CITY OF RIVERSIDE ANNEX

LOCAL HAZARD MITIGATION PLAN

AUGUST 2012

U.S. Department of Homeland Security
1111 Broadway, Suite 1200
Oakland, CA. 94607-4052

FEMA

April 1, 2015

Mark Bassett
Emergency Services Program Supervisor
Office of Emergency Services
4080 Lemon Street, Basement Room 8
Riverside, CA 92501

Dear Mr. Bassett:

We received documentation that the City of Riverside adopted the *Riverside County Multi-Jurisdictional Local Hazard Mitigation Plan*, on March 18, 2015. The plan is now in conformance with Title 44 Code of Federal Regulations (CFR) Part 201.6 *Local Mitigation Plans*.

The approval of this plan ensures the City of Riverside continued eligibility for project grants under FEMA's hazard mitigation assistance programs, including Hazard Mitigation Grant Program, Pre-Disaster Mitigation and Flood Mitigation Assistance grant programs. All requests for funding, however, will be evaluated individually according to the specific eligibility, and other requirements of the particular program under which applications are submitted. Approved mitigation plans are eligible for points under the National Flood Insurance Program's Community Rating System (CRS). Additional information regarding the CRS can be found at https://www.fema.gov/national-flood-insurance-program-community-rating-system or through their local floodplain manager.

FEMA's approval of the *Riverside County Multi-Jurisdictional Local Hazard Mitigation Plan* is for a period of five years, effective June 14, 2012. Prior to June 14, 2017, Riverside County and all participating jurisdictions are required to review and revise the plan to reflect changes in development, progress in local mitigation efforts, and changes in priorities, and resubmit it for approval in order to continue to be eligible for mitigation project grant funding. The enclosed plan review tool provides additional recommendations to incorporate into the plan when Riverside County and the City of Riverside undertake the identified plan maintenance process.

If you have any questions regarding the planning or review processes, please contact Phillip Wang, Hazard Mitigation Planning Specialist at (510) 627-7753, or by email at phillip.wang@fema.dhs.gov.

Sincerely,

Jeffrey D. Lusk
Division Director
Mitigation Division
FEMA Region IX

Enclosures

cc: Marcia Sully, California State Hazard Mitigation Officer
Jose Lara, Mitigation Planning Chief

www.fema.gov

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EXECUTIVE SUMMARY

The purpose of the City of Riverside Local Hazard Mitigation Plan (LHMP) Annex is to evaluate and assess the risks identified hazards pose to the city, review and assess past disaster occurrences and through the engagement of the whole community set goals to mitigate potential risks to reduce or eliminate long-term risk to people, property and environment from natural, man-made and technological hazards.

The Riverside Fire Department – Office of Emergency Management coordinated the development and update to the 2005 City of Riverside LHMP Annex to address planning considerations unique to the City of Riverside.

This 2012 plan update was prepared pursuant to the requirements of the Disaster Mitigation Act of 2000 to achieve eligibility and potentially secure mitigation funding through Federal Emergency Management Agency (FEMA) Flood Mitigation Assistance, Pre-Disaster Mitigation, and Hazard Mitigation Grant Programs.

The City of Riverside LHMP Annex integrates with the Riverside County Operational Area Multi-Jurisdictional Local Hazard Mitigation Plan and provides a uniform approach to community mitigation efforts.

The City's planning process followed a methodology presented by FEMA and Cal OES which included conducting meetings coordinated by Riverside Fire Department – Office of Emergency Management. These meetings were comprised of participating Federal, State and local jurisdictions agencies, special districts, school districts, non-profit communities, universities, businesses and general public.

The plan identifies vulnerabilities, provides recommendations for prioritized mitigation actions, evaluates resources and identifies mitigation shortcomings, provides future mitigation planning and maintenance of existing plan.

The plan is implemented upon FEMA approval and adoption by City Council.

PLAN ADOPTION/RESOLUTION

Appendix G

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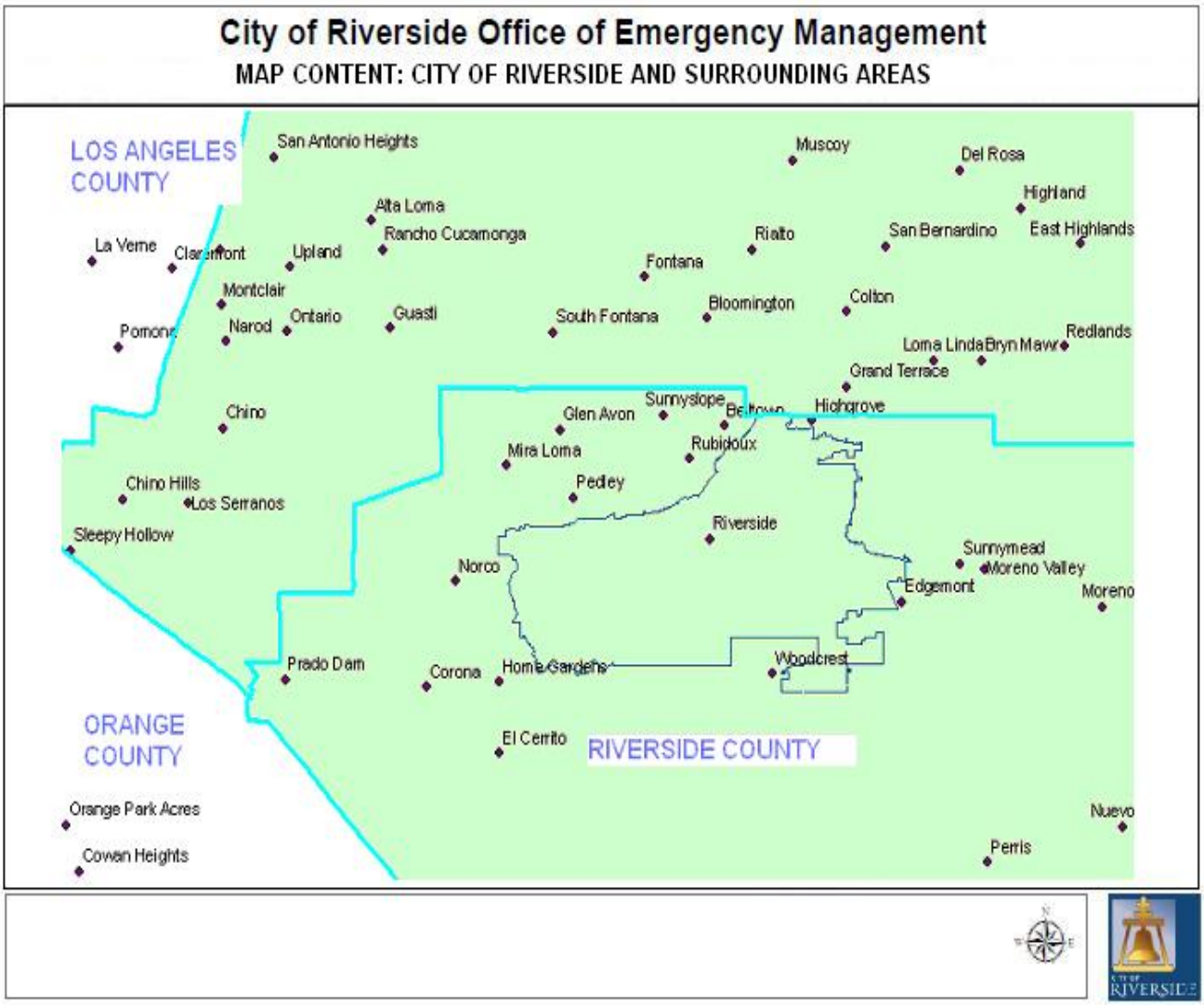
SECTION 1.0 - COMMUNITY PROFILE

1.1 MAP OF THE CITY OF RIVERSIDE



1.2 GEOGRAPHY AND CLIMATE DESCRIPTION

The City of Riverside is located Riverside County, California, United States, and is the county seat. Named for its location beside the Santa Ana River, it is located at the center of the Inland Empire and is the largest city in the Riverside-San Bernardino-Ontario metropolitan area of Southern California, the 4th largest inland California City and is located approximately 60 miles (97 km) east of Los Angeles. Riverside is the 61st most populous City in the United States and the 12th most populous city in California. The City of Riverside is currently 81 square miles according to the 2010 Census, and has a population of 303,871.

The City of Riverside sits in a valley surrounded by small mountain areas as well as large mountain ranges such as the San Jacinto and San Bernardino mountains. Within the City, surface elevations range from 700 feet above mean sea level near the Santa Ana River to over 1,400 feet west of La Sierra Avenue. The highest point in the sphere of City's Sphere of Influence is Arlington Mountain, standing 1,853. The City's downtown elevation is 860 feet.

The County seat for the County of Riverside is located in the City of Riverside, along with numerous State and Federal facilities. Riverside is situated along two major freeway systems; both of these freeways bisect the City. Along the northern edge of the City runs Highway 60 and is considered a primary east-west freeway link flowing traffic and goods westward to the Los Angeles metropolitan area and easterly to the Arizona border and beyond. The 91/215 freeway traverses the center portion of the City and is a primary north and south route for traffic and goods connecting Los Angeles metropolitan area to Las Vegas, Salt Lake City and beyond.

Major railway freight and passenger traffic follows the 91/215 freeway through the City leading from the Ports of Los Angeles and Long Beach to the San Bernardino/Colton rail yards, where the railcars are re-assembled for connections to northern and eastern portions of the country. The City of Riverside is home to four large college campuses: University of California at Riverside, California Baptist University, La Sierra University and Riverside Community College. With the exception of Riverside Community College, each of these campuses houses students throughout the academic year. The University of California at Riverside, an important agricultural, research, and engineering university, attracts students from throughout the world. K-12 education is provided by two school districts, Riverside Unified and Alvord Unified, with a total of 39 elementary schools, 9 middle schools, and 11 high schools. There are also a number of private schools including Sherman Indian High School (houses students throughout the academic year) and the California School for the Deaf.

Other attractions in Riverside include the Fox Performing Arts Center, Riverside Metropolitan Museum, which houses exhibits and artifacts of local history, the California Museum of Photography, the California Citrus State Historic Park, and the Parent Washington Navel Orange Tree, one of the two original orange trees in California.

The City is served by three major hospitals (Kaiser, Riverside Community, and Parkview).

Riverside experiences a semi-arid or an arid Mediterranean climate with hot, dry summers and mild, relatively wet winters. Temperatures in the summer can exceed 95°F (35°C) but with low humidity. In the winter, high temperatures may not rise above 55°F (13°C) during rainy days. On average, January is the coldest month with an average high/low of 68°F/43°F (20°C/6°C) while August is the hottest with a high/low of 95°F/64°F (35°C/18°C). Riverside receives 10.22" of precipitation annually with most of it occurring in the winter and early spring, especially January through March, with January being the wettest month. However, during El Nino years, Southern California can receive considerably more precipitation and cooler temperatures than average.

Figure 1.2.1 – Table – Climate Data for City of Riverside

Climate data for Riverside

Month	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Year
Record high °F (°C)	97 (36)	92 (33)	98 (37)	104 (40)	108 (42)	112 (44)	113 (45)	112 (44)	113 (45)	108 (42)	98 (37)	93 (34)	117 (47)
Average high °F (°C)	66 (19)	68 (20)	70 (21)	76 (24)	80 (27)	87 (31)	94 (34)	94 (34)	91 (33)	83 (28)	74 (23)	68 (20)	78.9
Average low °F (°C)	42 (6)	44 (7)	45 (7)	48 (9)	53 (12)	57 (14)	61 (16)	62 (17)	60 (16)	53 (12)	45 (7)	41 (5)	54.9
Record low °F (°C)	24 (−4)	27 (−3)	29 (−2)	33 (1)	38 (3)	44 (7)	49 (9)	49 (9)	42 (6)	32 (0)	26 (−3)	22 (−6)	22 (−6)
Precipitation inches (mm)	2.47 (62.7)	2.39 (60.7)	2.19 (55.6)	.60 (15)	.25 (6.4)	.10 (3)	.03 (0.8)	.17 (4.3)	.26 (6.6)	.26 (6.6)	.78 (19.8)	1.17 (29.7)	10.67 (271)

1.3 BRIEF HISTORY

On March 20, 1774, Juan Bautista De Anza, leading an exploratory expedition to find a good land route from southern Mexico to Alta California, reached what is today known as Riverside.

Riverside was founded in the early 1870s and is the birthplace of the California citrus industry. Founder John W. North and a group of Easterners who wished to establish a colony dedicated to furthering education and culture, Riverside was built on land that was once a Spanish rancho. Investors from England and Canada transplanted traditions and activities adopted by prosperous citizens: the first golf course and polo field in Southern California were built in Riverside.

The first orange trees were planted in 1871, but the citrus industry in Riverside began two years later when Eliza Tibbets received two Brazilian navel orange trees sent to her by a friend at the Department of Agriculture in Washington. The trees thrived in the Southern California climate and the navel orange industry grew rapidly. Within a few years, the successful cultivation of the newly discovered navel orange led to a California Gold Rush of a different kind: the establishment of the citrus industry. By 1882, there were more than half a million citrus trees in California, almost half of which were in Riverside. By the mid-1880s five packing houses sprang up in Riverside. The Santa Fe Railroad opened a direct line to Riverside in 1886 allowing direct shipment to the east. Eight years later the first refrigerated rail cars shipped oranges from Riverside to the east on the Santa Fe Railroad. The development of refrigerated railroad cars and innovative irrigation systems established Riverside as the wealthiest City per capita by 1895.

About 1875, Matthew Gage began work on a canal to bring water to all of Riverside, parts of which had no water available. With the irrigation made possible by Gage's canal, Riverside's greatest growth period began. Three new subdivisions—White's Addition, Hall's Addition, and Arlington Heights—were developed.

One of the first documented “disaster incidents” was on April 17, 1908 when there was an elephant stampede in Downtown Riverside. The elephant leading the stampede was named Floto. Floto was owned by the circus Sells-Floto Circus. The incident occurred when a Standard Oil wagon caught fire and ignited several of the circus tents. Frightened by this undue excitement, the herd of elephants became uncontrollable and charged through the east side of town, knocking down fences, outhouses and despoiling orchards.

During World War I, March Field, now March Air Reserve Base was established for the training of aviators. During World War II, March Field was expanded and another base, Camp Haan, was started across from March Field. The site is now occupied by the new National Veteran's Cemetery. A third base was built, called Camp Anza, which later became a City subdivision, called Arlanza.

As the City prospered, a small guest hotel designed in the popular Mission Revival style grew to become the world famous Mission Inn, favored by presidents, royalty and movie stars. Postcards of lush orange groves, swimming pools, and magnificent homes have attracted vacationers and entrepreneurs throughout the years. Many relocated to the warm, dry climate for reasons of health and to escape Eastern winters.

Riverside has over 100 City Landmarks, 20 National Register Sites and 2 National Landmarks have been designated by the City Council, all offering enjoyment and education to City residents and visitors. Examples include the Mission Inn, the Chinatown site, the National Packing House, Citrus Experiment Station and engineering feats like the Gage Canal. Many of these landmarks are found in the Downtown's Mission Inn Historic District. California's Mission Revival style, born in Riverside, can be seen throughout the City, most notably in the Mission Inn, the Municipal Auditorium, First Church of Christ Scientist, and the Fox Theater, home of the Riverside Film Festival.

The Mission Inn was developed from the Glenwood Tavern, owned by Captain Christopher Columbus Miller, who moved to Riverside in 1874 to survey land for the Gage Canal, which brought water to Riverside. His son Frank developed a lasting interest in culture and the arts and took over the expansion of the Inn. Over the years he embellished and expanded it into a unique resort known all over the world. It has played host to numerous movie stars, musicians and heads of state. Ronald and Nancy Reagan honeymooned there, and Richard and Pat Nixon were married on its grounds. Teddy Roosevelt planted a tree in its courtyard, and a special chair, built for President William Howard Taft when he visited, is still in the Inn's collection.

1.4 CITY GOVERNMENT

The City of Riverside by ordinance is a “council-manager” charter law type of government. The governing body consists of an elected mayor and seven council members, each serving a specific ward in the City. Riverside is a full-service City with approximately 2,380 full and part-time employees. The City's major services include:

- Airport
- Building and Safety
- Finance
- Information Technology
- City Attorney
- City Clerk
- City Management
- Code Enforcement
- Community Development
- Fire Department
- General Services
- Human Resources
- Library
- Museum
- Parks, Recreation, and Community Services
- Police Department
- Public Utilities – Electric and Water
- Public Works

1.5 ECONOMY DESCRIPTION

The City of Riverside is still considered mostly a bedroom community with land use divided approximately as follows:

- Agricultural - .1%
- Retail-Wholesale - .6%
- Professional Services - .6%
- Education - .1%
- Industrial - .7%
- Single Family Housing - 94.5%
- Multi-family housing - 2.4%
- Temporary Housing - Dorms, etc. - .2%

The City has seven distinct economic factors. These factors show the diversity of the City as it develops from a bedroom and agricultural community to a City of expanding activity. These factors are:

- Residential/Bedroom Community
- Both long-term permanent housing and short-term temporary college dormitory housing
- Industrial
- Arts and Culture
- Agriculture
- Military
- Education - College/University Level
- University of California, Riverside
- California Baptist University
- La Sierra University
- Riverside Community College
- Major Medical Care
- Three major primary hospitals for the region and several Senior Care Facilities

Figure 1.5.1 – Table Listing City of Riverside Major Employers

#	Employer	# of Employees
1	County of Riverside	7,000
2	University of California, Riverside	6,470
3	Riverside Unified School District	3,867
4	City of Riverside	2,380
5	Riverside Community College District	2,110
6	Alvord Unified School District	1,800
7	Riverside Community Hospital	1,600
8	Parkview Community Hospital	1,100
9	Kaiser Hospital	1,000
10	The Press-Enterprise	700
11	Goodrich	500
12	Pepsi Cola	500

1.6 POPULATION CHARACTERISTICS

The population of the City of Riverside from the 2010 Census was estimated at 303,871 with a 2015 population projection of 323,096 (this number varies based on the number of proposed annexations to the City). This was an increase in the population of 19.1% in the last ten years and a 3.22% since 2005 when the last LHMP was conducted.

Figure 1.6.1 Population Characteristics – City of Riverside

Population, 2010	303,871
Population, percent change, 2000 to 2010	19.10%
Population, 2005	294,059
Population, 2000	255,166
Persons under 5 years, percent, 2010	7.20%
Persons under 18 years, percent, 2010	26.80%
Persons 65 years and over, percent, 2010	8.60%
Female persons, percent, 2010	50.60%
White persons, percent, 2010 (a)	56.50%
Black persons, percent, 2010 (a)	7.00%
American Indian and Alaska Native persons, percent, 2010 (a)	1.10%
Asian persons, percent, 2010 (a)	7.40%
Native Hawaiian and Other Pacific Islander, percent, 2010 (a)	0.40%
Persons reporting two or more races, percent, 2010	5.10%
Persons of Hispanic or Latino origin, percent, 2010 (b)	49.00%
White persons not Hispanic, percent, 2010	34.00%
Living in same house 1 year & over, 2005-2009	79.80%
Foreign born persons, percent, 2005-2009	24.30%
Language other than English spoken at home, pct. age 5+, 2005-2009	42.40%
High school graduates, percent of persons age 25+, 2005-2009	77.20%
Bachelor's degree or higher, pct. of persons age 25+, 2005-2009	21.80%

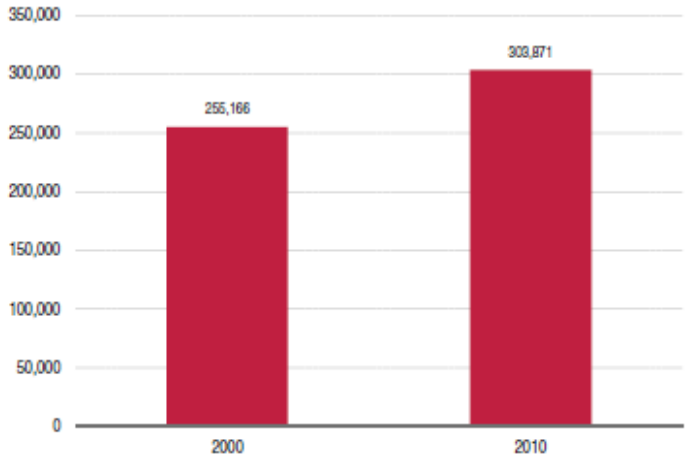
Source: US Census

Figure 1.6.2 Population Growth Chart – 2000 Comparison to 2010

Population (City of Riverside)*

Population Growth

Population: 2000, 2010



Sources: 2000 and 2010 Census

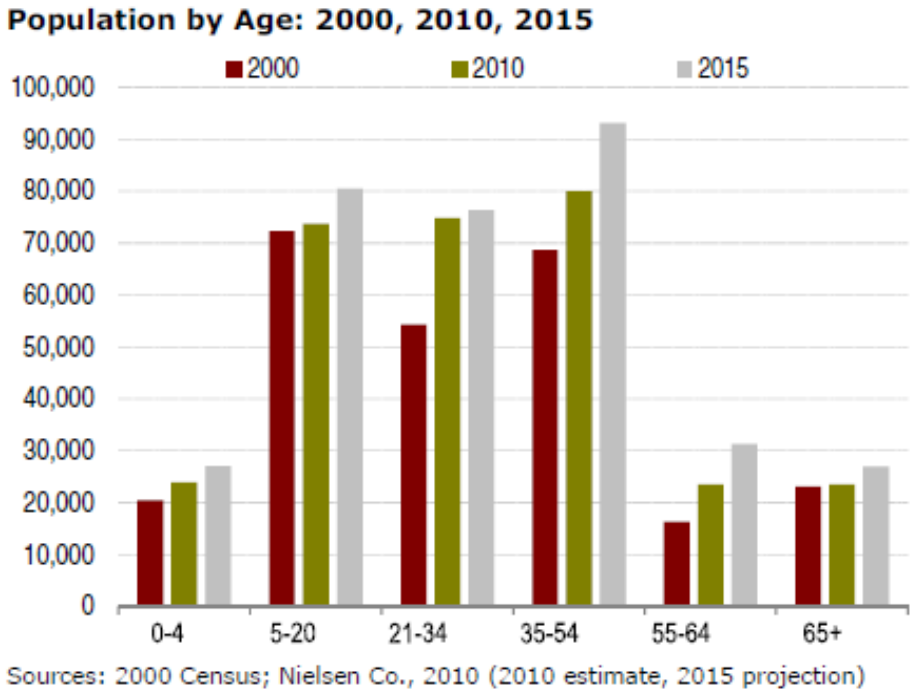
- Between 2000 and 2010, the total population of the City of Riverside increased by 48,705 reaching 303,871 in 2010.
- During this 10-year period, the city's population growth rate of 19.1 percent was lower than the Riverside County rate of 41.7 percent.
- In 2010 the city's population was ranked 1st out of 27 cities in the county.

Note: Due to discrepancies in 2010 population estimates between the U.S. Census Bureau and the California Department of Finance (DOF), in fall 2011, DOF is scheduled to revise 2001 to 2009 estimates, in light of the 2010 Census counts. After the DOF revises its 2001 to 2009 estimates, SCAG plans to incorporate them in updated Local Profiles reports.

Some population growth in the City of Riverside between 2000 and 2010 was due to annexation of adjacent developed areas.

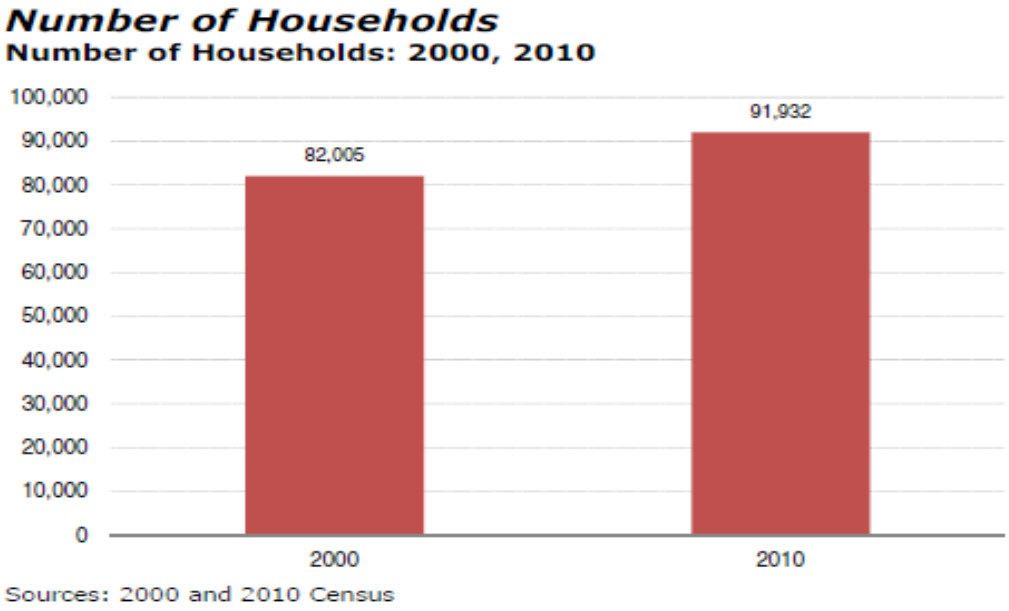
* The following charts in this report contain data for the City of Riverside unless noted otherwise.

Figure 1.6.3 – Projected Population by Age – City of Riverside



1.7 HOUSING CHARACTERISTICS

Figure 1.7.1 Housing Characteristics – City of Riverside



1.8 LAND USE AND DEVELOPMENT TREND QUESTIONNAIRE

LOCAL JURISDICTION DEVELOPMENT TRENDS QUESTIONNAIRE 2011

LAND USE ISSUES - COMPLETE THE INFORMATION BELOW

JURISDICTION:	DOES YOUR AGENCY HAVE RESPONSIBILITY FOR LAND USE AND/OR DEVELOPMENT ISSUES WITHIN YOUR JURISDICTIONAL BOUNDARIES? YES NO			
	2005 DATA	2012 DATA		2017
Current Population in Jurisdiction or Served	289,000	303,871	Projected Population in Jurisdiction or Served - in 2017	323,096
Current Sq Miles in Jurisdiction or Served	*98 sq. mi	81 sq. miles	Projected Sq Miles in Jurisdiction or Served - in 2017	81 sq. miles
Does Your Jurisdiction have any ordinances or regulations dealing with disaster mitigation, disaster preparation, or disaster response?	Yes		If yes, please list ordinance or regulation number. There are no current plans for additional annexation at this time.	
What is the number one land issue your agency will face in the next five years	Affordable housing. Controlling commercial & residential developments to limit the number of vacant homes and commercial buildings. Dealing with aged and obsolete housing and commercial buildings.			
Approximate Number of Homes/Apts/etc.	63,653	98,444	Projected Number of Homes/Apts/etc.- in 2017	107,325
Approximate Total Residential Value	**see note $14,592,224	***see note $229,497,575 .0000	Projected Residential Total Value - in 2017	N/A
Approximate Number of Commercial Businesses	20,200	22,621	Projected Number of Commercial Businesses - in 2017	
Approximate Percentage of Homes/Apts/etc in flood hazard zones	35%	35%	Approximate Percentage of Homes/Apts/etc in flood hazard zones - in 2017	35%
Approximate Percentage of Homes/Apts/etc in earthquake hazard zones	100%	100%	Approximate Percentage of Homes/Apts/etc in earthquake hazard zones - in 2017	100%
Approximate Percentage of Homes/Apts/etc in wildland fire hazard zones	10%	10%	Approximate Percentage of Homes/Apts/etc in wildland fire hazard zones - in 2017	10%
Approximate Percentage of Commercial Businesses in flood hazard zones	35%	35%	Approximate Percentage of Commercial Businesses in flood hazard zones - in 2017	35%
Approximate Percentage of Commercial Businesses in earthquake hazard zones	100%	100%	Approximate Percentage of Commercial Businesses in earthquake hazard zones - in 2017	100%
Approximate Percentage of Commercial Businesses in wildland fire hazard zones	10%	10%	Approximate Percentage of Commercial Businesses in wildland fire hazard zones - in 2017	10%
Number of Critical Facilities in your Jurisdiction that are in flood hazard zones	40	40	Projected Number of Critical Facilities in your Jurisdiction that are in flood hazard zones - in 2017	46%
Number of Critical Facilities in your Jurisdiction that are in earthquake hazard zones	125	183	Number of Critical Facilities in your Jurisdiction that are in earthquake hazard zones - in 2017	183
Number of Critical Facilities in your Jurisdiction that are in wildland fire hazard zones.	10	10	Number of Critical Facilities in your Jurisdiction that are in wildland fire hazard zones - in 2017	10
Does your jurisdiction plan on participating in the County's on-going plan maintenance program every two years as described in Part I of the plan?	Yes		If not, how will your jurisdiction do plan maintenance?	
Will a copy of this plan be available for the various planning groups within your jurisdiction for use in future planning and budgeting purposes?				Yes

*Note: Included our sphere of influence. ** Based upon average price of $229,246. ***Based on Average price $191,000 – Source SCAG 2011

SECTION 2.0 – PLANNING PROCESS

2.1 REGIONAL PLANNING PROCESS

The City and its Community Partners participated in workshops and meetings conducted by Riverside County. Below is a list of those meetings:

Planning Meetings presented by the County of Riverside:

- June 22, 2011
- June 30, 2011
- July 7, 2011
- July 12, 2011
- August 22, 2011
- August 31, 2011
- October 25, 2011

2.2 LOCAL PLANNING PROCESS

The City of Riverside participated in various LHMP planning meetings since 2009 in anticipation of updating the LHMP Plan as well as updating the City's Safety Element of the General Plan.

The City of Riverside's Office of Emergency Management works closely with the representatives from various City department's on the development of updates for the City's General Plan's Safety Element and this Local Hazard Mitigation Plan. Meetings were held to discuss, identify, and prioritize appropriate mitigation strategies. The group was made up of educators, architects, planners, building department officials, facility managers, emergency managers, police, and fire officials. The group was presented with an overview of the identified threats to the City and surrounding areas. There was a discussion of several mitigation efforts identified by the City. An assessment and ranking of hazards was conducted by the group in 2009 and again in 2011. There was little change between the two ratings, other than in 2011 the group added Sewage and Drinking Water Systems as hazards.

2.3 COMMUNITY PARTNER MEETINGS

Community Partner meetings were held to discuss specific hazards and their threats to our community partners such as Riverside School District, Riverside Community College, UCR, Riverside Community and Kaiser Hospitals, Riverside County Schools, etc. The group was presented with an overview of the identified threats to the City and surrounding areas. There was a discussion of several mitigation efforts identified by the City.

Planning Meetings with the City of Riverside Departments were held on:

- 4/13/2010
- 5/6/2011
- 8/19/2011
- 9/12/2011

Community Partners Meetings were held on:

- 9/27/2011 – All partners
- 6/28/2011 - UCR
- 9/20/2011 - Meeting with the Joint Staff Integrated Vulnerability Assessment

In addition, the following agencies have provided written and oral comments during the Community Partnership and City Planning meetings:

- Riverside Transit
- City of Moreno Valley
- Southern California Gas Company
- Burlington-Northern Railroad
- Amtrak
- County of San Bernardino
- UCR
- Department of Defense - Joint Staff Integrated Vulnerability Assessment Team

The chart on the next page indicates the scoring by the planning group during the 2011 planning sessions.

Additionally, at the final planning meeting, un-reinforced masonry buildings and asbestos were added to the issues discussed.

** Note – Per the planning group, Sewer and Drinking Water Systems were added for 2011.

Figure 2.3.1 2011 Ranking City Departments and Partners – City of Riverside

HAZARD	SEVERITY AVERAGE	PROBABILITY AVERAGE	RANKING AVERAGE	FINAL RANKING
EARTHQUAKE	4	3	1.1	1
WILDLAND FIRE	2	3	5.2	2
FLOODING.	3	3	5.5	3
TRANSPORTATION ACCIDENTS - RAIL/AIRCRAFT/HIGHWAY	2	3	6.3	4
BLACKOUTS	3	3	6.9	5
HAZMAT ACCIDENTS - INDUSTRIAL	2	3	8.2	6
DROUGHT	2	2	9.4	7
GAS/FUEL PIPELINE	3	2	9.4	8
TERRORIST ATTACK - HUMANS/STRUCTURES	3	2	9.7	9
WATER SYSTEM	3	2	10.3	10
PANDEMIC FLU/DISEASE/CONTAMINATION	3	2	10.8	11
DAM FAILURE/INUNDATION	3	2	11.1	12
EXTREME SUMMER/WINTER WEATHER	2	3	11.4	13
SEWER SYSTEM	3	3	11.9	14
SEVERE WIND EVENT	2	3	13.0	15
CIVIL UNREST	2	2	13.5	16
TERRORIST ATTACK AGAINST AGRICULTURAL	2	2	14.6	17
NUCLEAR ACCIDENT - SONGS	4	2	15.1	18
AQUEDUCT/CANAL	2	2	16.0	19
LANDSLIDES	2	1	17.2	20
JAIL/PRISON EVENT	1	2	17.3	21
INSECT INFESTATION	2	2	17.5	22

The chart below indicates the scoring by the planning group during the 2011 planning sessions for the individual participant disciplines and groups. Scoring is based on the hazard and the impact on their specific discipline.

Figure 2.3.2 2011 Ranking by Discipline – City of Riverside

HAZARD	City	K-12 School Districts	Universities/ Colleges	MARB	Public Transportation	Medical Facilities
EARTHQUAKE	1	1	1	1	1	1
WILDLAND FIRE	2	4	4		3	5
FLOODING	3	2	9	5	2	9
TRANSPORTATION ACCIDENTS - RAIL/AIRCRAFT/HIGHWAY	4	6	2	2	6	2
BLACKOUTS	5	8	6	11	5	7
HAZMAT ACCIDENTS - INDUSTRIAL	6	7	15	4	4	4
DROUGHT	7	3	5		7	12
GAS/FUEL PIPELINE	8	10	14	3	13	11
TERRORIST ATTACK - HUMANS/STRUCTURES	9	14	3	4	11	13
WATER SYSTEM	10	22	11	8	12	14
PANDEMIC FLU/DISEASE/CONTAMINATION	11	11	8	6	15	3
DAM FAILURE/INUNDATION	12	5	16	12	20	16
EXTREME SUMMER/WINTER WEATHER	13	3	7	13	8	6
SEWER SYSTEM	14	21	19	9	17	15
SEVERE WIND EVENT	15	15	12	10	10	8
CIVIL UNREST	16	12	13		21	17
TERRORIST ATTACK AGAINST AGRICULTURAL	17	13	10		9	21
NUCLEAR ACCIDENT - SONGS	18	17	17	7	14	19
AQUEDUCT/CANAL	19	20	20		18	18
LANDSLIDES	20	18	21		16	20
JAIL/PRISON EVENT	21	19	22		19	10
INSECT INFESTATION	22	16	18		22	22

2.4 PUBLIC MEETING – ASSESSMENT AND RANKING HAZARDS

A Community Forum presentation of the LHMP planning process was held on 9-27-2011. The Community Forum consisted of a representative group of community members from the City. The group was presented with an overview of the identified threats to the City and surrounding areas. There was a discussion of several mitigation efforts identified by the City. An assessment and ranking of hazards was conducted by the group and is shown on the table below.

Figure 2.4.1 2011 Ranking Community Forum- City of Riverside

HAZARD	City	Community Forum
EARTHQUAKE	1	1
WILDLAND FIRE	2	3
FLOODING	3	2
TRANSPORTATION ACCIDENTS - RAIL/AIRCRAFT/HIGHWAY	4	6
BLACKOUTS	5	5
HAZMAT ACCIDENTS - INDUSTRIAL	6	4
DROUGHT	7	7
GAS/FUEL PIPELINE	8	8
TERRORIST ATTACK - HUMANS/STRUCTURES	9	10
WATER SYSTEM	10	14
PANDEMIC FLU/DISEASE/CONTAMINATION	11	15
DAM FAILURE/INUNDATION	12	13
EXTREME SUMMER/WINTER WEATHER	13	11
SEWER SYSTEM	14	16
SEVERE WIND EVENT	15	12
CIVIL UNREST	16	20
TERRORIST ATTACK AGAINST AGRICULTURAL	17	19
NUCLEAR ACCIDENT - SONGS	18	9
AQUEDUCT/CANAL	19	17
LANDSLIDES	20	18
JAIL/PRISON EVENT	21	21
INSECT INFESTATION	22	22

2.5 PUBLIC MEETING OUTREACH

Through the use of the various meetings, the City identified several hazards that are addressed in the plan. These hazards include natural and human-caused hazards that might affect persons and property in the City of Riverside. The hazards were ranked based on the initial analysis. Of the twenty-two hazards that were identified and ranked several were found to be a less-significant hazard or there was little or no history relating to the event in the City.

2.6 PLAN APPROVAL AND ADOPTION

This updated LHMP will be presented for additional public review at a meeting of the City of Riverside's Public Safety Committee. Upon review and approval by the Public Safety Committee, the plan will be presented for a final public review and City Council approval for adoption at a City Council meeting. The City Council will adopt the plan via an official Resolution upon approval by FEMA.

SECTION 3.0 – UPDATES AND MITIGATION ACTIONS

3.1 UPDATES FROM 2005 PLAN

There were several hazards that occurred from 2005 to present. No potential new hazards have been identified since the approval of the 2005 plan.

3.2 BRIEF STATEMENT OF UNIQUE HAZARDS

The City of Riverside faces a diverse array of potential natural and human caused hazards. As with most cities in the Inland Empire, one of the primary concerns is the impact of a large earthquake in the region. Flood risk is a real concern with the Santa Ana River nearby, the large number of dams and reservoirs in and close to the City, the number of canals and arroyos traversing the City, and the low lying areas in the City that are routinely subject to flooding during heavy rains. The City's undeveloped hillsides and the Santa Ana riverbed provide an untapped fuel base for the City's yearly round of wildfires. Additionally, the legal and illegal activities of businesses and members of the community present potential hazards as well. The City's transportation network of roads, freeways, rail lines and airports provide additional associated risks to the City.

The City has identified the following twenty-two primary hazard risks: (Rank Order)

- Earthquake
- Wildland Fire
- Flooding
- Transportation Accidents - Rail/Aircraft/Highway
- Power/Outages/Brownouts
- Hazmat Accidents – Industrial (Hazardous/Radioactive Materials)
- Drought
- Gas/Fuel Pipeline
- Terrorist Attack - Humans/Structures
- Drinking – Domestic Water
- Pandemic Flu/Disease/Contamination
- Dam Failure/Inundation
- Extreme Summer/Winter Weather
- Sewage System – Treatment Plant
- Severe Wind Event
- Civil Unrest
- Terrorist Attack Against Agricultural
- Nuclear Accident – Songs
- Aqueduct/Canal
- Landslides
- Jail/Prison Event
- Insect Infestation

Additional hazards that have been identified by the group include:

- Un-reinforced masonry buildings
- Asbestos

Figure 3.2.1 – Past Hazard Occurrences to Impact Riverside County

June 28 1992	Earthquakes
December 1992	Late Winter Storms
October 27 & 28 1993	Firestorms
January 1995	Severe Winter
February 2 1998	El Niño
October – November 2003	Wildfires
January 2005	Storms
March 2005	Severe rainstorms
October 2006	Wildfire Riverside
October 21 2007	Wildfires
November 2008	Wildfires
January 17-21 2010	Winter storms
December 2010 – January 2011	Winter storms

The City of Riverside has experienced a number of different disasters in the past including numerous earthquakes, floods, wildfires, power outages / shortages, civil disturbances, and severe storms. The chart below lists occurrences within the City or its Sphere Of Influence requiring major responses or causing major damage.

Figure 3.2.2 - MAJOR CITY RELATED EVENTS 2000 TO 2010

(Disaster/Incident	Number of Events	Significant Incidents/Facts/Comments
Earthquake 5.0 or larger	2	No major damage reported from local earthquakes.
Wildland Fire (20 acres or more)	22	Presidential Declarations - DR 1810, 1731, 1498
Flooding	9	Presidential Declarations - DR 1952,1884, 1585, 1577
Extreme Summer/Winter Weather	3	4-5-06 Sever hail storm in Riverside-Corona area Extreme Heat -9-1-02 - 112 Degrees Extreme Cold - 1-12/18-07 -Extended extreme cold causing major citrus damage in City
Severe Wind/Tornado		**Funnel Cloud** – 1-9-05 Riverside/Jurupa area **Tornados** 5-5-06 - In the area or 215/60 Fwy 5-22-08 - 215/60 Fwy 4 separate tornados causing 9 car train derailment, on the ground for approximately 15 minutes
Agricultural Disease/Contamination/Infestation	1	2004-2005 - West Nile Disease requiring the destruction of chicken flocks
Sewer System Failure or Damage	8	Primary cause was contractor working in the area.
Major Gas/Fuel Pipeline	10	5-10-10 - Natural Gas Line over 60 Fwy @Blaine Construction workers cut gas main causing evacuation of 5,000 residents and student dorms at UCR for approximately 6 hours
Transportation Accidents – Rail/Aircraft/Highway	50	Primary accidents were train v. pedestrian and train v. vehicle, resulting in several fatalities. No train v. train incidents have occurred.
Blackouts	1	03-01 Rolling Blackouts –for three days 10/25/07 Total blackout of the entire City lasting approximately 6 hours
Dam Inundation	1	12-22-10 - Release of a high volume of water from Sycamore Canyon Dam during heavy rains resulting in the complete roadway washout - Chicago Ave @ Central
Hazmat Accidents Industrial	5	6/25/07 Major Fire at Hazmat Site closing the 60 Fwy for 4 hrs.

Sources: (1) City of Riverside Fire and OEM Incident History (2) San Diego National Weather Service

3.3 MITIGATION ACTIONS AND UPDATES TABLE

Hazard Type	Project Description	Lead Department	Status/Update
ALL	Incorporate Updated Local Hazard Mitigation Plan with City of Riverside General Plan	Fire Department - Office of Emergency Management	Pending FEMA approval of LHMP.
Flood	Freeman Substation 3301 Gibson Street, Riverside, CA 92504 Flood Mitigation-Drainage or levee	City of Riverside Public Works	Project pending funding or inclusion on Capital Improvement Program Budget
Flood	MONROE MDP - MONROE CHANNEL Replacement of City's existing open channel with underground reinforced concrete box with ten-year storm capacity. Project limits are from California Avenue upstream to Magnolia Avenue.	City of Riverside and Riverside County Flood Control	RFP to be released in January 2013
Flood	SOUTHWEST RIVERSIDE MDP LINES G, G-1 & F-1 From Lincoln Avenue southerly to Victoria Avenue in Meyers Street. Includes Lateral G-1 to Van Buren Boulevard and Lateral F-1 to Harrison Street. City of Riverside to design-build.	City of Riverside	Project to begin 3rd Quarter 2013
Flood	SYCAMORE DAM – OUTLET STRUCTURE MODIFICATIONS Reconstruct outlet structure to prevent blockage by debris accumulation. This is a pilot project to develop a solution for the District's six	City of Riverside	4th Quarter 2013

	other Riverside Reservoirs.		
Traffic Signal	Modify Signals timing Van Buren Blvd Signal Synchronization Mockingbird Cyn Rd to Gamble Ave 3.10 miles 0 ft/ 0 ft Modify Signals for improved signal timing. City of Riverside secured a MSRC grant and is the lead agency.	City of Riverside	FY 12/13
Road Improvement	Hidden Valley Wildlife Reserve Improve Entry Rd Arlington Ave to Maint. Sta./Vista Pt. 1.60 miles 0 ft/ 0 ft Const Access road improvements and Bike Trail on earthen levee.	City of Riverside.	FY 12/13
Replace Bridge	Van Buren Blvd Bridges Santa Ana River 0.10 miles 0 ft/ 0 ft Replace existing bridges	City of Riverside and City of Jurupa Valley	FY 12/13
Geology and Soil Erosion	Prior to the approval of the final construction plans, an Erosion Control plan that incorporates Best Management Practices (BMPs) to control erosion and protect water quality shall be approved by the Public Works Department. The BMPS shall be implemented by the construction contractor throughout the construction period.	City of Riverside Public Works Department	In progress scheduled to be completed in 2013

Figure 3.2.1 Capital Budget Funds – City of Riverside – FY 12/13

ANNUAL BUDGET SUMMARY BY FUND

Fund Description	Fund Number	Budgeted Expenditures 2011/12	Requested Expenditures 2012/13	Percentage Change
Capital Project Funds				
Storm Drain [5]	410	700,000	200,000	(71.43%)
Local Park Special Capital Improvements [9]	411	4,266,488	1,736,977	(59.29%)
Regional Park Special Capital Improvements	413	21,521	-	--
Capital Outlay [10]	430	58,500,000	44,600,000	(23.76%)
Measure A Capital Outlay [11]	432	6,933,500	17,893,700	158.08%
Transportation Development Impact Fees	433	-	25,000	--
Arlington Capital Projects [7]	471	871,468	-	--
Casa Blanca Capital Projects [7]	472	480,908	-	--
Magnolia Center Capital Projects [7]	474	525,828	-	--
University Corridor/Sycamore Canyon Capital Projects [7]	476	1,090,658	-	--
Downtown/Airport/Hunter Park/Northside Capital Projects [7]	478	2,756,734	-	--
La Sierra/Arlanza Capital Projects [7]	479	2,317,311	-	--
SubTotal		**78,464,416**	**64,455,677**	**(17.85%)**

Source: City of Riverside website

SECTION 4.0 – HAZARD IDENTIFICATION AND RISK ASSESSMENT

4.1 CITY OF RIVERSIDE HAZARDS

The City of Riverside faces a diverse array of potential natural and human caused hazards. As with most cities in the Inland Empire, one of the primary concerns is the impact of a large earthquake in the region. Flood risk is a concern because of the nearby Santa Ana River, the large number of dams and reservoirs in and close to the City, and the number of canals and arroyos traversing the City. The low lying areas in the City are routinely subject to flooding during heavy rains. The City's undeveloped hillsides and the Santa Ana riverbed provide an untapped fuel base for the City's yearly round of wildfires. Additionally, the legal and illegal activities of businesses and members of the community present potential hazards as well. The City's transportation network of roads, freeways, rail lines and airport provide additional associated risks to the City.

4.2 HAZARD IDENTIFICATION AND SCREENING

The following table identifies the risk assessment conducted by the City and indicates if there is specific information that should be included in the City's Annex to the County Plan or if the information contained in the County Plan provides adequate information to address the hazard as it relates to the City.

