targets is reduced and the perception of risk to potential offenders is increased as a deterrent. Natural access control can be achieved by designing streets, sidewalks, building entrances and neighborhood gateways to clearly indicate public routes, as well as discouraging access to private areas using structural or design elements.

❖ Physical Security

The CPTED goal of increasing physical security of areas is not to create an impenetrable fortress, but rather to make it more difficult and time consuming to enter a location. Some simple features that can be used include window locks, dead bolts for doors, and interior door hinges. Features that can be used outside of the home include having an orderly environment where entryways are exposed and well designed. The incorporation of landscaping features is another way to deter intruders and increase security around the home.

Objective PS-8: Improve community safety and reduce opportunities for criminal activity through appropriate physical design.

See this Element under "Police Services" for more information on Police Services.

Policy PS-8.1: Maximize natural surveillance in all new development through physical design features that promote visibility.

Policy PS-8.2: Promote land use and design policies and regulations which encourage a mixture of



compatible land uses to promote and increase the safety of public use areas and of pedestrian travel.

Policy PS-8.3: Involve the Police Department in the development review process of public areas relative to building and site plan vulnerabilities to criminal activities.

Policy PS-8.4: Coordinate efforts between the Police Department and Planning Division to develop guidelines for implementation of CPTED-related issues.

Policy PS-8.5: Continue to encourage residents and apartment managers to become involved in the Crime Free Multi-Housing Program as a way to reduce crime in apartment communities.

Residents and property owners interested in learning more about the Crime Free Multi-Housing program should contact the City Police Department for additional information.

MULTI-HAZARD FUNCTIONAL PLANNING AND INTERAGENCY RESPONSE

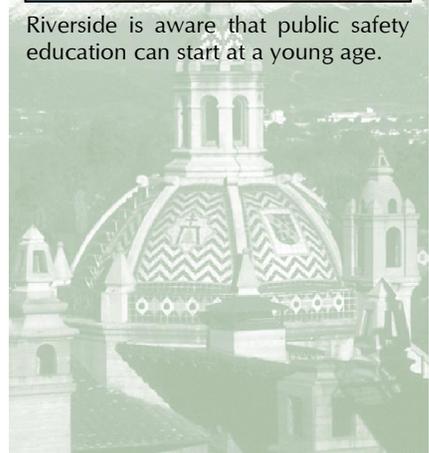
Many emergency situations require the coordinated response of multiple local and regional agencies. For example, fires can be the result of a crime and also result in injury or death. Because so many incidents blur the lines between the City's different first responder agencies, coordination of efforts between these agencies is critical.

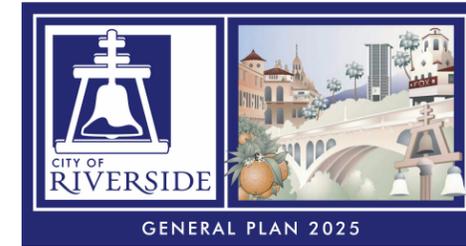
The Emergency Management Office within the Riverside Fire Department coordinates emergency response, disaster preparedness and disaster recovery by activating the California Standardized Emergency Management System (SEMS) and the National Incident Management System (NIMS). The Office prepares an Emergency Operations Plan, essential to the coordination of efforts in response to a major disaster, whatever its origin. Critical components of the plan include the establishment of multiple evacuation routes and the ability to provide emergency services in the swiftest manner possible. Figure PS-8.1 identifies the City's major evacuation routes and existing infrastructure that can influence response times during a major disaster. The Emergency Operations Plan is maintained by the Emergency Manager and is continuously updated. A major update of the plan is accomplished every five years. The plan is available to view at Riverside Public Library, Reference Section.

The Emergency Operations Center (EOC) is a secure facility where designated City personnel congregate to work in response to a disaster. The EOC, serving as the center of the City emergency operations, is located within the City's Corporation Yard at 3085 Saint Lawrence Street.



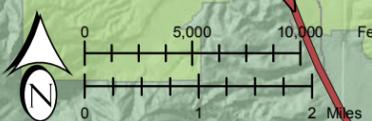
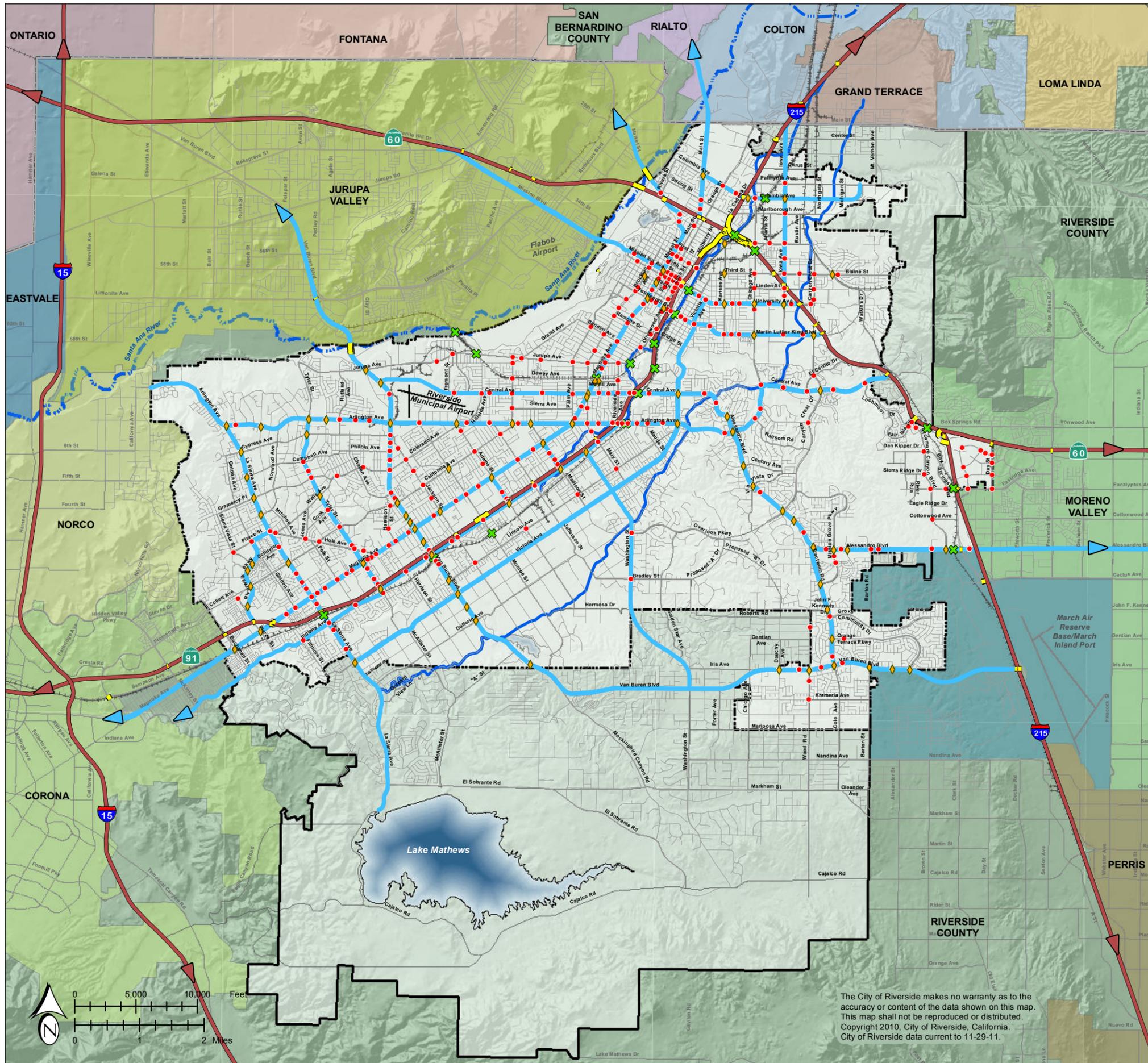
Riverside is aware that public safety education can start at a young age.





LEGEND

- RIVERSIDE COUNTY BOUNDARY
- - - RIVERSIDE CITY LIMITS
- RIVERSIDE SPHERE OF INFLUENCE
- FREEWAY
- ARTERIAL
- BRIDGE
- STREET
- RAILROAD
- RIVER
- CANAL
- ◆ BATTERY BACKUP TRAFFIC SIGNAL
- TRAFFIC SIGNAL
- ✕ GRADE-SEPARATED RAILROAD CROSSING



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Figure PS 8.1

EVACUATION ROUTES



The Emergency Management Office coordinates state-level terrorism preparedness, response and recovery, along with all other designated emergencies that may impact the City. SEMS and NIMS create a system where City, County and State emergency services work in concert to respond to any disaster in a coordinated fashion.

Educating residents and businesses about potential disasters and the Emergency Operations Plan can increase the effectiveness of response efforts. An educated public will know how to prevent injury and property damage during and after emergency events and also know how to find and offer help to their neighbors. The City will work to educate residents and businesses about appropriate actions to safeguard life and property during and after emergencies. Education about emergency preparedness can occur through the distribution of brochures, presentations to residents, instruction in local schools and on the City's website.

Objective PS-9: Minimize the effects from natural and urban disasters by providing adequate levels of emergency response services to all residents in Riverside.