Figure 4.2.1 Hazard Identification and Screening Table (Alphabetical Order)

Hazard	Included in City's Annex?	Why or Why not?	Comments
Agricultural Disease/Contamination/Infestation	No	Limited History	Covered in the County's Portion of the LHMP Plan
Civil Unrest/Civil Protest	Yes	Prior history of small to medium events.	
Dam Failure/Overtopping/ High Water Release – Dam Inundation	Yes	Probability is present due to high number of dams/reservoirs in the area.	The City's General Plan confirms that the City is within the inundation zones.
Drinking Water	Yes	Probability of small events is high, larger event probability is low.	Due to well water pumps being located near earthquake faults and underground pipes subject to breakage due to age and/or construction.
Drought	No	Ongoing situation county wide probability is dependent on yearly weather	Covered in the County's Portion of the LHMP Plan
Earthquake	Yes	Proximity to multiple faults places the City at risk.	Past history shows limited damage, but predictions place impact at a high level with large magnitude event.
Flooding	Yes	Past events have been experienced by the City.	City has been involved in four Presidential Declarations with extensive damage to City property
Hazmat Accidents/Hazardous Materials/Radioactive Materials	Yes	With major rail lines and Interstate Highways within the City probability of a rail or highway disaster is present.	
Landslide/Liquefaction	Yes	Minimal experience of large landslides. Minor landslides associated with heavy rain.	
Nuclear Accident - SONGS	Yes	Low probability, but high local concern.	Probability is very low, but the term "nuclear accident" creates high community concern
Pandemic Flu/Disease/Contamination	No	City has limited experience and low probability	All Public Health related events are handled by the County Public Health Dept. can fall under their Response Plans.
Pipelines	Yes	Large natural gas and petroleum pipelines throughout the City.	
Power Outages – Blackouts and Brownouts	Yes	Past events have been experienced by the City.	Only one source of power into the City

Sewer System	Yes	Probability of small events is high, larger event probability is low. Have experienced overflow issued during heavy rains.	Underground pipes subject to breakage due to age and/or construction.
Severe Wind/Tornado	Yes	Prior history with damage.	
Severe Winter/Summer Storms and Weather	No	Numerous past events have been experienced by the City.	Flooding covered separately. Over weather events covered in the County portion of the LHMP Plan
Terrorism/Bio-Terrorism (Attacks against humans, structures, agriculture)	Yes	Some probability, but low – No experience.	
Transportation (Air\Rail\Highway)	Yes	With major rail lines, freeways, highways, and airport/airport approaches within the City and its sphere of influence, probability is high	
Wildfire	Yes	Past events have been experienced by the City.	The City encompasses and is adjacent to many natural open space areas.
Asbestos	Yes	Numerous older residential and commercial buildings with asbestos in them	Identified late in the planning process – Not Ranked due to discussions on its status as a hazard to be ranked.
Un-Reinforced Masonry Buildings	Yes	Numerous older residential and commercial URM buildings.	Identified late in the planning process – Not Ranked due to discussions on its status as a hazard to be ranked.

4.3 IDENTIFICATION OF RISKS AND VULNERABILITIES

EARTHQUAKES

Severity - 4, Probability - 3, Ranking – 1

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. Although there are no such zones within the City or its Sphere of Influence, earthquakes are still of a major concern with the close proximity of major fault zones to the City. See Figure 4.3.1 Fault Zone Map.

For planning purposes, the City of Riverside uses FEMA's HAZUS software for determining the types of damages and impacts of various earthquakes. For the LHMP process, the City has selected a scenario of a 7.8M earthquake on the San Andreas Fault with an epicenter in the Salton Sea region. This scenario has been used by Cal-EMA for planning purposes and provides the highest potential for damage to the City based on the capabilities of all of the earthquakes in the area. The results of the HAZUS run are included at the end of this Annex.

A major earthquake occurring in or near the City may cause deaths and casualties, extensive property damage, fires and hazardous material spills and other ensuing hazards. The effects could be aggravated by aftershocks and by the secondary effects of fire, hazardous material/chemical accidents and possible failure of the waterways and dams. The time of day and season of the year would have a profound effect on the number of dead and injured and the amount of property damage sustained. Extensive search and rescue operations would be required to assist trapped or injured persons. Emergency medical care, food and temporary shelter could be required by injured or displaced persons. Identification and burial of many dead persons would pose difficult problems; public health would be a major concern. Mass evacuation may be essential to save lives, particularly in areas downwind from hazardous material releases. Many families would be separated particularly if the earthquake should occur during working hours, and a personal inquiry or locator system could be essential to maintain morale. Emergency operations could be seriously hampered by the loss of communications and damage to transportation routes within, and to and from, the disaster area and by the disruption of public utilities and services. (See Figure 4.3.2 Earthquake Faults - Critical Facilities and Figure 4.3.3 Earthquake Faults School Sites and Care Facilities.)

The economic impact on the City of Riverside from a major earthquake would be considerable in terms of loss of employment and loss of tax base. Also, a major earthquake could cause serious damage and/or outage of computer facilities. The loss of such facilities could curtail or seriously disrupt the operations of banks, insurance companies and other elements of the financial community. In turn, this could affect the ability of local government, business and the population to make payments and purchases.

Although there are a number of faults within a 50 mile range of the City, the fault zones listed below are seen as primary faults to the City.

The **San Andreas Fault** lays to the east of the City and at its closest point is eleven miles from Downtown Riverside, abutting the San Bernardino Mountains. The San Andreas Fault is estimated to have the capability of producing up to an 8.3 magnitude (M) earthquake.

The **San Jacinto Fault** also lays to the east of the City and at its closest point, is seven miles from Downtown. This fault passes 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.

The **Chino and Whittier Faults** are the two upper branches of the Elsinore Fault Zone. Northwest of Corona (Glen Ivy area), the Elsinore fault splits into two segments: the southwestern strand becoming the 40 km long Whittier Fault (probable magnitudes between 6.0 and 7.2) and the northeastern strand becoming the 21 km long Chino Fault (probable magnitudes between 6.0 and 7.0).

The **Chino-Central Avenue Fault** is located in the western portion of the Valley Region and is within an Alquist-Priolo Zone indicating that movement within the past 11,000 years is suspected. The Chino-Central Avenue fault is a southwest dipping, reverse-right lateral oblique slip fault that splays off from the Elsinore fault in the Corona area and continues to the Chino area for a total length of about 17 miles (28 kilometers). The Chino-Central Avenue fault is considered capable of generating a magnitude 6.7 earthquake. (See Riverside County OA MJHMP Section 5.3.3 Pages 196-218).

Figure 4.3.1 Fault Zone Map – City of Riverside

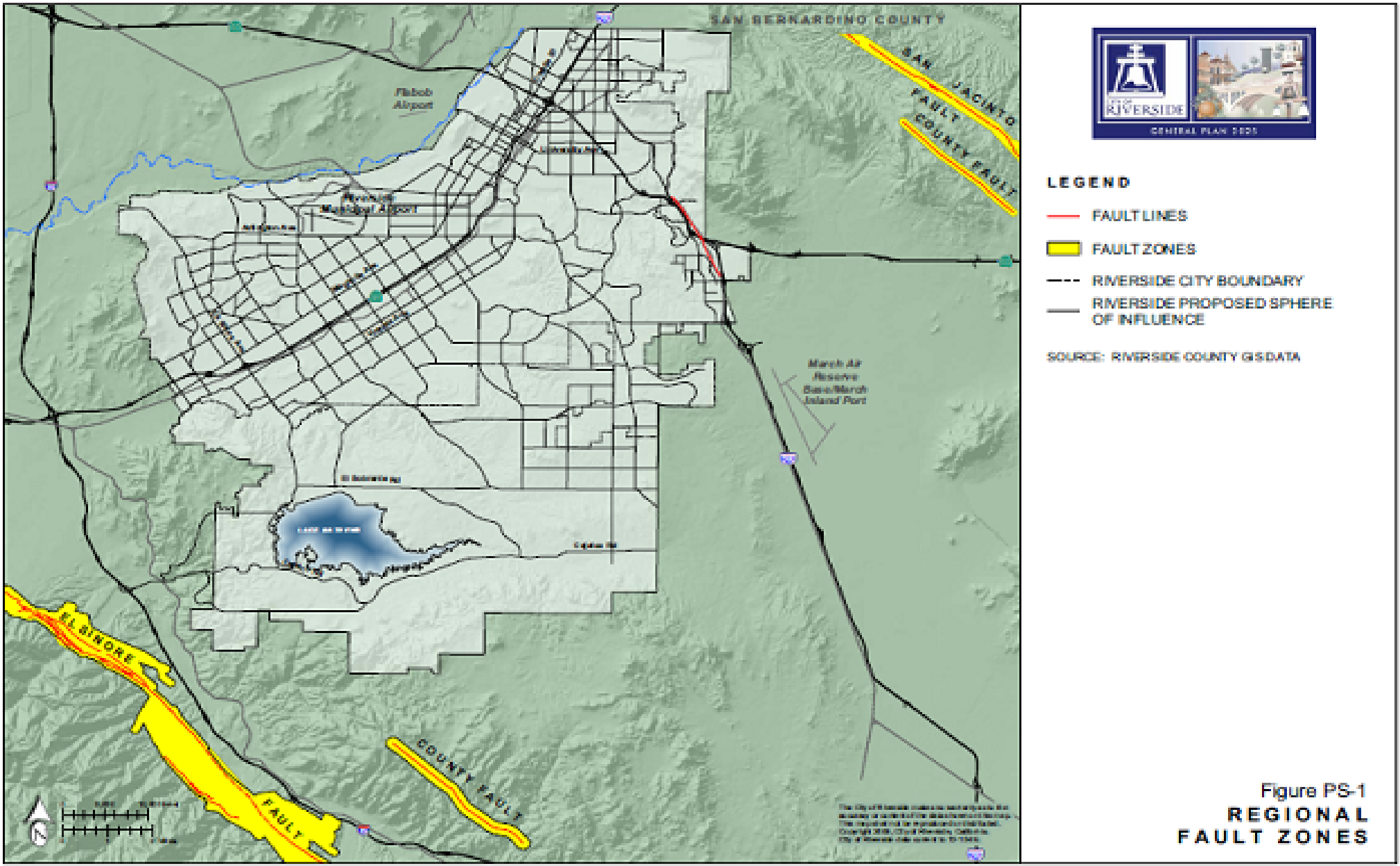


Figure 4.3.2 Earthquake Faults - Critical Facilities – City of Riverside

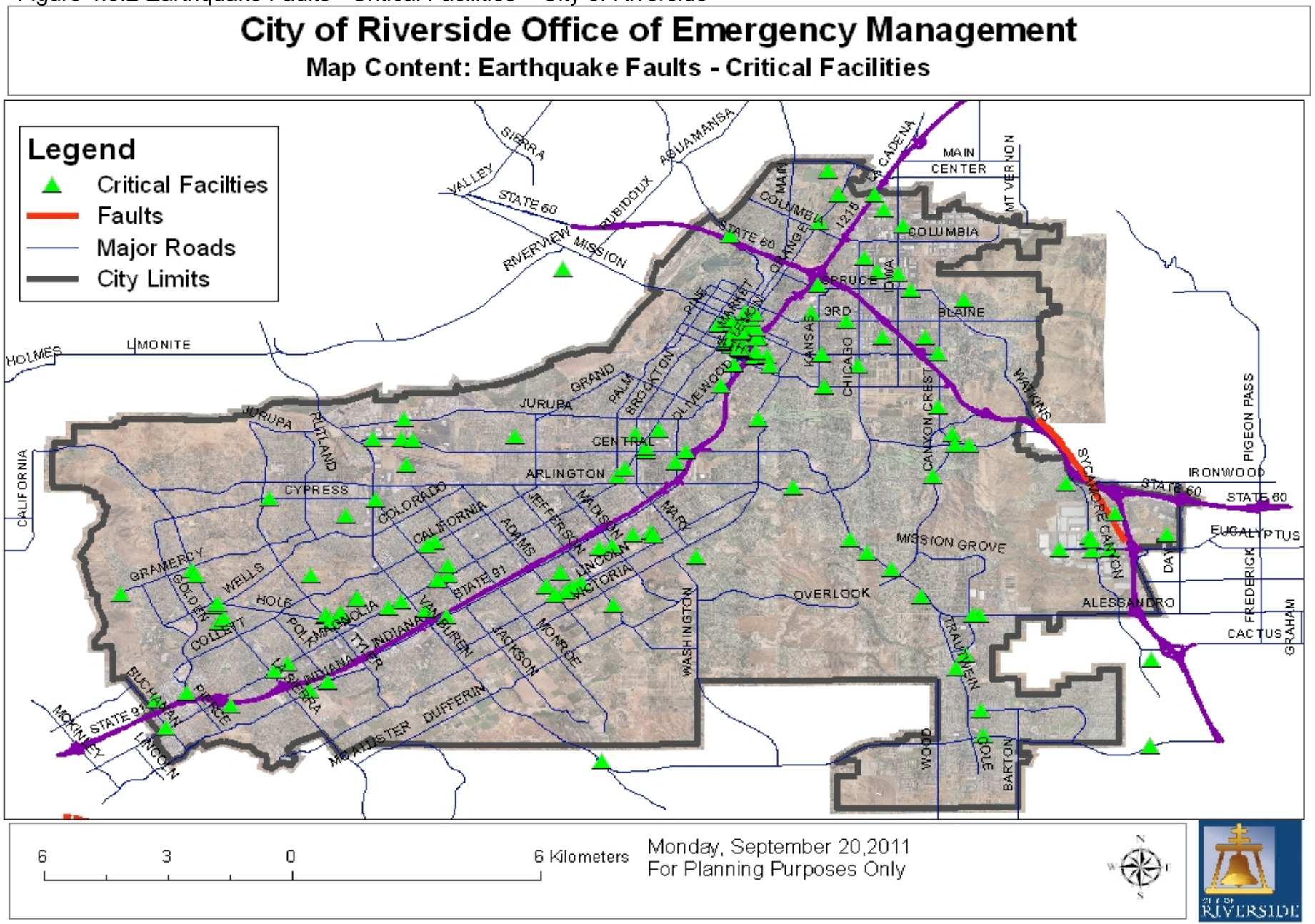
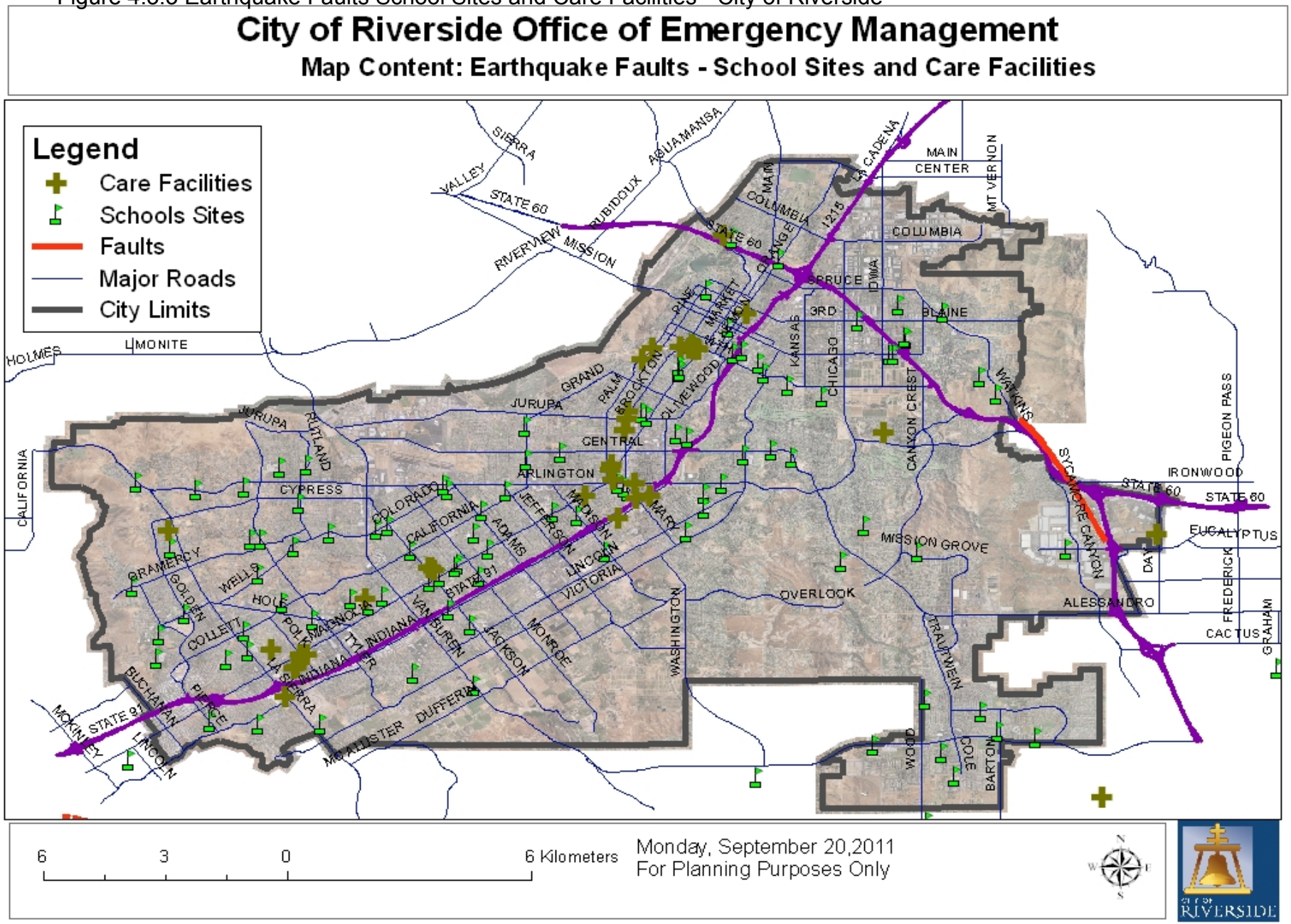


Figure 4.3.3 Earthquake Faults School Sites and Care Facilities - City of Riverside



LIQUEFACTION/LANDSLIDES

Severity - 2, Probability - 1, Ranking – 20

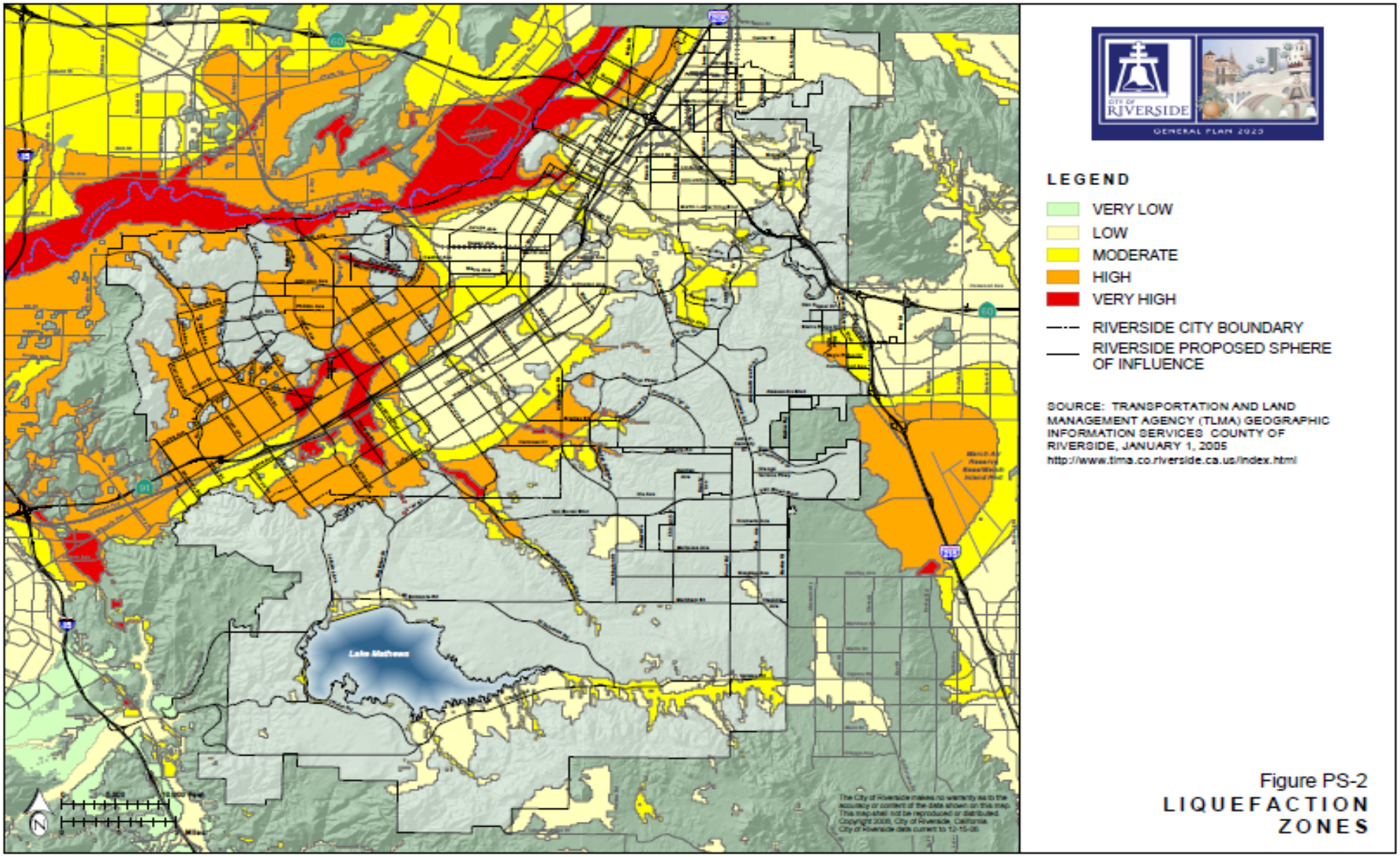
Liquefaction and natural ground failures are a phenomenon generally associated with earthquakes. The City has had many small ground failures (landslides and sink holes) generally associated with heavy rains. Liquefaction and related phenomena is when the strength and stiffness of a soil is reduced by earthquake shaking or other rapid loading.

There are four primary liquefaction areas in the City. These include the area along the Santa Ana River, a wide area south and west of the Riverside Municipal Airport, part of 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. See Figure 4.3.4 Liquefaction Zone Map.

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. 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 rock falls include areas in western and northeastern Riverside. Land sliding may result from heavy rain, erosion, removal of vegetation, seismic activity or combinations of these and other factors.

(See Riverside County OA MJHMP Section 5.3.10 Pages 252-257).

Figure 4.3.4 Liquefaction Zone Map – City of Riverside



WILDLAND FIRES

Severity - 2, Probability - 3, Ranking – 2

The City of Riverside has had twenty-two (twenty acres or more) wildland type fires in the last ten years and numerous smaller wildland fires. California law requires that periodic assessments and strategic plans be developed to inform policy decisions on the state's forest and rangeland resources (Cal Fire is mandated by Public Resource Code 4789). The City of Riverside participated in the assessment process for the City and its Sphere of Influence and the attached map has been approved by Cal Fire and the City. As shown on the map, the City has three distinct areas where the threat of wildland fires exists. See Figure 4.3.5 Fire Hazard Map.

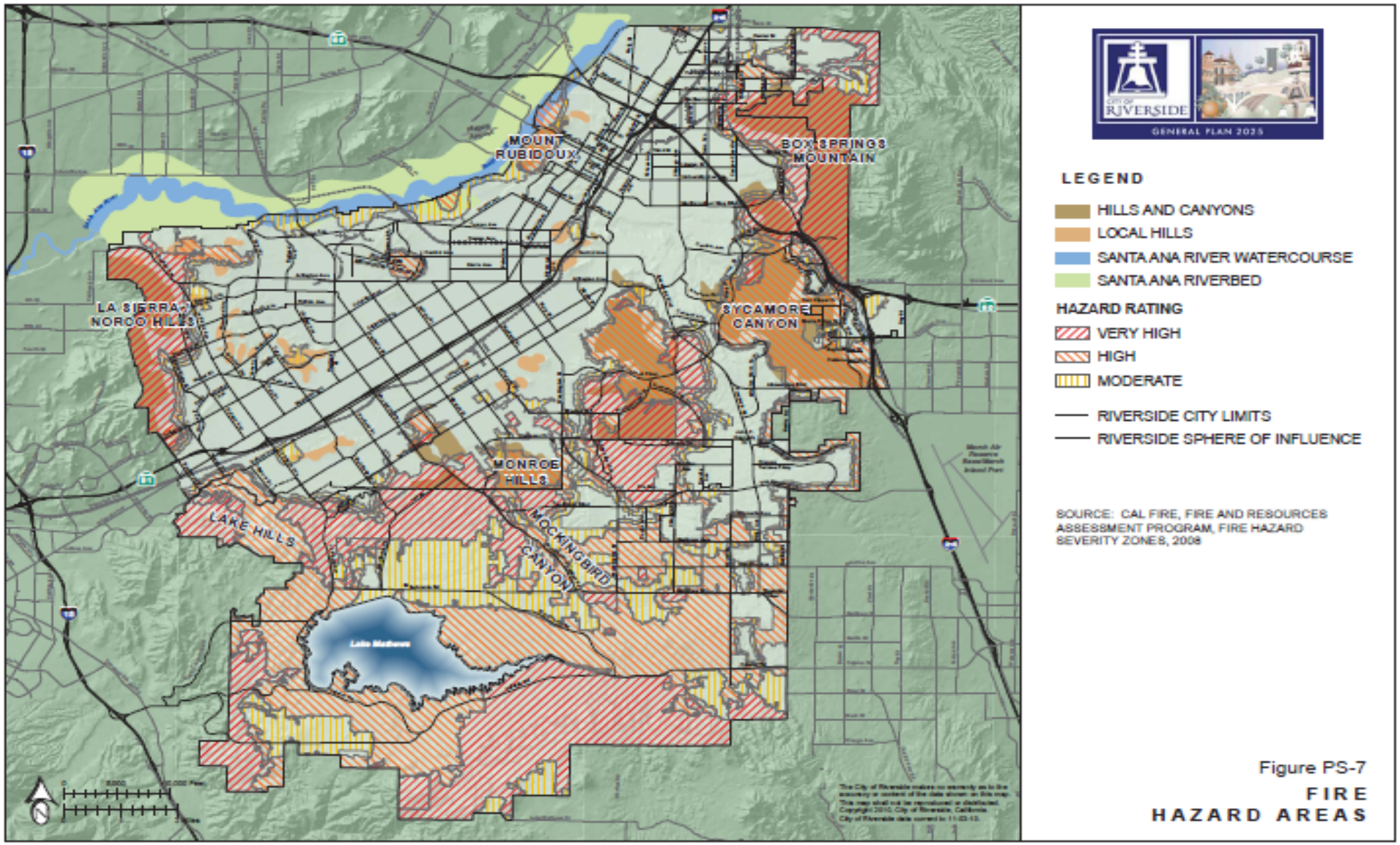
The Santa Ana River corridor is made up of a large amount of lush, natural vegetation within the watercourse and its immediate surroundings. The threat of fire in the riverbed is high from both natural causes and human created causes. Many of the fires in the riverbed have been associated with the various encampments that exist within the foliage areas.

This area within the City exists where the urban and suburban developments have come together against open expanses of wildland areas. This type of interface can be found in the City in the areas of UCR, Sycamore Canyon/Canyon Crest, Norco Hills, and the regional nature parks.

The City rests in a valley surrounded on three sides by foothill areas that fall under this category. Typically these areas are mostly covered with scrub brush and small trees. Firefighting efforts in these areas are hampered by limited fire apparatus access and a limited supply of water. Areas that fall in this category are Mt. Rubidoux, Woodcrest, Lake Hills/Mockingbird Canyon/Monroe Hills/La Sierra/Norco Hills areas, and Box Springs Mountain.

(See Riverside County OA MJHMP Section 5.3.1 Pages 154-163).

Figure 4.3.5 Fire Hazard Map – City of Riverside



HAZMAT ACCIDENTS/HAZARDOUS MATERIALS/RADIOACTIVE MATERIALS

Severity - 2, Probability - 3, Ranking – 6

A hazardous chemical release in the City of Riverside would most likely involve either legal transportation of chemicals by railroad or commercial truck carrier or the handling of chemicals at a licensed facility. Illegal activities such as a clandestine lab or illegal dumping of chemical waste have been identified as threats within the community. The City has not had a major hazmat release or spill in the past 10 years. There have been several illegal labs discovered in the City. The City has one EPA superfund site in the City and two within its sphere of influence. Hazardous materials can be found in three formats: legal/licensed sources, illegal sources, and illegal dumping.

LEGAL SOURCES - These are licensed companies/businesses and common carriers on the roadways. There are approximately 700 licensed hazardous material sites in the City. These facilities are a combination of large quantity and small quantity users. Small quantity users are school laboratories, department stores, home improvement stores, etc. Large quantity users include gas stations, chemical production companies, warehouses, and large storage facilities with large refrigeration units. There are locations within the City that use and/or store radioactive material for various medical and research activities. See Figure 4.3.6 Hazardous Material Site Map.

ILLEGAL SOURCES - These situations involve clandestine labs. The majority of clandestine labs in the area are involved in the production of methamphetamine, but a number of other drugs may also be synthesized, including phencyclidine (PCP), methylenedioxyamphetamine (MDA) and methylenedioxymethamphetamine (MDMA), lysergic acid diethylamide (LSD), methcathinone (CAT), amphetamine, and other controlled substances. Generally, these illegal labs are quite volatile because of the chemicals used and the production methods used. The locations are not constructed in a way to prevent fires, explosions, or toxic releases and the locations are not known to law enforcement or fire. There have been numerous labs of this type located in the City. See Figure 4.3.6- 4.3.7 Hazardous Waste Sites.

Clandestine Dumping

This is the criminal act of disposing of toxic materials and hazardous waste on public or private property. As the costs and restrictions increase for legitimate hazardous waste disposal sites, the number of illegal dumping of hazardous materials has increased proportionately.

Figure 4.3.6 Hazardous Material Site Map – City of Riverside

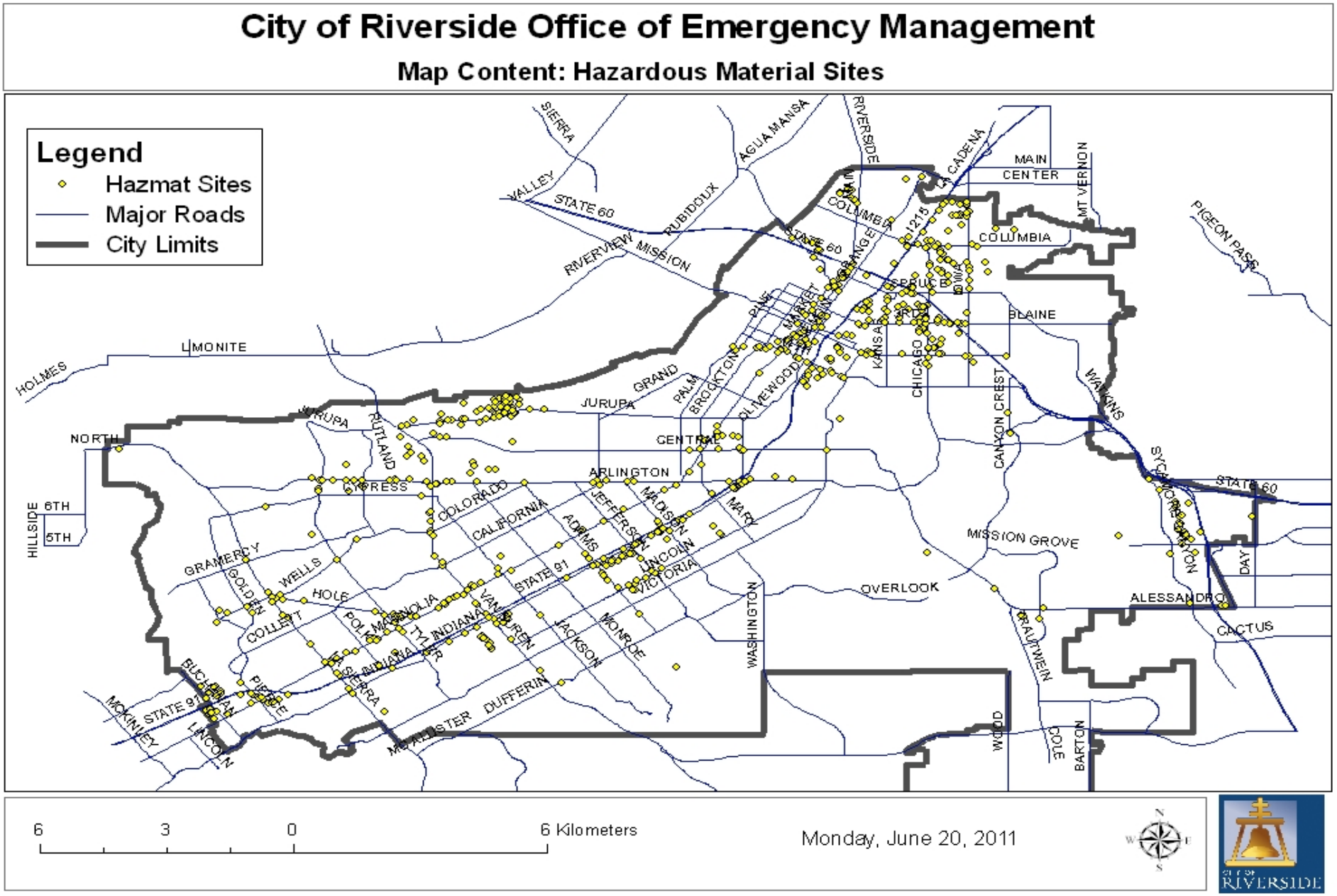
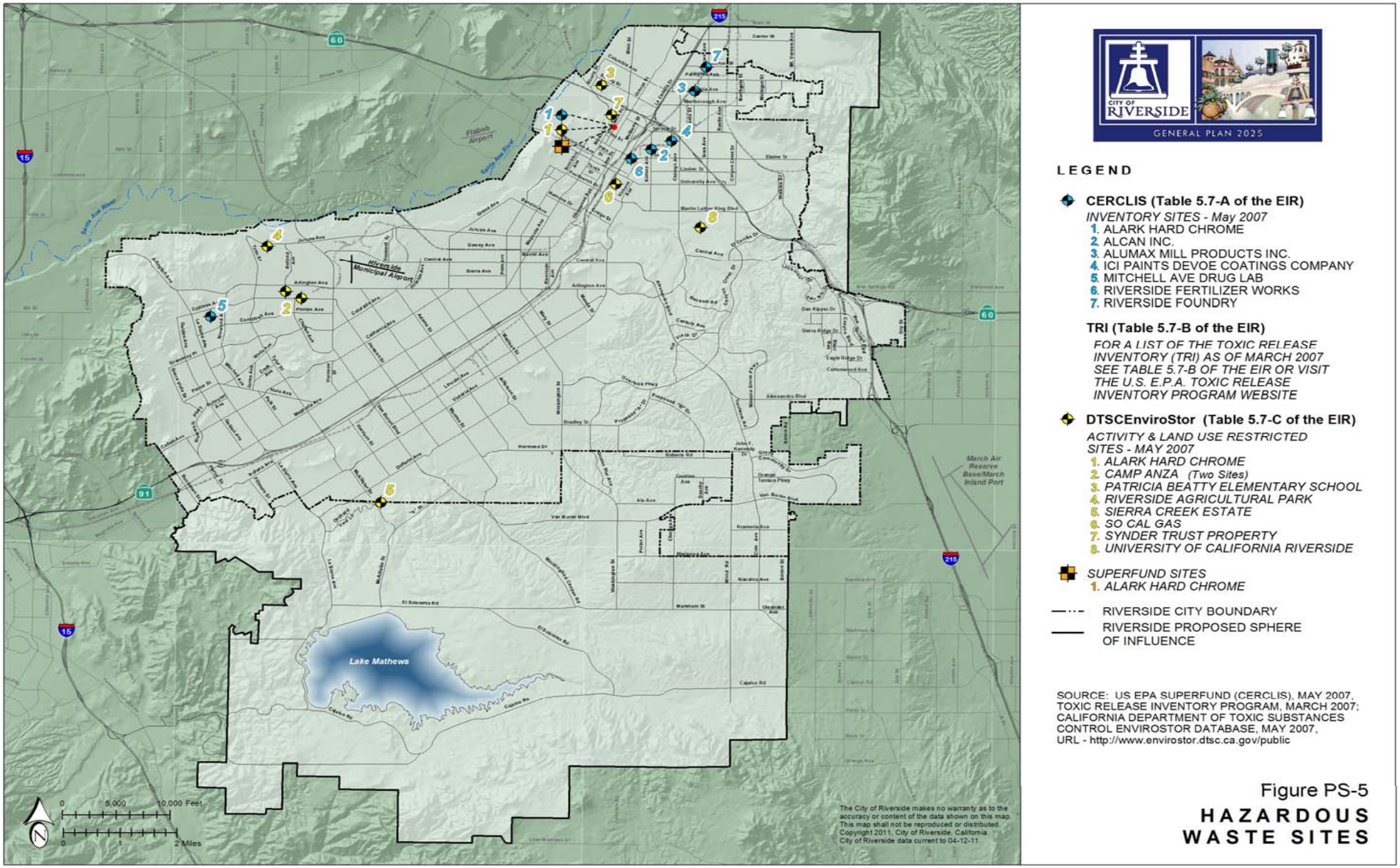


Figure 4.3.7 Hazardous Waste Sites – City of Riverside



PIPELINES

Severity - 3, Probability - 2, Ranking – 8

The term "pipeline" relates to natural gas, petroleum, and aviation fuel lines. Besides the impact of an earthquake on these systems, the second greatest concern for these pipelines is damage caused by contractors digging in the area where there are pipes. Although there are methods in place ways for contractors to become aware of the locations of pipelines, many of the incidents have been as a direct result of a contractor's digging or excavating. The specific number and locations of the various high pressure natural gas, aviation, and fuel lines are known by public safety responders, however the specific locations and descriptions are restricted as Law Enforcement Sensitive by Department of Homeland Security requirements. See Figure 4.3.8 Pipelines and Water Way Canals Map displays a rough placement of the pipelines within the City. The following types of pipelines are within the City and are possible hazards.

Natural Gas Lines

Traversing the City are several high pressure natural gas lines. These natural gas lines are classified into two categories:

Local distribution lines

These lines are designed to provide natural gas into the community for residential and commercial use. These lines usually run down the middle of the street and can be located within the general vicinity of a school, railroad track, or freeway. These pipes are generally the cause of the pipeline incidents in the City when they are broken by someone digging in the street. These lines are both cast iron and the new plastic lines.

Intra and Inter State transport lines

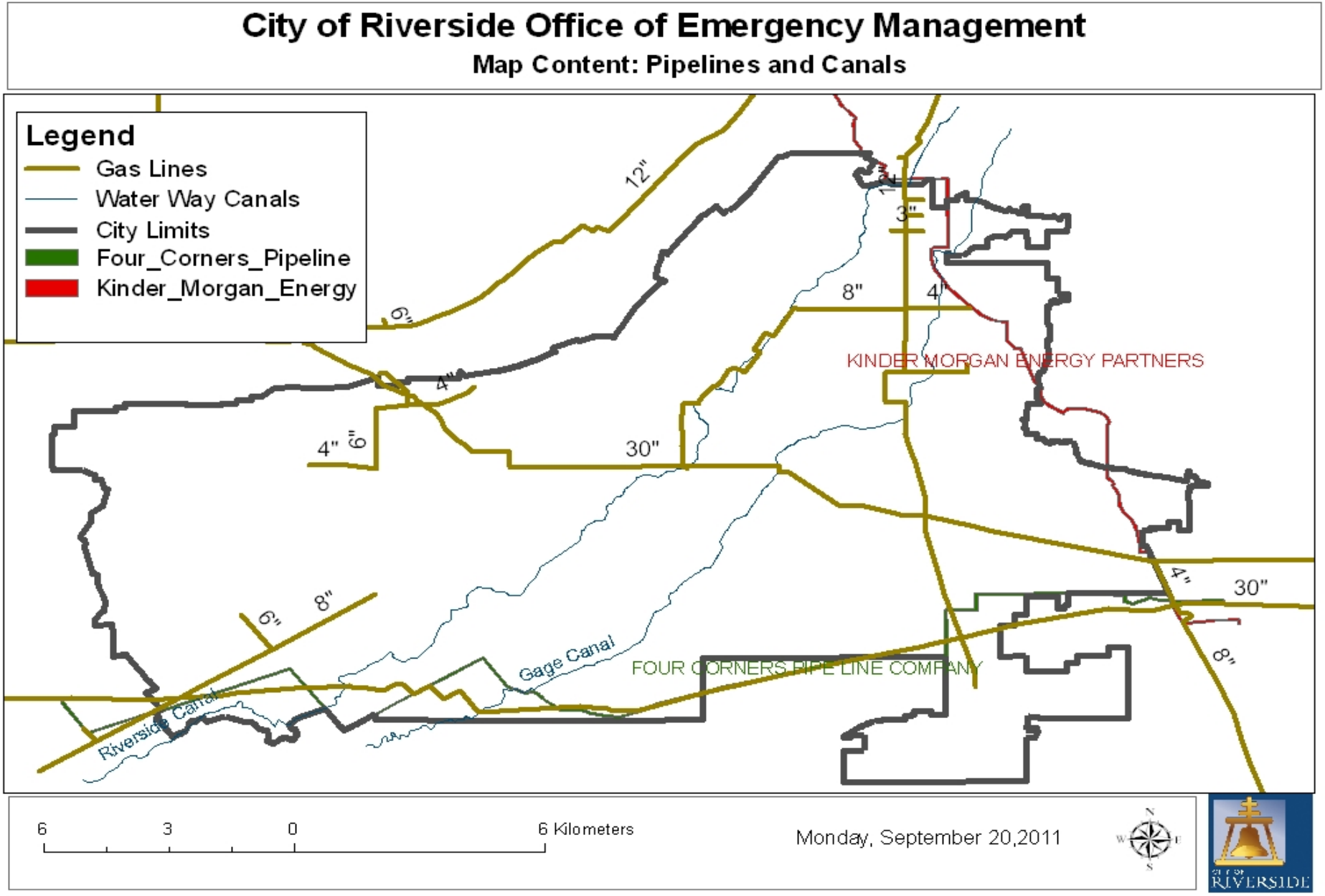
These pipelines carry natural gas at pressures anywhere from 200 to 1500 pounds per square inch (psi) and are much larger than the local distribution lines. The natural gas in these lines is being transported to locations in and out of the state.

Aviation and Petroleum Lines

Many of the petroleum lines traversing the City start in the refinery areas in Los Angeles County and provide petroleum projects to the various commercial distribution tank farms and rail centers both locally and out of state. These pipelines range from 6” to 14” in size. In some instances, these pipelines are within the general vicinity of a school, railroad track, or freeway. Kinder/Morgan runs from Jurupa through the City of Riverside to March Air Force Base. The line is 14.53 miles long and it carries Jet-A fuel and refined petroleum.

(See Riverside County OA MJHMP Section 5.4.4 Pages 282-284)

Figure 4.3.8 Pipelines and Water Way Canals Map – City of Riverside



FLOODING

Severity - 3, Probability - 3, Ranking – 3

The City has been involved in four Presidential Declarations in the last six years for flooding events. Flooding represents a potential hazard to citizens and property within the City. Flood hazards may be considered in two categories:

- Natural flooding from heavy rains
- Dam, reservoir or water tank failure.

While the majority of the area potentially subject to flooding is located along the Santa Ana River area, local topography and the presence of a number of large aboveground water storage tanks, increase the potential for flood events in other portions of the City. However, there are no NFIP insured repetitive loss areas. The principal types of flood hazards in the City include stream flooding, bridge scour, dam inundation and earthquake-induced flooding (seiches). The City is potentially vulnerable to flooding associated with the Santa Ana River and other small-scale floods originating from the hillsides in the City, local dams, and canals. While not likely to occur in the City, bridge foundations are vulnerable to scouring during a flood.

There are several portions of the City of Riverside that are prone to urban flooding due to debris accumulation in storm drains and in flood control channels and basins, overburdened sewage pumping stations, and aged drainage systems. Low-lying areas of the City are particularly susceptible to regular flooding. Over the past several years, the City has had heavy flooding as a result of heavy rains.

The flood hazard areas of the City are subject to periodic flooding that can adversely affect the public health, safety, and general welfare. Contamination due to flooded sewage systems poses the greatest risk to health and safety of persons in the affected areas. The heavy rains will overtax the sewer system, causing a backup. Many times, this will cause sewage to flow up from manhole covers onto the streets.

Additionally, there is a high probability that there will be some underground facilities (transformers and switches) impacted by the high volume of water. Potentially this will cause power outages, electrical shorts and fires in some underground vaults, as well as potentially severe damage to the electric supply equipment.

See figures 4.3.9. through 4.3.11 for 100 - 500 year flood maps.

Repetitive flooding areas

In many cases, the flooding has caused repetitive damage. These repetitive areas include:

- 14th Street and Highway 91
- Arlington Avenue and the railroad tracks
- Van Buren Avenue and Indiana Avenue
- Fairmount Park
- Lake Evans
- Downtown Area
- Don Derr Park
- University Avenue at the railroad tracks

(See Riverside County OA MJHMP Section 5.3.2 Pages 164-195)

Figure 4.3.9 - 100 and 500 Year FEMA Flood Zone Map – City of Riverside

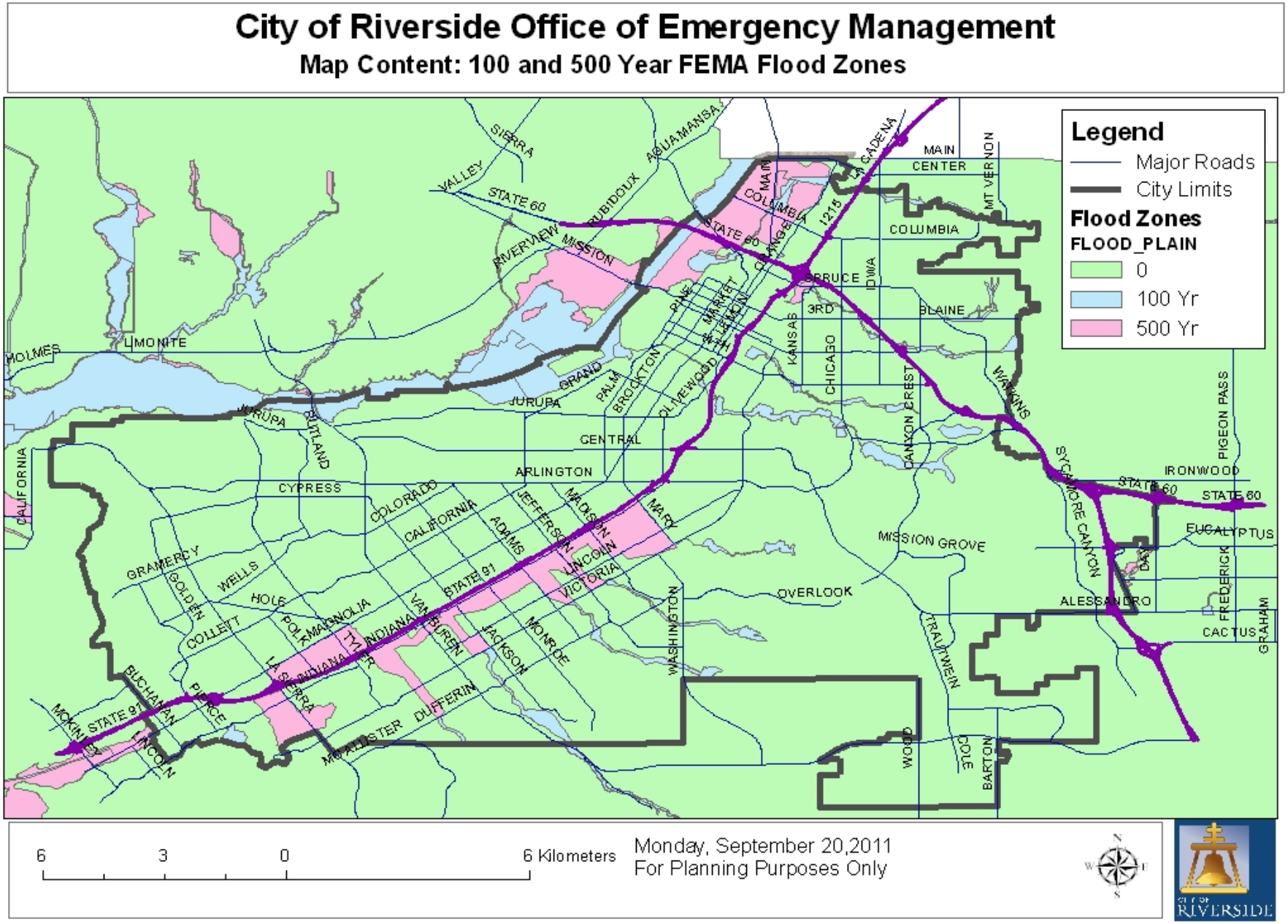


Figure 4.3.10 Flood Zones – Public Safety Facilities – City of Riverside

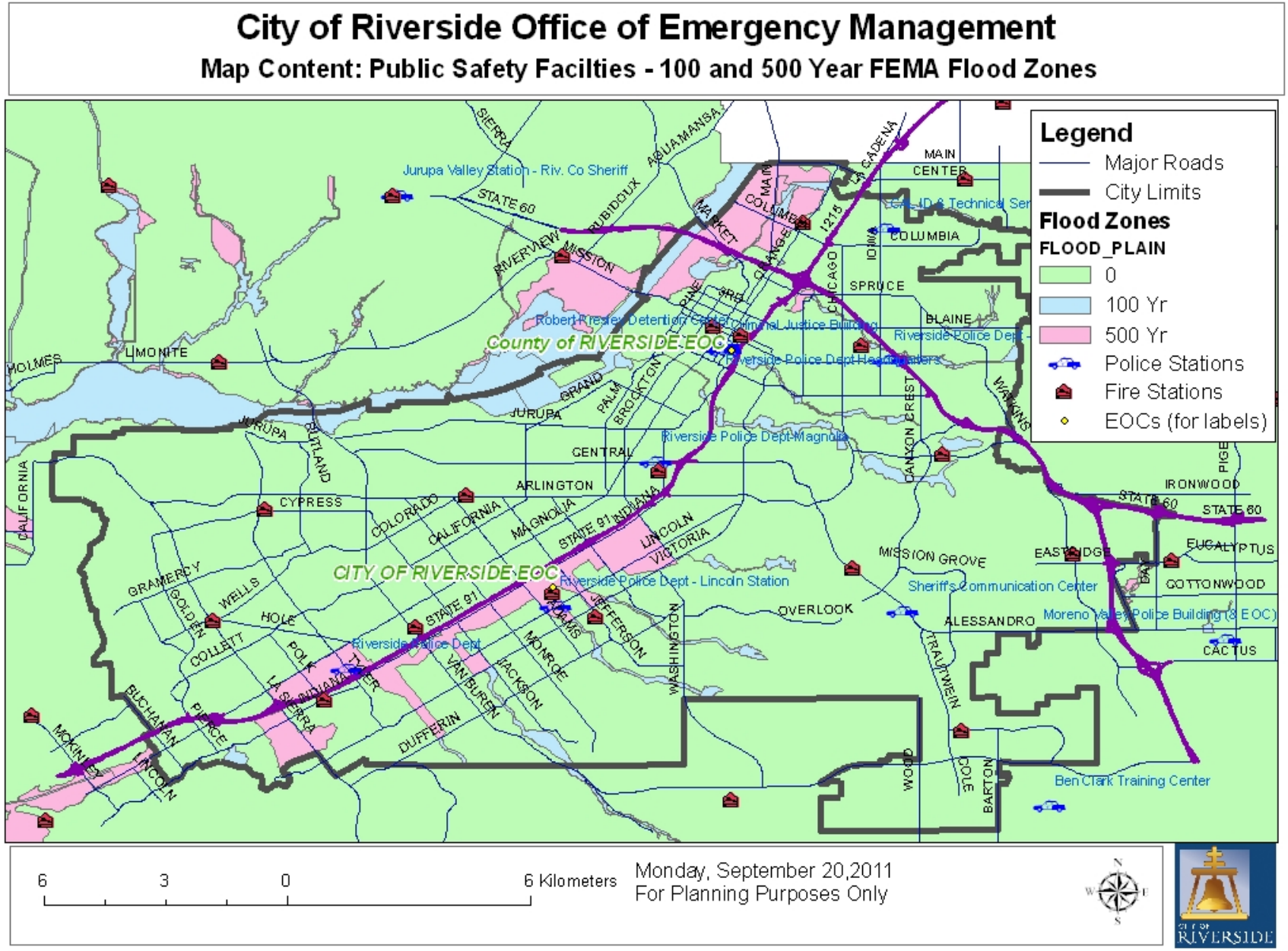
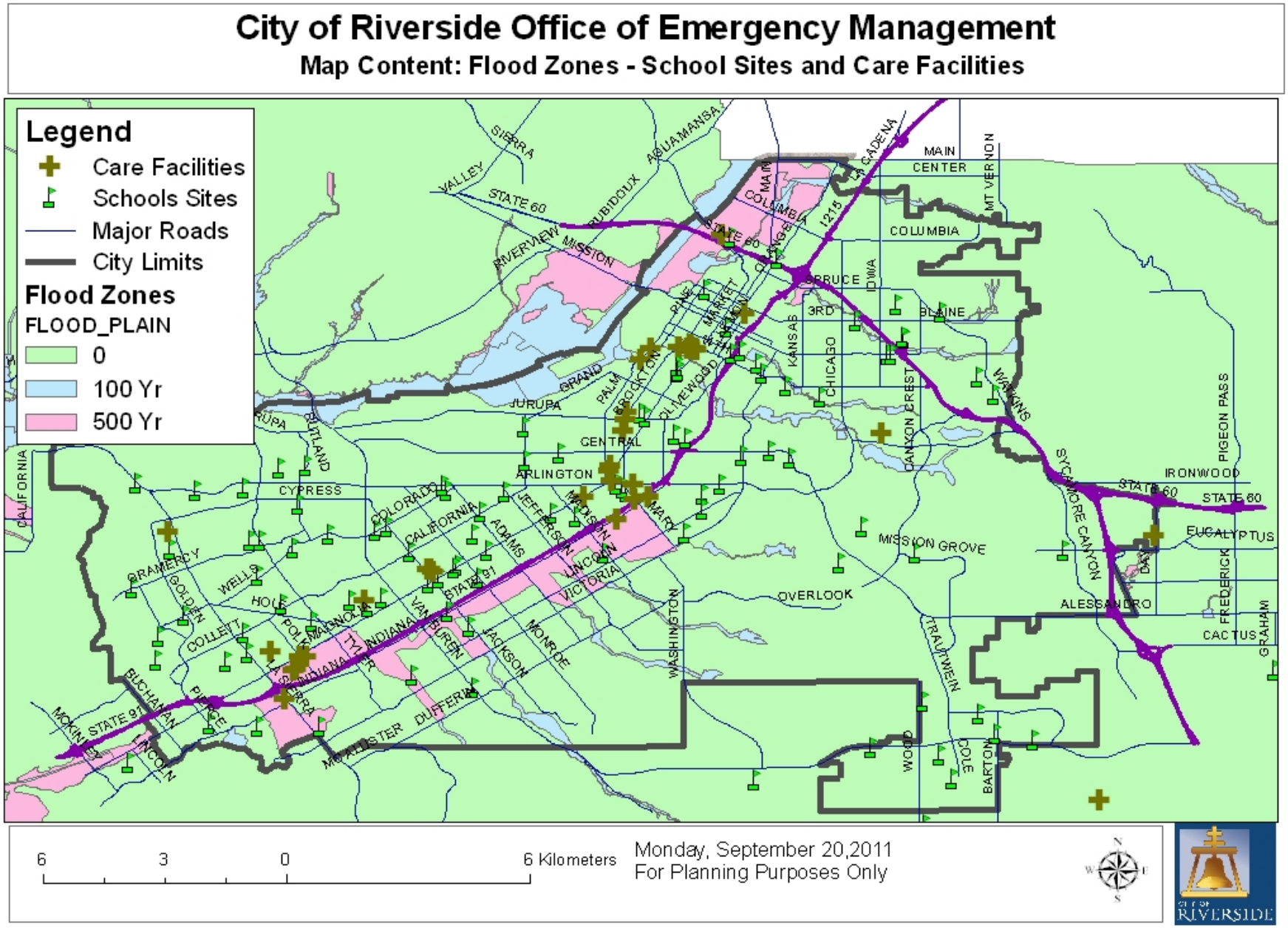


Figure 4.3.11 - Flood Zones – Schools Sites and Care Facilities – City of Riverside



Dam Inundation DUE TO Dam Failure/Overtopping/High Water Release

Severity - 3, Probability - 2, Ranking – 12

Although very unlikely, a catastrophic uncontrolled release of water from a dam would devastate large portions of the City. The event would more likely be a situation of a dam overtopping where water behind the dam sloshes over the top of the dam as a result of an earthquake or heavy rains or a higher than normal release of water from dam in order to prevent overtopping or dam damage. This usually happens in heavy rains. The City has had events related to high water releases. Because most of the City's dams/reservoirs have little or no levee systems downstream, the flow of water would be mainly uncontrolled. There are nine dams in the City of Riverside area. They are Alessandro Dam, Mary Street Dam, Box Springs Dam, Harrison Dam, Lake Matthews Dam (Dike 1 and 2), Mockingbird Canyon Dam, Prenda Dam, and Woodcrest Dam. All of the dams except for Lake Mathews are made of compacted earth. Lake Matthews Dam (Dikes 1 and 2) has concrete faces to prevent wash action. Of these dams, Mockingbird Canyon and Lake Matthews could have a significant impact on the City in the event of a dam event.

These dams have been rated under the National Dam Safety Standard rating for dams under the National Dam Inventory System for dam failure. Dam ratings are as follows:

- ***(L) LOW HAZARD POTENTIAL.*** Dams where a failure or mis-operation results in no probable loss of human life and low economic and/or environmental losses. Losses are principally limited to the owner's property.

- ***(S) SIGNIFICANT HAZARD POTENTIAL***. Dams where a failure or mis-operation results in no probable loss of human life but can cause economic loss, environment damage, disruption of lifeline facilities, or affect other concerns. These dams are often located in predominantly rural or agricultural areas, but could be located in with population and significant infrastructure.

- ***(H) HIGH HAZARD POTENTIAL***. Dams where a failure or mis-operation will probably cause loss of human life.

(See Riverside County OA MJHMP Section 5.4.1 Pages 261-270)

Dams in the City are rated as follows:

DAM NAME	HAZARD CLASSIFICATION
ALESSANDRO	H
MOCKINGBIRD CANYON	H
HARRISON STREET	H
BOX SPRINGS	H
SYCAMORE CANYON	H
WOODCREST	H
MARY STREET	H
PRENDA	H
MATTHEWS	H

List of Dams in the City of Riverside or its Sphere of Influence

#1

Alessandro Dam		Dam #1003-003
Dam Owner:	Riverside County FCWCD	Nat'l ID CA00798
Downstream Dams:	Mary Street	
Stream:	Alessandro Creek	Year completed: 1956
Type:	Earth	Crest Elevation: 1146.0
Storage:	370 acre feet	Crest length: 470
Drainage area:	4.63 sq. miles	Height: 60
T/B 715/J/4	Lat 33-55.8	Lon 117-21.8

Estimated Number of People Threatened: 14,350

<u>Facilities Affected</u>
City Fire Station #5
Arlington Christian School
California Manor
Cunningham Residential Care Home
Cypress Gardens Convalescent Hospital
Foothill Elementary School
Grace Christian School
Hardman Shopping Center
Jefferson Elementary School
Kids of America Elementary School (Private)
Magnolia Shopping Center
Marcy Branch Library
Madison Elementary School
Ramona High School
Riverside Medical Clinic
Riverside Plaza Shopping Center
St. Francis de Sales Elementary School (Private)

#2

Box Springs		Dam #1003-007
Dam Owner:	Riverside County FCWCD	Nat'l ID CA00802
Stream:	Box Springs Creek	Year completed: 1960
Type:	Earth	Crest Elevation: 1139.0
Storage:	405 acre feet	Crest length: 550
Drainage area:	4.00 sq. miles	Height: 49
T/B 716/E/1	Lat 33-57.4	Lon 117-19.5

Estimated Number of People Threatened: 2,000

<u>Facilities Affected</u>
Riverside Community College
Riverside Faith Temple Church School (Private)

#3

Harrison St Dam		Dam # 1003-002
Dam Owner:	Riverside County FCWCD	Nat'l ID CA00797
Stream:	Harrison Creek	Year completed: 1954
Type:	Earth	Crest Elevation: 1123.5
Storage:	208 acre feet	Crest length: 760
Drainage area:	2.03 sq. miles	Height: 50
T/B 745/B/4	Lat 33-52.9	Lon 117-25.8

#4

Mary Street Dam		Dam # 1003-011
Dam Owner:	Riverside County FCWCD	Nat'l ID CA01211
Stream:	Alessandro Wash	Year completed: 1981
Type:	Earth	Crest Elevation: 1009.0
Storage:	320 acre feet	Crest length: 1035
Drainage area:	6.70 sq. miles	Height: 40
T/B 13/C/6	Lat 33-56.0	Lon 117-22.1

#5

Lake Matthews		Dam # 35-000
Dam Owner:	Metropolitan Water Dist.	Nat'l ID CA00212
Stream:	Trust Cajalco Creek	Year completed: 1918
Type:	Earth	Crest Elevation: 1404.0
Storage:	186000 ac. ft.	Crest length: 6522
Drainage area:	40.00 sq. miles	Height: 264
T/B 774	Lat 33-50.0	Lon 117-27.6

Estimated Number of People Threatened: 80,000

Facilities Affected

Alvord Continuation School
Arizona Intermediate
McAuliffe Elementary School
Orrenema Elementary School

#6

Mockingbird Canyon Dam		Dam # 81-003
Dam Owner:	City of Riverside	Nat'l ID CA00305
Stream:	Mockingbird Cyn	Year completed: 1914
Type:	Hydraulic Fill	Crest Elevation: 1015.0
Storage:	1250 acre feet	Crest length: 1525
Drainage area:	13.13 sq. miles	Height: 74
T/B 745/C/2	Lat 33-53.6	Lon 117-25.1

Estimated Number of People Threatened: 2,600

Facilities Affected

Tyler Mall
Fire Station #8
Arlington Gardens Convalescent Hospital
Children's Village
Five Points Shopping Center
Hawthorne Elementary School
Kaiser Foundation Hospital
La Petite Academy
La Sierra Branch Library
La Sierra High School
La Sierra University Child Development Center
McAuliffe Elementary School
Trinity Christian Day Care Center

#7

Prenda		Dam # 1003-004
Dam Owner	Riverside County FCWC	Nat'l ID CA00799
Stream:	Prenda Creek	Year completed: 1954
Type:	Earth	Crest Elevation: 1242.0
Storage:	192 acre feet	Crest length: 1313
Drainage area:	1.93 sq. miles	Height: 44
T/B 715/J/7	Lat 33-54.6	Lon 117-22.2

Estimated Number of People Threatened 6,000

Facilities Affected
California Highway Patrol Facility
City Corporation Yard
City EOC
Riverside Police Department - Lincoln Facility
Arlanza Elementary School
Copper Lantern Shopping Center
Balcom Guest Homes
Bryant Park State Preschool
California Baptist College
Grace Christian School
Jackson Elementary School
Kids of American Learning
Magnolia Convalescent
Sunrise Gardens
YMCA of Riverside

#8

Sycamore Canyon Dam		Dam # 1003-005
Dam Owner:	Riverside County FCWCD	Nat'l ID CA00800
Stream:	Sycamore Canyon	Year completed: 1956
Type:	Earth	Crest Elevation: 1013.0
Storage:	860 acre feet	Crest length: 620
Drainage area:	10.70 sq. miles	Height: 63
T/B 716/B/1	Lat 33-57.2	Lon 117-20.6

Estimated Number of People Threatened: 21,400

Facilities Affected
Pine Center Shopping Center
Riverside Community College
Riverside Community Hospital
Victoria Country Club

#9

Woodcrest Dam		Dam # 1003-000
Dam Owner:	Riverside County FCWCD	Nat'l ID CA00796
Stream:	Woodcrest Creek	Year completed: 1954
Type:	Earth	Crest Elevation: 1122.
Storage:	420 acre feet	Crest length: 900
Drainage area:	5.32 sq. miles	Height: 44
T/B 745/G/1	Lat 33-54.1	Lon 117-22.7

Estimate Number of People Threatened 10,600

Facilities Affected

California Highway
City Corporation Yard
City EOC
Riverside Police Department - Lincoln Facility
Agape Christian Schools
Arlington
Bryant Park State Preschool
California Baptist College
California Manor
Care West Mission Nursing Home
Chemawa Junior High School
Cypress Gardens Convalescent Hospital
Jackson Elementary School
Kids of America Learning Center
Magnolia Avenue Baptist Children Center
Magnolia Convalescent Hospital
Monroe Elementary School
Riverside Christian Elementary
Riverside Christian High
YMCA of Riverside

Figure 4.3.12 Dam Inundation Zones – City of Riverside

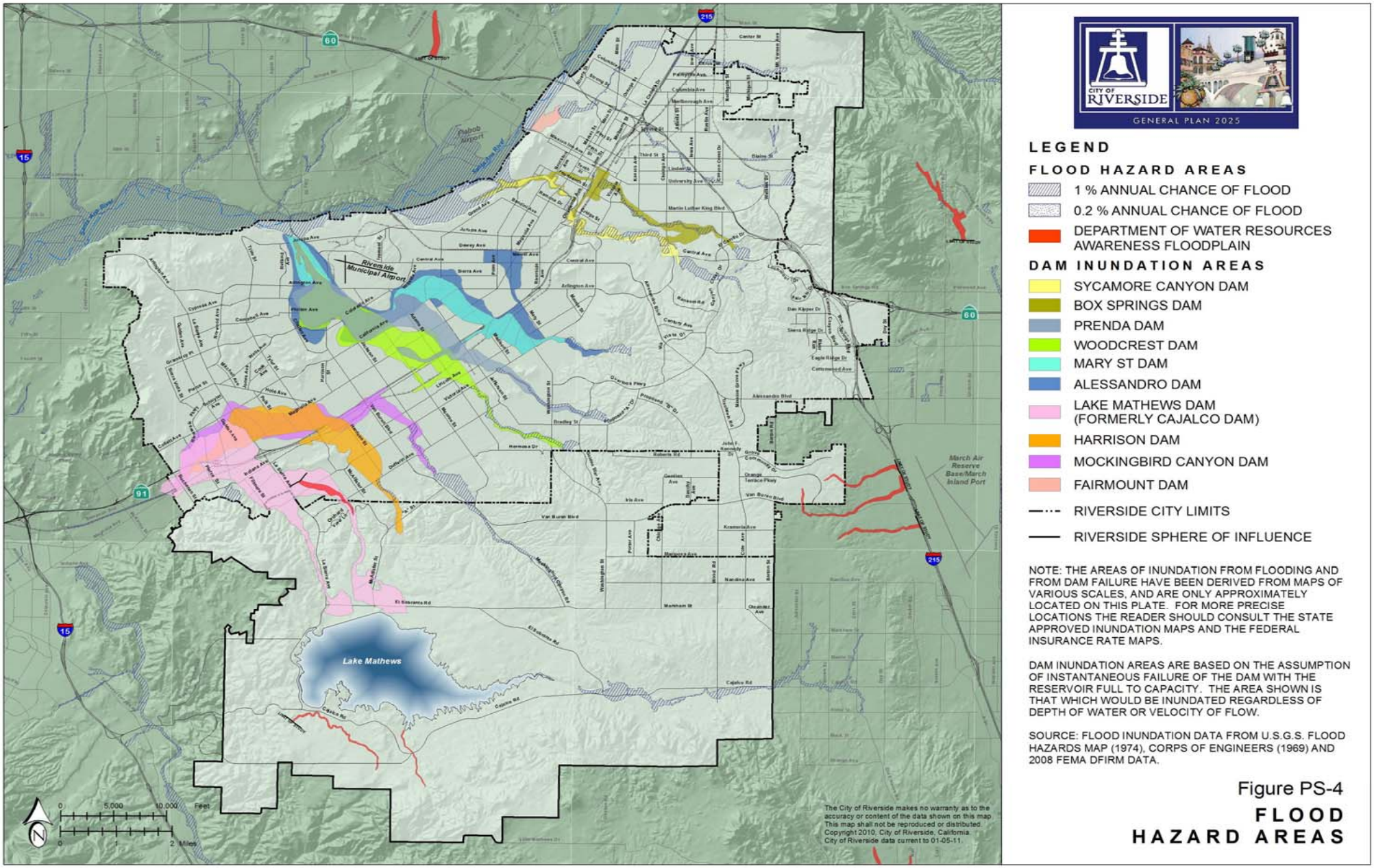


Figure 4.3.13 Dam Inundations Zones – Schools and Care Facilities – City of Riverside

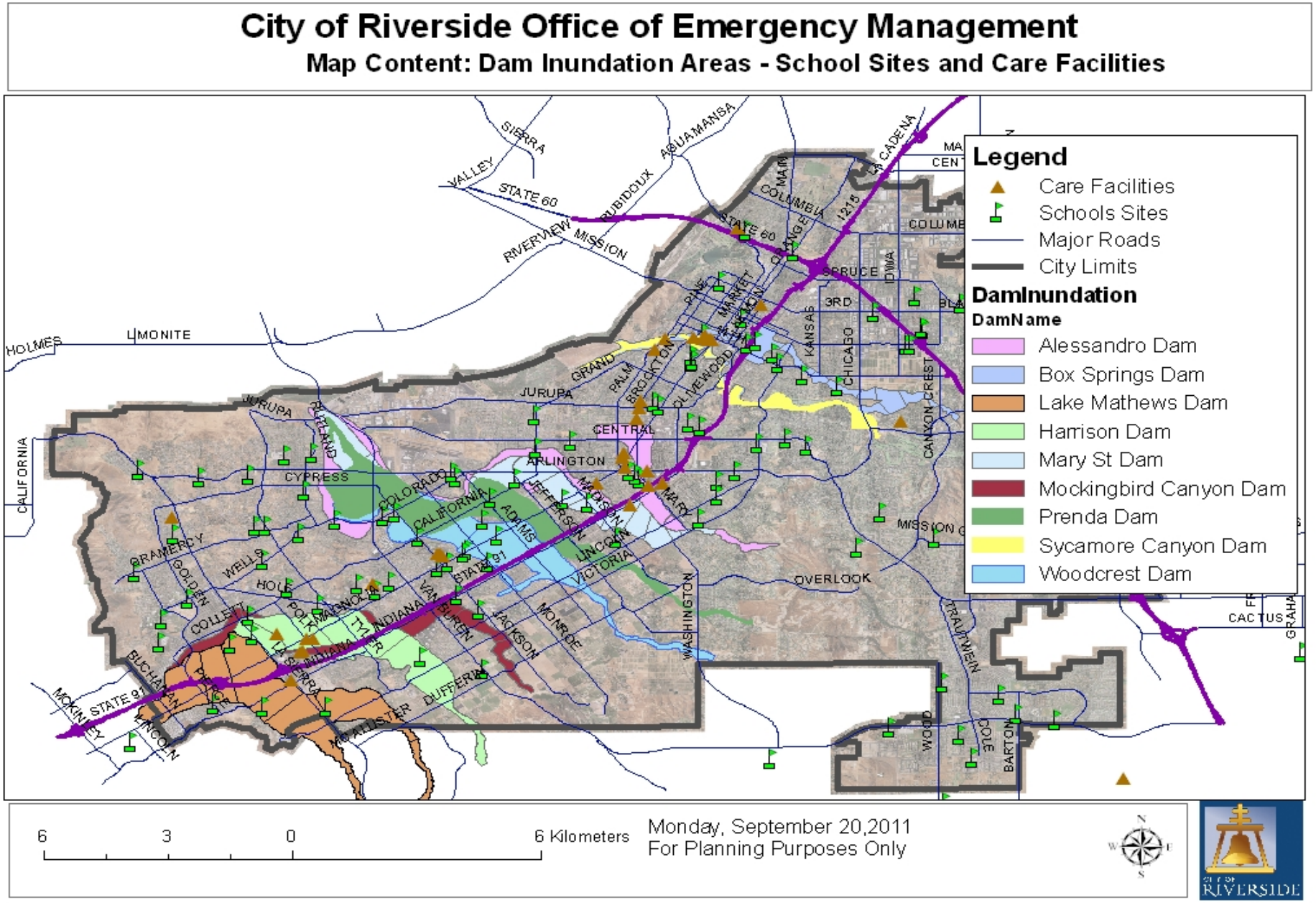
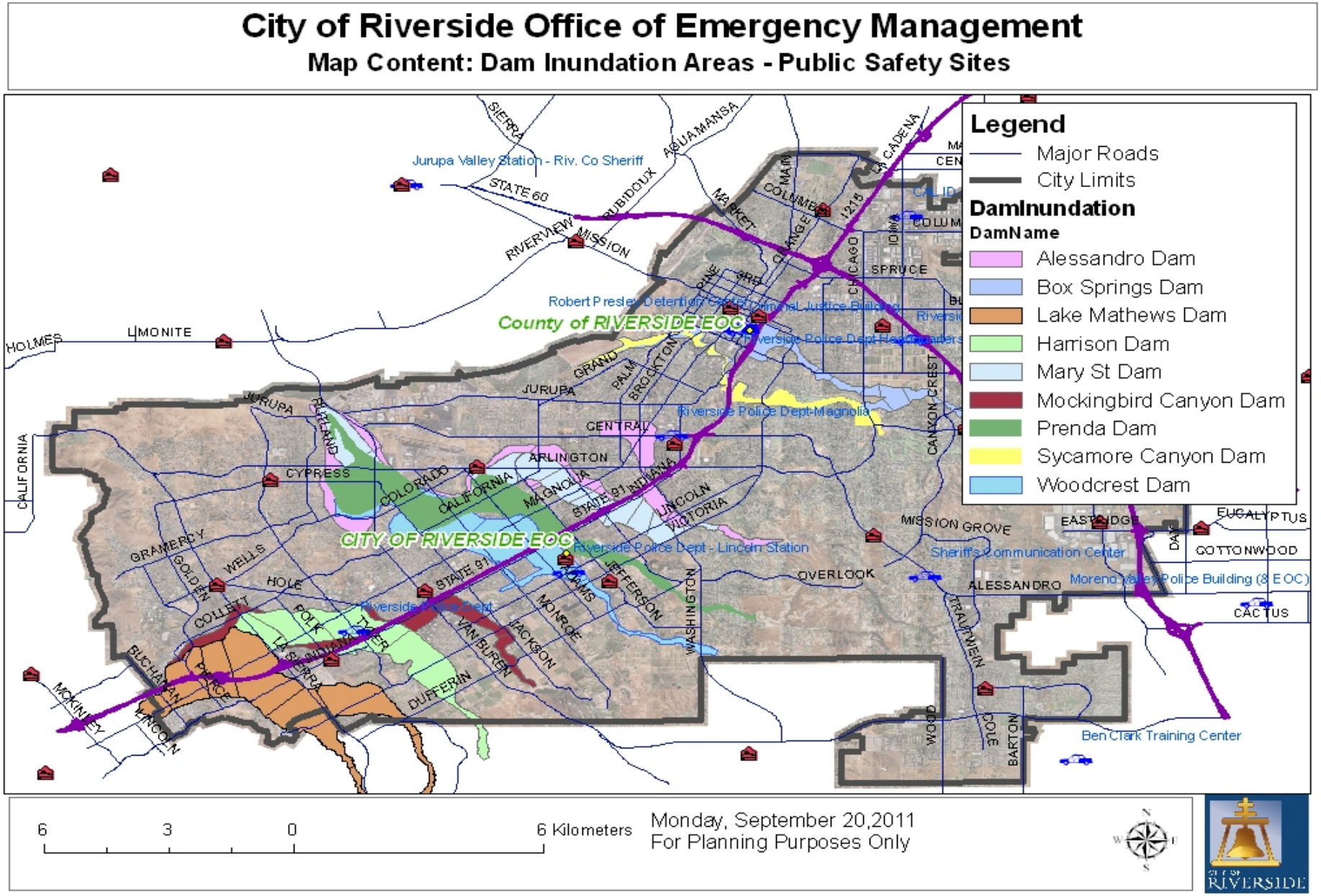


Figure 4.3.14 Dam Inundation – Public Safety Facilities – City of Riverside



TRANSPORTATION

Severity - 2, Probability - 3, Ranking – 4

The City's multi-faceted transportation network contains major freeways, rail lines, aircraft routes, and airports.

Highway Transportation

The road systems include the 60 Freeway on the north, the 91 Freeway through the center of the City, and the 215 Freeway along the east. The 91 Freeway ranks as the busiest in California with the 60 Freeway ranking a close 2nd. The following data was developed in 2006 by CalFire when they performed their Highway Hazardous Materials Study.

Examples of predicted increases between now and 2020

4.1 SR-91 at the Orange County Line-a 95% increase over the current daily traffic volume

4.2 SR-60/I-215 in Box Springs-a 60% increase to about 300,000 vehicles per day-this is about 30% more than SR-91 carries today into Orange County

4.3 I-215 near March Air Reserve Base-a 100% increase

(See figure 4.3.15 for a map of transportation corridors in and adjacent to the City of Riverside).

One of the primary study sites in the County used by CalFire in their Hazardous Materials Study (2006) was the 60 Freeway at the Orange Street Overpass in Riverside (only site in the City). Of the study sites, this site had the highest number of commercial trucks (16 per hour) displaying hazardous materials placards. Of those, 63 percent of the bulk hazardous loads were flammable liquids and 2 percent were toxic and/or corrosive substances. In addition to these placarded trucks, there are numerous smaller delivery trucks that carry hazardous materials under the amount that requires placarding.

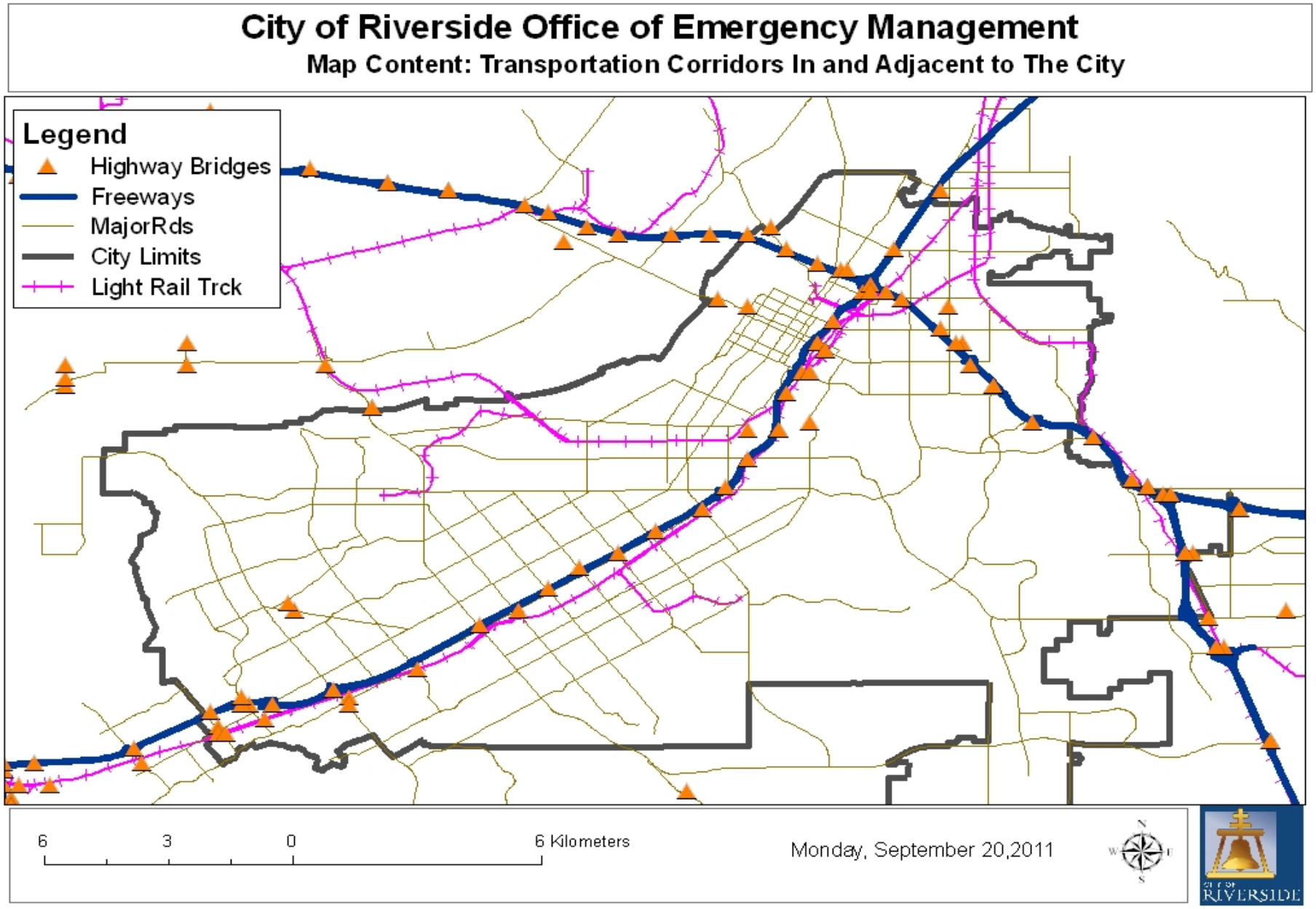
Additional information shows those existing freeway traffic volumes within the City range from 101,000-125,000 vehicles per day on SR 60, 160,000-197,000 vehicles per day on SR-91, and 151,000-173,000 vehicles per day on I-215.

In addition to the freeways, there are several heavily traveled north-south and east-west connector roadways in the City.

Kaiser Hospital, St. Francis de Sales School, and Sherman Indian High School are located in close proximity to the 91 Fwy.

(See Riverside County OA MJHMP Section 5.4.3 Pages 277-281)

Figure 4.3.15 Ground Transportation Corridors – City of Riverside



Rail Service

The primary hazard with rail service has not been any train vs. train or track derailments. There continues to be a large number of train v. vehicle or train v. pedestrian accidents in the City. These accidents have caused both traffic and rail service delays of up to 6 hours, but has not caused any major derailments. The danger with these types of accidents is that they can create train derailments or accidents when the train impacts with a vehicle or when the train engineer attempts to stop the train quickly.

The City of Riverside is served by two main line freight railroads, operating along 17 miles of railroad corridors within the City. The two rail services in the region follow the 91 and 215 Freeways with both passenger and freight service. There are 26 mainline crossings where the railroads intersect with City streets and approximately 128 trains (100 cars per train) pass through the City each day. The Union Pacific (UP) line is the main line from the Pacific Coast to Texas and the Midwest. The Burlington Northern Santa Fe (BNSF) line is the life blood route to the Ports of Los Angeles and Long Beach, and to all parts east. A third system, Metrolink, provides commuters a direct route to Los Angeles or Orange County. Amtrak, a national rail service, passes through the City, en route between Chicago and Los Angeles, using the BNSF route, twice per day. Both of these rail lines are major arteries to the Los Angeles and Long Beach ports. The bulk of the port traffic comes through the Riverside area. Any type of interruption to service would cripple the railroads. In addition to the main line tracks, a variety of railroad spurs and industry tracks are throughout the City. Also, the Riverside Branch line of Union Pacific from downtown Riverside to the Hunter Park area connects with the San Jacinto Branch line near Marlborough, running near the base of Box Springs Mountain.

Arlington High School, Hawthorne Elementary, and the City EOC are located in close proximity to railroad tracks.

Figure 4.3.16 Railway Movement through the City of Riverside

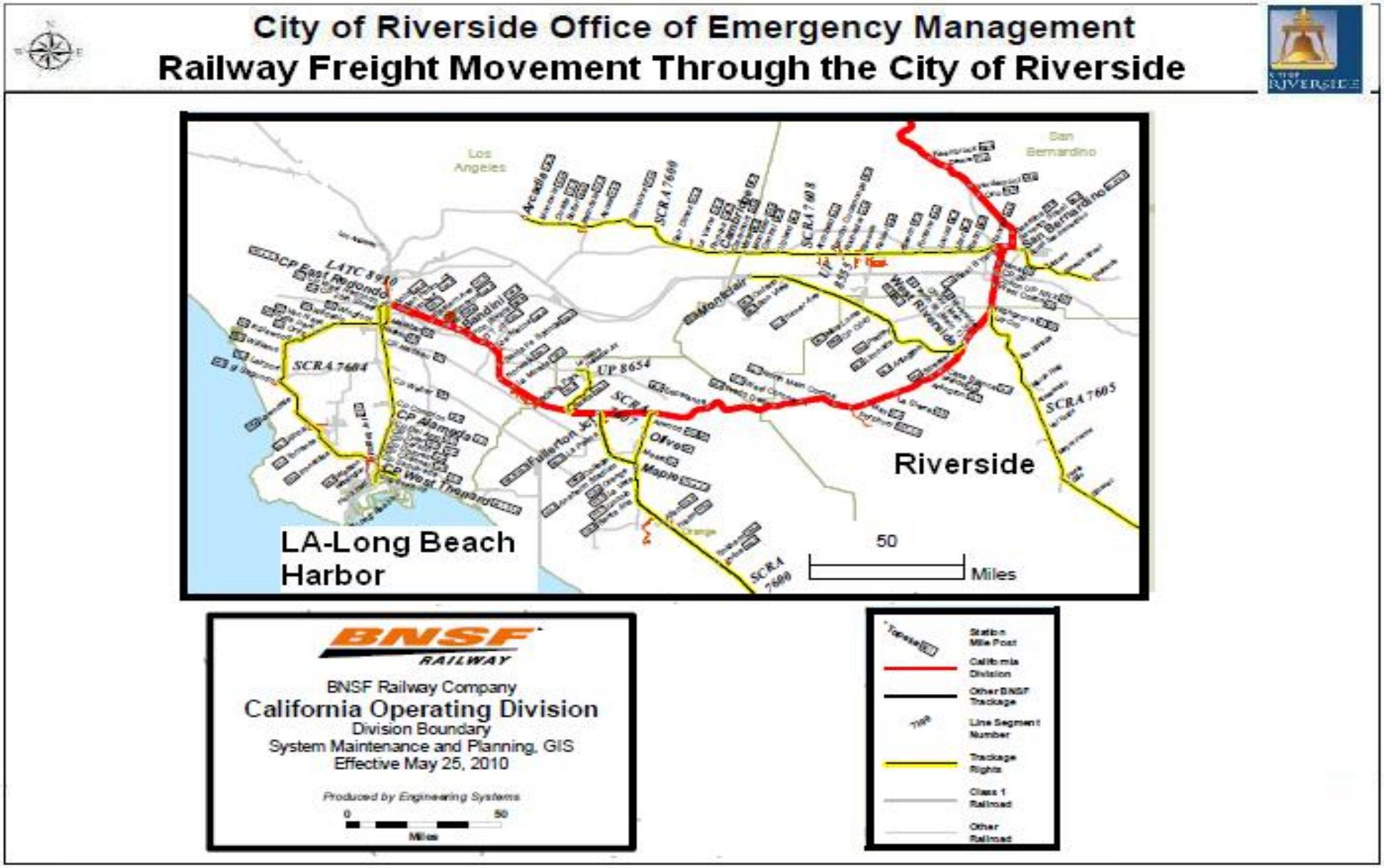


Figure 4.3.17 Railroads - Schools and Care Facilities – City of Riverside

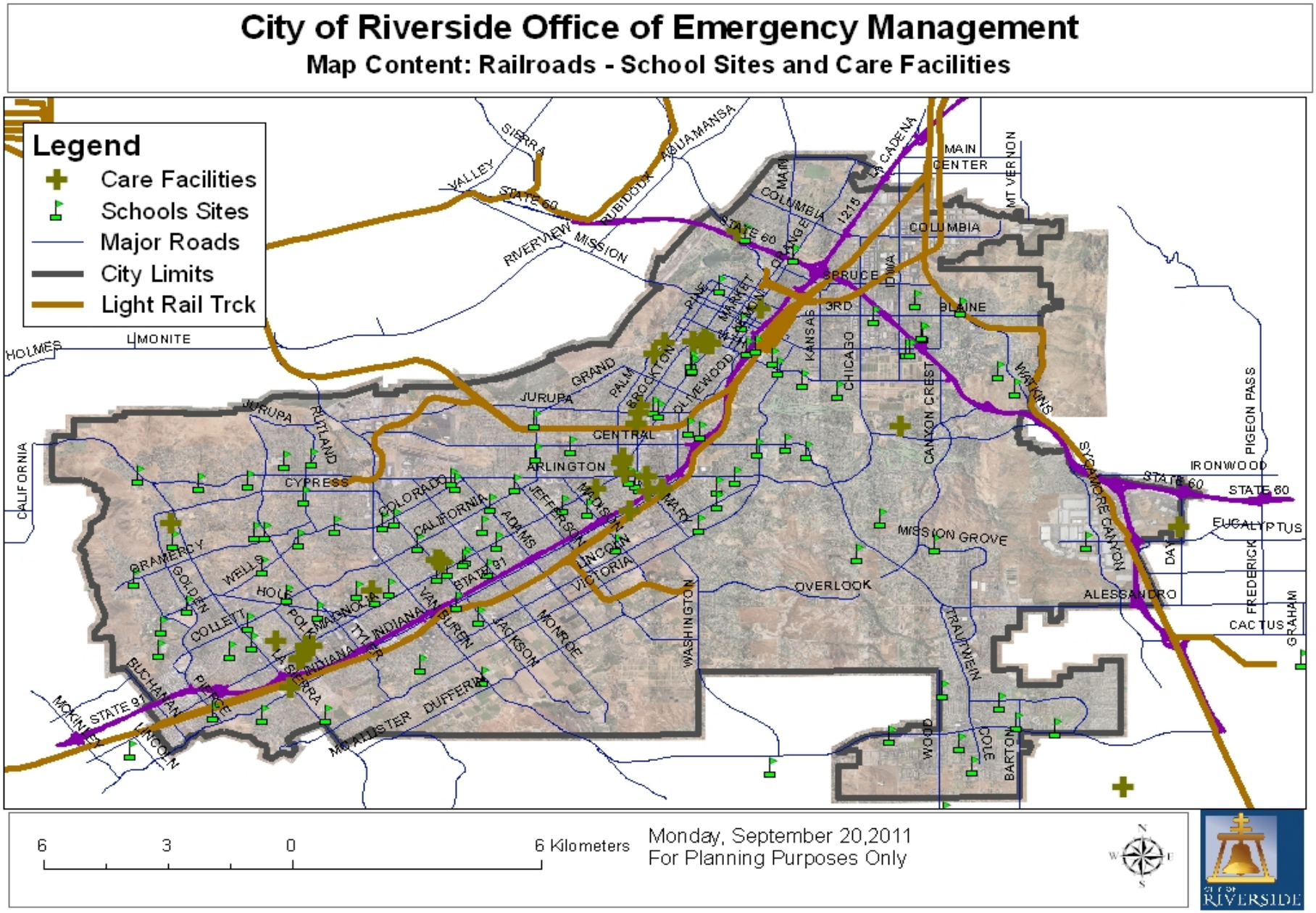
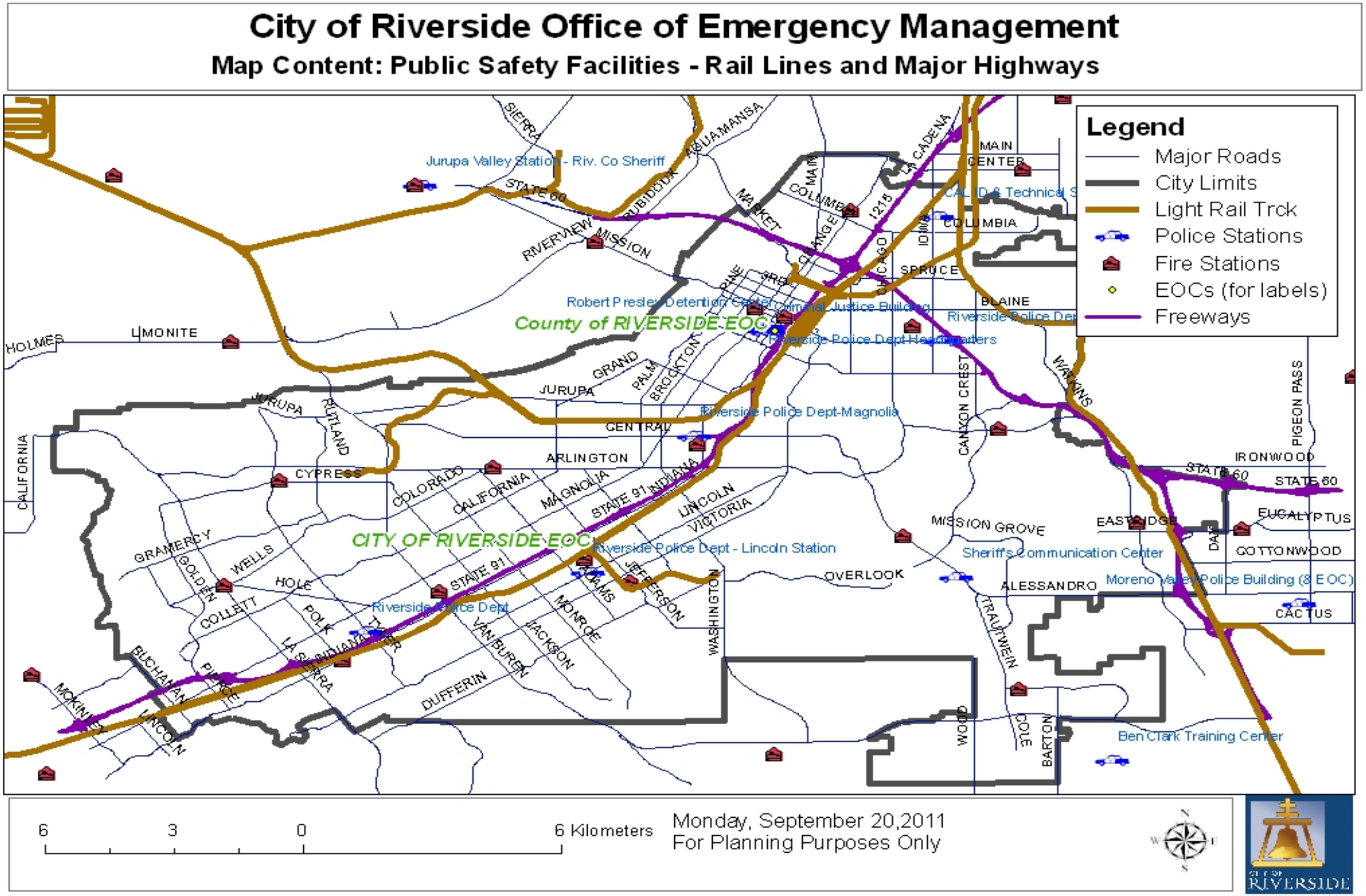


Figure 4.3.18 Public Safety Facilities – Railroads – City of Riverside



Airports and Air Transportation

Air transportation hazards not only include our local airports, but also the fact that many of the flight paths into and out of airports such as Ontario, Long Beach, Orange County, LAX, Riverside Municipal, Flabob, Corona, and March Reserve Base, all cross over the City. Only a small number of aircraft accidents have occurred within the sphere of the City, and those were all small planes crashing into the ground. The potential for a single large commercial or military aircraft crash or some type of mid-air accident are remote, but have the potential to cause significant damage and/or death from passengers on the plane or people on the ground. Local airports of interest are:

Ontario Airport

The nearest commercial airport to the City is Ontario Airport. The airport is a combination of cargo and passenger services. It is ranked as the 46th busiest airport nationally in terms of air travel and cargo.