- Policy PS- 9.1: Maintain an effective, coordinated and up-to-date community-wide emergency response plan.
- Policy PS-9.2: Support the Riverside Emergency Management Office in coordinating the City's response to disasters, providing public outreach and presentations and assisting residents to prepare for major events.
- Policy PS-9.3: Review and test the City's Emergency Operations Plan periodically to note any deficiencies or practices requiring modification.
- Policy PS-9.4: Ensure that equipment and structures designed to provide emergency disaster services are located and designed to function after a disaster or emergency event, or relocate any such structures which are not adequate to provide emergency services.
- Policy PS-9.5: Provide effective and relevant information to the public regarding disaster preparedness.
- Policy PS-9.6: Conduct regularly scheduled disaster exercises to better prepare Police, Fire and other City employees with disaster responsibilities.





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See Objectives PS-1, PS-2 and PS-6 for more information on hazards.

Policy PS-9.7: Identify actions to reduce the severity and probability of hazardous occurrences.

Policy PS-9.8: Reduce the risk to the community from hazards related to geologic conditions, seismic activity, flooding and structural and wildland fires by requiring feasible mitigation of such impacts on discretionary development projects.

Objective PS-10: Improve the community’s ability to respond effectively to emergencies.

Policy PS-10.1: Ensure that Police and Fire service facilities are strategically located to meet the needs of all areas of the City.

Policy PS-10.2: Consider means to develop joint police and general community facilities within the City.

Policy PS-10.3: Ensure that public safety infrastructure and staff resources keep pace with new development planned or proposed in Riverside and the Sphere of Influence.

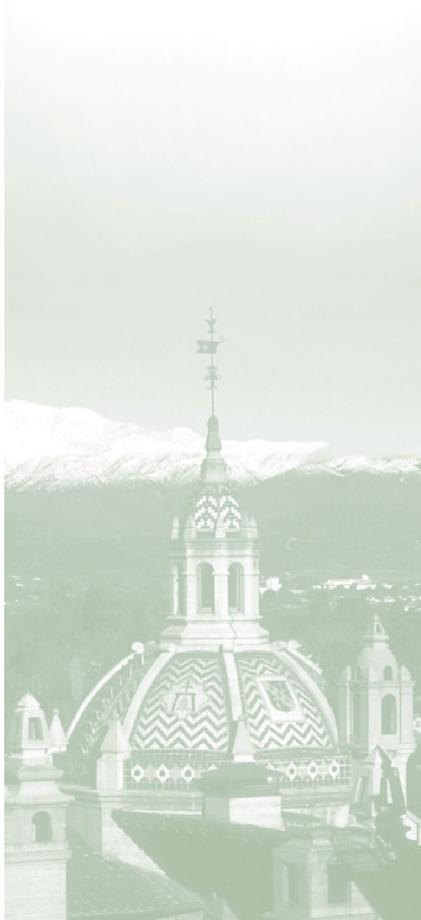
Policy PS-10.4: Continue to ensure that each development or neighborhood in the City has adequate emergency ingress and egress, and review neighborhood access needs to solve problems, if possible.

Policy PS-10.5: Coordinate with local agencies and organizations to educate all residents and businesses to take appropriate action to safeguard life and property during and immediately after emergencies.

Policy PS-10.6: Improve communications between public safety agencies and other City departments, particularly with regard to new development or annexation areas.

Policy PS-10.7: Encourage the development of financial programs to improve emergency response services.

Policy PS-10.8: Investigate and pursue additional funding mechanisms available to fund City services for hazard response and recovery.





Policy PS-10.9: Maintain a safe and secure, technologically advanced Emergency Operations Center allowing for room to expand as the City grows.

SPECIAL CONSIDERATIONS FOR HISTORIC AND ARCHAEOLOGICAL RESOURCES

Riverside’s numerous historic homes, buildings and districts are true community treasures. Unfortunately, older buildings are often more susceptible to fire, seismic and other risks due to outmoded or out-of-date construction methods. Similarly, archaeological resources are susceptible to natural disasters such as flooding and wildfires. As a result, special coordinated attention is necessary to ensure that the City’s countless historic and archaeological resources are preserved for future generations.

For more information on Historic Resources see the Historic Preservation Element.

Objective PS-11: Preserve the historic and archaeological resources of the City from demolition, destruction and/or severe damage in the event of natural and human-caused disasters, hazards and/or other emergency events.

See the Historic Preservation Element for additional information on the protection of historic resources.

In particular review Objective HP-4.0.

Policy PS-11.1: Protect resources listed in the Historical Resources Inventory from premature or inadvertent demolition and encourage retrofitting of these resources to protect them from damage caused by a disaster episode.

Policy PS-11.2: Take reasonable steps to prevent the loss of historic building without endangering public safety or contributing to additional property damage.

Policy PS-11.3: Preserve sensitive and significant archaeological, cultural and historic resources by maintaining coordination between Riverside’s Emergency Management Office, the Eastern Information Center (EIC) at the University of California, Riverside (UCR) and Native American Tribes identified by the Native American Heritage Commission (NAHC) to obtain area specific information related to sensitive resources during natural and human-caused disasters, hazards and/or other emergency events.





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