March Air Reserve Base

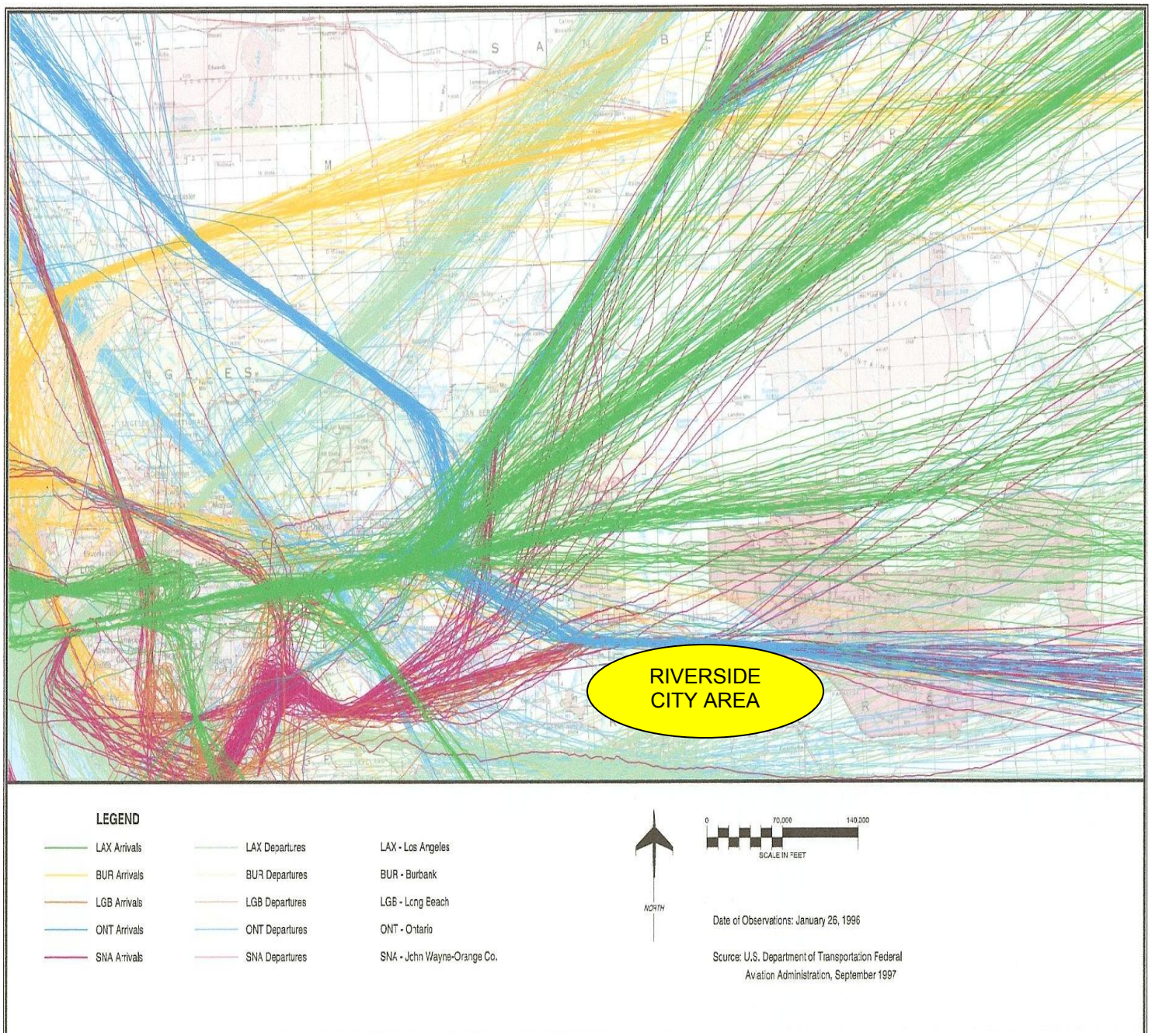
This base is located on the easterly border of the City. Once an active Air Force base, it is now a large military reserve base. Activity at the base has increased rather than decreased since its transition to a reserve base. It currently houses the State Air National Guard, Air Force reserve units, federal law enforcement ground and air operations, and most recently is being developed as a joint use facility for civil air cargo operations. One of the primary military missions of the base is the transportation of military personnel to and from overseas locations, usually by commercial carrier. It also houses KC-135 air refueling tankers, F-16 combat jets, and C-17 cargo planes. The KC-135 flights leaving March on missions are carrying a full load of jet fuel, increasing the hazards should one crash off-base in the City. The base is also identified as a FEMA jump-off and landing location for FEMA resources. Although the base does have its own fire agency, the base relies on mutual aid agreements for additional fire and law enforcement assistance.

There have been no major aircraft incidents in the City created by aircraft from the base, although the potential is high as the normal practice path for aircraft is to take off in a northerly direction, turn west traveling over the City, and then land from a southerly direction.

The Riverside Municipal Airport

This is a general aviation/executive airport with an average of 7000 flights per month. The airport is host to mostly small private and small to medium executive type aircraft, but does have the ability to handle a plane up to the size of a 737 or a military C-17. The military practices yearly landing and taking off from the airport. There have been no major aircraft incidents in the City created by aircraft leaving or approaching the airfield, but the potential is high as the approach and departure path for aircraft is directly over homes and businesses.

Figure 4.3.19 - 1996 U.S. Dept of Transportation – Southern California Approach Paths



San Onofre Nuclear GENERATING Power Plant – SONGS

Severity - 4, Probability - 2, Ranking – 18

The City is located within the 35 and 50 mile Emergency Planning Zones of SONGS. SONGS is a power plant jointly owned by Southern California Edison, San Diego Gas and Electric, and the cities of Riverside and Anaheim.

The Nuclear Regulatory Commission defines two emergency planning zones around nuclear power plants for planning purposes in the case of an accident: The City lies within the Ingestion Pathway Zone.

Emergency Planning Zone (EPZ)

The federal government requires that communities within approximately 10 miles of a nuclear power plant be included in an EPZ Plan that provides for a plume exposure pathway zone with a radius of 10 miles (16 km), concerned primarily with exposure to, and inhalation of, airborne radioactive contamination.

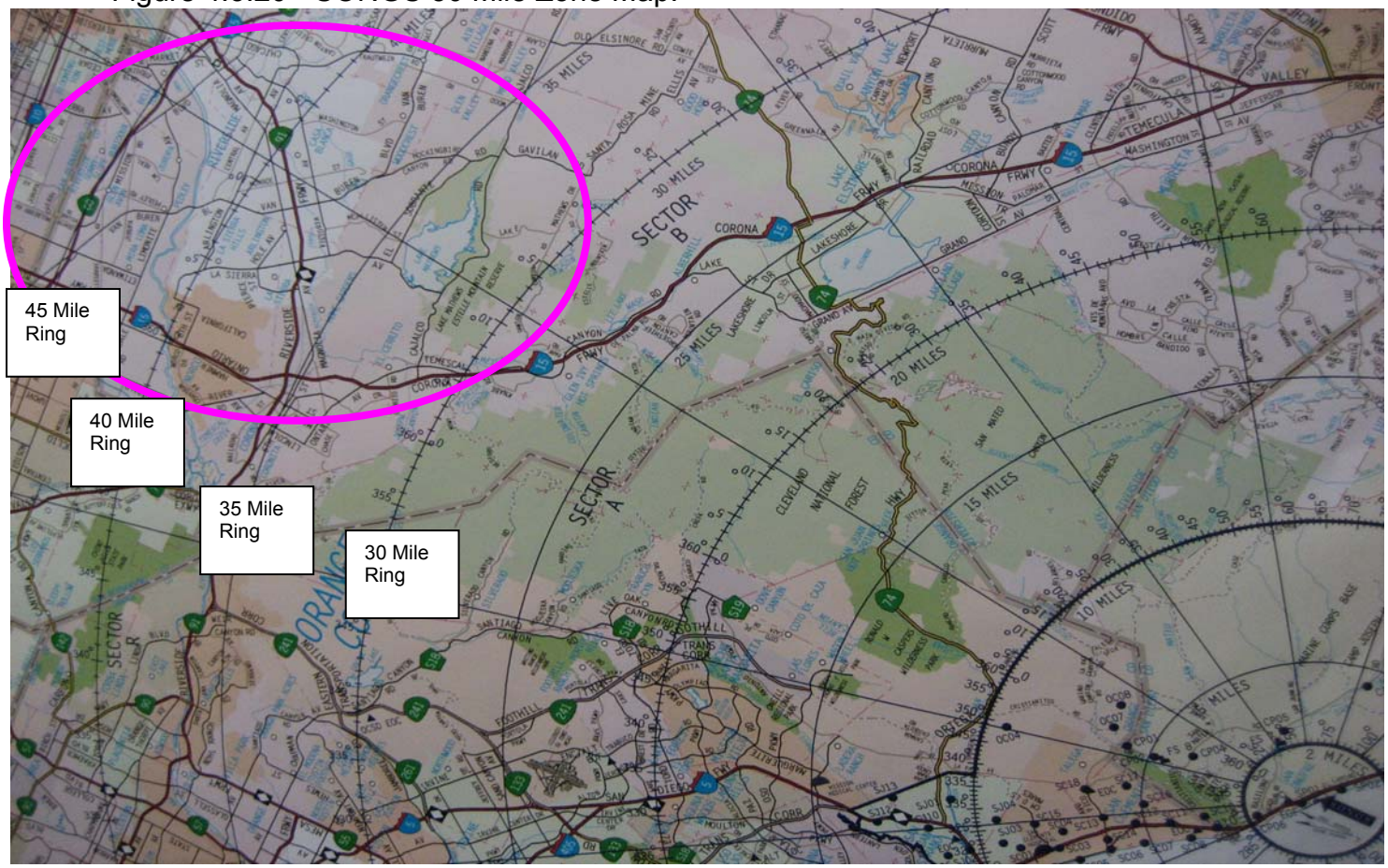
Ingestion Pathway Zone (IPZ)

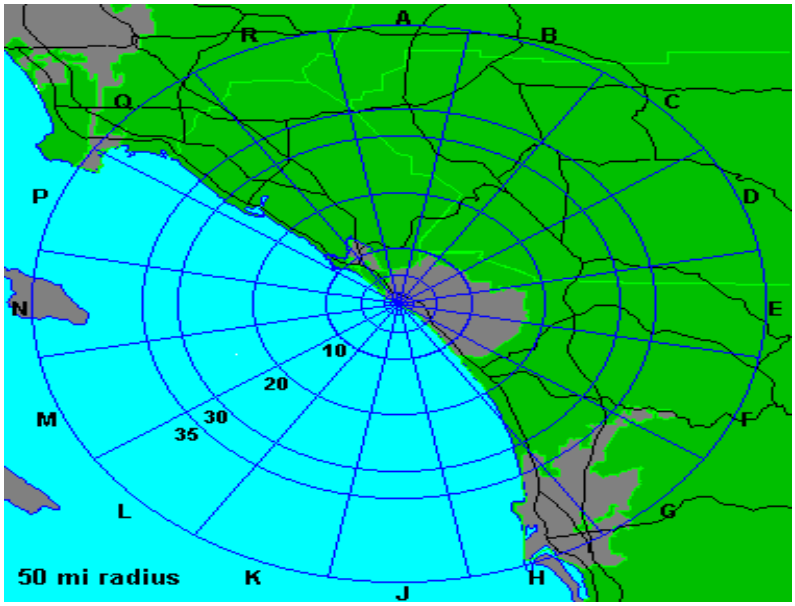
An ingestion pathway zone of about 50 miles (80 km) is concerned primarily with the ingestion of foods and liquids contaminated by radioactivity. The purpose of this zone is to prevent the accidental ingestion of deposited radioactive materials by humans and livestock.

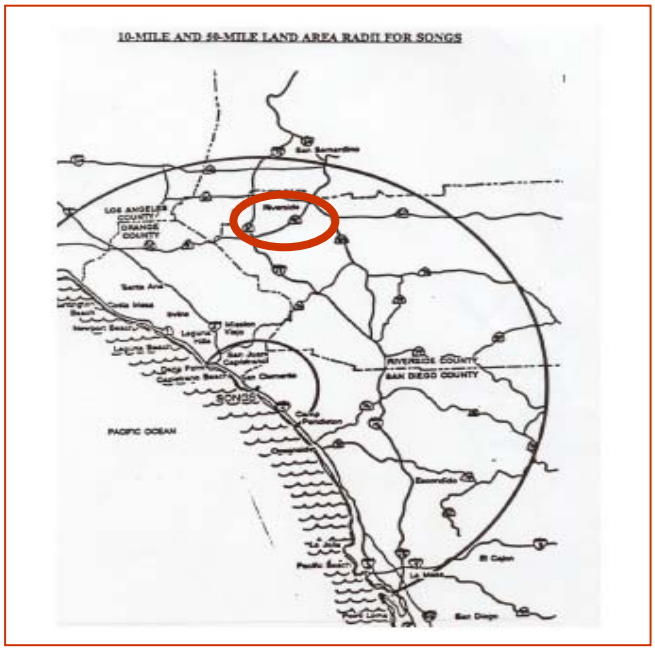
(See Riverside County OA MJHMP Section 5.4.7 Pages 291-294)

[Disclaimer: As of LHMP Annex Adoption SONGS is in progress of being decommissioned. This will be reflected in the 2017 update.]

Figure 4.3.20 - SONGS 50 Mile Zone Map.







POWER OUTAGES – BLACKOUTS/BROWNOUTS

Severity - 3, Probability - 3, Ranking – 5

The City of Riverside operates its own electric utility service and distributes electricity to more than 105,000 residential, commercial, and industrial customers. The City has one primary electricity source into the City's power grid. The loss of this primary electrical source completely isolates the City from any outside power supply. As a backup to this single supply source, the City has two cogeneration facilities capable of supplying enough power to support 40% of the City's power needs. These two facilities are connected to the City's power grid and provide power to the City's identified critical facilities.

In October, 2007, there was a failure of the primary power source, causing a complete loss of power to all customers in the service area. As the cogeneration facilities did come on-line as quickly as anticipated, power was slower to return than anticipated. This outage lasted approximately 6 hours.

The City is a member of Cal-ISO, which controls 75 percent of the California's Power Grid. Cal-ISO controls the flow of power and identifies when there is the need for power providers to reduce their usage. Should there be a notice from Cal-ISO to the City to reduce usage, the City would reduce usage by using the cogeneration plants to supplement power usage, or if necessary, begin the process of interrupting service on a rotating black-out basis. Power will be turned off in portions of the utility's service area for approximately a half hour and then will be restored—at which time the power will be turned off in another portion of the grid. This rotation will continue until the service can be restored to full capacity.

The City's above ground power lines are susceptible to the high winds that pass through the City. The potential for arcing lines causing sparks to drop onto buildings or brush is a hazard that the utility department continues to address. Traffic accidents where a pole is struck by a vehicle is an on-going occurrence in the City, however there have been few major fires caused by this type of event.

In addition to the overhead lines, there is a potential for events relating to underground vaults and power lines. These vaults and lines are susceptible to flooding during heavy rains as well as being broken by contractors digging in the streets and on property where underground utilities are used.

(See Riverside County OA MJHMP Section 5.4.5 Pages 285-288)

CIVIL UNREST/CIVIL PROTEST

Severity - 2, Probability - 2, Ranking – 16

The City has been the focal point of numerous civil protests over the past ten years. Although none of these have been overly violent or caused major property damage, but the potential for large scale events is always present. The majority of events fall under the classification of civil protest (picketers, etc.) rather than civil unrest (mobs, looting, property damage, etc.). With the large number of facilities located in the City that represent Federal, State, and Local governments, along with the various colleges and universities, the City has averaged some type of protest on a monthly basis.

(See Riverside County OA MJHMP Section 5.6.1 Pages 304-306)

DRINKING WATER

Severity - 3, Probability - 2, Ranking – 10

The City owns and operates both the drinking water and sewage systems. The various water pipelines running through the City may not be as volatile as a natural gas, petroleum, or aviation fuel line, but as a hazard, these pipelines can cause physical damage to the City's infrastructure, as well as creating a health risk. Many of the City's pipelines are of significant age and subject to breaking.

Besides the impact of an earthquake on these systems, the second greatest concern for both systems is damage caused by contractors digging in the area where there are pipes. Although there are in place ways for contractors to become aware of the locations of pipelines, many of the incidents have been as a direct result of a contractor's digging or excavating.

Drinking Water Systems

Water Transportation Pipelines

Water transportation pipelines that support Southern California traverse the City. The sizes of these lines range from 20" up to as large as 42". Among the pipelines in the area is the Colorado Aqueduct that runs from Parker Dam to Lake Mathews. Damage to one of these lines can cause contamination to the fresh water supply throughout the region as well as disruption of the supply of regional drinking water.

City Drinking Water

The City of Riverside Public Utilities, Water Department, provides drinking water to approximately 288,000 people mostly within the City. An average of approximately 68 million gallons of water per day are transported and distributed through approximately 967 miles of pipeline and stored in 16 reservoirs. Riverside's water system also includes 10 water treatment plants, 51 domestic wells, 39 booster pump stations and 14 miles of canal. Local drinking water is obtained from water wells located in the City of San Bernardino. The City relies on pipelines running from wells in San Bernardino, across the 10 Fwy, through Grand Terrace and into the filtration and treatment plants. The wells rely on electricity not supplied by the City, but rather Edison. Both the water wells and the local transport water lines are in close proximity to the San Andreas Fault and various rail tracks. These pipelines are subject to damage from earthquakes, flooding, and power outages. Once the water reaches the City, it is either stored in one of the 16 above ground water tanks or closed reservoirs (storage capacity designed to provide one peak day of supply or up to three (3) to five (5) days under emergency conditions) or pushed out to the City through smaller distribution lines. The City's drinking water supply is also the water supply for its fire hydrants. A small portion of the City has water supplied by the Western Municipal Water District.

The Gage Canal/Pipeline

This system of canals and pipelines is the primary source of water for the agricultural industry in the City of Riverside. Should there be a loss of this canal system; there would be a significant impact on the citrus industry in the City.

(See Riverside County OA MJHMP Section 5.5.2 Page 300)

Sewage Systems

Severity - 3, Probability - 3, Ranking – 14

Waste water and rain runoff from Riverside's residential, commercial and industrial contributors is collected through over 1,100 miles of sewer pipeline from 5 locations that flow into the treatment plant. The City's sewer pipes are all underground and are susceptible to being broken by contractors digging in the streets and on property. The City has had several events each year where pipelines have been damaged in this manner with disruption of service being minor. These pipelines can cause physical damage to the City's infrastructure, as well as creating health risks. Many of the City's pipelines are of significant age and subject to breaking.

Waste Water Treatment Plant

The City's waste water treatment plant receives wastewater and storm water runoff. The Riverside Water Quality Control Plant provides treatment of all domestic and industrial wastewater generated within the City and in the Rubidoux, Edgemont, and Jurupa Community Services Districts There is only one primary collection pipe that collects storm water and carries it to the plant and in heavy rains, the City has experienced sewage backup into the City streets. Once the sewage has been treated, the water is used for recharging the aquifer under the Santa Ana River. Primary power for the plant is supplied through the normal City supplied electrical service and is directly connected to one of the City's cogeneration plants should there be a loss of primary power. Many of the plants pipelines and treatment systems are old, which has caused issues in the past. The plant does not use liquid chlorine as part of its processing.

TERRORISM

Severity - 2, Probability - 2, Ranking – 17

To date, the City has yet to experience an act of human/structure directed terrorism, agri-terrorism, or bioterrorism. The City of Riverside is part of the Riverside Urban Area Security Initiative region, one of thirty-five regional DHS terrorism prevention regions. As with most cities in California, Riverside has its vulnerabilities from both international and inner U.S. terrorist groups. Located in the City are numerous locations which are part of the City's Critical Facility List that could be sites of potential terrorism. These sites include the numerous local, state and federal buildings, local dams/reservoirs, research facilities, agricultural sites, public gathering sites. As the County Seat, there are a large number of locations that could be a target for a localized individual terrorist attack.
(See Riverside County OA MJHMP Section 4.4.11 Page 310-313)

TORNADOS

The area around the intersection of the 60 Fwy and the 215 Fwy has been the location in the City where two separate tornados events (rated F1) and a funnel cloud have occurred. In the May 22, 2008 incident, two tornados were observed together in the same area.

(See Riverside County OA MJHMP Section 5.3.8 Page 246-249)

ASBESTOS

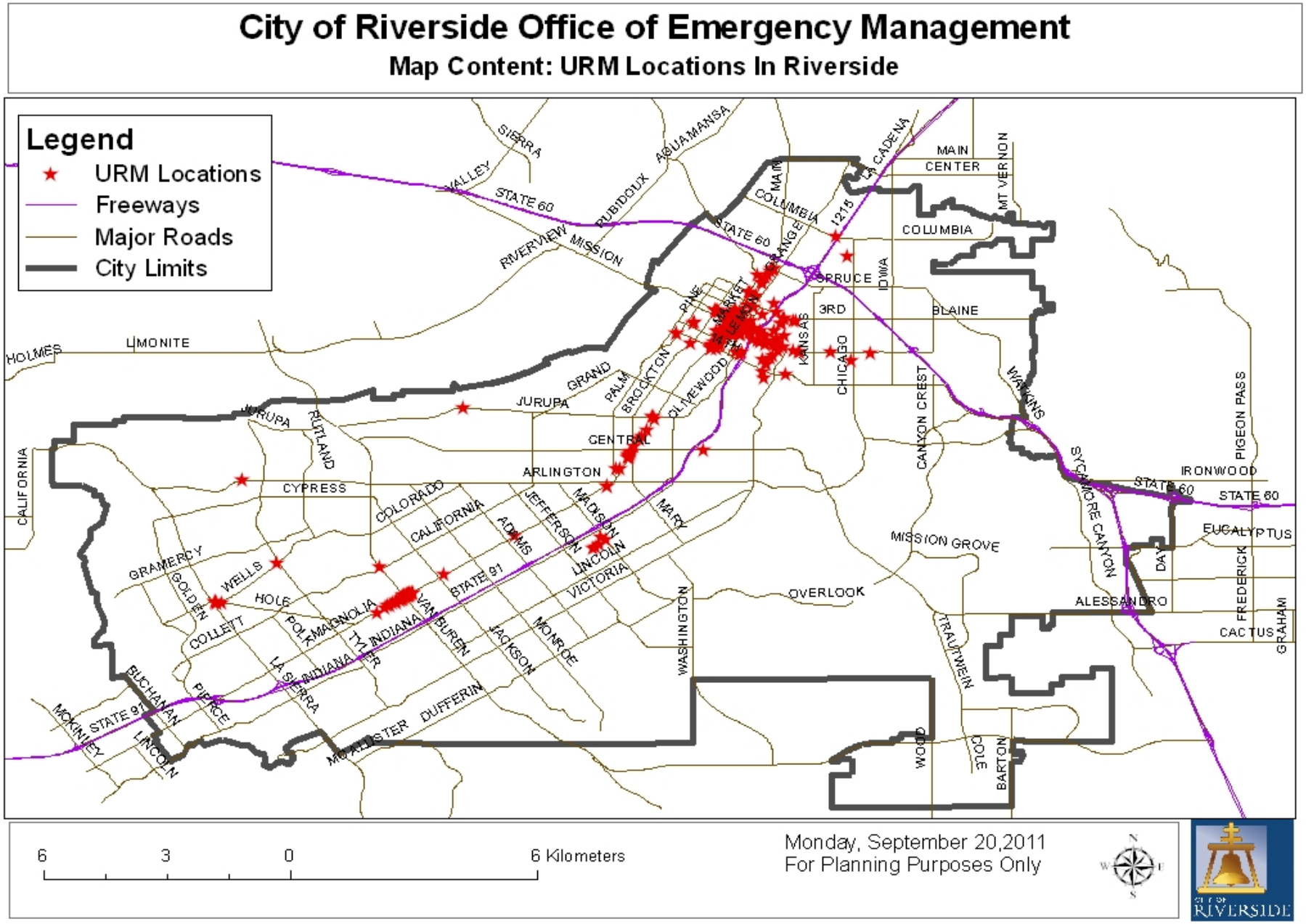
The issue of asbestos as a hazard in the City was brought up during the last planning meeting. The issue about asbestos as a hazard is based on the large number of pre-1970 homes and commercial buildings that are in the City. Many of these buildings are being remodeled and/or upgraded and the issues of asbestos in the paint, flooring, and insulation will remain a long-term problem.

UN-REINFORCED MASONRY BUILDINGS

The planning team has identified approximately 215 un-reinforced older masonry buildings in the City. The majority of the un-reinforced masonry buildings are downtown businesses, which is very much a community asset. These buildings pose a great risk of injury or death to the public. The danger to the public is high in areas of these types of buildings. During a strong or long shaking earthquake, these buildings have a high potential for partially or completely falling apart, raining brick and debris down on the sidewalks and streets. These buildings also have a high potential for trapping individuals in the building. The City, through the Community Redevelopment process, is either purchasing and razing the buildings or retrofitting them when possible.

(See Riverside County OA MJHMP Section 5.3.3 Page 196-218)

Figure 4.3.21 - Map of Un-reinforced Masonry Locations



4.4 CRITICAL CITY FACILITIES AND INFRASTRUCTURE

A critical facility/infrastructure may be defined as a location (structure or improvement) that are critical to the health and welfare of the population and that are especially important following hazard events. Critical facilities include, but are not limited to, shelters, police and fire stations, utility systems, hospitals, schools, dams, etc.

Figure 4.4.1 – City of Riverside Critical Facilities

Critical Facilities Type	Number
Airports	1
Communications Centers	2
Detention Centers	3
Emergency Command Centers	2
Police Stations	4
Fire Stations	14
Primary Care Hospitals	3
Federal Law Enforcement/Court Facilities	9
Maintenance Yards	2
Schools and Day Care Facilities	103
+Public Utilities—Water Facilities	33
+Public Utilities—Electric Facilities	19
Water Treatment Plants	2
Dams/Reservoirs	9
Primary City Buildings	13
Primary County Buildings	30
Courts	4
Community Centers (shelters)	11
Non-Governmental Buildings	8
Totals	272

4.5 CITY OF RIVERSIDE CRITICAL FACILITIES RATINGS

The City has grouped critical facilities into one of three categories that describe their criticality to the City of Riverside's viability:

Category One

Damage to facilities or its occupants will have a significant and immediate impact on the City of Riverside's ability to effectively respond to or recover from a catastrophic event. These are facilities that have been identified by a public safety or public health agency as critical to public safety or health.

Category Two

This includes facilities that, if damaged or destroyed, will have a significant impact within 24 hours upon the City's continuity of operations in business or the public interest. It generally should be an operation that is normally un-interruptible in nature. Alternatively, it could have regional, statewide, or national impact that could severely impact economic, governmental, or industrial operations.

Category Three

This includes facilities that, if damaged or destroyed, can cause significant impact within 72 hours to the continuity of operations in business or other public interest.

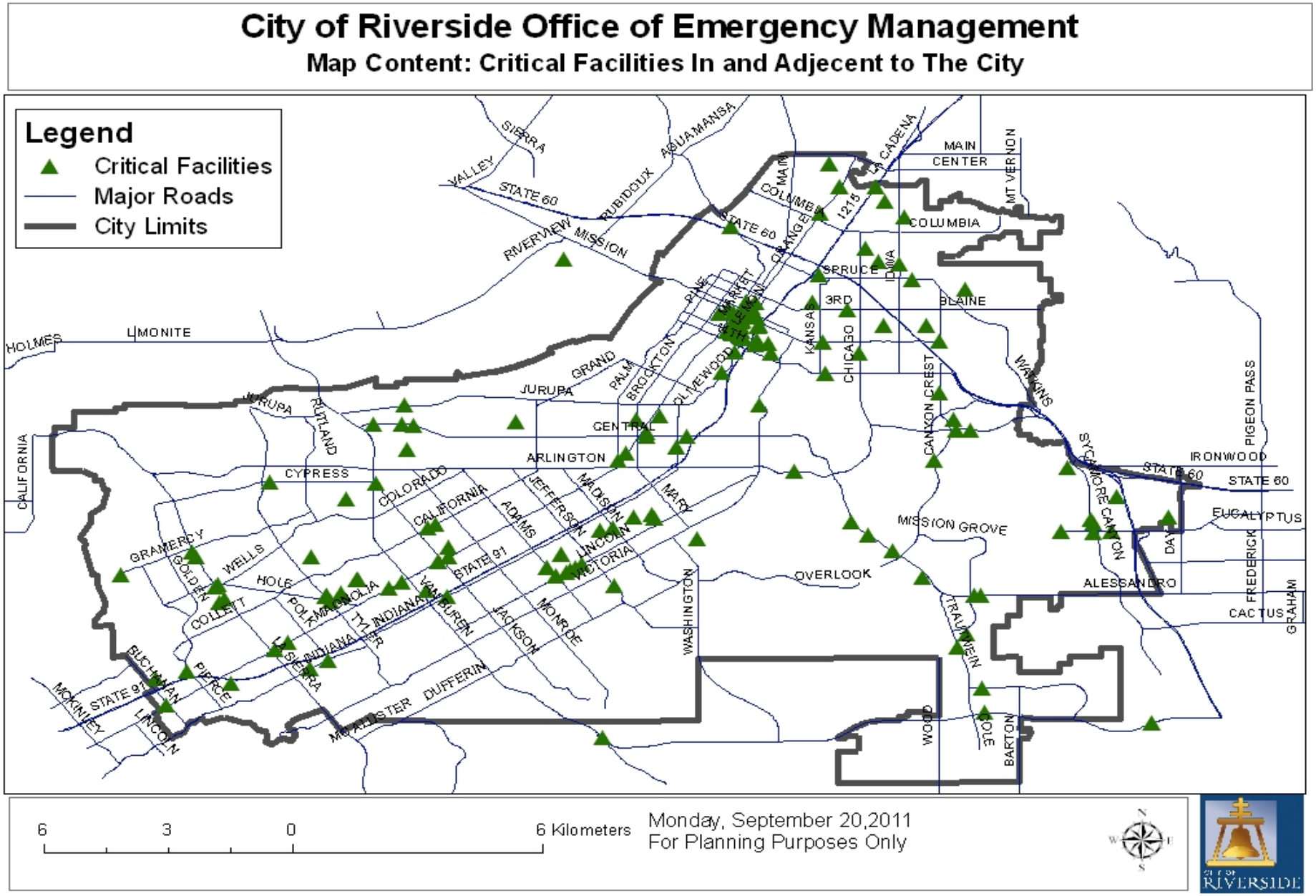
4.6 INVENTORY OF CRITICAL FACILITIES IN THE CITY

This inventory includes Primary City, County, State, and Federal facilities.

Figure 4.6.1 Critical Facilities Map for City of Riverside

Source: City of Riverside

Figure 4.6.1 Map of Critical Facilities – City of Riverside



4.7 CRITICAL FACILITY LISTING

The listed critical facilities have been identified as Law Enforcement Sensitive locations and under DHS guidance, their exact locations (addresses) and other vital information are restricted.

Schools and hospitals are considered critical facilities, but are not listed in this table.

Figure 4.9.1 Asset Table/Replacement Value

Facility	Building Value	Contents Value
Airport Terminal	$1,975,990.00	$216,875.00
Amtrak @@	$0.00	
Amtrak - Metrolink Station @@	$0.00	
Arlington Lib	$439,468.23	$290,330.00
Army Well 1	$0.00	
Army Well 3	$0.00	
AT&T Regional Control Center @@	$0.00	
AT&T Switching Facility @@	$0.00	
AT&T Telephone @@	$0.00	
Bobby Bonds Park Community Center	$2,948,009.00	$632,737.00
Bordwell Park Community Center	$638,289.49	$89,041.00
Bryant Park Arlanza Center	$638,289.49	$89,041.00
California Tower ***	$0.00	
Casa Blanca Branch Lib	$2,739,414.82	$761,733.00
Cesar Chavez Community Center	$3,595,564.00	
CHP ***	$0.00	
City Utility - Water Booster Station	$33,047.00	$103,500.00
City Utility - Water Booster Station	$44,563.00	$130,191.00
City Utility - Water Buchanan #2 Well	$20,806.00	$98,730.00
City Utility - Water Cook Booster Station	$10,200.00	$208,958.00
City Utility - Water Country Club Booster	$70,972.00	$82,565.00
City Utility - Water Crest Booster Station	$32,550.00	$65,098.00
City Utility - Water Cunningham Well	$9,102.00	$66,181.00
City Utility - Water Electric Well	$13,794.00	$89,399.00
City Utility - Water Booster Station	$67,228.00	$278,826.00
City Utility - Water Field Booster Station	$5,100.00	$67,376.00
City Utility - Water Fill Well	$10,200.00	$66,181.00
City Utility - Water Frances Mary Booster Station	$130,045.00	$142,126.00
City Utility - Water Grand Terrace Booster Station	$229,230.00	$400,342.00
City Utility - Water Iowa Booster Station	$126,735.00	$564,165.00
City Utility - Water Lemon Booster Station 1	$56,977.00	$206,136.00
City Utility - Water Lemon Booster Station 2	$147,563.00	$576,100.00
City Utility - Water Mockingbird Booster Station	$137,756.00	$403,596.00
City Utility - Water Mockingbird Canyon Valve Station	$30,288.00	$403,596.00
City Utility - Water Mulberry Booster Station	$137,975.00	$177,929.00
City Utility - Water Olivewood #2 Booster Station	$38,558.00	$225,667.00

City Utility - Water Public Works Department	$163,863.00	$0.00
City Utility - Water Ross Booster Station	$8,160.00	$171,853.00
City Utility - Water Springs Well	$40,878.00	$81,370.00
City Utility - Water Sugarloaf Booster	$80,784.00	$133,446.00
City Utility - Water Tilden Booster Station	$111,308.00	$431,803.00
City Utility - Water University City Booster	$85,078.00	$304,866.00
City Utility - Water Victoria Booster	$114,612.00	$524,025.00
City Utility - Water Well 1	$11,774.00	$70,519.00
City Utility - Water Well 2	$13,434.00	$70,519.00
City Utility - Water Well B	$21,725.00	$98,730.00
City Utility - Water Well Bldg.	$113,511.00	$98,730.00
City Utility - Water Well C	$20,357.00	$87,879.00
CHA Warehouse **		
Corona Citrus Packing House @@	$0.00	
Corp Yard	$3,021,011.00	$1,863,144.00
Dales Senior Center	$258,297.00	$58,579.00
DEA #	$0.00	
DMV ***	$0.00	
DMV ***	$0.00	
DMV ***	$0.00	
Electric New Substation Bldg.	$161,048.00	$7,437,321.00
Electric - Plaza Bldgs. 1 & 2 Substation	$62,154.00	$5,544,023.00
Electric Casa Blanca Substation	$1,902,106.72	
Electric Central Substations	$16,491.00	$2,007,131.00
Electric Freeman Bldgs. 1-4 Substation	$197,819.00	$13,017,056.00
Electric Harvey Lynn Bldgs. 1-3 Substation	$69,207.00	$10,316,651.00
Electric Hunter Bldgs. 1-4 Substation	$91,249.00	$6,470,185.00
Electric Kaiser Substation	$752,000.00	$703,042.00
Electric La Colina Bldgs. 1-3 Substation	$114,827.00	$17,609,162.00
Electric Maintenance Bldg. Substation	$680,743.00	$391,662.00
Electric Mt. View Bldgs. 1-3 Substation	$133,569.00	$9,489,932.00
Electric Orangecrest Substation	$2,255,000.00	$2,108,027.00
Electric Sherman Substation	$133,569.00	
Electric Springs Co - Generation Plant	$25,562,000.00	$23,890,006.00
Electric Springs Substation	$4,511,000.00	$4,216,060.00
Electric Substation 1	$1,001,773.00	$7,934,136.00
Electric Substation 2	$464,850.00	$0.00
Electric University Substation	$133,569.00	$5,094,855.00
Eric M. Solander Center	$0.00	
Federal Public Defender #	$0.00	
Fire Dept Classroom Training	$29,580.00	$0.00
Fire Headquarters	$828,699.00	$89,074.00
Goeske Center	$7,579,374.00	$275,127.00
Joyce Jackson Community Center	$1,232,819.57	$114,810.00
La Sierra Branch Lib	$1,675,503.64	$786,506.00
La Sierra Community Center	$1,232,819.57	$114,810.00
Lewis Community Center	$1,232,819.57	$114,810.00

Lincoln Park Community Center	$118,003.85	$17,063.00
Main Library	$9,454,631.33	$4,933,864.00
Marcy Lib	$361,383.00	
Marcy Library	$517,320.86	
Metro Water District	$0.00	
Metrolink @	$0.00	
Metrolink @	$0.00	
Orange Square Office Facility	$17,808,620.00	$1,900,000.00
Pacific Bell @@	$0.00	
Pacific Bell @@	$0.00	
Pepsi Bottling Co. @@	$0.00	
Pierce St Lift Stn# 15	$0.00	
Police Dept Headquarters	$6,917,625.00	$1,441,226.00
Police Dept Helicopter Hangar	$2,004,467.00	$612,692.00
Police Dept Patrol Building	$4,586,767.00	$961,197.00
Primary EOC	$8,000,000.00	$375,000.00
Public Utilities Main Offices	$18,601,104.00	
Ralph's Distribution Center @@	$0.00	
Reid Park Ruth Lewis Community Center	$1,055,771.00	$107,299.00
RFD# 1	$4,178,000.00	$186,935.00
RFD# 10	$306,816.00	$88,423.00
RFD# 11	$669,722.00	$152,545.00
RFD# 12	$1,396,309.00	$338,498.00
RFD# 13	$669,722.00	$152,545.00
RFD# 14	$669,722.00	$152,545.00
RFD# 2	$824,670.00	$214,928.00
RFD# 3	$1,048,611.00	$301,505.00
RFD# 4	$434,653.00	$124,115.00
RFD# 5	$309,019.00	$86,470.00
RFD# 6	$669,722.00	$152,545.00
RFD# 7	$386,820.00	$110,990.00
RFD# 8	$589,820.00	$162,628.00
RFD# 9	$431,236.00	$120,753.00
Riverside City Hall	$23,948,963.00	$3,785,982.00
Riverside Co. ** Admin Center - Main Bldg.	$0.00	
Riverside Co. ** Admin Center - Tower	$0.00	
Riverside Co. ** Health Service	$0.00	
Riverside Co. ** Jail	$0.00	
Riverside Co. ** Jail & Probation	$0.00	
Riverside Co. ** Public Defender	$0.00	
Riverside Co. ** Public Soc Services	$0.00	
Riverside Co. ** Animal Control	$0.00	
Riverside Co. ** Child Protective Services Admin	$0.00	
Riverside Co. ** Co Clerk	$0.00	
Riverside Co. ** Coroner's Office	$0.00	
Riverside Co. ** Courthouse East Wing	$0.00	
Riverside Co. ** Courthouse West Wing	$0.00	

Riverside Co. ** DA's Office	$0.00	
Riverside Co. ** DPSS	$0.00	
Riverside Co. ** Facilities	$0.00	
Riverside Co. ** Family Law	$0.00	
Riverside Co. ** Flood Control	$0.00	
Riverside Co. ** Hall Of Justice	$0.00	
Riverside Co. ** Health	$0.00	
Riverside Co. ** Juvenile Court	$0.00	
Riverside Co. ** Law Lib	$0.00	
Riverside Co. ** Mental Health	$0.00	
Riverside Co. ** Mental Health	$0.00	
Riverside Co. ** Mental Health	$0.00	
Riverside Co. ** Mental Health	$0.00	
Riverside Co. ** Probation	$0.00	
Riverside Co. ** Public Health	$0.00	
Riverside Co. ** Purchasing	$0.00	
Riverside Co. ** Roads Dept	$0.00	
Riverside Co. ** Transportation Dept	$0.00	
Riverside Co. ** Workforce Training Center	$0.00	
Riverside Co. Public Works **	$0.00	
Riverside Convention Center	$8,704,623.00	
Riverside Public Utilities Building	$4,138,833.60	

**** Riverside County Facilities

***** State Facilities

Federal Facilities

@@ Private Industry

4.8 ESTIMATING POTENTIAL LOSS

Please refer to Riverside County Operational Area MJHMP Section 4.5 page 144 for the property loss value for the City of Riverside.

(See Section 1.8 on Page 18 - Development Trends Questionnaire)

SECTION 5.0 – COMMUNITY RATING SYSTEM

5.1 NATIONAL FLOOD INSURANCE PROGRAM

The City of Riverside has participated in the National Flood Insurance Program since 1982, as enacted by City Ordinance 5039. In August 2008, the City of Riverside began using digital floodplain management maps and a revised flood insurance study, provided by the Federal Emergency Management Agency (FEMA). Under the City's Municipal Code, Chapter 16.18, Flood Hazard Areas and Implementation of National Flood Insurance Program, the City establishes a "Flood Plain Administrator" and identifies methods of reducing losses. When construction and plans are reviewed all projects are checked for compliance with the City's Floodplain Management Program. No projects are issued Grading or Building Permits unless it is in compliance. The City coordinates its floodplain activities with the Riverside County Flood Control District, which is the primary flood management agency in the County.

5.2 NATIONAL FLOOD INSURANCE PROPERTIES

The City does participate in the National Flood Insurance Program. According to the October, 2011, NFIP publication, the City of Riverside is a Class 9 community.

a. ***Describe participation in NFIP, including any changes since previously approved plan.*** The City of Riverside has participated in the National Flood Insurance Program since 1982.

b. ***Date first joined NFIP****.* 1982

c. ***Identify actions related to continued compliance with NFIP****.*
When construction and plans are reviewed all projects are checked for compliance with the City's Floodplain Management Program. No projects are issued Grading or Building Permits unless it is in compliance. The City coordinates its floodplain activities with the Riverside County Flood Control District, which is the primary flood management agency in the County.

d. ***CRS member?*** The City of Riverside is a CRS member.

e. ***CRS class?*** CRS class is 9.

f. ***Describe any data used to regulate flood hazard area other than FEMA maps***. None

g. ***Have there been issues with community participation in the program*****?** No

h. ***What are the general hurdles for effective implementation of the NFIP?*** None

i. ***Summarize actions related to continued compliance with NFIP.***
When construction and plans are reviewed all projects are checked for compliance with the City's Floodplain Management Program. No projects are issued Grading or

Building Permits unless it is in compliance. The City coordinates its floodplain activities with the Riverside County Flood Control District, which is the primary flood management agency in the County.

j. ***NFIP Repetitive Loss Structures.***

The City of Riverside has no NFIP insured structures that have been repetitively damaged by floods. (See Section 4.3 Flooding, page 48. Description of Jurisdictions Type of Properties See Riverside County MJHMP Section 4.5, page 144.)

SECTION 6.0 – CAPABILITIES ASSESSMENT

6.1 REGULATORY MITIGATION CAPABILITIES

Figure 6.1.1 Regulatory Mitigation Capabilities – City of Riverside

Regulatory Tool	Yes/ No	Comments
General plan	Yes	Comprehensive General Plan for the City of Riverside, Updated 2013
Zoning and Subdivision planning	Yes	Ordinance No. 6966, November 27, 2007, Riverside Municipal Code Title 19,
Subdivision ordinance	Yes	Ordinance No. 6968, November 27, 2007. Riverside Municipal Code Title 18
Site plan review requirements	Yes	Ordinance No. 6966, November 27, 2007, Riverside Municipal Code Title 19
Growth management ordinance	Yes	General Plan – Land Use and Urban Design Element – The Built Environment, Growing Smarter, Updated March 2013
Floodplain ordinance	Yes	Ordinance No. 6997, July 23, 2008. Municipal Code Chapter 16.18
Building code	Yes	Ordinance No. 7237, November 27, 2013. Uniform Building, Mechanical and Plumbing, and National Electrical codes.
Fire Code	Yes	Ordinance No. 7245, January 7, 2014. 2013 California Fire Code
Fire department ISO rating	Yes	Rating 2
Capital improvements plan	Yes	Adopted August 27, 2013, Five-year plan; updated annually
Economic development plan	Yes	Revised February 2012
Hazardous Materials Area Plan	Yes	Revised June 13, 2014.
Local emergency operations plan	Yes	Emergency Operations Plan, updated 2011

CITY OF RIVERSIDE GENERAL AND ASSOCIATED PLANS

Long-range goals and objectives of physical form and amenity and provides guidance for developmental regulations, such as zoning and subdivision ordinances. The plan has numerous specific plans addressing geographical areas within the City. Major portions of the plan include:

- Land Use and Urban Design Element
- Circulation and Community Mobility Element
- Housing Element
- Education Element
- Public Safety Element
- Noise Element
- Public Facilities & Infrastructure Element
- Open Space and Conservation Element
- Air Quality Element
- Park and Recreation Element
- Historic Preservation Element

6.2 ADMINISTRATIVE AND TECHNICAL MITIGATION CAPABILITIES

Personnel Resources	Yes/No	Department/Position
Planner/engineer with knowledge of land development/land management practices	Yes	Development Director
Engineer/professional trained in construction practices related to buildings and/or infrastructure	Yes	City Engineer and Building Official
Planner/engineer/scientist with an understanding of natural hazards	No	
Personnel skilled in GIS Data - Land use and links to Assessor's data	Yes	Police, Public Works, Utilities, and Planning Department
Full time building official	Yes	Building Official
Floodplain Administrator	Yes	City Engineer
Emergency manager	Yes	Emergency Services Administrator
Grant writer	Yes	Internal personnel and some use of outside consultants
Warning systems/services	Yes	Reverse 911

6.3 CITY OF RIVERSIDE'S FISCAL MITIGATION CAPABILITIES

Figure 6.2.1 Fiscal Mitigation Capabilities – City of Riverside

Financial Resources	Accessible/Eligible to Use (Yes/No)	Comments
Community Development Block Grants	Yes	
Capital improvements project funding	Yes	
Authority to levy taxes for specific purposes	Yes	With voter approval
Fees for water, sewer, gas, or electric services	Yes	Water, Electric, Sewer, Trash
Impact fees for new development	Yes	
Incur debt through general obligation bonds	Yes	With voter approval
Incur debt through special tax bonds	Yes	With voter approval
Incur debt through private activities	No	

6.4 MITIGATION OUTREACH AND PARTNERSHIPS

The City has an existing water responsible program and annual fire safety programs throughout the year at special community events. The City has an automatic aid agreement for fire with the City of Corona and the Riverside County Fire. The City is also part of the regional and statewide fire and law mutual aid system.

The City's Office of Emergency Management is working with Riverside City School District, UCR, and other higher education sites to assist in identifying risk on and around campus sites.

6.5 OTHER MITIGATION EFFORTS

The City is continuing to implement mitigation efforts. Examples include the following:

The City has purchased new generators and installed connections for the generators at City identified Critical Facilities.

The City has designated cooling centers if needed during a heat emergency.

Seismic Hazards

Goals for achieving and maintaining safety from seismic events, include preventing serious injury, loss of life, serious damage to critical facilities involving large assemblies of people, and loss of continuity in providing services.

The City will continue to inventory all buildings which are unsound under conditions of “moderate” seismic activity; buildings having questionable structural resistance should be considered for either rehabilitation or demolition. As part of the City’s Redevelopment program, many of the un-reinforced masonry buildings have been purchased by the City and torn down. (See Section 9.0, page 107)

Public Safety Hazards

Goals for public safety seek to reduce loss of life or property due to crime, fire, earthquake, or other disasters or hazards, provide adequate medical and emergency services to reduce the effects of natural or manmade disasters, promote citizen awareness and preparedness for emergency/disaster situations or potential for the incidence of crime, and implement adequate interagency disaster planning.

The City will continue to maintain and update its Emergency Operations Plans, along with the additional specific annexes relating to utilities (water and electric), the water treatment, airport, hazmat, etc.

Building and Safety Regulations

The City has adopted several codes, among them the Uniform Building Code, Mechanical and Plumbing Code, and the National Electrical Code.

To assist the community, the City has developed a series of drawings, forms, and handouts that cover many of the basic codes and building standards.

SECTION 7.0 - MITIGATION STRATEGY

7.1 LOCAL JURISDICTION MITIGATION STRATEGIES AND GOALS

Goal 1: Provide Protection for People's Lives from All Hazards

Objective 1.1: Increase the methods of providing timely notification and direction to the public of imminent and potential hazards.

Objective 1.1.1: In addition to the City's Reverse 911 system, increase the use of the City's and OEM's website to provide emergency notification and direction.

Objective 1.1.2: In conjunction with UCR, insure that the University's notification system receives City notifications and passes them on.

Objective 1.2: Protect public health and safety by preparing for, responding to, and recovering from the effects of natural or technological disasters.

Goal 2: Improve Awareness about Hazards and Associated Vulnerabilities That Threaten Our Communities

Objective: 2.1: Increase public awareness about the nature and extent of hazards they are exposed to, where they occur, what is vulnerable, and recommended responses to identified hazards (i.e. both preparedness and response).

Objective 2.1.1: Create/continue an outreach program, provide educational resources, and develop and provide training.

Objective 2.1.2: 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.

Goal 3: Improve the Community's Capability to Mitigate Hazards and Reduce Exposure to Hazard Related Losses

Objective 3.1: Reduce damage to property from an earthquake event.

Objective 3.1.1: Adopt/maintain building codes to meet required earthquake standards.

Objective 3.1.2: 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.

Objective 3.2: 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.

Objective 3.3: Increase awareness of Mobile Home Owners of the need to retrofit homes through the use of foundation strapping.

Objective 3.4: Coordinate efforts between public safety, building officials, communication staff and others to create innovative public awareness programs.

Goal 4: Reduce flood and storm related losses.

Objective 4.1: Identify existing facilities located in the one-hundred-year floodplain, particularly bridges and potential emergency access routes.

Objective 4.2: Provide for better collection of data related to severe weather events.

Objective 4.3: Reduce localized flooding within the City's storm drain systems.

Objective 4.3.1: Implement better drainage to accommodate heavy rains that cause flooding.

Objective 4.4: Encourage flood control techniques along the Santa Ana River that are harmonious with potential recreational uses in the area

Goal 5: Protect the community from hazards related to air, RAIL, and ground transportation.

Objective 5.1: 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.

Objective 5.2: Ensure compatible land uses near March Air Reserve Base/March Inland Port through participation of staff and elected officials in the adoption of the March Joint Land Use Study and the Riverside County Airport Land Use Compatibility Plan.

Objective 5.3: Pursue grade-separated rail crossings as the first level priority for reducing street/rail conflicts

Objective 5.4: Use technology to improve safety at grade crossings that cause the least environmental harm (e.g., automated horn systems).

GOAL 6: Protect the community from hazards related to wildland fires.

Objective 6.1: Mitigate existing fire hazards related to urban development or patterns of urban development as they are identified and as resources permit.

Objective 6.2: 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.

Objective 6.3: Integrate fire safety considerations in the planning process.

Objective 6.4: Continue to implement stringent brush-clearance requirements in areas subject to wildland fire hazards.

Goal 7: Maintain coordination of disaster planning protect the community from hazards related to wildland fires.

Objective 7.1: Coordinate with changing DHS/FEMA needs and requirements

Objective 7.1.1: Maintain SEMS (Standardized Emergency Management System) and NIMS (National Incident Management System) training for City personnel.

Objective 7.1.2: Maintain continued Disaster Mitigation Act (DMA) planning.

Objective 7.2: Emergency Operations and other City-Community plans such as the General Plan, Safety Element, Utilities Plan, etc.

Objective 7.3: Maintain an effective, coordinated and up-to-date community-wide emergency response plan.

Objective 7.4: 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.

Objective 7.5: Identify actions to reduce the severity and probability of hazardous occurrences.

Objective 7.6: 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.

7.2 FUTURE MITIGATION ACTIONS AND PRIORITIES

1. Develop a high wind response plan for electric utilities to conform to CPUC's requirements to reduce the threat of fire during high winds.

Issue/Background: The CPUC has mandated that the City's Electric Utility have fire prevention plan for overhead facilities in high fire threat areas during Red Flag Warnings

Other Alternatives: State Requirement – Must be implemented.

Responsible Office: Riverside Public Utilities

Priority: High

Cost Estimate: City Personnel Time Only

Potential Funding: City Funding

Benefits: The result of the plan will be to have a Standard Operations Plan that will provide required activities by the Electrical Department to help reduce the potential for wildland fires caused by arcing and/or falling electrical lines during high winds. The plan will provide for the inspection of power lines during high winds.

Schedule: Immediate

2. Electric Substation retrofits

Issue/Background: The three following electric substations provide power to essential critical facilities as well as to residences and commercial businesses. Each facility will need to be reviewed by a consultant to provide a complete evaluation of the retrofit needed to be done. The cost estimates were projected by the City's Electric Utility Department.

Substation # 1 - Hunter Substation

Direct population served: 4,799 customers in the Northeast part of Riverside

Essential Facilities served - Nine water wells, two water booster stations, Fire Stations 4 and 6, American Medical Response Ambulance Service Dispatch Center, KDIF Radio, AT & T Wireless Central Office and Riverside Community Hospital (primary paramedic coordination point for the western portion of Riverside County).

Substation #2 - Mt. View Substation

Direct population served: - 12,565 customers in the North West part of Riverside

Essential Facilities served - Federal Aviation Administration, Riverside Municipal Airport, Riverside Police Aviation, Riverside Regional Water Quality Control Plant, Riverside Unified School District Central Kitchens, City Fire Station 5 and the Joyce Jackson Community Center.

Substation # 3 - La Colina Substation

Direct population served: 15,088 customers in the Eastern part of Riverside

Essential Facilities served - 1 water well, 5 water booster stations, City Fire Stations 9 and 14, and 2 sewer lift stations. In addition, the substation provides power to the Metropolitan Water District's Mills Filtration Plant which is the primary water source for much of the western part of Riverside County

Other Alternatives: None

Responsible Office: Riverside Public Utilities

Priority: High

Cost Estimate:

Consultant's Evaluation: $150,000

Retrofit Design Cost: $ 30,000

Estimated Project Cost: $130,000

Potential Funding: Pre-disaster Mitigation Grant

Benefits: The retrofit of these three electric substations would help insure that the identified critical facilities would be provided with viable power after an earthquake.

Schedule: Pending

3. Evaluation of the city's drinking water system

Issue/Background: There has not been a complete assessment of the City's entire water delivery system. This assessment would look at all the main water facilities to evaluate the vulnerability of the facilities to a large size seismic event in the region, rank each facility by criticality, and provide recommended system improvements and cost for each of the facilities. The study would detail the impact to the water system and to the residents served.

Other Alternatives: None.

Responsible Office: Riverside Public Utilities

Priority: High

Cost Estimate: $1,000,000

Potential Funding:

Drinking Water State Revolving Fund

Pre-Disaster Mitigation Grant

City Funding

Benefits: The review of the drinking water delivery will provide the City with a better understanding of the potential risks of a loss of drinking water as a result of a large scale earthquake. The assessment of system's vulnerability will assist the City in ranking the facilities by criticality and provides recommended system improvement by facility with cost estimates.

Schedule: Immediate

4. Riverside Transmission Reliability Project

Issue/Background: Currently, the only source of the City's imported energy for its customers comes through Edison's Vista Substation, located in the City of Grand Terrace. Because the Vista Substation is the only source of imported power for the City, any loss of supply at that substation would greatly affect RPU's ability to serve its customers. The proposed Project would provide a second point of delivery for electricity, reducing dependence on the existing Vista Substation and providing the capacity and reliability needed to support recent and future growth in the area. An additional substation also provides greater flexibility for future expansion of the electrical system, as needed.

Other Alternatives: The City to build its own power generating plant.

Responsible Office: Riverside Public Utilities

Priority: High

Cost Estimate: $15,377,603

Potential Funding:

Joint City and Edison Funding

Benefits: The project will provide a second method of delivering power to the City. This second method will help insure that should there be a loss of the primary source, that electrical power will still be available to the City.

Schedule: Immediate.

5. **Museum Retrofit**

Issue/Background: The Riverside Metropolitan Museum received into its collection the Harada House in 2004. Shortly after in 2005 the Harada House was heavily impacted by a severe storm, DR-1577. The National Park Service has placed the Harada House on its National Historic Landmark Threatened List due to the Houses fragile condition. The Harada House is among the most significant civil rights landmarks in California and helps tell the civil rights story of the Harada family from the 1913 California Alien Land Law and their fight to keep their home to the family's interment in Japanese Internment Camps. The proposed project would develop engineering specifications for seismic stabilization and site drainage.

Other Alternatives: None.

Responsible Office: Riverside Metropolitan Museum

Priority: High

Cost Estimate:

Consultant's Evaluation: $50,000

Retrofit Design Cost: $20,000

Estimated Project Cost: $225,000

Potential Funding:

Pre-Disaster Mitigation Grant

California Cultural & Historical Endowment Planning Grant

Charitable Foundations

Benefits: Preservation of the Harada House will allow the story of this important civil rights history to continue to be accessible to future generations.

Schedule: Immediate

6. **Increase Flood Awareness**

Issue/Background: The City of Riverside has experienced four Major Disaster Declarations in the past ten years and had numerous severe storms that have led to flooding. Outreach to residents at community events such as health and safety fairs to increase awareness of the NFIP and educate residents on flood risks is extremely important.

Other Alternatives: None.

Responsible Office: Riverside Fire Department Office of Emergency Management Community Preparedness Coordinator

Priority: High

Cost Estimate: City Personnel Time Only

Potential Funding:

City Funding

Benefits: Increases flood awareness and flooding preparedness among Riverside residents. Encouraging residents to purchase flood insurance can help lessen the impact if flooding does occur.

Schedule: On-going

7. **Increase Wildfire Risk Awareness**

Issue/Background: With hills and a riverbottom that are constantly at risk of wildland fires the City of Riverside is always at risk of Wildland Urban Interface fires. The City currently provides on our website fire hazard risk maps to help inform the public of the risks we face. We also participate in the highly successful Ready! Set! Go! program by passing out the Ready! Set! Go! information at outreach events throughout the city and on our social media sites. With additional funds we could expand the outreach through a multi-platform media campaign through a PSA on TV, billboards near fire hazard zones and targeted mailings to residents informing them of the hazards and providing a Ready! Set! Go! handout providing them with detailed information on how they can mitigate wildland fire hazards on their property as well as be prepared if fire strikes in the Wildland Urban Interface.

Other Alternatives: None.

Responsible Office: Riverside Fire Department

Priority: High

Cost Estimate: $70,000

Potential Funding:

City Funding

Pre-disaster Mitigation Grant

Benefits: Increases residents' awareness of wildland fire risk and how they can mitigate their property to reduce that risk. Residents will also be better prepared if a fire does threaten their home and neighborhood.

Schedule: Immediate

8. **Protection of Wastewater Treatment Infrastructure**

Issue/Background: The City's Regional Wastewater Treatment Plant is within a 110-year flood plain and partially protected by a levee. The City is planning on a two phase project 1) to raise the levee and 2) improve the levee's scour protection to provide 100-year flood protection to the treatment plant.

Other Alternatives: None.

Responsible Office: Riverside Department of Public Works

Priority: High

Cost Estimate: $10 million for both phases

Potential Funding:

City Funding

Pre-disaster Mitigation Grant

Benefits: Protection of the Wastewater treatment plant during flooding events.

Schedule: Phase one complete by November 2018.

9. Retrofit of Critical Rail and Street Infrastructure

Issue/Background: The City is trisected by two major intercontinental rail lines carrying over 130 trains per day. While the City has completed 6 rail/Highway grade separations over the past few years to improve emergency response for the City's Police, Fire and Ambulance service, additional grade separations are needed. High on the priority list is construction of a grade separation along the BNSF Rail line to near the City's Corporation yard/Lincoln Police Station and the City's downtown and residential area to improve emergency response during any event that results in trains blocking the street crossing.

Responsible Office: Riverside Department of Public Works

Priority: High

Cost Estimate: $35 Million

Potential Funding:

State and Federal Grants

Local Transportation Funds

Benefits: Provides for an improved emergency response. Will reduce traffic congestion, reduction in vehicle emissions and mitigates at-grade rail incidents.

Schedule: Within 4 years of securing funding.

10. **Increase Water-Saving Measures Awareness**

Issue/Background: The City of Riverside has taken steps to improve our water supply and increase water conservation through education and a highly successful incentive program. Riverside Public Utility's incentives through its Green Riverside program include rebates to replace lawns with artificial turf, installation of Weather Based Irrigation Controllers, high efficiency toilets and clothes washers and through free low-flow sprinkler nozzles. The Green Riverside program participates in community events and has a strong web and social media presence to provide education and awareness regarding water conservation.

Other Alternatives: None.

Responsible Office: Riverside Public Utilities – Water Conservation Coordinator

Priority: High

Cost Estimate: Based on yearly funding.

Potential Funding:

City Funding

Conservation Surcharge

Benefits: Through these voluntary conservation and incentive programs Riverside Public Utility customers have saved more than 782 million gallons per year. Increased awareness of these programs will increase water savings and improve the water supply for all.

Schedule: On-going.

SECTION 8.0- PLAN IMPLEMENTATION AND MAINTENANCE PROCESS

8.1 MONITORING, EVALUATING AND UPDATING PLAN

The LHMP is a living document that reflects the City's ongoing hazard mitigation activities. The process of monitoring, evaluating, and updating the Plan will be critical to the effectiveness of hazard mitigation. The City's Office of Emergency Management is responsible for maintaining, evaluating, and updating the Plan. The Plan will be reviewed annually and updated every five years as required. The plan will also be reviewed as part of the normal review and update of the City's General Plan and Safety Element. Recommendation for Plan revisions will be based on the following criteria:

- Changes in federal or state laws
- Accomplishment of Actions, Objectives and Goals
- Advances in knowledge or understanding of hazards.
- Additional hazard events, including federally declared disasters.
- Changes in the City's risk to the identified and/or additional hazards
- Performance of mitigation projects during hazard events.

The HMPT will convene annually to review the progress made towards the Plan's goals and objectives. The HMPT will review each goal and objective to determine their relevance to changing situations in the City, as well as changes in state or federal policy and laws to ensure that the Plan is addressing current and expected conditions. The HMPT will also review the risk assessment section of the Plan to determine if this information should be updated or modified. The parties responsible for the various implementation actions will report on the status of their projects and will include which implementation processes worked well, any difficulties encountered, how coordination efforts were proceeding, and which strategies should be revised.

SECTION 9.0 – INCORPORATION INTO EXISTING PLANNING MECHANISMS

The Local Hazard Mitigation Plan and related strategies have been incorporated into the following City of Riverside Plans. During the planning process for new and updated local planning documents the LHMP will be used to ensure consistency with the hazard mitigation goals and strategies across the plans. (See Section 6.5, page 93)

1. CITY OF RIVERSIDE GENERAL PLAN

The City's General Plan provides objectives and policies that guide land use and development decisions as well as help shape the priorities of the city.

Name: Riverside General Plan 2025

Last Update: Amended March 2013

Next Update: Plan, Elements and Implementation Plan are reviewed annually

Major portions of the plan include:

- Land Use and Urban Design Element – Amended March 2013
- Circulation and Community Mobility Element – Amended November 2012
- Housing Element – Amended July 2012
- Arts and Culture Element – Adopted November 2007
- Education Element – Adopted November 2007
- Public Safety Element – Amended November 2012
    - Objective PS-1 - Minimize the potential damage to existing and new structures and loss of life that may result from geologic and seismic hazards
    - Objective PS-6 - Protect Property in Urbanized and Un-urbanized areas from fire hazards
    - Objective PS-2 - Guarding Against Flooding and Dam Inundation
- Noise Element – Adopted November 2007
- Open Space and Conservation Element – Amended November 2012
- Air Quality Element – Adopted November 2007
- Public Facilities & Infrastructure Element – Amended November 2012
- Park and Recreation Element – Amended November 2012
- Historic Preservation Element – Amended November 2012

Adopted: November 2007

2. Building and Safety – Adopted November 27, 2013

Name: Uniform Building, Mechanical and Plumbing and National Electrical Codes

Used to enforce safe structural standards and to reduce damages from earthquakes and other building hazards.

3. Fire Code – Adopted January 7, 2014

   Name: 2013 California Fire Code

The Fire Code seeks to safeguard of life and property from the hazards of fire and explosion arising from the storage, handling and use of hazardous substances, materials and devices and from conditions hazardous to life or property in the use or occupancy of buildings or premises.

4. Riverside Municipal Code 6.15.020 – Adopted January 3, 2006

   The Riverside Municipal Code reduces risk to property from wildland fire through the enforcement of weed abatement inspections and fines.

5. CAPITAL IMPROVEMENT PLAN

The City's Capital Improvement Program (CIP) is a multi-year planning instrument that drives the evaluation and identification of capital infrastructure projects in need of renovation, repair and/or construction.

Name: Capital Improvement Program 2013/14 – 2017/18 Seizing Our Destiny/The Movement for Riverside's Prosperous Future

Last Update: August 27, 2013

Next Update: July 2014

6. Emergency Operations Plan

The Emergency Operations Plan (EOP) provides strategic guidance for response and recovery to a full range of emergencies and disasters. The EOP is both a preparedness and response document.

Name: City of Riverside Emergency Operations Plan, Part I: Base Plan

Adopted: January 18, 2011 by Resolution No. 22151

Last Update: January 18, 2011

Next Update: January 2016

7. Hazardous Materials Area Plan

The Area Plan was developed to be used in conjunction with the EOP and LHMP. It helps prepare and respond to hazardous materials incidents.

Last Updated: June 13, 2014

Next Update: June 13, 2017

8. Other plans and policies outlined in capability assessments (SEE SECTION 6.1, FIGURE 6.1.1, PAGE 90)

9. City Ordinances

SECTION 10.0 – CONTINUED PUBLIC INVOLVEMENT

The City of Riverside is dedicated to involving the public directly in the continual reshaping and updating of the Hazard Mitigation Plan. The HMPT members will be responsible for the annual review and update of the Plan. The five-year update will incorporate at least one public workshop to allow public involvement, input, and feedback about the Plan.

APPENDIX A – PUBLIC NOTICE

APPENDIX A-1 LHMP PLANNING MEETING ROSTER

APPENDIX A-2 COMMUNITY FORUM ANNOUNCEMENT

City of Riverside
Local Hazard Mitigation Planning Meeting
Sept. 12, 2011

Name	City Department/Agency	Email Address / Phone Number
Sherry Colgan Stone	RCCD	Phone: 951-833-6750 EMAIL ADDRESS: SHERRY.STONE@RCCD.EDU
Diane Jenkins	CDD	Phone: 951 826-5625 EMAIL ADDRESS: DiJenkins@riversideca.gov
Steve Braosman	RPD	Phone: (951) 905-2944 EMAIL ADDRESS: sbraad@riversideca.gov
Jason Jolley	RPW	Phone: (951) 351-6187 EMAIL ADDRESS: JJolley@riversideca.gov
Mike Cruz	City of Moreno Valley OEM	Phone: 951.413.3810 EMAIL ADDRESS: mikec@moval.org
LeAnn Coletta	MVOEM	Phone: 951 413 3804 EMAIL ADDRESS: lfranns@moval.org
DAN CHUDY	Community Dev	Phone: x 5915 EMAIL ADDRESS: dchudy@riversideca.gov
WILLIAM T. SCHELLHOUS	RFD PREVENTION	Phone: 951-826-5373 EMAIL ADDRESS: wschellhous@riverside ca.gov
Marvin Tucker	March ARB	Phone: 951-655-3024 EMAIL ADDRESS: Marvin.Tucker@us.af.mil
Todd Jorgenson	RPU	Phone: (951) 351-6268 EMAIL ADDRESS: tjorgenson@riversideca.gov

City of Riverside
Local Hazard Mitigation Planning Meeting
Sept. 12, 2011

Name	City Department/Agency	Email Address / Phone Number
BOB RIVERS	PW / STREETS	Phone: 351-6082 EMAIL ADDRESS: rrivers @ riverside ca. gov
Jim Lowery	P.W. / Streets	Phone: 351-6129 EMAIL ADDRESS: JLowery @ riverside ca. gov
MICHAEL D'AMICO	RIVERSIDE / RCOE	Phone: 951-826-6250 EMAIL ADDRESS: ~~MDAMICO~~ mdamico@rcoe.us
Jennifer McDowell	Fire Train / Ops	Phone: EMAIL ADDRESS: JMcdowell@riverside ca. gov
Melanie Francis	Riverside Transit	Phone: 951 565-5042 EMAIL ADDRESS: MFrancis@ riversidetransit.com
Susan Meadows	RCH	Phone: 951 733-9193 EMAIL ADDRESS: Susan.Meadows@HCA healthcare
Georgi Collins	RCH	Phone: 796-3369 EMAIL ADDRESS: georgi.collins@hca healthcare.com
Tina English	Development	Phone: EMAIL ADDRESS: City Hall
Matthew Bates	RPU	Phone: 951 826-5116 EMAIL ADDRESS: mbates @ riverside ca. gov
MARK RIPLEY	Airport	Phone: 951 351-6113 EMAIL ADDRESS: mripley@riversideca.gov

City of Riverside
Local Hazard Mitigation Planning Meeting
Sept. 12, 2011

Name	City Department/Agency	Email Address / Phone Number
Kirk Lewis	Riverside U.S.D.	Phone: (951) 788-7135 x 80413 EMAIL ADDRESS: KLewis@RUSD.K12.CA.US
Rick Davis	KAISER	Phone: 951 353-5818 EMAIL ADDRESS: RICK.K.DAVIS@KP.ORG
Cesar Aucejo	P.W. - Electric	Phone: (951) 826-5997 EMAIL ADDRESS: caucejo@riversideca.gov
Lonny Young	P.W. - Eng.	Phone: 951-826-5294 EMAIL ADDRESS: LYoungo riversideca.gov
Russell Vernon	University of California Riverside, EHS	Phone: 951 827 5119 EMAIL ADDRESS: russell.vernon@ucr.edu
Paul Walker	UC Riverside	Phone: 951-827-2609 EMAIL ADDRESS: paul.walker@ucr.edu
Gina Perez	Riverside Fire OEM	Phone: 951-320-8112 EMAIL ADDRESS: gperez@Riversideca.gov
		Phone: EMAIL ADDRESS:
		Phone: EMAIL ADDRESS:
		Phone: EMAIL ADDRESS:

APPENDIX A-2 Community Forum Announcement

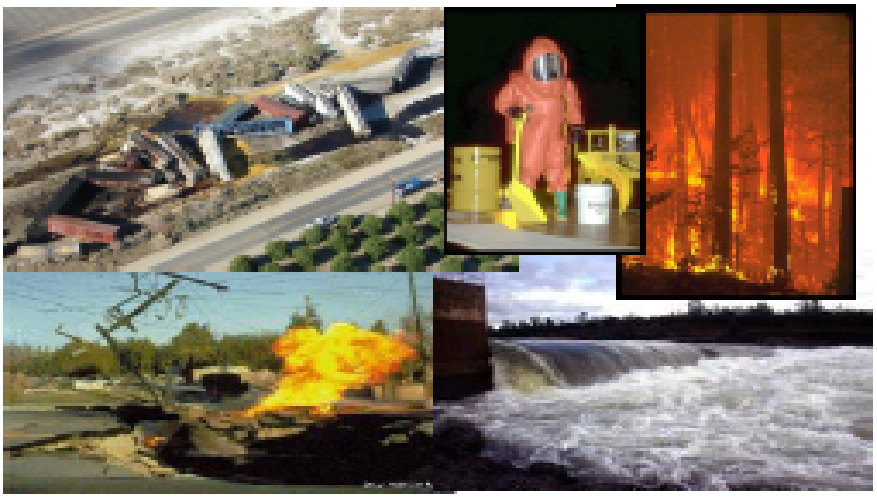
CITY OF RIVERSIDE - LOCAL HAZARD MITIGATION PLAN
COMMUNITY FORUM

The City of Riverside is required to conduct an update to its Local Hazard Mitigation Plan every five years. As part of the update process, the community at large is asked to participate in a presentation and review of information about the known local hazards. As part of the review, members of the community are asked to rank the hazards based on their probability of occurrence and their consequence impact on the City. We are asking CERT Team to assist us by participating in this public forum.

The forum will be held on

Thursday, October 27th
Riverside Fire Department- Training Classroom
3085 Saint Lawrence Street
6:00 pm to 8:00 pm

The forum is not restricted to CERT members only it is open to everyone. Please forward to those who may be interested.



Riverside Fire Department – Office of Emergency Management
(951) 320-8100

APPENDIX B- INVENTORY WORKSHEETS

APPENDIX B-1 HAZARD QUESTIONNAIRE

APPENDIX B-2 MITIGATION STRATEGIES AND GOALS

APPENDIX B-1 HAZARD QUESTIONNAIRE

HAZARD IDENTIFICATION QUESTIONNAIRE AND MITIGATION STRATEGIES

The below charts were reviewed and updated by the Hazard Identification Committee

DOES YOUR ORGANIZATION OWN OR OPERATE A FACILITY	
IN A FLOOD PLAIN	YES
NEAR FLOOD PLAIN	YES
NEAR RAILROAD TRACKS	YES
NEAR A DAM	YES
UPSTREAM FROM A DAM	YES
DOWNSTREAM FROM A DAM	YES
DOWNSTREAM OF A LAKE	YES
DOWNSTREAM FROM A RESERVOIR	YES
NEAR A CONTROLLED FLOOD CONTROL CHANNEL	YES
NEAR UNCONTROLLED FLOOD CONTROL CHANNEL	YES
ON AN EARTHQUAKE FAULT	NO
NEAR AN EARTHQUAKE FAULT	NO
WITHIN THE 50 MILE SAN ONOFRE EVACUATION ZONE	YES
IN A FOREST AREA	NO
NEAR A FOREST AREA	NO
NEAR A MAJOR HIGHWAY	YES
A HAZARDOUS WASTE FACILITY	YES
NEAR A HAZARDOUS WASTE FACILITY	NO
A HAZARDOUS STORAGE FACILITY	YES
NEAR A HAZARDOUS STORAGE FACILITY	YES
NON REINFORCED BUILDINGS	YES
A MAJOR GAS/OIL PIPELINE	NO
NEAR A MAJOR GAS/OIL PIPELINE	YES
DOES YOUR ORGANIZATION HAVE ANY LOCATIONS THAT:	
HAVE BEEN DAMAGED BY EARTHQUAKE AND NOT REPAIRED	NO
HAVE BEEN DAMAGED BY FLOOD	YES
HAVE BEEN DAMAGED BY FLOOD MORE THAN ONCE	YES
HAVE BEEN DAMAGED BY FOREST FIRE	NO
HAVE BEEN DAMAGED BY FOREST FIRE MORE THAN ONCE	NO
HAVE BEEN IMPACTED BY A TRANSPORTATION ACCIDENT	NO
HAVE BEEN IMPACTED BY A PIPELINE EVENT	YES
EMERGENCY OPERATIONS INFORMATION	
DOES YOUR ORGANIZATION HAVE AN EOC	YES
IS YOUR EOC LOCATED IN A FLOOD PLAIN	NO
NEAR FLOOD PLAIN	YES
NEAR RAILROAD TRACKS	YES
NEAR A DAM	NO
UPSTREAM FROM A DAM	NO
DOWNSTREAM FROM A DAM	NO
DOWNSTREAM OF A LAKE	NO

DOWNSTREAM FROM A RESERVOIR	NO
NEAR A CONTROLLED FLOOD CONTROL CHANNEL	NO
NEAR UNCONTROLLED FLOOD CONTROL CHANNEL	NO
ON AN EARTHQUAKE FAULT	NO
NEAR AN EARTHQUAKE FAULT	YES
WITHIN THE 50 MILE SAN ONOFRE EVACUATION ZONE	YES
IN A FOREST AREA	NO
NEAR A FOREST AREA	NO
NEAR A MAJOR HIGHWAY	YES
A HAZARDOUS WASTE FACILITY	NO
NEAR A HAZARDOUS WASTE FACILITY	NO
A HAZARDOUS STORAGE FACILITY	NO
NEAR A HAZARDOUS STORAGE FACILITY	YES
NON REINFORCED BUILDINGS	NO
A MAJOR GAS/OIL PIPELINE	NO
NEAR A MAJOR GAS/OIL PIPELINE	NO
OTHER FACILITY INFORMATION ARE THERE LOCATIONS WITHIN YOUR JURISDICTION THAT:	
COULD BE CONSIDERED A TERRORIST TARGET	YES
COULD BE CONSIDERED A BIO-HAZARD RISK	YES

APPENDIX B-2 MITIGATION STRATEGIES AND GOALS

EARTHQUAKE	
H	Aggressive public education campaign in light of predictions
H	Generate new literature for dissemination to:
H	◊ Government employees
H	◊ Businesses
H	◊ Hotel/motel literature
H	◊ Local radio stations for education
H	◊ Public education via utilities
H	◊ Identify/create television documentary content
H	Improve the Emergency Alert System (EAS)
H	◊ Consider integration with radio notification systems
H	◊ Upgrade alerting and warning systems for hearing impaired
H	◊ Training and maintenance
M	Procure earthquake-warning devices for critical facilities
M	Reinforce emergency response facilities
M	Provide training to hospital staffs
M	Require earthquake gas shutoffs on remodels/new construction
M	Evaluate re-enforcing reservoir concrete bases
L	Evaluate EOCs for seismic stability
L	Install earthquake cutoffs at reservoirs
L	Install earthquake-warning devices at critical facilities
NA	Develop a dam inundation plan for new Diamond Valley Reservoir
	Earthquake retrofitting
H	◊ Bridges/dams/pipelines
H	◊ Government buildings/schools
H	◊ Mobile home parks
H	Develop educational materials on structural reinforcement and home inspections
	Ensure Uniform Building Code compliance
H	◊ Update to current compliance when retrofitting
M	Insurance coverage on public facilities
L	Funding for non-structural abatement (Earthquake kits, etc.)
NA	Pre - identify empty commercial space for seismic re-location
H	Electrical co-generation facilities need retrofitting/reinforcement (Palm Springs, others?)
M	Mapping of liquefaction zones
M	Incorporate County geologist data into planning
H	Backup water supplies for hospitals
M	Evaluate pipeline seismic resiliency
L	Pre-positioning of temporary response structures
H	Fire sprinkler ordinance for all structures

L	Evaluate adequacy of reservoir capacity for sprinkler systems
M	Training/standardization for contractors performing retrofitting
	Website with mitigation/contractor/retrofitting information
M	◊ Links to jurisdictions
M	◊ Alerting information
M	◊ Volunteer information
M	Evaluate depths of aquifers/wells for adequacy during quakes
M	Evaluate hazmat storage regulations near faults
COMMUNICATIONS IN DISASTER ISSUES	
H	Communications Interoperability
H	Harden repeater sites
H	Continue existing interoperability project
H	Strengthen/harden
H	Relocate
H	Redundancy
H	Mobile repeaters
FLOODS	
M	Update development policies for flood plains
M	Public education on locations of flood plains
M	Develop multi-jurisdictional working group on floodplain management
M	Develop greenbelt requirements in new developments
M	Update weather pattern/flood plain maps
H	Conduct countywide study of flood barriers/channels/gates/water dispersal systems
M	Required water flow/runoff plans for new development
H	Perform GIS mapping of flood channels, etc.
L	Install vehicular crossing gates/physical barriers for road closure
H	Maintenance of storm sewers/flood channels
H	Create map of flood channels/diversions/water systems etc.
L	Require digital floor plans on new non-residential construction
H	Upgrade dirt embankments to concrete
L	Conduct countywide needs study on drainage capabilities
L	Increase number of pumping stations
H	Increase sandbag distribution capacities
	Develop pre-planned response plan for floods
M	◊ Evacuation documentation
M	◊ Re-examine historical flooding data for potential street re-design
H	Training for city/county PIOs about flood issues
	Warning systems - ensure accurate information provided
M	◊ Publicize flood plain information (website?)
L	◊ Install warning/water level signage

M	◊ Enhanced public information
H	◊ Road closure compliance
H	◊ Shelter locations
H	◊ Pre-event communications
	Look at County requirements for neighborhood access
M	◊ Secondary means of ingress/egress
M	Vegetation restoration programs
M	Ensure critical facilities are hardened/backed up
H	Hardening water towers
H	Terrorism Surveillance - cameras at reservoirs/dams
M	Riverbed maintenance
H	Evaluate existing lift stations for adequacy
M	Acquisition of property for on-site retention
M	Evaluate regulations on roof drainage mechanisms
M	Erosion-resistant plants
M	Traffic light protection
M	Upkeep of diversionary devices
M	Install more turn-off valves on pipelines
H	Backup generation facilities
H	Identify swift water rescue capabilities across County
WILDFIRES	
H	Aggressive weed abatement program
H	◊ Networking of agencies for weed abatement
NA	Develop strategic plan for forest management
H	Public education on wildfire defense
H	Encourage citizen surveillance and reporting
H	Identify hydrants with equipment ownership information
H	Enhanced firefighting equipment
H	Fire spotter program/red flag program
H	◊ Expand to other utilities
M	Research on insect/pest mitigation technologies
M	Volunteer home inspection program
	Public education program
H	◊ Weather reporting/alerting
H	◊ Building protection
H	◊ Respiration
H	Pre-identify shelters/recovery centers/other resources
H	Roofing materials/defensive spacing regulations
M	Community task forces for planning and education
M	Fuel/dead tree removal

H	Strategic pre-placement of firefighting equipment
H	Establish FEMA coordination processes based on ICS
H	Brush clearings around repeaters
H	Research new technologies for identifying/tracking fires
H	Procure/deploy backup communications equipment
H	"Red Tag" homes in advance of event
H	Provide fire-resistant gel to homeowners
H	Involve insurance agencies in mitigation programs
M	Clear out abandoned vehicles from oases
H	Code enforcement
M	Codes prohibiting fireworks
M	Fuel modification/removal
M	Evaluate building codes
M	Maintaining catch basins

OTHER HAZARDS	
M	Improve pipeline maintenance
M	Wetlands mosquito mitigation (West Nile Virus)
M	Insect control study
M	Increase County Vector Control capacities
H	General public drought awareness
H	◊ Lawn watering rotation
M	Develop County drought plan
NA	Mitigation of landslide-prone areas
NA	Develop winter storm sheltering plan
L	Ease permitting process for building transmission lines
L	Evaluate restrictions on dust/dirt/generating activities during wind seasons
NA	Rotational crop planning/soil stabilization
NA	Enhance agricultural checkpoint enforcement
M	Agriculture - funding of detection programs
M	Communications of pipeline maps (based on need to know)
M	Improved notification plan on runaway trains
H	Improve/maintain blackout notification plan.
H	Support business continuity planning for utility outages
H	Terrorism training/equipment for first responders
H	◊ Terrorism planning/coordination
H	◊ Staffing for terrorism mitigation
H	Create a SONGS regional planning group
H	◊ Include dirty bomb planning
H	Cooling stations - MOUs in place

L	Fire Ant eradication program
L	White Fly infestation abatement/eradication program
H	Develop plan for supplemental water sources
H	Public education on low water landscaping
NA	Salton Sea desalinization
M	Establish agriculture security standards (focus on water supply)
M	ID mutual aid agreements
H	Vulnerability assessment on fiber-optic cable
M	Upgrade valves on California aqueduct
	Public education
M	◊ Bi-lingual signs
H	◊ Blackout information
M	Notification system for rail traffic - container contents
H	Control and release of terrorism intelligence
NA	Develop prison evacuation plan (shelter in place?)

APPENDIX C - MAPS

APPENDIX C-1 HAZUS EARTHQUAKE RISK ASSESSMENT

APPENDIX C-2 HAZUS PROJECTION DATA

APPENDIX C -3.1-3.12 HAZUS MAPS

APPENDIX C- 1 HAZUS EARTHQUAKE RISK ASSESSMENT

The following table and maps summarize citywide earthquake loss estimates, critical facility damage, and functionality as projected by the City's Office of Emergency Management using FEMA's HAZUS-MH MR-4 software. This includes the improved regional building and essential facility inventory databases developed under FEMA funding for the Riverside County Essential Facilities Risk Assessment Project as well as additional building data developed by the City's Office of Emergency Management with the assistance of other City departments.

The geographical size of the HAZUS City of Riverside Study Region is 123.15 square miles and contains 64 census tracts. The square miles, building information, and population for the study region are greater than the actual size of the City because the software uses Census Tracts for its base data and the City boundaries overlap into Census Tracts beyond the dedicated boundaries of the City. There are over 92 thousand households in the study region with total population of 346,728 people (2000 Census Bureau data).

There are an estimated 93 thousand buildings in the study region with a total building replacement value (excluding contents) of 20,321 (millions of dollars). Approximately 91.00 % of the buildings (and 78.00% of the building value) are associated with residential housing. The replacement value of the transportation and utility lifeline systems is estimated to be 25,657 and 186,820 (millions of dollars) respectively.

The table shows a comparison of the results of three primary scenarios for the study region:

A 7.8 earthquake on the San Andreas Fault with the epicenter at the Salton Sea (location determined by CalEMA for Golden Guardian '08 exercise)

A 6.5 earthquake located along the Elsinore Fault with an epicenter based on prior active earthquakes in the area.

A 6.5 earthquake located along the San Jacinto Fault with an epicenter based on prior active earthquakes in the area.

The attached maps were generated by HAZUS and are based on the 7.8 San Andreas scenario. These maps are for planning purposes only and are not an accurate depiction of an actual event.

APPENDIX C -2 HAZUS PROJECTION DATA

Total Building Exposure Value for the Study Region*(Value in thousands of dollars)*			$ 20,321,080
	M7.8 San Andreas Fault Scenario (including Liquefaction)	M6.5 San Jacinto Fault (including Liquefaction)	M6.5 Elsinore Fault (including Liquefaction)
	The total building-related losses were 606.46 (millions of dollars); 22 % of the estimated losses were related to the business interruption of the region. By far, the largest loss was sustained by the residential occupancies which made up over 38 % of the total loss.	The total building-related losses were 536.58 (millions of dollars); 15 % of the estimated losses were related to the business interruption of the region. By far, the largest loss was sustained by the residential occupancies which made up over 57 % of the total loss.	The total building-related losses were 320.80 (millions of dollars); 14 % of the estimated losses were related to the business interruption of the region. By far, the largest loss was sustained by the residential occupancies which made up over 60 % of the total loss.
Capital Stock Losses*(All values are in thousands of dollars)*			
Cost of Structural Damage	$ 73,766	$ 57,993	$ 33,650
Cost of Non-Structural Damage	$ 283,494	$ 280,597	$ 172,729
Total Building Damage (Str. + Non-Str.)	$ 357260	$ 338,590	$ 206,379
Building Loss Ratio %	1.76%	1.67%	1.02%
Cost of Contents Damage	$ 112,933	$ 112,745	$ 67,591
Inventory Loss	$ 4,919	$ 3,499	$ 2,301
Income Losses*(All values are in thousands of dollars)*			
Relocation Loss	$ 43,210	$ 33,824	$ 18,789
Capital-Related Loss	$ 26,583	$ 12,897	$ 7,081
Rental Income Loss	$ 24,566	$ 17,375	$ 9,280
Wage Losses	$ 36,991	$ 17,651	$ 9,385

Total Direct Economic Loss*(All values are in thousands of dollars)*	$ 606,462	$ 536,580	$ 320,802
Building Damage Count (Total number of buildings in HAZUS Scenario Zone)	93,557	93,557	93,557
No Damage	72,442	72635	77495
Slight	17,242	16392	12918
Moderate	2,850	3886	2789
Extensive	837	554	320
Complete	186	90	35
Building Damage By Occupancy Type (Total number of buildings in HAZUS Scenario Zone)	93,557	93,557	93,557
Agriculture			
No Damage	150	166	181
Slight	46	38	31
Moderate	22	18	13
Extensive	7	4	2
Complete	2	1	0
TOTAL	227	227	227
Commercial			
No Damage	3,483	4,321	4,968
Slight	1411	1030	736
Moderate	879	613	350
Extensive	277	135	57
Complete	66	17	5
TOTAL	6,116	6,116	6,116
Education			
No Damage	113	124	138
Slight	33	26	19
Moderate	14	12	7
Extensive	4	3	1
Complete	1	0	0
TOTAL	165	165	165

Government			
No Damage	46	62	80
Slight	22	18	9
Moderate	17	11	4
Extensive	7	3	1
Complete	2	0	0
TOTAL	94	94	94
Industrial			
No Damage	757	903	1,007
Slight	282	218	176
Moderate	187	142	98
Extensive	59	35	19
Complete	17	4	2
TOTAL	1,302	1,302	1,302
Other Residential – Apts, Mobile Homes, Condos, Student Housing			
No Damage	6,802	8,047	8,457
Slight	2,685	2,069	1,688
Moderate	1,229	891	870
Extensive	421	193	191
Complete	84	21	15
TOTAL	11,221	11,221	11,221
Religion			
No Damage	218	255	293
Slight	76	59	41
Moderate	42	31	17
Extensive	15	8	3
Complete	3	1	0
TOTAL	354	354	354

Single Family			
No Damage	60,871	58,757	62,371
Slight	12,687	12,932	10,219
Moderate	462	2,168	1,429
Extensive	47	176	46
Complete	11	45	13
TOTAL	74,078	74,078	74,078
Expected Utility System and Critical Gov't Facilities With At Least Moderate Damage			
Potable Water	8 of the 25 Facilities	2 of the 25 Facilities	2 of the 25 Facilities
Waste Water	4 of the 171 Facilities	4 of the 171 Facilities	4 of the 171 Facilities
Natural Gas	0 of the 5 facilities	0 of the 5 facilities	0 of the 5 facilities
Oil Systems	0 of the 5 facilities	0 of the 5 facilities	0 of the 5 facilities
Electrical Power	0 of the 33 facilities	0 of the 33 facilities	0 of the 33 facilities
Communication	0 of the 5 facilities	4 of the 5 facilities	4 of the 5 facilities
Hospitals	18 of 36 in the County	5 of 36 in the County	0 of 36 in the County
Schools	99 of the 1926 Buildings	60 of the 1926 Buildings	0 of the 1926 Buildings
Police Stations	0 of the 10 Buildings	1 of the 10 Buildings	0 of the 10 Buildings
Fire Stations	0 of the 19 Buildings	0 of the 19 Buildings	0 of the 19 Buildings
EOC's	1 of the 2 Facilities	0 of the 2 Facilities	0 of the 2 Facilities
Number of Households without Water or Electric Service for the first 24 hours			
Potable Water	14,500	87	0
Electric Power	10,440	10,440	10,440
Expected Utility System Pipeline Damage - Breaks			
Potable Water	103	38	10
Waste Water	81	30	8
Natural Gas	87	32	8
Oil	0	0	0

Debris Generation

HAZUS estimates the amount of debris that will be generated by the earthquake. The model breaks the debris into two general categories: a) Brick/Wood and b) Reinforced Concrete/Steel. This distinction is made because of the different types of material handling equipment required to handle the debris.

	The model estimates that a total of 0.200 million tons of debris will be generated. Of the total amount, Brick/Wood comprises 26.00% of the total, with the remainder being Reinforced Concrete/Steel. If the debris tonnage is converted to an estimated number of truckloads, it will require 7,960 truckloads (@25 tons/truck) to remove the debris generated by the earthquake.	The model estimates that a total of 0.060 million tons of debris will be generated. Of the total amount, Brick/Wood comprises 44.00% of the total, with the remainder being Reinforced Concrete/Steel. If the debris tonnage is converted to an estimated number of truckloads, it will require 2,480 truckloads (@25 tons/truck) to remove the debris generated by the earthquake.	The model estimates that a total of 0.060 million tons of debris will be generated. Of the total amount, Brick/Wood comprises 44.00% of the total, with the remainder being Reinforced Concrete/Steel. If the debris tonnage is converted to an estimated number of truckloads, it will require 2,480 truckloads (@25 tons/truck) to remove the debris generated by the earthquake.

Debris Summary by Type (Amount in thousands of tons)

Brick, Wood and Other	53	44	33
Concrete and Steel	147	72	44
Total	200	116	77
Displaced Households	278	222	102
Persons Requiring Short-term Sheltering	307	225	106

Casualties

Day Casualties

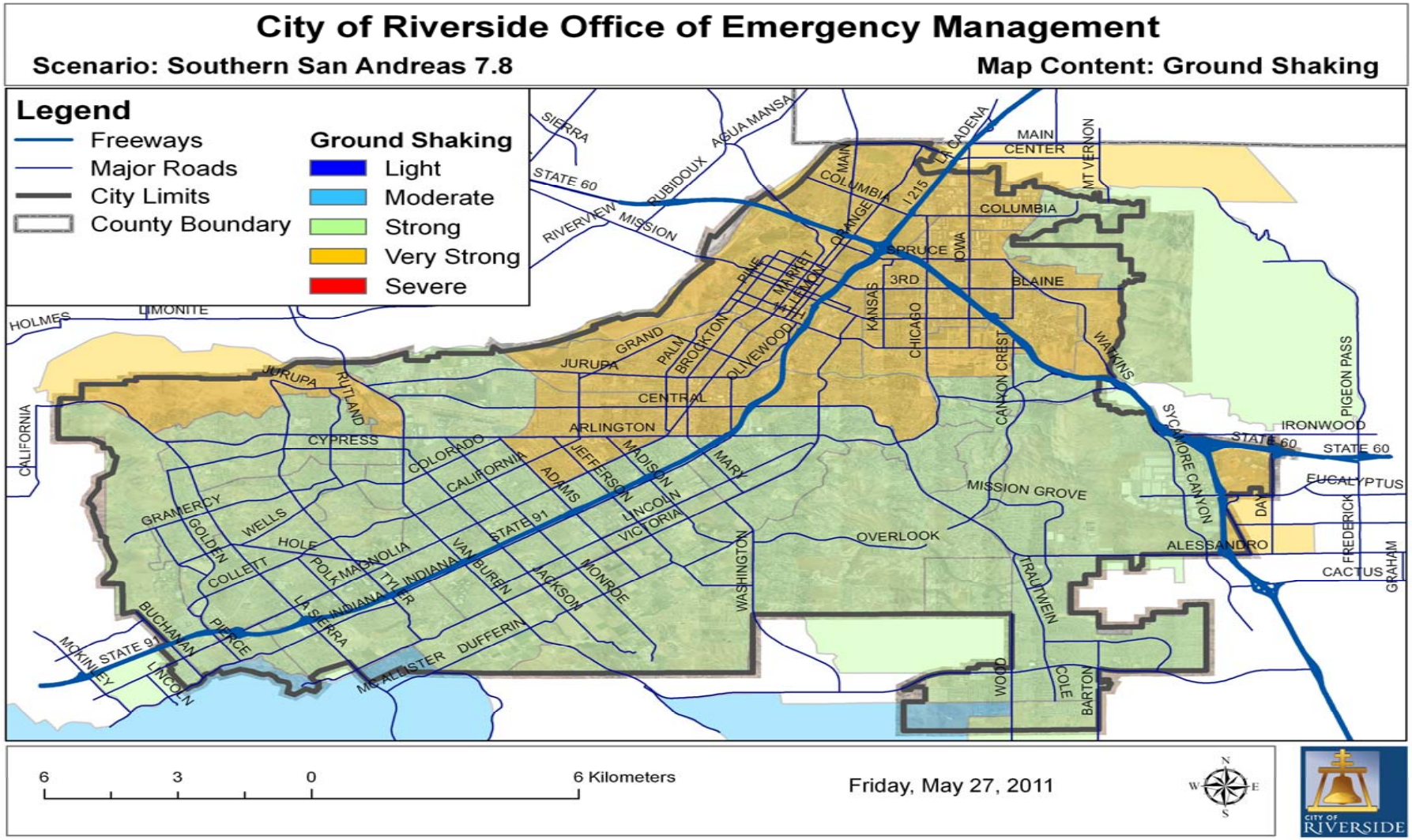
Injured, medical attention needed, but hospitalization.	241	120	76
Hospitalization required, but not life-threatening	54	20	11
Hospitalization required - can be life threatening	8	2	1
Potential Fatalities	15	4	2

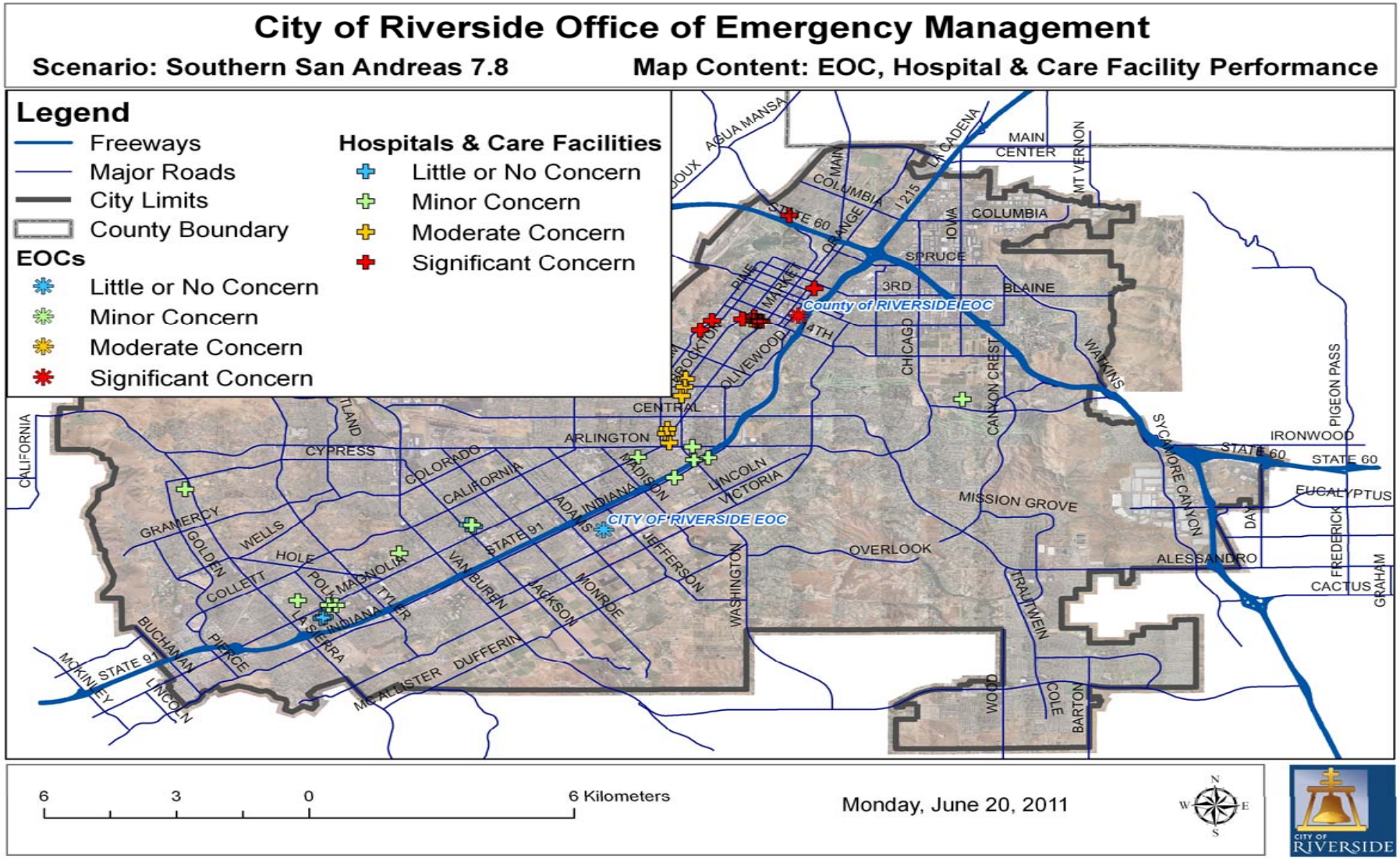
Evening Casualties

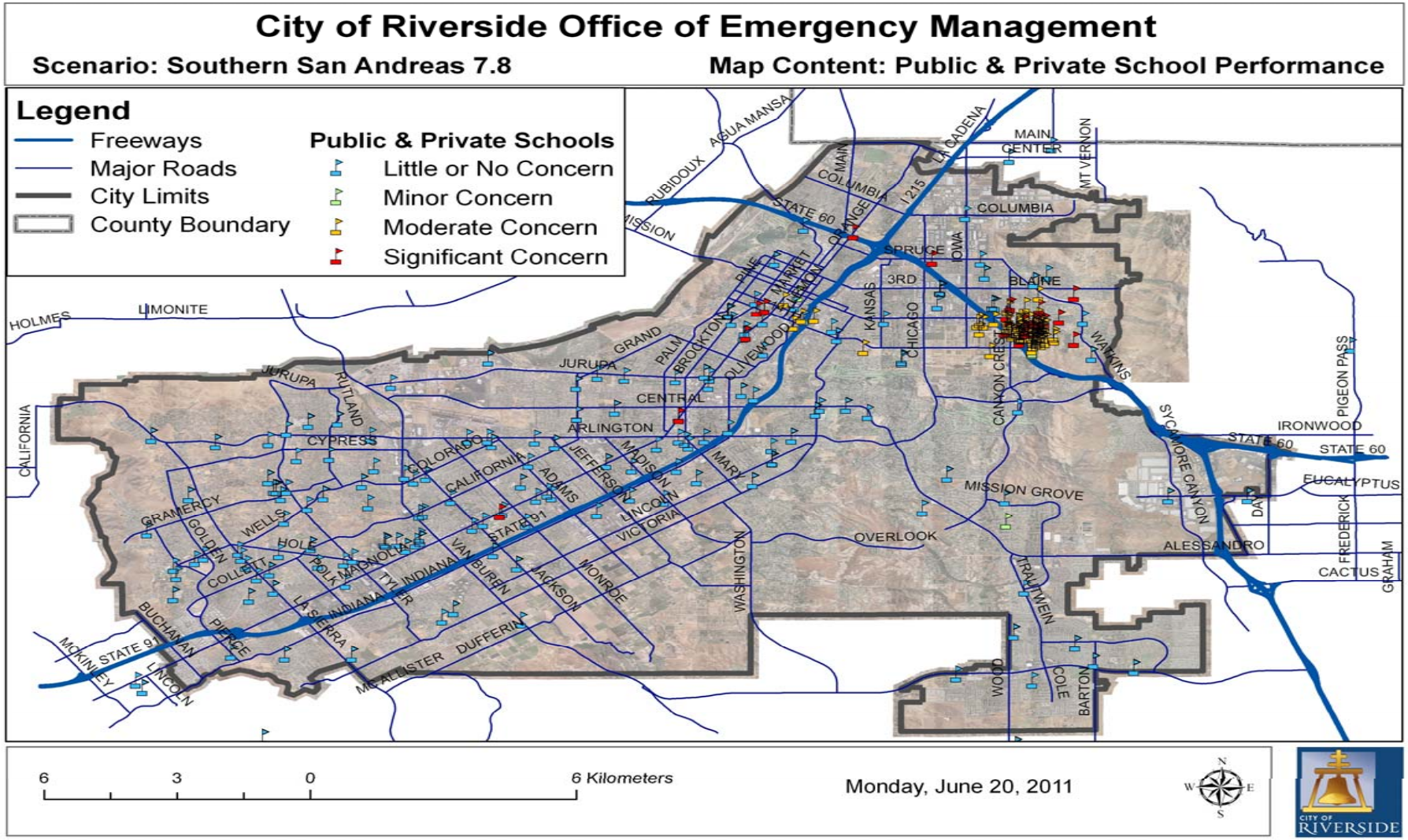
Injured, medical attention needed, but hospitalization.	181	99	69
Hospitalization required, but not life-threatening	55	20	20
Hospitalization required - can be life threatening	37	10	17
Potential Fatalities	16	4	5

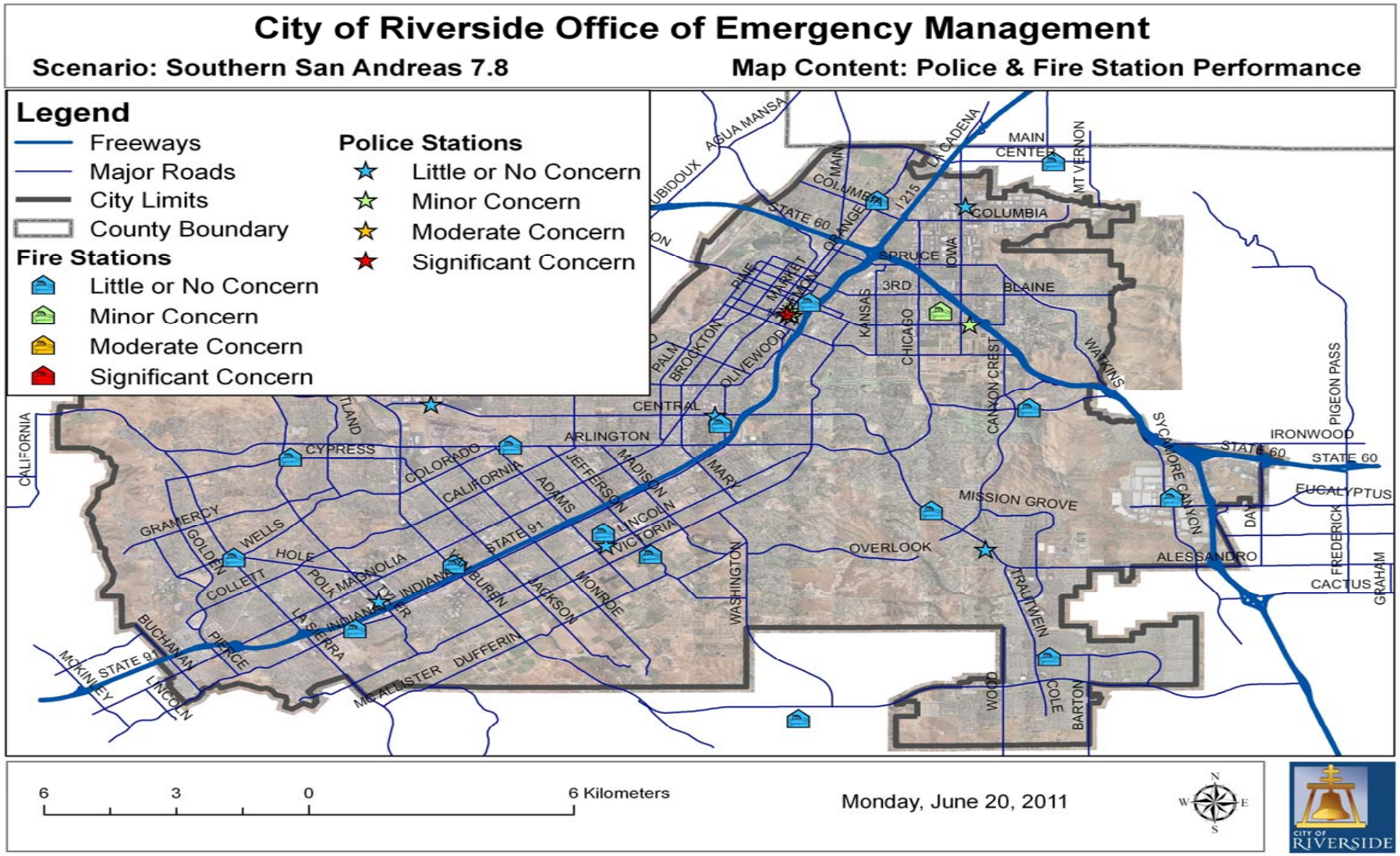
Night Casualties

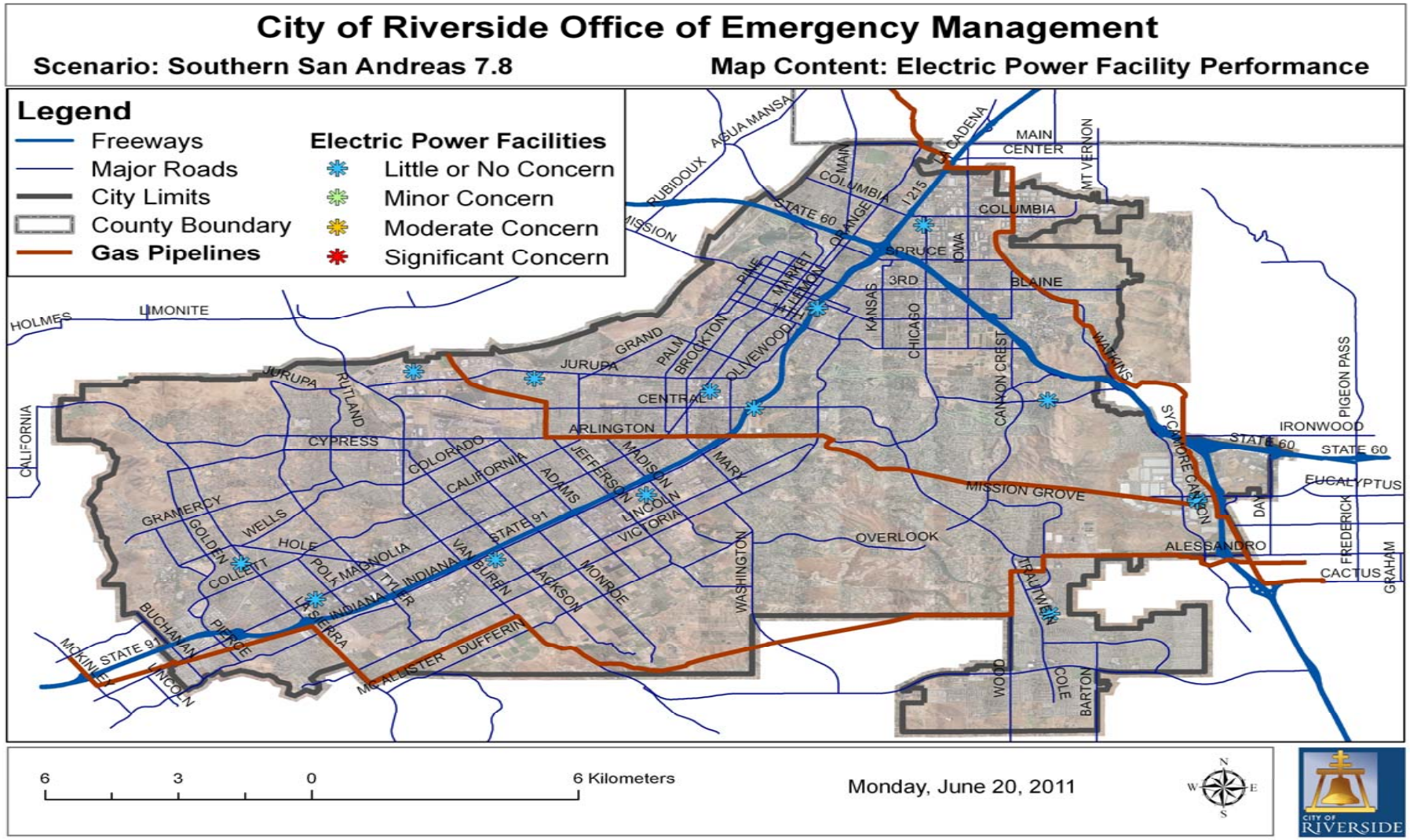
Injured, medical attention needed, but hospitalization.	95	80	61
Hospitalization required, but not life-threatening	15	9	6
Hospitalization required - can be life threatening	2	1	0
Potential Fatalities	3	1	0

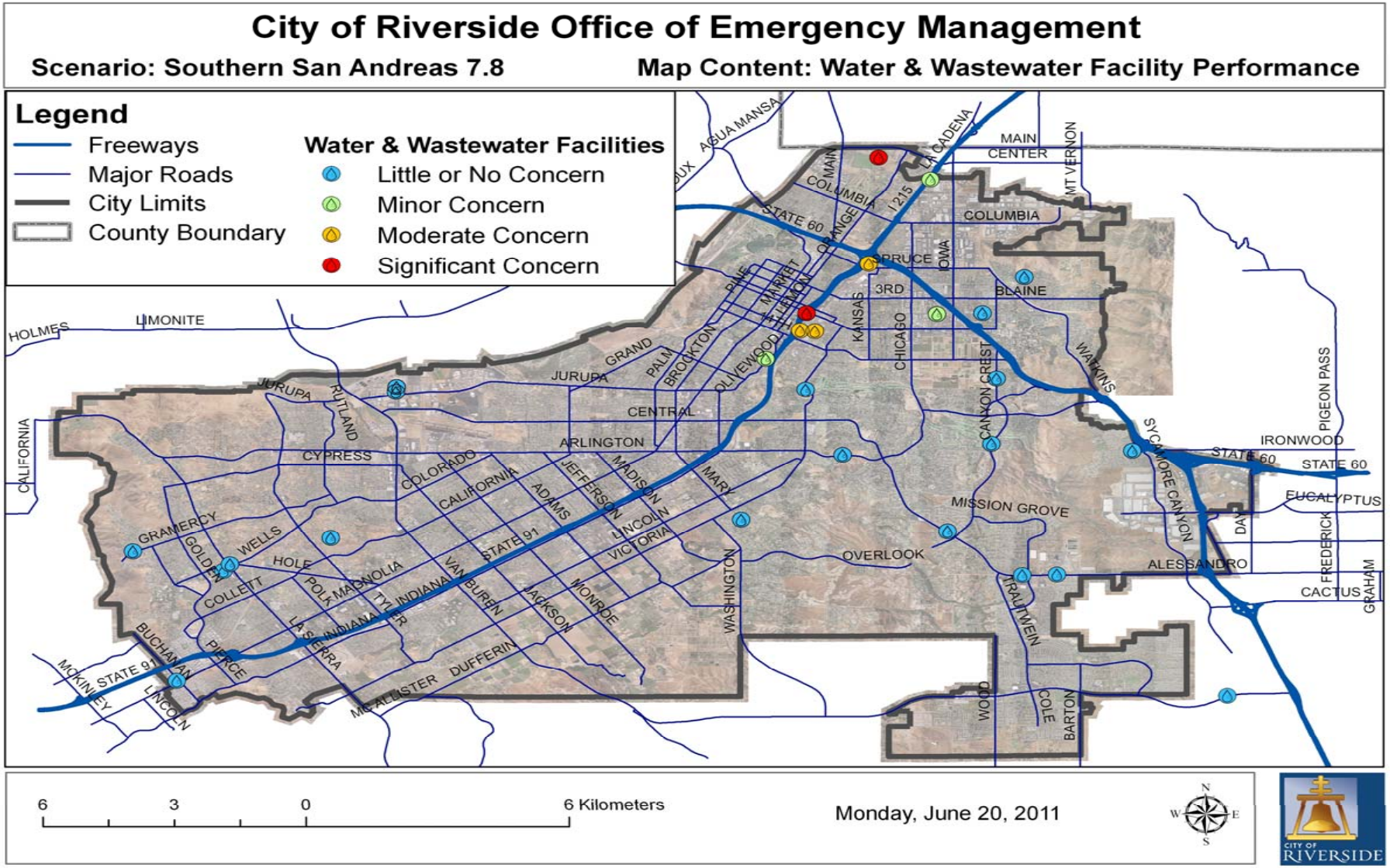

City of Riverside Office of Emergency Management
Scenario: Southern San Andreas 7.8
Map Content: Ground Shaking
Legend
Freeways
Major Roads
City Limits
County Boundary
Ground Shaking
Light
Moderate
Strong
Very Strong
Severe
6
3
0
6 Kilometers
Friday, May 27, 2011
CITY OF RIVERSIDE

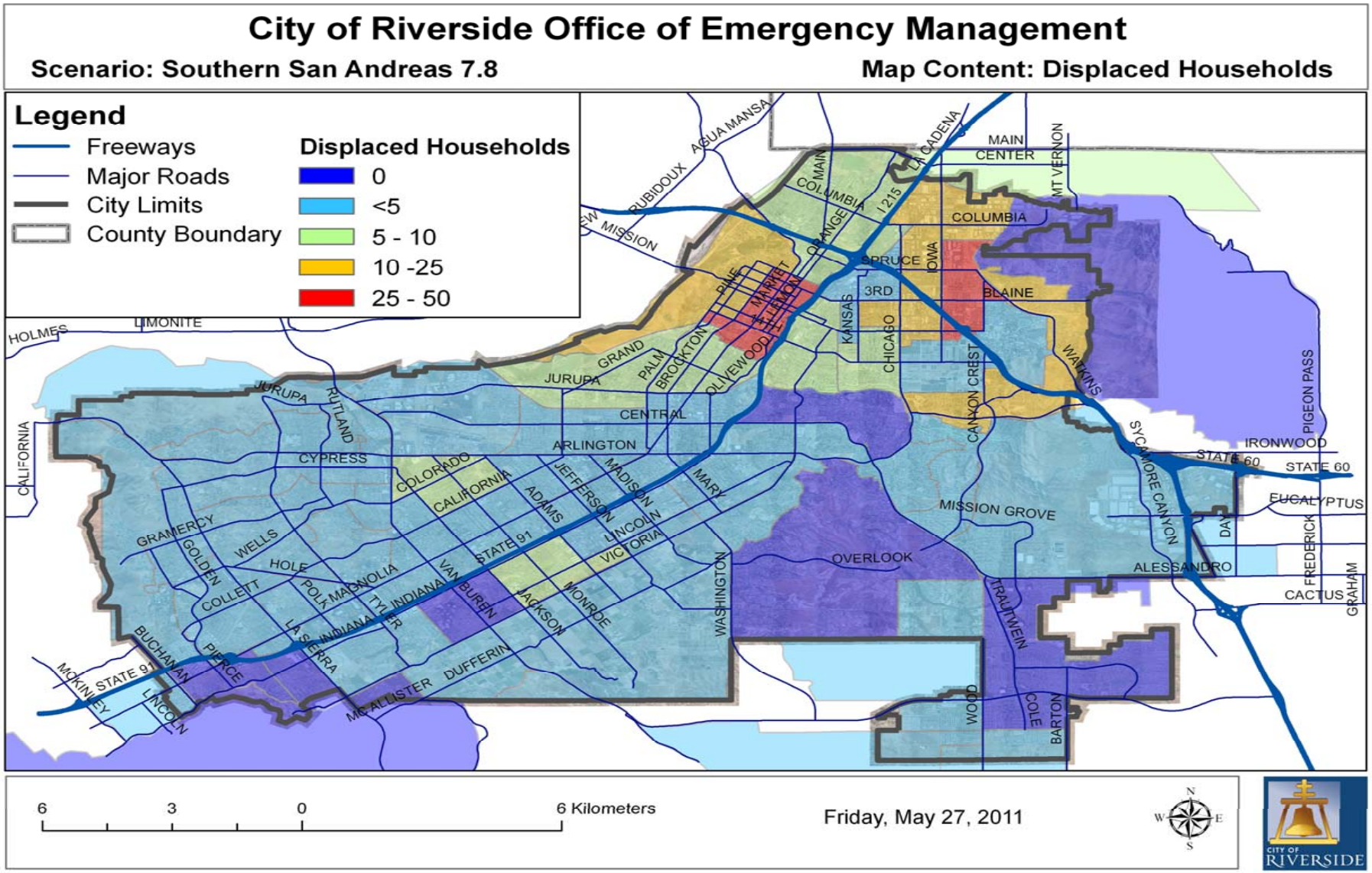

City of Riverside Office of Emergency Management
Scenario: Southern San Andreas 7.8
Map Content: EOC, Hospital & Care Facility Performance
Legend
Freeways
Major Roads
City Limits
County Boundary
EOCs
Little or No Concern
Minor Concern
Moderate Concern
Significant Concern
Hospitals & Care Facilities
Little or No Concern
Minor Concern
Moderate Concern
Significant Concern
County of RIVERSIDE EOC
CITY OF RIVERSIDE EOC
6
3
0
6 Kilometers
Monday, June 20, 2011
CITY OF RIVERSIDE

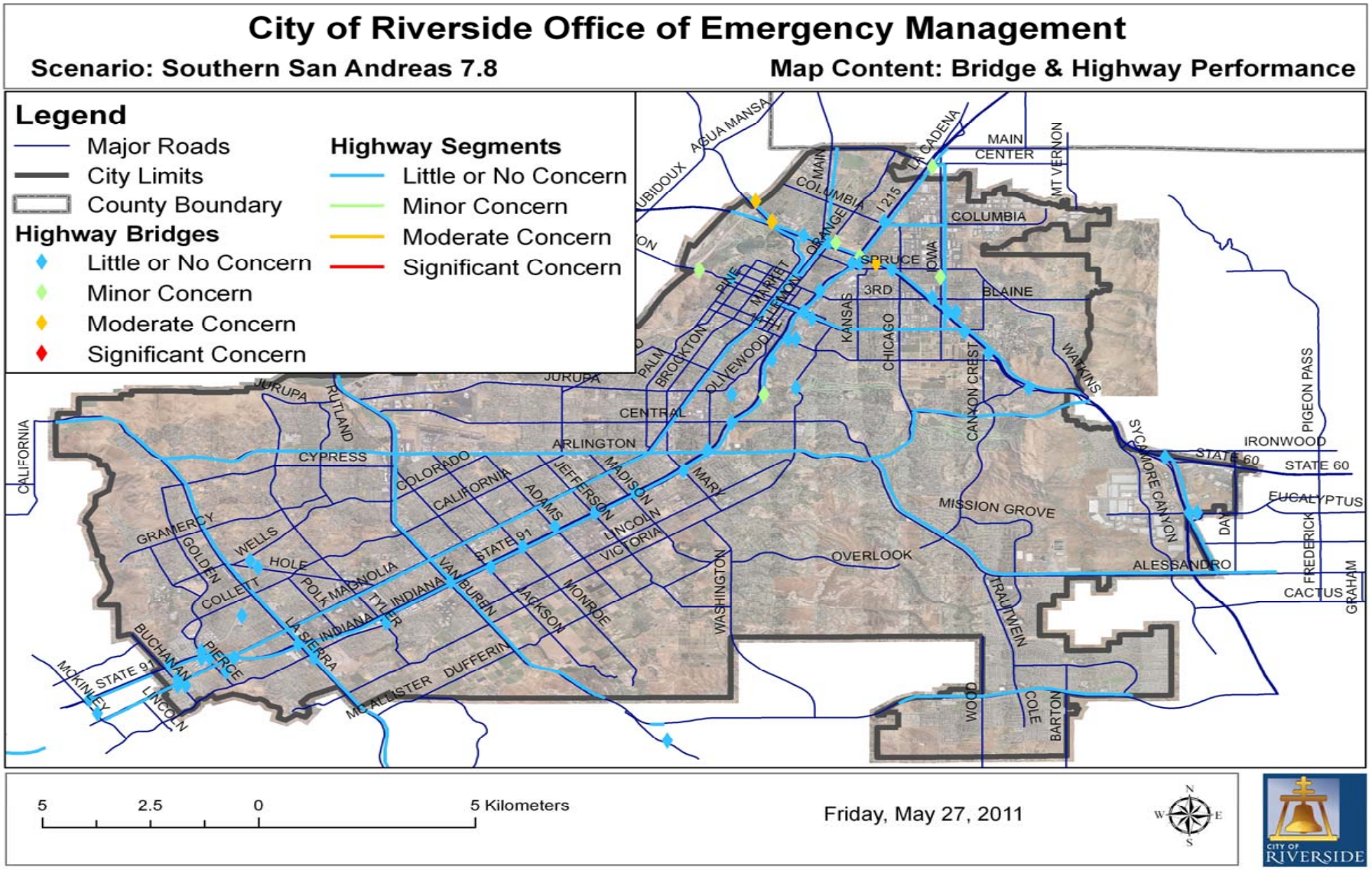

City of Riverside Office of Emergency Management
Scenario: Southern San Andreas 7.8
Map Content: Public & Private School Performance
Legend
Freeways
Major Roads
City Limits
County Boundary
Public & Private Schools
Little or No Concern
Minor Concern
Moderate Concern
Significant Concern
6
3
0
6 Kilometers
Monday, June 20, 2011
CITY OF RIVERSIDE

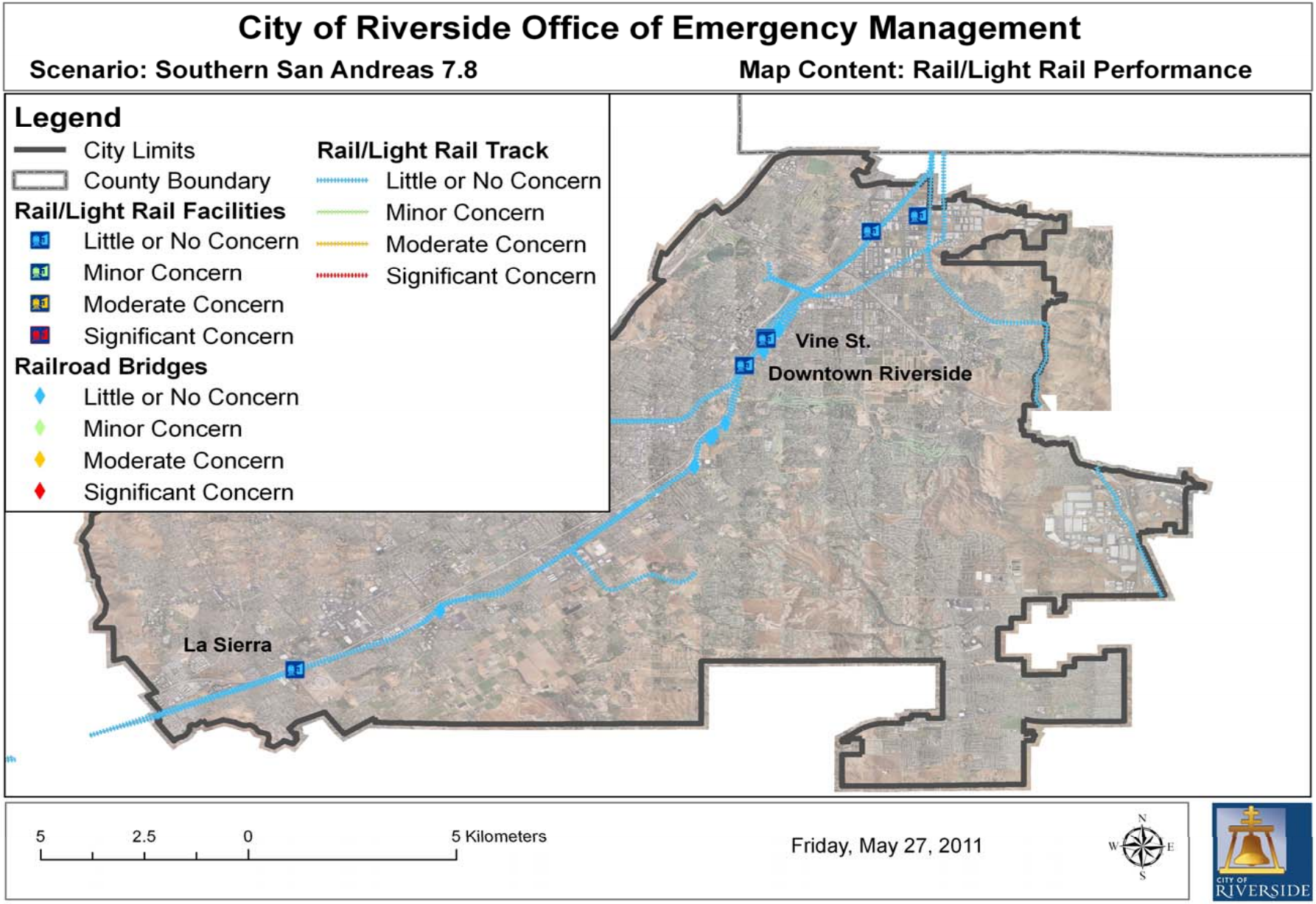

City of Riverside Office of Emergency Management
Scenario: Southern San Andreas 7.8
Map Content: Police & Fire Station Performance
Legend
Freeways
Major Roads
City Limits
County Boundary
Fire Stations
Little or No Concern
Minor Concern
Moderate Concern
Significant Concern
Police Stations
Little or No Concern
Minor Concern
Moderate Concern
Significant Concern
6
3
0
6 Kilometers
Monday, June 20, 2011
CITY OF RIVERSIDE

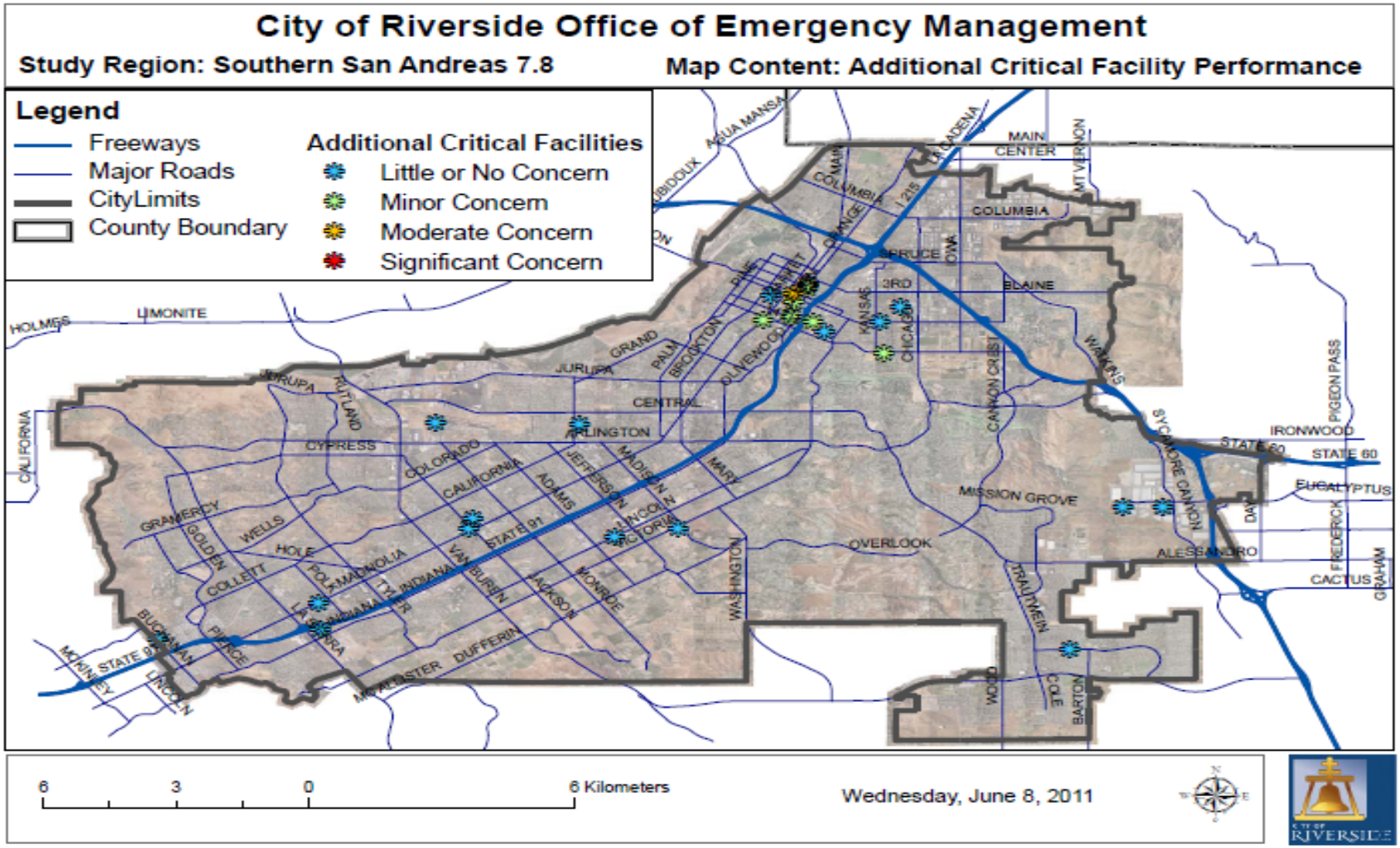

City of Riverside Office of Emergency Management
Scenario: Southern San Andreas 7.8
Map Content: Electric Power Facility Performance
Legend
Freeways
Major Roads
City Limits
County Boundary
Gas Pipelines
Electric Power Facilities
Little or No Concern
Minor Concern
Moderate Concern
Significant Concern
6
3
0
6 Kilometers
Monday, June 20, 2011
CITY OF RIVERSIDE

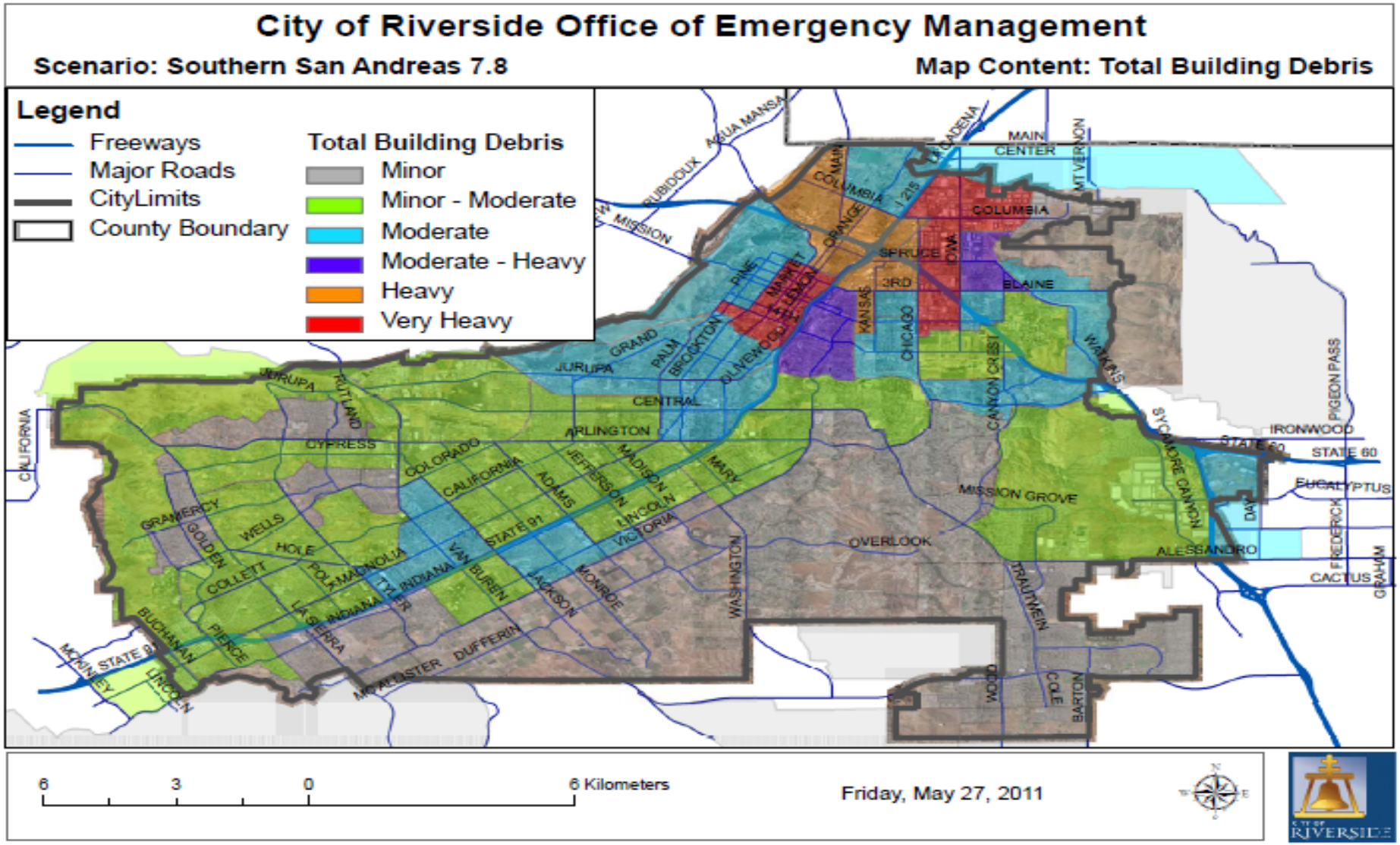

City of Riverside Office of Emergency Management
Scenario: Southern San Andreas 7.8
Map Content: Water & Wastewater Facility Performance
Legend
Freeways
Major Roads
City Limits
County Boundary
Water & Wastewater Facilities
Little or No Concern
Minor Concern
Moderate Concern
Significant Concern
6
3
0
6 Kilometers
Monday, June 20, 2011
CITY OF RIVERSIDE

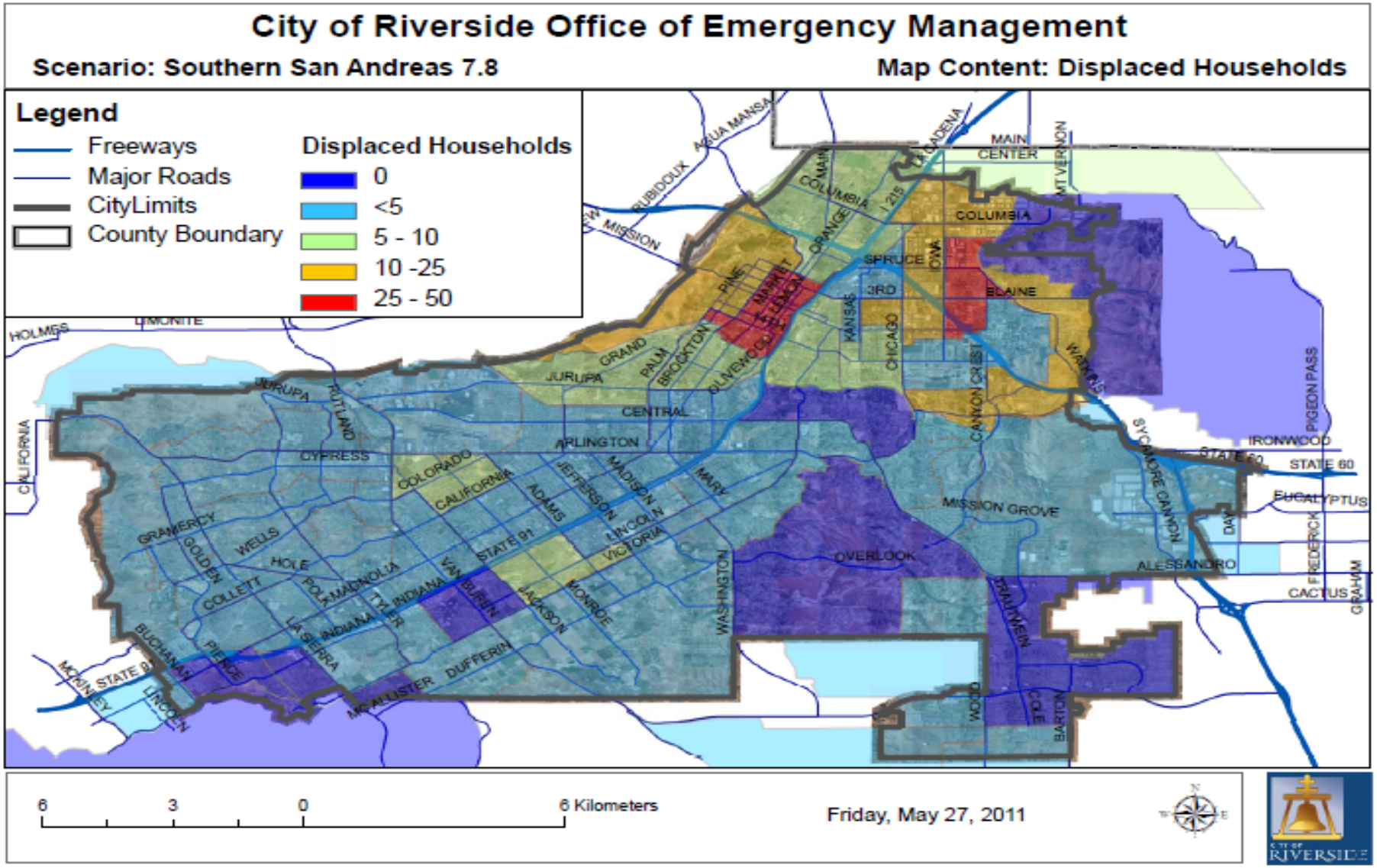

City of Riverside Office of Emergency Management
Scenario: Southern San Andreas 7.8
Map Content: Displaced Households
Legend
Freeways
Major Roads
City Limits
County Boundary
Displaced Households
0
<5
5 - 10
10 -25
25 - 50
6
3
0
6 Kilometers
Friday, May 27, 2011
CITY OF RIVERSIDE


City of Riverside Office of Emergency Management
Scenario: Southern San Andreas 7.8
Map Content: Bridge & Highway Performance
Legend
Major Roads
City Limits
County Boundary
Highway Bridges
Little or No Concern
Minor Concern
Moderate Concern
Significant Concern
Highway Segments
Little or No Concern
Minor Concern
Moderate Concern
Significant Concern
5
2.5
0
5 Kilometers
Friday, May 27, 2011
CITY OF RIVERSIDE


City of Riverside Office of Emergency Management
Scenario: Southern San Andreas 7.8
Map Content: Rail/Light Rail Performance
Legend
City Limits
County Boundary
Rail/Light Rail Facilities
Little or No Concern
Minor Concern
Moderate Concern
Significant Concern
Railroad Bridges
Little or No Concern
Minor Concern
Moderate Concern
Significant Concern
Rail/Light Rail Track
Little or No Concern
Minor Concern
Moderate Concern
Significant Concern
Vine St.
Downtown Riverside
La Sierra
5
2.5
0
5 Kilometers
Friday, May 27, 2011
N
W
E
S
CITY OF RIVERSIDE


City of Riverside Office of Emergency Management
Study Region: Southern San Andreas 7.8
Map Content: Additional Critical Facility Performance
Legend
Freeways
Major Roads
CityLimits
County Boundary
Additional Critical Facilities
Little or No Concern
Minor Concern
Moderate Concern
Significant Concern
6
3
0
6 Kilometers
Wednesday, June 8, 2011
RIVERSIDE


City of Riverside Office of Emergency Management
Scenario: Southern San Andreas 7.8
Map Content: Total Building Debris
Legend
Freeways
Major Roads
CityLimits
County Boundary
Total Building Debris
Minor
Minor - Moderate
Moderate
Moderate - Heavy
Heavy
Very Heavy
6
3
0
6 Kilometers
Friday, May 27, 2011
CITY OF RIVERSIDE


City of Riverside Office of Emergency Management
Scenario: Southern San Andreas 7.8
Map Content: Displaced Households
Legend
Freeways
Major Roads
CityLimits
County Boundary
Displaced Households
0
<5
5 - 10
10 -25
25 - 50
6
3
0
6 Kilometers
Friday, May 27, 2011
RIVERSIDE

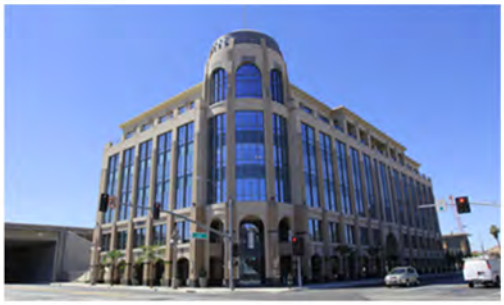
APPENDIX D-CAPITAL IMPROVEMENT PROGRAM

SEE ATTACHMENT

Document pages 1-132

Capital Improvement Program
2013/14 - 2017/18

Seizing Our Destiny / The Movement for Riverside's Prosperous Future



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Cover Photos

Seizing Our Destiny is Riverside's community-driven campaign that builds on the City's existing strengths to create an even better place to live, work, and play for future generations. The program's goal is to improve quality of life, attract diverse and dynamic people, encourage innovation, and work together for the common good.

1. Downtown Riverside – The Downtown area is more than just the heart of the City; it is also the cultural and urban hub of the Inland Empire. No other place in the Inland Empire has the diversity offered by Downtown Riverside in so compact an area. With its grid street pattern originally laid out in 1870 – long before the widespread advent of the automobile – Downtown retains a distinct historic and walkable character reminiscent of many older California cities.
2. Fire Station #1 – The City of Riverside has remained a dynamic place while moving deeper into its post-Renaissance era, thanks in part to redevelopment projects such as the Downtown Fire Station. The new three-story fire station will house fire equipment, living quarters, and administrative offices.
3. Riverside Convention Center – The new Riverside Convention Center, opening in early 2014, offers 21 rooms with over 65,000 square feet of flexible meeting space and can accommodate groups ranging from 25 to 3,000 for conventions, meetings, trainings, and competitions.
4. Citrus Tower – Another project that was made possible through Riverside redevelopment efforts, Citrus Tower is a 140,000 square foot, six-story Class A professional office building in Downtown Riverside that was made possible by the City's former Redevelopment Agency assembling land and clearing blighted and empty buildings.
5. Ryan Bonominio Park at the Tequesquite Arroyo – Completed in June 2013 and named in honor of a Riverside police officer who was killed in the line of duty, the park includes two lighted ball fields, two basketball courts, three picnic shelters, a playground, and a community garden. New walking paths are also available, as is a trailhead for the Santa Ana River Trail.
6. Fox Entertainment Plaza – The Fox Entertainment Plaza is a multi-purpose facility next to the Fox Performing arts Center that includes a large parking garage, retail space, a black box theater, and additional museum exhibit space for the Riverside Metropolitan Museum.

City of Riverside

Capital Improvement Program

2013/14 - 2017/18

Mayor
Honorable William R. Bailey

City Council
Mike Gardner
Andy Melendrez
Ken Gutierrez
Paul Davis
Chris Mac Arthur
Jim Perry
Steve Adams

Submitted to the City Council by:
Scott C. Barber
City Manager

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City of Riverside

2013/14 to 2017/18
Capital Improvement Program

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City Manager's Transmittal Letter

Office of the
City Manager

CITY OF
RIVERSIDE

August 27, 2013

Honorable Mayor and City Council,

I am pleased to present to you the $448 million Capital Improvement Program (CIP) for fiscal years 2013/14 through 2017/18. Although the CIP is a planning document and does not directly appropriate funds, the fiscal year 2013/14 projects listed in the CIP are incorporated into the City's 2013/14 Annual Budget.

This year's CIP document reflects the continuation of a six year effort to improve the format, consistency, and relevance of the CIP. Care has been taken to accurately project the City's capital needs over the five-year planning period through a thorough assessment of existing and needed infrastructure and facilities using a methodology that is consistent across all City Departments. We are confident that this year's CIP document will provide even more value to City staff and the public in understanding the infrastructure challenges that face our City over the next five years, as well as the recommended solutions to address those issues and beyond.

The proposed CIP responds to the needs of our residents to ensure the streets, public buildings, sewer, water, and electric infrastructure, and parks are well maintained for maximum safety, attractiveness, and functionality. Thus, the CIP presents a dual emphasis on planning for new projects as well as protecting existing physical assets. To that end, $72 million has been programmed for Transportation and Railroad-Related projects; $9 million for Municipal Buildings and Facilities, such as library, police, and fire facilities; $5 million for Parks, Recreation, and Community Services projects; and $339 million for upgrades to and expansion of the City's electric, water, sewer, and storm drain infrastructure.

Thanks to prudent fiscal planning and oversight by the City Council, and the City's excellent credit standing, we are rectifying decades of deferred capital investment and providing the community infrastructure that citizens of a world-class city expect and deserve. Through the implementation of the five-year CIP, Riverside is strengthening its commitment to the Seizing Our Destiny principles: to nurture Intelligent Growth, be a Catalyst for Innovation, be a Location of Choice, and evolve as a Unified City.

Respectfully submitted,

Scott C. Barber
City Manager

3900 Main Street • Riverside, CA 92522 • 951.826.5553 • www.riversideca.gov

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City of Riverside

2013/14 to 2017/18
Capital Improvement Program

Guide to the Capital Improvement Program

Capital Improvement Program Defined

The City's Capital Improvement Program (CIP) is a multi-year planning instrument that drives the evaluation and identification of capital infrastructure projects in need of renovation, repair, and/or construction. Capital projects range from road maintenance or construction to the renovation of municipal buildings, recreation centers, and ball fields, to water main and sewer repair. The CIP relates these projected capital needs to the financial sources that will support their realization and the timeframe in which both the financing and work will take place. Capital improvement programming is the process by which these capital projects are identified, prioritized, and selected, and thus are incorporated into the long-range fiscal and strategic planning of the City. The CIP document is designed to report to the City Council, the public, City staff, and other interested parties the capital management and planning strategies of the City.

Benefits of the Capital Improvement Program

Capital improvement programming links short and long-range general plans with growth, public and private development, and the annual budgetary process. In this way, the CIP attempts to achieve the goals and objectives of the City's residents, a variety of boards and commissions, and the City Council. The CIP carries the following primary benefits:

- Focuses attention on Citywide priorities and citizen expectations
- Provides a concrete implementation framework for the General Plan, Citywide Strategic Plan, and Visioning Report
- Fosters inter-departmental coordination of City infrastructure investments
- Promotes accountability for the long-term planning and investment of public funds for large-scale public purposes

Capital improvement projects typically carry considerable future impact, meaning that they have a life span of at least five years or more. They are often, but not always, financed over a longer period of time, in effect spreading the cost of the project across generations of users. In this sense, the choices made for how a project will be paid for is not only a financial question of fiscal capacity and prudence, but a philosophical issue as well.

Perhaps the greatest benefit of having a Capital Improvement Program is that the process focuses attention on improving or constructing the capital improvements necessary for providing the services and facilities expected by the residents and businesses of the City of Riverside, both today and tomorrow.

The CIP and the City's Annual Operating Budget

In order to reap the benefits of focused attention paid to long-term planning for capital projects, the Capital Improvement Program is for the most part developed separately from the City's Annual Operating Budget. However, the approval of the CIP does not signal appropriation of funds. Rather, the CIP serves as a planning instrument for both budgeting and infrastructure development. Appropriations are made for capital projects when the City Council approves the annual budget for the City.

The Capital Improvement Program document is different from the annual budget as it sets forth a five-year program. The first year's program contains projects that are included in the proposed Annual Operating Budget for the upcoming fiscal year. The remaining four years reflect staff's recommended priorities for the future and are reviewed and revised annually by the City Council.

Development and Adoption of the CIP

The development of the City's Capital Improvement Program occurs over approximately a six month period. The Finance Department initiates the CIP process by providing a preparation guide and schedules to the relevant departments. The schedules and project lists are reviewed at the departmental level and updated accordingly.

The development of the City's Capital Improvement Program is to a certain extent decentralized. This means that although the CIP is coordinated through the Finance Department, individual departments are responsible for fully developing their individual Capital Improvement Programs. This is accomplished by identifying needs,

Guide to the Capital Improvement Program

performing appropriate fiscal and environmental impact analyses, conducting legislative and environmental scans to ensure that the CIP is current, acquiring input from various stakeholders, and selecting the final projects for consideration. Each department then submits its CIP to the Finance Department.

The Finance Department evaluates the individual Capital Improvement Programs for consistency with the Citywide Strategic Plan, the General Plan, citizen input, and the Visioning Report. The Finance Department then finalizes the proposed Capital Improvement Program for preliminary City Council review and conceptual approval. Projects for which conceptual approval has been attained are inserted into the Operating Budget and proposed for adoption in May or June of each year.

CAPITAL IMPROVEMENT PROGRAM SCHEDULE

	Dec	Jan	Feb	Mar	Apr	May	June
CIP Kickoff	Early Dec.						
Departments Prepare CIPs	December - February						
Departments Submit CIPs			Late Feb.				
City Manager Reviews Department CIPs and Assembles Citywide CIP				March			
Planning Commission Reviews CIP for General Plan 2025 Conistency						Late May	
Council Reviews Preliminary Operating & Capital Budget and Holds Public Hearings							Mid June
Council Adopts Final Operating & Capital Budget							Late June

Amending the Capital Budget

At any Council meeting after the adoption of the budget, the City Council may amend or supplement the budget by motion adopted by the affirmative votes of at least five members. This vote authorizes the transfer of unused balances appropriated for one purpose to another purpose or to appropriate available funds not included in the budget.

Document Organization

The City of Riverside's Capital Improvement Program document includes four primary sections:

- City Manager's Transmittal Letter – Executive summary of the Capital Improvement Program
- Guide to the CIP – details the purpose and benefits of a CIP, the relationship between the CIP and the annual Operating Budget, and the development of the CIP; and details the document's organization and the funding types, funding sources, and City Funds utilized for capital projects
- CIP Summary – contains an overview of the Citywide CIP by fund, funding source, project type, Department, and other categorizations
- CIP Program Sections – In-depth Capital Improvement Programs for the program sections described below
- Glossary – Definitions of relevant terms used throughout the document

CIP Program Sections

Capital projects are grouped into 11 program sections in the Capital Improvement Program. They are:

- Municipal Buildings and Facilities
- Parks, Recreation, and Community Services
- Transportation
- Railroad-Related Projects
- Sewer
- Storm Drain
- Refuse
- Public Parking
- Airport
- Electric
- Water

GIS maps preface each section and provide easy identification of the location of the projects proposed for funding in year one of the CIP and their distribution throughout the City.

The narrative descriptions for each CIP section include the following sections: Introduction, Key Revenues and

Guide to the Capital Improvement Program

Funding Sources, and Future CIP Considerations. These narrative descriptions bring the key issues and priorities addressed in each section of the CIP to light and provide an overview of the detail contained in the following tables.

The detailed financial tables following each program section's narrative provide information on revenues, expenditure requirements, and the proposed capital projects. If applicable, these tables provide information on unfunded capital projects, as well.

In the financial tables, the first year's program contains the proposed projects for the upcoming fiscal year. The remaining four years reflect staff's recommended priorities for the future and are reviewed and revised annually by the City Council.

Municipal Buildings and Facilities
The Municipal Buildings and Facilities program includes expenditures for Departments that are not described in other sections of the CIP. Such projects include Police and Fire stations, Libraries, the Museum, the Municipal Auditorium, and the Convention Center. Projects of a recurring nature such as parking lot repaving and facility painting are also included in the Municipal Buildings and Facilities CIP, even for Departments described elsewhere in this document.

Parks, Recreation, and Community Services
The Parks, Recreation, and Community Services program includes projects to construct, maintain, and upgrade parks, game courts and fields, medians, community centers, and recreation buildings.

Transportation
The Transportation program includes projects to extend and widen streets, street resurfacing, construction of curbs, gutters, center medians, bikeways & pedestrian facilities, right-of-way acquisition, and traffic signal improvements.

Railroad-Related Projects
The Railroad-Related Projects program includes projects that grade separate the intersections of City streets with the BNSF and Union Pacific railroads, as well as other related rail projects.

Sewer
The Sewer program includes projects to increase system capacity for new users, replace aging or obsolete systems, and meet new regulatory requirements.

Storm Drain
The Storm Drain program includes projects that either eliminate a nuisance flow or provide additional flood protection.

Refuse
The Refuse program includes projects to meet the State mandate that the closed Tequesquite landfill not pollute the nearby Santa Ana River and adjacent groundwater.

Public Parking
The Public Parking program includes projects to construct new parking facilities and to improve existing facilities.

Airport
The Airport program includes projects to maintain the Airport, to improve safety, and to comply with Federal Aviation Administration (FAA) standards and regulations.

Electric
The Electric program includes projects to construct additions to the City's electric infrastructure and to maintain existing facilities.

Water
The Water program includes projects to construct additions to the City's water infrastructure and to maintain existing facilities.

Funding Sources

The City employs a combination of approaches to fund its capital projects. For many smaller improvement projects, funds are appropriated from cash on hand. Large-scale capital projects are funded through a variety of methods including long-term financing, user fees, proceeds from bond issues, grants, assessments, impact fees, and tax levies certificates of participation (COPs), and reserve balances. Since the City's various Departments are budgeted within numerous Funds, each potentially with multiple revenue streams, the funding sources are greatly varied and the process decentralized.

Guide to the Capital Improvement Program

The Funds in which capital improvements are budgeted and the various funding sources that provide revenue to these Funds are described below by CIP program section. General Fund revenue sources are not described, due to the complex nature of sources providing revenue to the General Fund. The General Fund's major support comes from sales tax, property tax, fees for services rendered, the utility users tax, and transfers from the Electric and Water Funds. General Fund projects are budgeted on an availability of funds basis and funded from annual revenues.

Municipal Buildings and Facilities
Projects included in the Municipal Buildings and Facilities CIP are funded primarily from the General Fund (101). In certain cases, projects are funded from other Funds when a project impacts a non-General Fund Department (such as Public Utilities). In all cases these projects are funded from annual revenues. Major revenue sources include:

- General Fund Revenues – General Fund revenues allocated to capital projects
- Other Fund Revenues – revenues allocated to minor capital projects from other City Funds

Parks, Recreation, and Community Services
Capital expenditures for the Parks, Recreation, and Community Services Department are budgeted in the General Fund (101), the Local Parks Fund (411), and the Regional Parks Fund (413). Neighborhood park improvements are funded through the Local Parks Fund, while regional park improvements are funded through the Regional Parks Fund. Major revenue sources include:

- General Fund Revenues – General Fund revenues allocated to capital projects
- Development Fees – portions of fees charged when property is developed that are dedicated to the funding of local and regional parks and recreation facilities

Local Park Fee and Regional Park Fee revenues are dependent on development. Therefore, the CIP only shows projects as funded for which fee revenues are already available or that are annual funding obligations. As funding becomes available, the Parks, Recreation, and Community Services Department requests that the City Council appropriate funds for projects contained in the Unfunded Capital Projects list. Projects are not programmed based on anticipated revenues.

Transportation & Railroad-Related Projects
Capital expenditures for the construction and improvement of transportation infrastructure are budgeted in the General Fund (101), the Special Gas Tax Fund (230), the Capital Outlay Fund (430), the Measure A Fund (432), the Transportation Development Impact Fees Fund (433), and the Transportation Uniform Mitigation Fees Fund (434). The allocation of revenues to the 230, 430, 432, 433, and 434 Funds is complex and is dictated by various regulations that are not important for the purposes of the CIP. In the detailed tables found in the Transportation program section of this document, these five funds are shown commingled, though in actuality specific revenues described below will be allocated to specific Funds. Revenue sources include:

- Signal Mitigation Fees – a City funding source generated from portions of fees charged when property is developed that are dedicated to funding new and upgraded traffic signals
- Transportation Impact Fees – a City funding source generated from portions of fees charged when property is developed that are dedicated to funding local transportation capacity improvements
- Measure A Sales Tax Revenue – a City and County funding source generated from Riverside County's half-cent sales tax dedicated to transportation projects that is allocated directly to the City of Riverside as well as through the Riverside County Transportation Commission
- Transportation Uniform Mitigation Fees (TUMF) – a regional funding source generated from portions of fees charged when property is developed that are dedicated to funding regional transportation capacity improvements
- State Gas Tax Revenue – revenue generated by the State's tax on gasoline sales that is dedicated to local transportation capacity improvements
- State Proposition 42 Revenue – revenue generated by additional gas tax revenues

allocated to transportation projects by voter initiative

- State Proposition 1B Revenue – revenue generated by the sale of bonds authorized by voter initiative for transportation improvements
- Congestion Mitigation and Air Quality (CMAQ) Improvement Program – a Federal funding program authorized by the Intermodal Surface Transportation Efficiency Act (ISTEA) that provides grants primarily for traffic signal projects, transportation demand management projects, and transit projects
- Surface Transportation Program (STP) – a Federal funding program authorized by ISTEA that includes two funding mechanisms – one is a population formula program where local agencies receive funds for transportation improvement projects according to their respective populations and the other provides grants for projects that reduce traffic congestion, improve transportation circulation, and maintain transportation infrastructure
- Surface Transportation Program Local (STPL) – STPL is similar to STP, except that funds are dedicated to local street improvements
- Demonstration (DEMO) Funds – allocations of STP funds for specific projects earmarked by congress
- Congressional Earmarks – project-specific appropriations made by congress to fund transportation capacity improvements
- California Public Utilities Commission Grade Separation Program – a funding program administered by the California Public Utilities Commission that provides funding for railroad grade separations
- Railroad Funds – private funding from the Union Pacific and BNSF railroads to assist with the construction of railroad grade separations

Sewer

Capital expenditures for the construction and improvement of the City's sewer system are budgeted in the Sewer Fund (550), which is an enterprise fund. In addition to capital expenditures, operational expenditures related to the City's sewer system are budgeted in the Sewer Fund. Revenue sources include:

- Sewer Connection Fees – fees charged when property is developed that are dedicated to the funding of sewer infrastructure projects
- Service Charges – funds that are generated from service charges to users of the City's sewer system
- Community Services District (CSD) Payments – payments from Community Services Districts for which the City provides sewage treatment services
- State Revolving Loans – low interest loans provided by the State to fund capital improvements
- Bond Proceeds – proceeds from the sale of revenue bonds

Storm Drain

Capital expenditures for the construction and improvement of storm drains are budgeted in the Storm Drain Fund (410). Revenue sources include:

- Storm Drain Fees – fees charged when property is developed that are dedicated to the funding of storm drain infrastructure projects

Refuse

Expenditures for the maintenance of the City's closed landfill are budgeted in the Refuse Collection Fund (540), which is an enterprise fund. No refuse-related capital expenditures are planned. Revenue sources for maintenance of the landfill include:

- Landfill Capping Surcharge – fee assessed to users of City commercial refuse disposal services

Public Parking

Capital expenditures for the City's Public Parking facilities are budgeted in the Public Parking Fund (570), which is an enterprise fund. Revenue sources include:

- Rent Revenues – revenue from rented facilities
- Garage, Lot and Meter Fees – fees charged for parking

Guide to the Capital Improvement Program

- Parking Fines – fines assessed for parking violations
- Bond Proceeds – proceeds from the sale of revenue bonds

Airport

Capital expenditures for the Riverside Municipal Airport are budgeted in the Airport Fund (530), which is an enterprise fund. The Federal Aviation Administration (FAA) will fund up to 95 percent of eligible projects. And, under the California Department of Transportation (CALTRANS) Division of Aeronautics' grant program, the City can apply for 2.5 percent matching funds for FAA-approved projects. Revenue sources include:

- Rent Revenues – revenue from rented facilities
- Landing & Tie Down Fees – fees assessed on aircraft operating at and based at the Airport
- Fuel Sales – revenue from the sale of fuel purchased from the Airport
- Fuel Flowage Fees – fees charged on fuel purchased at the Airport
- Non-Commercial Aircraft Tax – funds generated from taxes imposed on non-commercial aircraft
- CALTRANS Grants – grant proceeds received from the Division of Aeronautics
- Airport Improvement Program (AIP) Grants – grant proceeds received from the FAA

Electric

Capital expenditures for the City's Electric Utility are budgeted in the Electric Fund (510), which is an enterprise fund. Revenue sources include:

- Electric Rates – revenue from rates
- Contributions In Aid of Construction – funding contributions by private parties
- Bond Proceeds – proceeds from the sale of revenue bonds

Water

Capital expenditures for the City's Water Utility are budgeted in the Water Fund (520), which is an enterprise fund. Revenue sources include:

- Water Rates – revenue from rates
- Contributions In Aid of Construction – funding contributions by private parties
- Bond Proceeds – proceeds from the sale of revenue bonds

Capital Improvement Program Summary

Overview of the CIP

The five-year Capital Improvement Program amounts to $448,444,616. For FY 2013/14, capital improvement projects totaling $73,323,994 will be undertaken to expand and maintain the infrastructure within the City of Riverside. Descriptions of each project, as well as the related revenues and expenditures, can be found in the individual program sections of the CIP. Summary information can be found in the tables on the following pages.

Unfunded Capital Projects

In addition to the $448 million five-year funded CIP, unfunded capital project needs currently total $365.1 million. The unfunded projects are included in the Electric, Railroad-Related Projects, Transportation, Parks, Recreation, & Community Services, and Municipal Buildings & Facilities CIP Sections. In the case of the Parks, Recreation, and Community Services CIP, the majority of the unfunded projects will be funded in the latter four years of the CIP. The Parks, Recreation, and Community Services Department does not show projects as funded until funding is in place. As a result, there are always projects listed on the unfunded project list that are anticipated to be funded before the conclusion of the five-year period covered by the CIP.

Transportation and Railroad-Related Projects expenditures in the funded CIP are considerable. However, the current needs still outweigh available resources and $194 million is still unfunded. The unfunded or partially unfunded transportation projects include six significant street widening projects, two major median construction projects, and two quiet zone projects. In the case of many of these projects, a sizable portion of the projects' cost is anticipated to be funded with non-City funds. Each unfunded project is described in the individual program sections of the CIP. Summary information can be found in the tables on the following pages.

Summary Tables

The following tables provide a high-level overview of the citywide five-year Capital Improvement Program.

- Table PS-1: Capital Improvement Program Summary by Fund – This table categorizes the funded portion of the CIP by Fund and by the anticipated year(s) of funding. Revenue sources providing the funds shown for each Fund can include non-City sources.
- Table PS-2: Capital Improvement Program Summary by Program Section and Project Type – This table categorizes the funded portion of the CIP by the program sections found in this document and by the anticipated year(s) of funding.
- Table PS-3: Capital Improvement Program Summary by Department – This table categorizes the funded portion of the CIP by the Department's that will ultimately be responsible for the new facility and by the anticipated year(s) of funding. This table provides a more detailed breakdown of Table PS-2 for those program sections, such as Municipal Buildings & Facilities, that include projects impacting more than one Department.
- Table PS-4: Capital Improvement Program Summary by Revenue Source – This table illustrates the revenue sources that provide the funding for the CIP by the anticipated year(s) that the revenue will be collected.
- Table PS-5: Budgeted Projects Summary for 2013/14 – This table provides a detailed list of the projects proposed for the first year of the CIP. Typically, these are the projects that will be included in the City's operating budget as budgeted capital expenditures for the upcoming budget year.
- Table PS-6: Summary of Unfunded Projects by Fund – This table repeats the format of Table PS-1, illustrating unfunded projects without specifying an anticipated year of construction.
- Table PS-7: Summary of Unfunded Projects by Program Section – This table repeats the format of Table PS-2, illustrating unfunded projects without specifying an anticipated year of construction.
- Table PS-8: Summary of Unfunded Projects by Department – This table repeats the format of Table PS-3, illustrating unfunded projects without specifying an anticipated year of construction.

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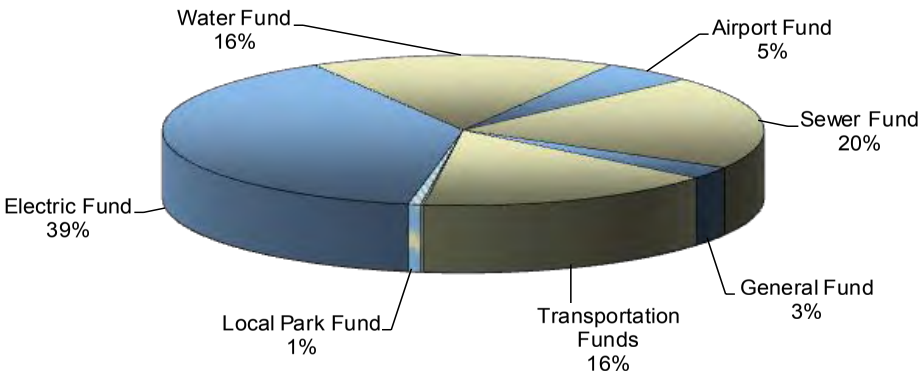
2013/14 to 2017/18

Capital Improvement Program

Capital Improvement Program Summary by Fund

Fund	Fund Description	2013/14	2014/15	2015/16	2016/17	2017/18	Total
101	General Fund	479,194	3,072,613	2,498,824	3,234,707	2,385,178	11,670,516
Various	Transportation Funds	22,761,800	19,919,600	10,487,900	9,406,700	9,876,100	72,452,100
410	Storm Drain Fund	150,000	150,000	150,000	150,000	150,000	750,000
411	Local Park Fund	600,000	600,000	600,000	600,000	600,000	3,000,000
413	Regional Park Fund	47,000	-	-	-	-	47,000
510	Electric Fund	35,316,000	35,356,000	35,092,000	32,983,000	35,291,000	174,038,000
520	Water Fund	7,945,000	19,338,000	14,513,000	15,513,000	16,163,000	73,472,000
530	Airport Fund	3,540,000	8,325,000	4,525,000	3,125,000	2,625,000	22,140,000
540	Refuse Collection Fund	-	-	-	-	-	-
550	Sewer Fund	2,235,000	1,875,000	36,460,000	40,265,000	9,640,000	90,475,000
570	Public Parking Fund	250,000	-	-	-	-	250,000
650	Central Garage Fund	-	-	50,000	100,000	-	150,000
	Total	**73,323,994**	**88,636,213**	**104,376,724**	**105,377,407**	**76,730,278**	**448,444,616**

Expenditures by Fund



NOTE: Categories comprising less than 1% of total are not labeled.

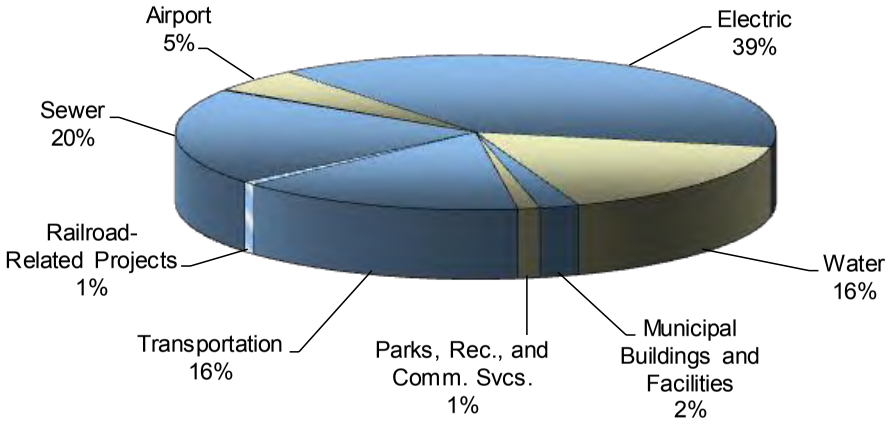
2013/14 to 2017/18

Capital Improvement Program

Capital Improvement Program Summary by Program Section and Project Type

CIP Program Section	2013/14	2014/15	2015/16	2016/17	2017/18	Total
Municipal Buildings and Facilities	100,000	2,655,500	2,090,000	2,830,000	1,830,000	9,505,500
Parks, Recreation, and Community Services	1,026,194	1,017,113	1,058,824	1,104,707	1,155,178	5,362,016
Transportation	22,170,000	19,310,000	9,860,000	8,760,000	9,210,000	69,310,000
Railroad-Related Projects	591,800	609,600	627,900	646,700	666,100	3,142,100
Sewer	2,235,000	1,875,000	36,460,000	40,265,000	9,640,000	90,475,000
Storm Drain	150,000	150,000	150,000	150,000	150,000	750,000
Refuse	-	-	-	-	-	-
Public Parking	250,000	-	-	-	-	250,000
Airport	3,540,000	8,325,000	4,525,000	3,125,000	2,625,000	22,140,000
Electric	35,316,000	35,356,000	35,092,000	32,983,000	35,291,000	174,038,000
Water	7,945,000	19,338,000	14,513,000	15,513,000	16,163,000	73,472,000
Total	**73,323,994**	**88,636,213**	**104,376,724**	**105,377,407**	**76,730,278**	**448,444,616**

Expenditures by Section



NOTE: Categories comprising less than 1% of total are not labeled.

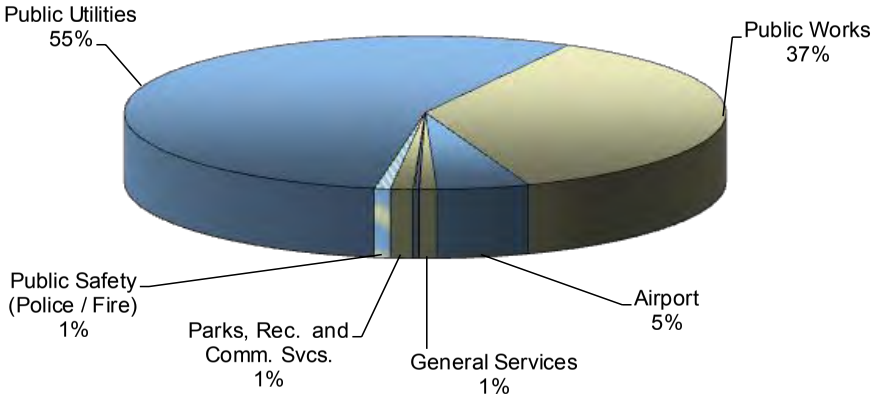
2013/14 to 2017/18

Capital Improvement Program

Capital Improvement Program Summary by Department

Department	2013/14	2014/15	2015/16	2016/17	2017/18	Total
Airport	3,540,000	8,325,000	4,525,000	3,125,000	2,625,000	22,140,000
General Services [1]	100,000	990,000	1,030,000	1,080,000	980,000	4,180,000
Convention Center	-	150,000	-	-	-	150,000
Library	-	250,000	250,000	250,000	250,000	1,000,000
Museum	-	190,000	50,000	50,000	50,000	340,000
Parks, Recreation, and Community Services	1,026,194	1,017,113	1,058,824	1,104,707	1,155,178	5,362,016
Public Safety (Police / Fire)	-	1,075,500	760,000	1,450,000	550,000	3,835,500
Public Utilities	43,261,000	54,694,000	49,605,000	48,496,000	51,454,000	247,510,000
Public Works	25,396,800	21,944,600	47,097,900	49,821,700	19,666,100	163,927,100
Total	**73,323,994**	**88,636,213**	**104,376,724**	**105,377,407**	**76,730,278**	**448,444,616**

Expenditures by Department



[1] Includes recurring project budgets that may ultimately be charged to other Departments.

NOTE: Categories comprising less than 1% of total are not labeled.

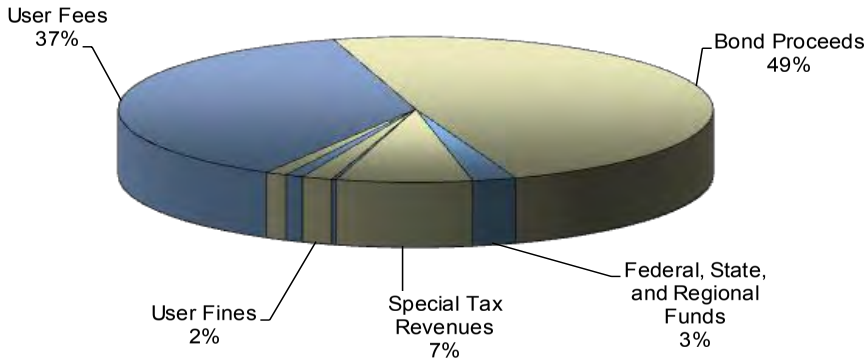
2013/14 to 2017/18

Capital Improvement Program

Capital Improvement Program Summary by Revenue Source

Revenue Source	2013/14	2014/15	2015/16	2016/17	2017/18	Total
User Fees	65,783,512	70,890,560	69,527,366	71,719,687	73,950,009	351,871,134
Bond Proceeds	192,928,000	51,403,000	139,598,000	38,245,000	40,928,000	463,102,000
Federal, State, and Regional Funds	5,155,300	7,843,500	4,252,500	2,929,500	2,457,000	22,637,800
Special Tax Revenues	13,505,800	13,701,930	13,903,570	14,110,720	14,324,481	69,546,501
Private Funds	438,430	449,391	460,626	472,141	483,945	2,304,533
User Fines	3,018,000	3,028,000	3,228,000	3,228,000	3,228,000	15,730,000
Interest	2,435,000	1,799,000	2,107,000	1,645,000	1,390,000	9,376,000
Other [1]	844,194	2,267,113	3,328,824	2,494,706	1,840,000	10,774,837
Total	**284,108,236**	**151,382,494**	**236,405,886**	**134,844,754**	**138,601,435**	**945,342,805**
Less: Amounts Not Available for Current CIP [2]						(496,898,189)
Adjusted Total						**448,444,616**

Revenues by Revenue Source



[1] Includes any revenues anticipated from the General Fund and Airport Fund for Routine Municipal Buildings & Facilities and Park/Community Center projects.

[2] Includes funds estimated to be on hand at the end of the five-year CIP for future projects, certain enterprise funds operating expenditures, debt service for previous capital projects, and other minor items.

NOTE: Revenues include some enterprise fund revenues used for non-capital expenditures as well as excess revenues not allocated in the CIP.

NOTE: Categories comprising less than 2% of total are not labeled.

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2013/14 to 2017/18

Capital Improvement Program

Budgeted Projects Summary for 2013/14

Project Number	Project Type	Project Description	General Fund (101)	Other City Funds	Restricted Non-City Funds	Total
	Municipal Buildings and Facilities					
MB-30	Recurring Projects	Convention Center Facility Refurbishment	35,000	-	-	35,000
MB-31	Recurring Projects	Convention Center Minor Facility Repairs	50,000	-	-	50,000
MB-33	Recurring Projects	HVAC Replacement at Various City Facilities	15,000	-	-	15,000
		SubTotal	**100,000**	**-**	**-**	**100,000**
	Parks, Recreation, and Community Services					
PR-1	Recurring Projects	Construction Contingency Reserve	-	400,000	-	400,000
PR-2	Recurring Projects	Park Land Acquisition Reserve	-	200,000	-	200,000
PR-3	Recurring Projects	Park Refurbishment	224,922	-	-	224,922
PR-4	Recurring Projects	Recreation Center Rehabilitation	154,272	-	-	154,272
PR-5	Regional Parks	Fairmount Park - Fairmount Court Properties	-	47,000	-	47,000
		SubTotal	**379,194**	**647,000**	**-**	**1,026,194**
	Transportation					
TR-1	Street Construction	Arlington Avenue - Fairhaven to City Limit	-	500,000	-	500,000
TR-3	Street Construction	Certificates of Participation (COP) - Paving Projects	-	9,727,890	-	9,727,890
TR-4	Street Construction	COP Paving Projects (performed by Streets division)	-	1,272,110	-	1,272,110
TR-6	Street Construction	Collett Avenue Extension - Napa to Buchanan	-	1,900,000	-	1,900,000
TR-7	Street Construction	Fairway Drive - McAllister to Van Buren	-	250,000	-	250,000
TR-8	Street Construction	Market Street Arbor Repair south of SR-60	-	50,000	-	50,000
TR-9	Street Construction	Market Street Bridge Replacement at Santa Ana River	-	100,000	-	100,000
TR-10	Street Maintenance	Curb and Gutter Repair	-	200,000	-	200,000
TR-11	Street Maintenance	Major Streets Rehabilitation/Preservation	-	2,710,000	-	2,710,000
TR-12	Street Maintenance	Minor Streets Rehabilitation/Preservation	-	2,750,000	-	2,750,000
TR-13	Street Maintenance	Miscellaneous Street Construction	-	500,000	-	500,000
TR-14	Street Maintenance	Sidewalk / Trail Construction at Various Locations	-	500,000	-	500,000
TR-15	Street Maintenance	Sidewalk Repair	-	400,000	-	400,000
TR-16	Street Maintenance	Wheelchair Ramps	-	600,000	-	600,000
TR-18	New Signals	Lincoln-St. Lawrence	-	250,000	-	250,000
TR-19	Signal Interconnections	Traffic Management Center	-	50,000	-	50,000
TR-20	Signal Interconnections	14th/Martin Luther King - Market to I-215	-	50,000	-	50,000
TR-21	Signal Interconnections	University - Brockton to Campus Drive	-	50,000	-	50,000
TR-23	Signal Maintenance	Controller Assembly Replacement	-	40,000	-	40,000
TR-24	Signal Maintenance	LED Signal Lenses Replacement	-	50,000	-	50,000
TR-25	Signal Maintenance	Roadside Signs Upgrade	-	50,000	-	50,000
TR-26	Signal Maintenance	Spread Spectrum Radio Replacement	-	10,000	-	10,000
TR-27	Signal Maintenance	Striping and Markings Installations/Removals	-	25,000	-	25,000
TR-28	Signal Maintenance	Traffic Signal Loop Replacement	-	35,000	-	35,000
TR-29	Signal Modifications	Brockton from Central to Mission Inn (Protective/Permissive)	-	100,000	-	100,000
		SubTotal	**-**	**22,170,000**	**-**	**22,170,000**
	Railroad-Related					
RR-3	Rail Projects	BNSF/UP Quiet Zone - Panorama & Cridge	-	291,800	-	291,800
RR-5	Rail Projects	Phase 2 Grade Separation Program	-	100,000	-	100,000
RR-8	Rail Projects	Union Pacific Quiet Zone - Brockton & Palm	-	200,000	-	200,000
		SubTotal	**-**	**591,800**	**-**	**591,800**
	Sewer					
SW-1	Plant Capacity/Repl.	Facility System and Equipment Upgrade/Replacement	-	625,000	-	625,000
SW-2	Plant Capacity/Repl.	Tertiary System Upgrade	-	250,000	-	250,000
SW-13	Sewer Projects	Miscellaneous Sewer Construction	-	1,000,000	-	1,000,000
SW-14	Sewer Projects	Pipe Liner Repair Various Locations	-	150,000	-	150,000
SW-15	Sewer Projects	Miscellaneous Lift Station Equipment Replacement	-	100,000	-	100,000
SW-16	Sewer Projects	CW Manhole Adj & Pipe Replacement	-	85,000	-	85,000
SW-17	Sewer Projects	Arlanza Trnk Swr Ln MH Rehab	-	25,000	-	25,000
		SubTotal	**-**	**2,235,000**	**-**	**2,235,000**
	Storm Drain					
SD-1	Recurring Projects	Miscellaneous Storm Drain Construction	-	150,000	-	150,000
		SubTotal	**-**	**150,000**	**-**	**150,000**
	Public Parking					
PA-1	Construction	Lot 33 Improvements	-	250,000	-	250,000
		SubTotal	**-**	**250,000**	**-**	**250,000**

Project Number	Project Type	Project Description	General Fund (101)	Other City Funds	Restricted Non-City Funds	Total
	Airport					
AP-1	Construction	Relocate Southern California Gas Line	-	800,000	-	800,000
AP-2	Construction	Land Acquistion 13.34 acres for Runway 9 RPZ	-	2,700,000	-	2,700,000
AP-3	Construction	Install Runway End Identifier Lights (REILs) for Runway 27	-	40,000	-	40,000
		SubTotal	**-**	**3,540,000**	**-**	**3,540,000**
	Electric					
EL-1	Driven by Others	Engineering/Pre-Design	-	362,000	-	362,000
EL-2	Driven by Others	Major OH/UG Conversions	-	1,643,000	-	1,643,000
EL-3	Driven by Others	Cable Replacement - PW Street Rehab.	-	400,000	-	400,000
EL-4	Driven by Others	Major Street Light Projects	-	360,000	-	360,000
EL-5	Driven by Others	Neighborhood Street Light Retrofit (Riverside Renaissance)	-	765,000	-	765,000
EL-6	Driven by Others	CalTrans HOV- Non-Reimbursable	-	100,000	-	100,000
EL-7	Power Resources	CAISO/Resource Optimization Studies (Load Mgmt)	-	100,000	-	100,000
EL-8	Power Resources	San Onofre	-	2,105,000	-	2,105,000
EL-9	Generation	Facility Compliance/Upgrades	-	2,396,000	-	2,396,000
EL-10	System Improvements	Engineering/Pre-Design	-	1,575,000	-	1,575,000
EL-11	System Improvements	Cable Replacement	-	1,157,000	-	1,157,000
EL-12	System Improvements	City-wide Communications	-	1,966,000	-	1,966,000
EL-13	System Improvements	Distribution Automation/Reliability	-	250,000	-	250,000
EL-14	System Improvements	GO 165 Upgrades /Line Rebuilds / Relocate	-	1,204,000	-	1,204,000
EL-15	System Improvements	Major 4-12 kV Conversion	-	1,739,000	-	1,739,000
EL-16	System Improvements	Major Feeders	-	2,180,000	-	2,180,000
EL-17	System Improvements	Major Tract Distribution	-	144,000	-	144,000
EL-18	System Improvements	SCADA	-	900,000	-	900,000
EL-19	System Improvements	SCE Condemnation Costs	-	560,000	-	560,000
EL-20	System Improvements	Substation Bus & Upgrades	-	3,055,000	-	3,055,000
EL-21	System Improvements	Substation Transformer Addition	-	2,732,000	-	2,732,000
EL-23	Recurring Projects	Engineering/Pre-Design	-	482,000	-	482,000
EL-24	Recurring Projects	Capacitors-Regulators	-	50,000	-	50,000
EL-25	Recurring Projects	Distribution Line Extensions	-	2,295,000	-	2,295,000
EL-26	Recurring Projects	Lines Rebuilds / Relocate	-	1,235,000	-	1,235,000
EL-27	Recurring Projects	Meters	-	800,000	-	800,000
EL-28	Recurring Projects	Services	-	383,000	-	383,000
EL-29	Recurring Projects	Street Lighting	-	315,000	-	315,000
EL-30	Recurring Projects	System Substation Modifications	-	63,000	-	63,000
EL-31	Recurring Projects	Transformers	-	2,000,000	-	2,000,000
EL-32	Special Projects	Special Project - Facilities Planning	-	2,000,000	-	2,000,000
		SubTotal	**-**	**35,316,000**	**-**	**35,316,000**
	Water					
WA-1	System Improvements	Main Replacements	-	2,300,000	-	2,300,000
WA-2	System Improvements	Pump Station Replacements	-	635,000	-	635,000
WA-3	System Improvements	Facility Rehabilitation	-	2,293,000	-	2,293,000
WA-5	Recurring Projects	System Expansion (New Customer Construction)	-	1,100,000	-	1,100,000
WA-6	Recurring Projects	Meters	-	850,000	-	850,000
WA-7	Recurring Projects	Water Stock	-	10,000	-	10,000
WA-8	Recurring Projects	Distribution System Facilities Replacements	-	657,000	-	657,000
WA-9	Recurring Projects	Hydrant Check Valves	-	100,000	-	100,000
		SubTotal	**-**	**7,945,000**	**-**	**7,945,000**
		Total	**479,194**	**72,844,800**	**-**	**73,323,994**

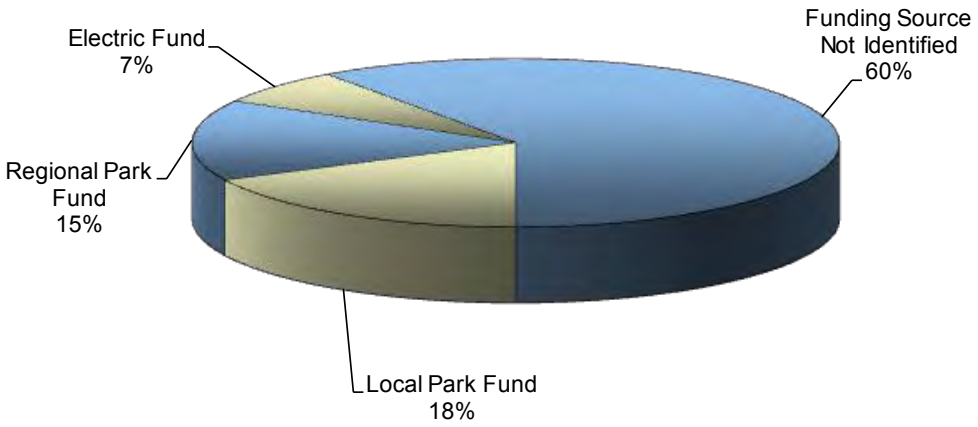
2013/14 to 2017/18

Capital Improvement Program

Summary of Unfunded Projects by Fund

Fund	Fund Description	Total
411	Local Park Fund	64,547,400
413	Regional Park Fund	56,847,500
510	Electric Fund	25,000,000
520	Water Fund	-
	Funding Source Not Identified [1]	218,748,199
	Total	**365,143,099**

Requirements by Fund



[1] Projects for which a funding source has not yet been determined and therefore a Fund is not yet assignable.

NOTE: Categories comprising less than 1% of total are not labeled.

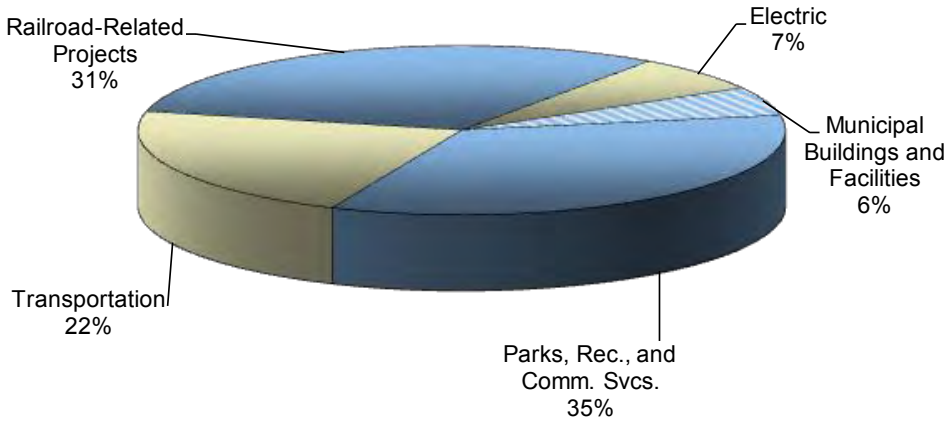
2013/14 to 2017/18

Capital Improvement Program

Summary of Unfunded Projects by Program Section

CIP Program Section	Total
Municipal Buildings and Facilities	20,200,000
Parks, Recreation, and Community Services	125,419,900
Transportation	80,266,499
Railroad-Related Projects	114,256,700
Sewer	-
Storm Drain	-
Refuse	-
Public Parking	-
Airport	-
Electric	25,000,000
Water	-
Total	**365,143,099**

Requirements by Section



NOTE: Categories comprising less than 1% of total are not labeled.

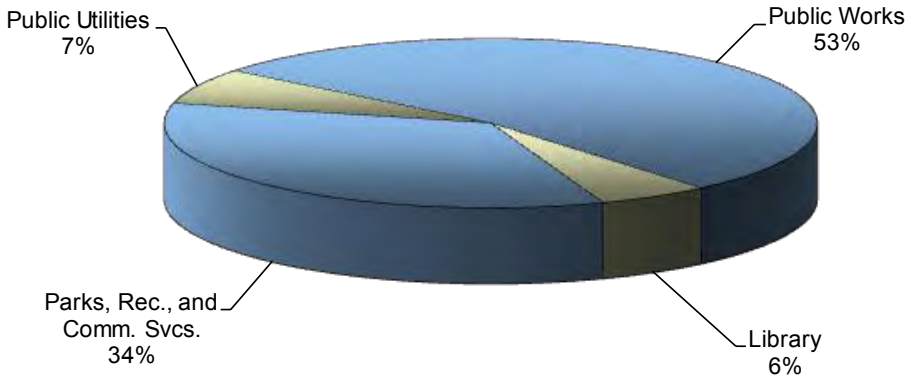
2013/14 to 2017/18

Capital Improvement Program

Summary of Unfunded Projects by Department

Department	Total
Airport	-
General Services	-
Library	20,200,000
Museum	-
Parks, Recreation, and Community Services	125,419,900
Public Safety (Police / Fire)	-
Public Utilities	25,000,000
Public Works	194,523,199
Total	**365,143,099**

Requirements by Department



NOTE: Categories comprising less than 1% of total are not labeled.

Program Summary

2013/14	2014/15	2015/16	2016/17	2017/18	Total
100,000	2,655,500	2,090,000	2,830,000	1,830,000	9,505,500

Introduction

The Municipal Buildings and Facilities Capital Improvement Program aims to provide safe, clean, well-maintained, and functional facilities in order to allow City departments to effectively provide services to the community. This CIP plays a crucial role in providing a welcoming, comfortable, and aesthetically pleasing atmosphere for our residents, visitors, and City employees.

The Municipal Buildings and Facilities CIP details capital improvements and maintenance for City-owned buildings and facilities. Parks and recreation facilities and most airport projects are contained in separate capital improvement programs. The General Services Department oversees the majority of the projects in the Municipal Buildings and Facilities CIP. The following sections describe selected highlights.

Convention Center
The five-year CIP includes a $150,000 improvement for Convention Center chairs.

General Services
The five-year General Services CIP includes $1,240,000 of improvement projects at the City's Corporation Yard, City Hall and other City facilities.

Library
The five-year CIP includes $1.0 million for various branch library facility improvements such as parking lot refurbishment and roof replacement.

Museum
This CIP includes $340,000 for refurbishment and improvement projects at the Metropolitan Museum.

Public Safety
Over the five-year period, the Police and Fire Departments will see $3.84 million of improvement projects constructed as outlined in this CIP. Projects include roof replacement at two fire stations, security fencing for three fire stations, and other more minor improvement projects at various police and fire facilities.

Recurring Projects
This portion of CIP totals $2.9 million over the five years of the CIP. These obligations cover projects associated with the refurbishment of facilities and areas that contribute to the City's economic development efforts. This includes HVAC improvements, facility painting, ADA modifications, and repairs/improvements at the Convention Center, Fox Theater, and Municipal Auditorium.

Key Revenues and Funding Sources

The Municipal Buildings and Facilities CIP derives funding from a variety of sources. Most typically these projects are funded through the General Fund, with projects being charged out to the appropriate department.

Future CIP Considerations

Projects totaling $18.65 million have been identified and are shown in the CIP as unfunded. City staff continues to evaluate available funding options and are working to find funding sources for the remaining unfunded projects.

Table MB-1

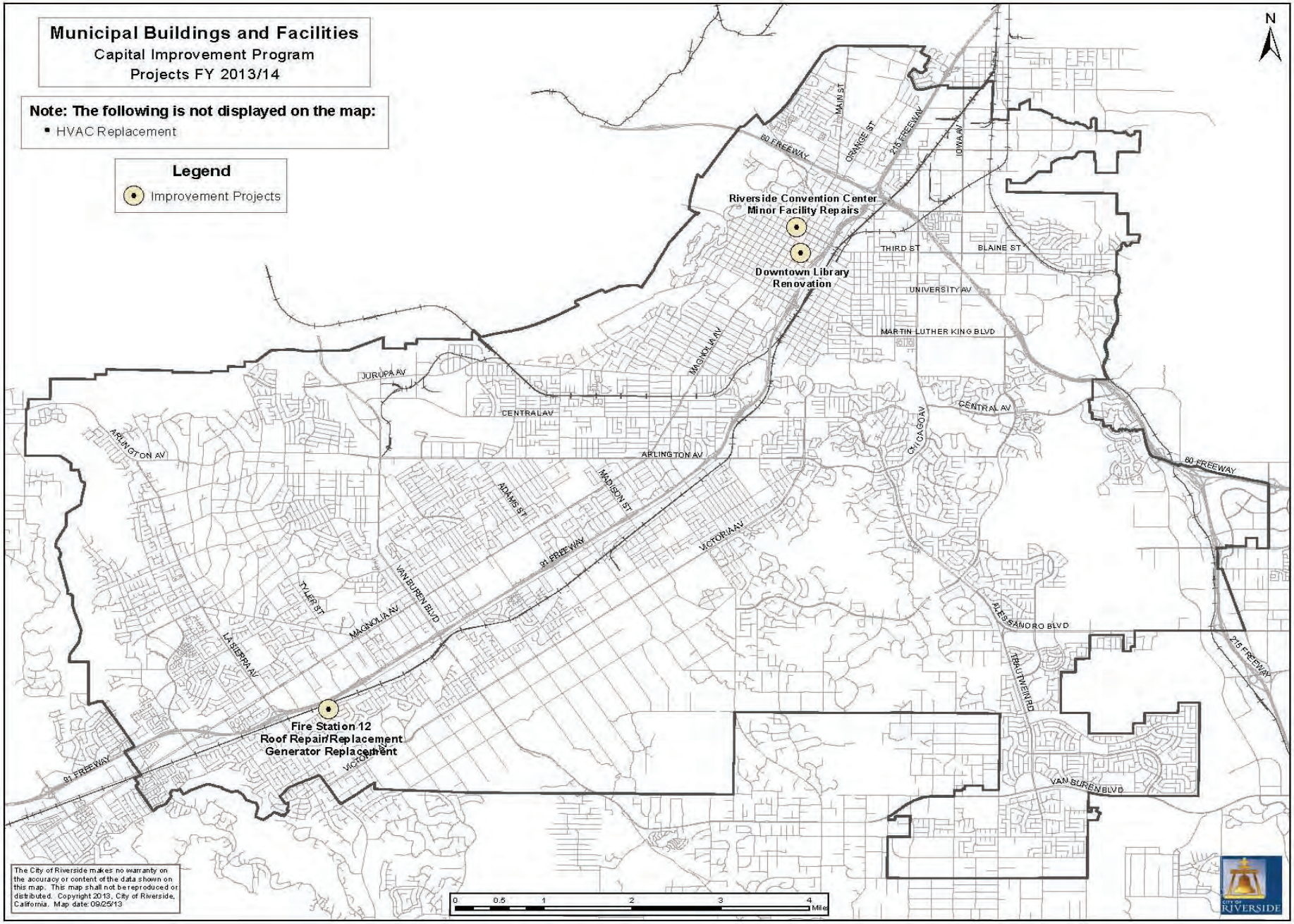
2013/14 to 2017/18

Capital Improvement Program - Municipal Buildings and Facilities

Budgeted Projects - Year One

Project Number	Project Type	Project Description	General Fund (101)	Central Garage Fund (650)	Airport Fund (530)	Restricted Non-City Funds	Total
MB-27	Recurring Projects	Convention Center Facility Refurbishment	35,000	-	-	-	35,000
MB-28	Recurring Projects	Convention Center Minor Facility Repairs	50,000	-	-	-	50,000
MB-30	Recurring Projects	HVAC Replacement at Various City Facilities	15,000	-	-	-	15,000
		Total	**100,000**	**-**	**-**	**-**	**100,000**

NOTE: Projects funded in the Municipal Buildings and Facilities CIP that impact Departments described elsewhere in this document are shown here only.


Municipal Buildings and Facilities
Capital Improvement Program
Projects FY 2013/14
Note: The following is not displayed on the map:
HVAC Replacement
Legend
Improvement Projects
N
Riverside Convention Center
Minor Facility Repairs
Downtown Library
Renovation
Fire Station 12
Roof Repair/Replacement
Generator Replacement
60 FREEWAY
MAIN ST
ORANGE ST
215 FREEWAY
IOWA AV
THIRD ST
BLAINE ST
UNIVERSITY AV
MARTIN LUTHER KING BLVD
MAGNOLIA AV
JURUPA AV
CENTRAL AV
ARLINGTON AV
CHICAGO AV
ADAMS ST
MADISON ST
91 FREEWAY
VICTORIA AV
VAN BUREN BLVD
TYLER ST
LA SIERRA AV
ALESSANDRO BLVD
TRAUTWEIN RD
The City of Riverside makes no warranty on the accuracy or content of the data shown on this map. This map shall not be reproduced or distributed. Copyright 2013, City of Riverside, California. Map date: 09/25/13
0 0.5 1 2 3 4 Miles
CITY OF RIVERSIDE

City of Riverside

Table MB-2

2013/14 to 2017/18

Capital Improvement Program - Municipal Buildings and Facilities

Capital Improvement Program Summary

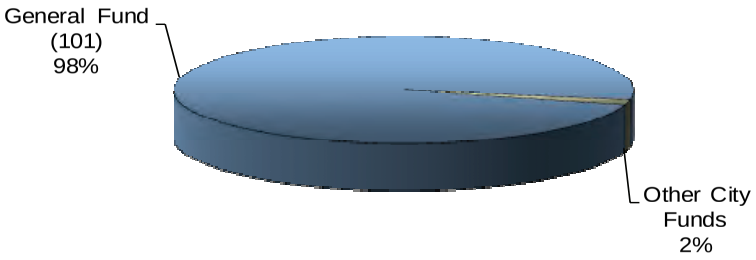
Projected Expenditures by Fund

Fund	2013/14	2014/15	2015/16	2016/17	2017/18	Total	Unfunded
General Fund (101)	100,000	2,655,500	2,040,000	2,730,000	1,830,000	9,355,500	-
Other City Funds	-	-	50,000	100,000	-	150,000	-
Funding Source Not Identified	-	-	-	-	-	-	20,200,000
Total	**100,000**	**2,655,500**	**2,090,000**	**2,830,000**	**1,830,000**	**9,505,500**	**20,200,000**

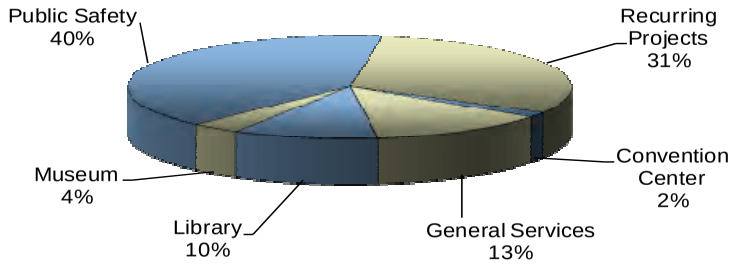
Projected Expenditures by Category

Project Category	2013/14	2014/15	2015/16	2016/17	2017/18	Total	Unfunded
Convention Center	-	150,000	-	-	-	150,000	-
General Services	-	490,000	250,000	300,000	200,000	1,240,000	-
Library	-	250,000	250,000	250,000	250,000	1,000,000	20,200,000
Museum	-	190,000	50,000	50,000	50,000	340,000	-
Public Safety	-	1,075,500	760,000	1,450,000	550,000	3,835,500	-
Recurring Projects	100,000	500,000	780,000	780,000	780,000	2,940,000	-
Total	**100,000**	**2,655,500**	**2,090,000**	**2,830,000**	**1,830,000**	**9,505,500**	**20,200,000**

Expenditures by Fund



Expenditures by Category



NOTE: Pie Charts do not included unfunded projects.
NOTE: Categories comprising less than 1% of total are not labeled
NOTE: Projects funded in the Municipal Buildings and Facilities CIP that impact Departments described elsewhere in this document are shown here only.

City of Riverside

Table MB-3

2013/14 to 2017/18

Capital Improvement Program - Municipal Buildings and Facilities

Projected Capital Funding Revenue Sources by Fund

Revenue Type	Revenue Source	2013/14	2014/15	2015/16	2016/17	2017/18	Total
							-
	See Note [1]						
							-
	Total Funds Available for Capital Improvements	**-**	**-**	**-**	**-**	**-**	**-**

[1] The Municipal Buildings & Facilities CIP is Funded from General and other Fund revenues. Therefore, revenues are not shown here.

2013/14 to 2017/18

Capital Improvement Program - Municipal Buildings and Facilities

Projected Capital Funding Appropriations by Fiscal Year

Sources of Funds	2013/14	2014/15	2015/16	2016/17	2017/18
Total Funds Available for Capital Improvements from Revenue - General Fund (101)	100,000	2,655,500	2,040,000	2,730,000	1,830,000
Total Funds Available for Capital Improvements from Revenue - Other City Funds	-	-	50,000	100,000	-
Fund Balance from Prior Year [1]	-	-	-	-	-
Total Funds Available for Capital Improvements	**100,000**	**2,655,500**	**2,090,000**	**2,830,000**	**1,830,000**

Project Number	Project Type	Project Description	2013/14	2014/15	2015/16	2016/17	2017/18	Total	Unfunded
MB-1	Convention Center	Convention Center Chairs	-	(150,000)	-	-	-	(150,000)	-
MB-2	General Services	City Hall Basement Improvements	-	(20,000)	-	-	-	(20,000)	-
MB-3	General Services	City Hall Basement Security Enhancements	-	(10,000)	-	-	-	(10,000)	-
MB-4	General Services	Corporation Yard Fuel Island Restroom	-	-	(50,000)	-	-	(50,000)	-
MB-5	General Services	Corporation Yard Exterior Building Painting	-	(100,000)	-	-	-	(100,000)	-
MB-6	General Services	Corporation Yard E85 Fueling Station	-	-	-	(100,000)	-	(100,000)	-
MB-7	General Services	Corporation Yard Parking Lot Repaving	-	(50,000)	(100,000)	(100,000)	(100,000)	(350,000)	-
MB-8	General Services	Generator Switchgear	-	(100,000)	(100,000)	(100,000)	(100,000)	(400,000)	-
MB-9	General Services	Roof White Coating - Fleet Services	-	(80,000)	-	-	-	(80,000)	-
MB-10	General Services	City Hall Dock Security Improvements	-	(50,000)	-	-	-	(50,000)	20,200,000
MB-11	General Services	Tire Maintenance Building Improvements	-	(70,000)	-	-	-	(70,000)	-
MB-12	General Services	Corp Yard Satellite Building Paint	-	(10,000)	-	-	-	(10,000)	-
MB-13	Library	Branch Library Improvements	-	(250,000)	(250,000)	(250,000)	(250,000)	(1,000,000)	-
MB-UF-1	Library	Downtown Library Renovation	-	-	-	-	-	-	-
MB-14	Museum	Museum Elevator Renovation	-	(100,000)	-	-	-	(100,000)	-
MB-15	Museum	Metropolitan Museum Improvements	-	(50,000)	(50,000)	(50,000)	(50,000)	(200,000)	-
MB-16	Museum	Metropolitan Museum Improvements - Sidewalk Medilions	-	(40,000)	-	-	-	(40,000)	-
MB-17	Public Safety	Fire Stations 4, 7, 8 New Kitchens	-	(75,000)	-	-	-	(75,000)	-
MB-18	Public Safety	Fire Stations 4, 7, 8 Generator and Transfer Switch Replacements	-	(140,500)	-	-	-	(140,500)	-
MB-19	Public Safety	Fire Stations 2 and 3 Roof Repair/Replacement	-	(150,000)	(150,000)	(150,000)	-	(450,000)	-
MB-20	Public Safety	Lincoln PD Generator Replacement	-	(100,000)	-	-	-	(100,000)	-
MB-21	Public Safety	Fire Stations 4, 9, and 10 Security Fencing	-	(60,000)	(60,000)	-	-	(120,000)	-
MB-22	Public Safety	Fire Station 11 Gender Modifications	-	-	-	(750,000)	-	(750,000)	-
MB-23	Public Safety	Fire Station Improvements	-	(400,000)	(400,000)	(400,000)	(400,000)	(1,600,000)	-
MB-24	Public Safety	Fire Station Security Systems	-	(50,000)	(50,000)	(50,000)	(50,000)	(200,000)	-
MB-25	Public Safety	Police Department Improvements	-	(100,000)	(100,000)	(100,000)	(100,000)	(400,000)	-
MB-26	Recurring Projects	Americans with Disabilities Act Modifications at Various City Facilities	-	(100,000)	(100,000)	(100,000)	(100,000)	(400,000)	-
MB-27	Recurring Projects	Convention Center Facility Refurbishment	(35,000)	(35,000)	(50,000)	(50,000)	(50,000)	(220,000)	-
MB-28	Recurring Projects	Convention Center Minor Facility Repairs	(50,000)	(50,000)	(50,000)	(50,000)	(50,000)	(250,000)	-
MB-29	Recurring Projects	Fox Theater Facility Repairs	-	(50,000)	(50,000)	(50,000)	(50,000)	(200,000)	-
MB-30	Recurring Projects	HVAC Replacement at Various City Facilities	(15,000)	(15,000)	(15,000)	(15,000)	(15,000)	(75,000)	-
MB-31	Recurring Projects	Miscellaneous Improvements at City Facilities	-	(250,000)	(500,000)	(500,000)	(500,000)	(1,750,000)	-
MB-32	Recurring Projects	Municipal Auditorium Facility Repairs/Refurbishment	-	-	(15,000)	(15,000)	(15,000)	(45,000)	-
		Total	**(100,000)**	**(2,655,500)**	**(2,090,000)**	**(2,830,000)**	**(1,830,000)**	**(9,505,500)**	**20,200,000**
		Unbudgeted Balance	**-**	**-**	**-**	**-**	**-**		

[1] The Municipal Buildings and Facilities CIP is not funded from any funding sources that retain a year-end balance. Projected expenditures are equal to projected appropriations.

NOTE: Projects funded in the Municipal Buildings and Facilities CIP that impact Departments described elsewhere in this document are shown here only.

2013/14 to 2017/18

Capital Improvement Program - Municipal Buildings and Facilities

Funded Capital Projects

Project Number	Project Type	Project Description	General Fund (101)	Central Garage Fund (650)	Restricted Non-City Funds	Total
MB-1	Convention Center	Convention Center Chairs	150,000	-	-	150,000
MB-2	General Services	City Hall Basement Improvements	20,000	-	-	20,000
MB-3	General Services	City Hall Basement Security Enhancements	10,000	-	-	10,000
MB-4	General Services	Corporation Yard Fuel Island Restroom	-	50,000	-	50,000
MB-5	General Services	Corporation Yard Exterior Building Painting	100,000	-	-	100,000
MB-6	General Services	Corporation Yard E85 Fueling Station	-	100,000	-	100,000
MB-7	General Services	Corporation Yard Parking Lot Repaving	350,000	-	-	350,000
MB-8	General Services	Generator Switchgear	400,000	-	-	400,000
MB-9	General Services	Roof White Coating - Fleet Services	80,000	-	-	80,000
MB-10	General Services	City Hall Dock Security Improvements	50,000	-	-	50,000
MB-11	General Services	Tire Maintenance Building Improvements	70,000	-	-	70,000
MB-12	General Services	Corp Yard Satellite Building Paint	10,000	-	-	10,000
MB-13	Library	Branch Library Improvements	1,000,000	-	-	1,000,000
MB-14	Museum	Museum Elevator Renovation	100,000	-	-	100,000
MB-15	Museum	Metropolitan Museum Improvements	200,000	-	-	200,000
MB-16	Museum	Metropolitan Museum Improvements - Sidewalk Medilions	40,000	-	-	40,000
MB-17	Public Safety	Fire Stations 4, 7, 8 New Kitchens	75,000	-	-	75,000
MB-18	Public Safety	Fire Stations 4, 7, 8 Generator and Transfer Switch Replacements	140,500	-	-	140,500
MB-19	Public Safety	Fire Stations 2 and 3 Roof Repair/Replacement	450,000	-	-	450,000
MB-20	Public Safety	Lincoln PD Generator Replacement	100,000	-	-	100,000
MB-21	Public Safety	Fire Stations 4, 9, and 10 Security Fencing	120,000	-	-	120,000
MB-22	Public Safety	Fire Station 11 Gender Modifications	750,000	-	-	750,000
MB-23	Public Safety	Fire Station Improvements	1,600,000	-	-	1,600,000
MB-24	Public Safety	Fire Station Security Systems	200,000	-	-	200,000
MB-25	Public Safety	Police Department Improvements	400,000	-	-	400,000
MB-26	Recurring Projects	Americans with Disabilities Act Modifications at Various City Facilities	400,000	-	-	400,000
MB-27	Recurring Projects	Convention Center Facility Refurbishment	220,000	-	-	220,000
MB-28	Recurring Projects	Convention Center Minor Facility Repairs	250,000	-	-	250,000
MB-29	Recurring Projects	Fox Theater Facility Repairs	200,000	-	-	200,000
MB-30	Recurring Projects	HVAC Replacement at Various City Facilities	75,000	-	-	75,000
MB-31	Recurring Projects	Miscellaneous Improvements at City Facilities	1,750,000	-	-	1,750,000
MB-32	Recurring Projects	Municipal Auditorium Facility Repairs/Refurbishment	45,000	-	-	45,000
		Total Funded Projects	**9,355,500**	**150,000**	**-**	**9,505,500**

NOTE: Projects funded in the Municipal Buildings and Facilities CIP that impact Departments described elsewhere in this document are shown here only.

Table MB-6

2013/14 to 2017/18

Capital Improvement Program - Municipal Buildings and Facilities

Unfunded Capital Projects

Project Number	Project Type	Project Description	General Fund (101)	Airport Fund (530)	Funding Source Not Identified	Total
MB-UF-1	Library	Downtown Library - Unfunded Component	-	-	20,200,000	20,200,000
		Total Unfunded Projects	**-**	**-**	**20,200,000**	**20,200,000**

NOTE: Projects funded in the Municipal Buildings and Facilities CIP that impact Departments described elsewhere in this document are shown here only.

Program Summary

2013/14	2014/15	2015/16	2016/17	2017/18	Total
1,026,194	1,017,113	1,058,824	1,104,707	1,155,178	5,362,016

Introduction

The Parks, Recreation, and Community Services Capital Improvement Program (CIP) reflects projects proposed within the limits of available funds and projects for which funds have already been appropriated. The proposed five-year CIP for the Parks, Recreation, and Community Services Department is based on available Development Impact Fees.

Projects listed for FY 2013/14 were selected based on the recommendations of the 2003 Park and Open Space Master Plan element of the General Plan, Park and Recreation Commission Subcommittee review, and Park and Recreation Commission approval. The recommendations from the Park and Open Space Master Plan focused on providing recreational uses that are not currently being met and improving vacant park land in order to move closer to a target of having three developed park acres per 1,000 population.

The top projects were selected based on available funding from Local Park Fees and Regional Park Fees. Due to budget constraints, this year's appropriations were limited to Park and Community Center Refurbishment, improvements for Fairmount Park Court Properties, and continuation of existing projects only.

Key Revenues and Funding Sources

The CIP is supported by the following revenue sources: the Local Park Fees Fund (411); the Regional Park Fees Fund (413); and the General Fund (101).

Local Park Fees Fund

Local Park Fees are derived from development fees and are used to finance capital improvements to neighborhood and community parks. Development in the City provides a source of funding for local park fees.

Regional Park Fees Fund

Regional Park Fees projects are derived from regional fees. These funds are used to finance capital improvements to regional parks or for regional needs, such as Fairmount Park, Mt. Rubidoux, and Sycamore Canyon. Development in the City provides a source of funding for regional park improvement needs.

General Fund

The General Fund also provides an annual commitment for refurbishment projects at the recreation centers and within the parks.

Future CIP Considerations

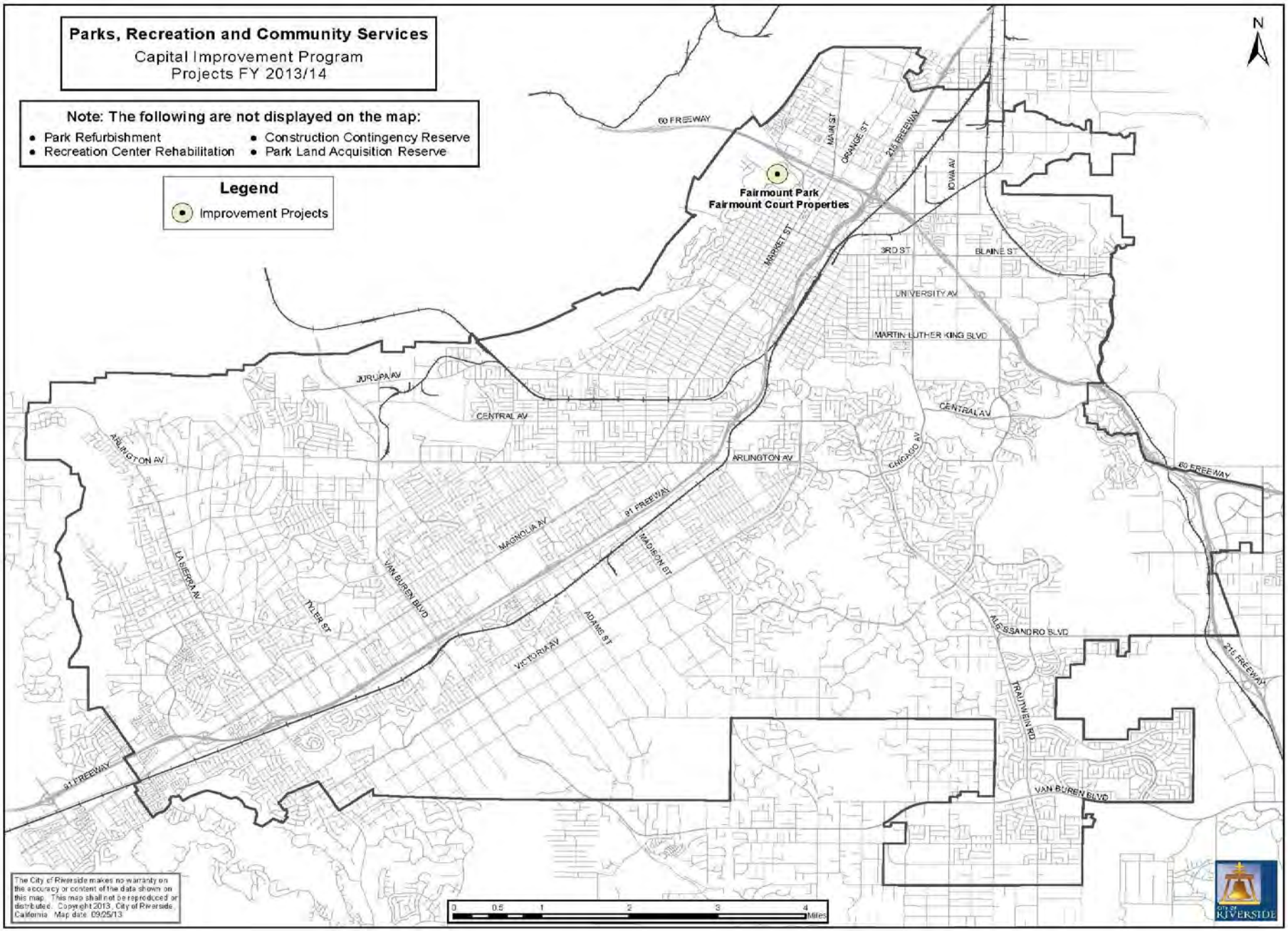
A list of Future Capital Projects is appended, which details additional needs in alphabetical, not prioritized, order and is not an inclusive listing of park projects needed to fully implement the park system or to correct known deficiencies.

2013/14 to 2017/18

Capital Improvement Program - Parks, Recreation, and Community Services

Budgeted Projects - Year One

Project Number	Project Type	Project Description	General Fund (101)	Local Park Fund (411)	Regional Park Fund (413)	Restricted Non-City Funds	Total
PR-1	Recurring Projects	Construction Contingency Reserve	-	400,000	-	-	400,000
PR-2	Recurring Projects	Park Land Acquisition Reserve	-	200,000	-	-	200,000
PR-3	Recurring Projects	Park Refurbishment	224,922	-	-	-	224,922
PR-4	Recurring Projects	Recreation Center Rehabilitation	154,272	-	-	-	154,272
PR-5	Regional Parks	Fairmount Park - Fairmount Court Properties	-	-	47,000	-	47,000
		Total	**379,194**	**600,000**	**47,000**	**-**	**1,026,194**


Parks, Recreation and Community Services
Capital Improvement Program
Projects FY 2013/14
Note: The following are not displayed on the map:
• Park Refurbishment
• Recreation Center Rehabilitation
• Construction Contingency Reserve
• Park Land Acquisition Reserve
Legend
Improvement Projects
Fairmount Park
Fairmount Court Properties
60 FREEWAY
MAIN ST
ORANGE ST
215 FREEWAY
IOWA AV
MARKET ST
3RD ST
BLAINE ST
UNIVERSITY AV
MARTIN LUTHER KING BLVD
JURUPA AV
CENTRAL AV
ARLINGTON AV
CHICAGO AV
91 FREEWAY
MAGNOLIA AV
MADISON ST
LA SIERRA AV
VAN BUREN BLVD
TYLER ST
ADAMS ST
VICTORIA AV
ALESSANDRO BLVD
TRAUTWEIN RD
N
0 0.5 1 2 3 4 Miles
The City of Riverside makes no warranty on the accuracy or content of the data shown on this map. This map shall not be reproduced or distributed. Copyright 2013, City of Riverside, California. Map date: 09/25/13.
City of RIVERSIDE

2013/14 to 2017/18

Capital Improvement Program - Parks, Recreation, and Community Services

Capital Improvement Program Summary

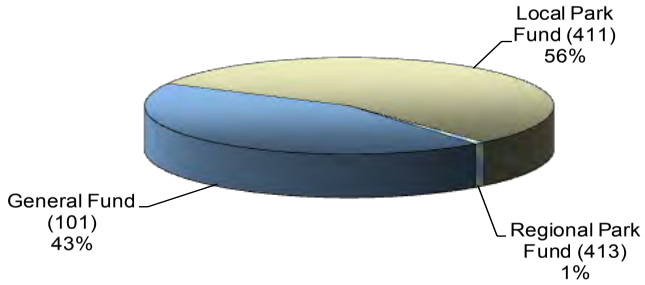
Projected Expenditures by Fund

Fund	2013/14	2014/15	2015/16	2016/17	2017/18	Total	Unfunded
General Fund (101) [1]	379,194	417,113	458,824	504,707	555,178	2,315,016	-
Local Park Fund (411)	600,000	600,000	600,000	600,000	600,000	3,000,000	64,547,400
Regional Park Fund (413)	47,000	-	-	-	-	47,000	56,847,500
Funding Source Not Identified	-	-	-	-	-	-	4,025,000
Total	**1,026,194**	**1,017,113**	**1,058,824**	**1,104,707**	**1,155,178**	**5,362,016**	**125,419,900**

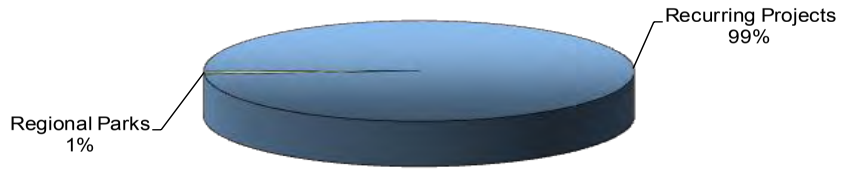
Projected Expenditures by Category

Project Category	2013/14	2014/15	2015/16	2016/17	2017/18	Total	Unfunded
Local Parks	-	-	-	-	-	-	70,847,400
Regional Parks	47,000	-	-	-	-	47,000	54,572,500
Recurring Projects	979,194	1,017,113	1,058,824	1,104,707	1,155,178	5,315,016	-
Total	**1,026,194**	**1,017,113**	**1,058,824**	**1,104,707**	**1,155,178**	**5,362,016**	**125,419,900**

Expenditures by Fund



Expenditures by Category



[1] General Fund available funds shown include anticipated revenue from non-City sources categorized as Restricted Non-City Funds.

NOTE: Pie Charts do not included unfunded projects.
NOTE: Categories comprising less than 1% are not labeled.

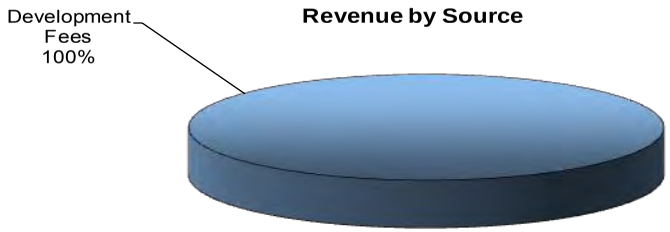
2013/14 to 2017/18

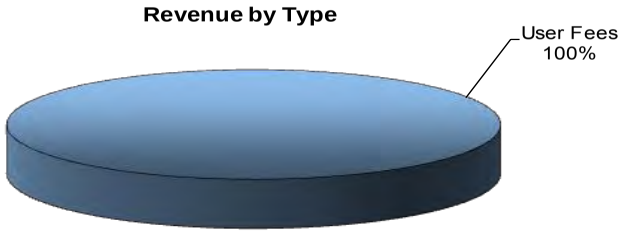
Capital Improvement Program - Parks, Recreation, and Community Services

Projected Capital Funding Revenue Sources by Fund

Local Park Fund (411)

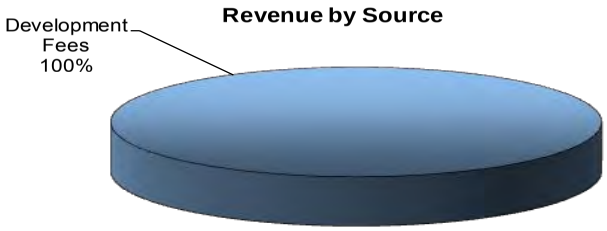
Revenue Type	Revenue Source	2013/14	2014/15	2015/16	2016/17	2017/18	Total
User Fees	Development Fees	3,000,000	4,000,000	4,000,000	4,000,000	4,000,000	19,000,000
	Total Funds Available for Capital Improvements from Revenue	**3,000,000**	**4,000,000**	**4,000,000**	**4,000,000**	**4,000,000**	**19,000,000**

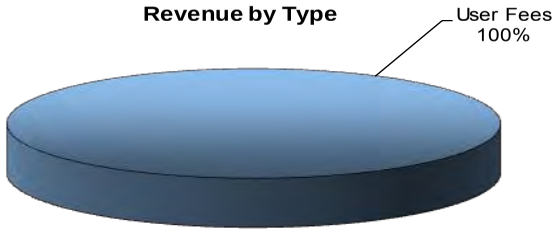




Regional Park Fund (413)

Revenue Type	Revenue Source	2013/14	2014/15	2015/16	2016/17	2017/18	Total
User Fees	Development Fees	750,000	1,000,000	1,000,000	1,000,000	1,000,000	4,750,000
	Total Funds Available for Capital Improvements from Revenue	**750,000**	**1,000,000**	**1,000,000**	**1,000,000**	**1,000,000**	**4,750,000**





NOTE: Categories comprising less than 1% are not labeled.

2013/14 to 2017/18

Capital Improvement Program - Parks, Recreation, and Community Services

Projected Capital Funding Appropriations by Fiscal Year

Sources of Funds	2013/14	2014/15	2015/16	2016/17	2017/18
Total Funds Available for Capital Improvements from Revenue - General Fund (101) [1]	379,194	417,113	458,824	504,707	555,178
Total Funds Available for Capital Improvements from Revenue - Local Parks Fund (411)	3,000,000	4,000,000	4,000,000	4,000,000	4,000,000
Total Funds Available for Capital Improvements from Revenue - Regional Parks Fund (413)	750,000	1,000,000	1,000,000	1,000,000	1,000,000
Fund Balance from Prior Year - Parks Funds (411 & 413)	423,460	993,975	2,147,730	3,201,485	4,255,240
Total Funds Available for Capital Improvements	**4,552,654**	**6,411,088**	**7,606,554**	**8,706,192**	**9,810,418**
Less: Adjustments for Non-Capital Expenditures					
MS4 Permit Charge	(69,843)	(69,843)	(69,843)	(69,843)	(69,843)
Allocated Costs	(25,402)	(25,402)	(25,402)	(25,402)	(25,402)
Debt Service - 2008 Certificates of Participation (411) [2]	(2,300,000)	(1,700,000)	(1,800,000)	(1,800,000)	(1,800,000)
Debt Service - 2011 Renaissance Loan	(69,200)	(732,000)	(732,000)	(732,000)	(732,000)
Debt Service - 2012 Renaissance Loan	(68,040)	(719,000)	(719,000)	(719,000)	(719,000)
Adjusted Total Funds Available for Capital Improvements	**2,020,169**	**3,164,843**	**4,260,309**	**5,359,947**	**6,464,173**

Project Number	Project Type	Project Description	2013/14	2014/15	2015/16	2016/17	2017/18	Total	Unfunded
PR-1	Recurring Projects	Construction Contingency Reserve	(400,000)	(400,000)	(400,000)	(400,000)	(400,000)	(2,000,000)	-
PR-2	Recurring Projects	Park Land Acquisition Reserve	(200,000)	(200,000)	(200,000)	(200,000)	(200,000)	(1,000,000)	-
PR-3	Recurring Projects	Park Refurbishment	(224,922)	(247,414)	(272,155)	(299,371)	(329,308)	(1,373,170)	-
PR-4	Recurring Projects	Recreation Center Rehabilitation	(154,272)	(169,699)	(186,669)	(205,336)	(225,870)	(941,846)	-
PR-5	Regional Parks	Fairmount Park - Fairmount Court Properties	(47,000)	-	-	-	-	(47,000)	-
PR-UF-1	Local Parks	Arizona Middle School Field Renovation	-	-	-	-	-	-	(500,000)
PR-UF-2	Local Parks	Bergamont/Replace Playground Equipment and Surface	-	-	-	-	-	-	(350,000)
PR-UF-3	Local Parks	Bonds/Parking Lot Lighting	-	-	-	-	-	-	(125,000)
PR-UF-4	Local Parks	Bordwell/Gymnasium	-	-	-	-	-	-	(4,600,000)
PR-UF-5	Local Parks	Carlson Park/St. Francis Falls Restoration	-	-	-	-	-	-	(675,000)
PR-UF-6	Local Parks	Castleview Park Development	-	-	-	-	-	-	(10,200,000)
PR-UF-7	Local Parks	Collett/Playground	-	-	-	-	-	-	(500,000)
PR-UF-8	Local Parks	Don Lorenzi/Restroom	-	-	-	-	-	-	(400,000)
PR-UF-9	Local Parks	Fairmount Park - North Hill	-	-	-	-	-	-	(905,000)
PR-UF-10	Local Parks	Gage Canal Trails	-	-	-	-	-	-	(770,000)
PR-UF-11	Local Parks	Golden Star	-	-	-	-	-	-	(8,882,500)
PR-UF-12	Local Parks	Highland Park Community Center	-	-	-	-	-	-	(1,437,500)
PR-UF-13	Local Parks	Highland/Basketball Court	-	-	-	-	-	-	(150,000)
PR-UF-14	Local Parks	Islander Trailhead - Park Expansion	-	-	-	-	-	-	(2,900,000)
PR-UF-15	Local Parks	Mission Ranch	-	-	-	-	-	-	(6,321,000)
PR-UF-16	Local Parks	Mt. Vernon Expansion	-	-	-	-	-	-	(1,698,900)
PR-UF-17	Local Parks	Mt. Vernon Park	-	-	-	-	-	-	(3,782,500)
PR-UF-18	Local Parks	Nichols Community Center	-	-	-	-	-	-	(6,675,000)
PR-UF-19	Local Parks	Park Inventory and Master Plan 2012	-	-	-	-	-	-	(300,000)
PR-UF-20	Local Parks	Patterson Park/Playground	-	-	-	-	-	-	(500,000)
PR-UF-21	Local Parks	Pool Refurbishments - Various	-	-	-	-	-	-	(1,300,000)
PR-UF-22	Local Parks	Skate Parks - Future Sites	-	-	-	-	-	-	(1,325,000)
PR-UF-23	Local Parks	Taft/Playground	-	-	-	-	-	-	(500,000)
PR-UF-24	Local Parks	Thundersky/Playground	-	-	-	-	-	-	(500,000)
PR-UF-25	Local Parks	Trails	-	-	-	-	-	-	(4,000,000)

Project Number	Project Type	Project Description	2013/14	2014/15	2015/16	2016/17	2017/18	Total	Unfunded
PR-UF-26	Local Parks	University Neighborhood Parks Master Plans (Mt. Vernon, Islander, Highlander)	-	-	-	-	-	-	(3,200,000)
PR-UF-27	Local Parks	Various Sites/Install Park and Progress Signs	-	-	-	-	-	-	(150,000)
PR-UF-28	Local Parks	Victoria-Cross Development/Additional	-	-	-	-	-	-	(1,100,000)
PR-UF-29	Local Parks	Victoria-Cross Development/Initial Development	-	-	-	-	-	-	(4,200,000)
PR-UF-30	Local Parks	Villegas Park - Phase II Improvements	-	-	-	-	-	-	(2,900,000)
PR-UF-31	Regional Parks	Challen Hill	-	-	-	-	-	-	(1,875,000)
PR-UF-32	Regional Parks	Fairmount Park Banks Intersection/Pedestrian Access	-	-	-	-	-	-	(525,000)
PR-UF-33	Regional Parks	Fairmount Park Dexter Parking Lot	-	-	-	-	-	-	(1,417,500)
PR-UF-34	Regional Parks	Fairmount/Historic Core Phase I (Bandshell, Amphitheater Renovation)	-	-	-	-	-	-	(750,000)
PR-UF-35	Regional Parks	Fairmount/Historic Core Phase II (Pedestrian Access, Restroom, Parking Improvements)	-	-	-	-	-	-	(3,200,000)
PR-UF-36	Regional Parks	Fairmount/Irrigation System Modifications	-	-	-	-	-	-	(625,000)
PR-UF-37	Regional Parks	Fairmount/Lighting & Lakeshore Access Improvements, Phase II	-	-	-	-	-	-	(825,000)
PR-UF-38	Regional Parks	Fairmount/Water Quality Improvements/Aeration - Phase I	-	-	-	-	-	-	(100,000)
PR-UF-39	Regional Parks	Fairmount/Water Quality Improvements/Aeration - Phase 2	-	-	-	-	-	-	(900,000)
PR-UF-40	Regional Parks	Hole Lake Park Site Development	-	-	-	-	-	-	(2,200,000)
PR-UF-41	Regional Parks	Indian Hill Acquisition	-	-	-	-	-	-	(1,830,000)
PR-UF-42	Regional Parks	MWD Box Springs Feeder	-	-	-	-	-	-	(600,000)
PR-UF-43	Regional Parks	Quail Run Fencing	-	-	-	-	-	-	(50,000)
PR-UF-44	Regional Parks	Savi Ranch Development	-	-	-	-	-	-	(16,000,000)
PR-UF-45	Regional Parks	Sycamore Canyon Property Fence	-	-	-	-	-	-	(2,200,000)
PR-UF-46	Regional Parks	Sycamore Canyon Trailhead	-	-	-	-	-	-	(1,850,000)
PR-UF-47	Regional Parks	Trail Projects - Including MWD Box Springs	-	-	-	-	-	-	(19,625,000)
		Total	**(1,026,194)**	**(1,017,113)**	**(1,058,824)**	**(1,104,707)**	**(1,155,178)**	**(5,362,016)**	**(125,419,900)**
		Unbudgeted Balance	**993,975**	**2,147,730**	**3,201,485**	**4,255,240**	**5,308,995**		

[1] Due to the numerous General Fund revenue sources, it would be difficult to attribute projects to a specific revenue source. Sufficient General Fund revenues exist to fund the projects shown in the Parks, Recreation, and Community Services CIP.

[2] The General Fund is currently servicing a portion of this debt on behalf of the Local Park Fees Fund. To the extent that surplus revenues materialize, these funds will be redirected to the General Fund to reimburse the debt service costs funded by the General Fund in prior years.

2013/14 to 2017/18

Capital Improvement Program - Parks, Recreation, and Community Services

Funded Capital Projects

Project Number	Project Type	Project Description	General Fund (101)	Local Park Fund (411)	Regional Park Fund (413)	Restricted Non-City Funds	Total
PR-1	Recurring Projects	Construction Contingency Reserve	-	2,000,000	-	-	2,000,000
PR-2	Recurring Projects	Park Land Acquisition Reserve	-	1,000,000	-	-	1,000,000
PR-3	Recurring Projects	Park Refurbishment	1,373,170	-	-	-	1,373,170
PR-4	Recurring Projects	Recreation Center Rehabilitation	941,846	-	-	-	941,846
PR-5	Regional Parks	Fairmount Park - Fairmount Court Properties	-	-	47,000	-	47,000
		Total Funded Projects	**2,315,016**	**3,000,000**	**47,000**	**-**	**5,362,016**

2013/14 to 2017/18

Capital Improvement Program - Parks, Recreation, and Community Services

Unfunded Capital Projects

Project Number	Project Type	Project Description	General Fund (101)	Local Park Fund (411)	Regional Park Fund (413)	Funding Source Not Identified	Total
PR-UF-1	Local Parks	Arizona Middle School Field Renovation	-	-	-	500,000	500,000
PR-UF-2	Local Parks	Bergamont/Replace Playground Equipment and Surface	-	350,000	-	-	350,000
PR-UF-3	Local Parks	Bonds/Parking Lot Lighting	-	125,000	-	-	125,000
PR-UF-4	Local Parks	Bordwell/Gymnasium	-	4,600,000	-	-	4,600,000
PR-UF-5	Local Parks	Carlson Park/St. Francis Falls Restoration	-	675,000	-	-	675,000
PR-UF-6	Local Parks	Castleview Park Development	-	10,200,000	-	-	10,200,000
PR-UF-7	Local Parks	Collett/Playground	-	500,000	-	-	500,000
PR-UF-8	Local Parks	Don Lorenzi/Restroom	-	400,000	-	-	400,000
PR-UF-9	Local Parks	Fairmount Park - North Hill	-	905,000	-	-	905,000
PR-UF-10	Local Parks	Gage Canal Trails	-	770,000	-	-	770,000
PR-UF-11	Local Parks	Golden Star	-	8,882,500	-	-	8,882,500
PR-UF-12	Local Parks	Highland Park Community Center	-	1,437,500	-	-	1,437,500
PR-UF-13	Local Parks	Highland/Basketball Court	-	150,000	-	-	150,000
PR-UF-14	Local Parks	Islander Trailhead - Park Expansion	-	-	-	2,900,000	2,900,000
PR-UF-15	Local Parks	Mission Ranch	-	6,321,000	-	-	6,321,000
PR-UF-16	Local Parks	Mt. Vernon Expansion	-	1,698,900	-	-	1,698,900
PR-UF-17	Local Parks	Mt. Vernon Park	-	3,782,500	-	-	3,782,500
PR-UF-18	Local Parks	Nichols Community Center	-	6,675,000	-	-	6,675,000
PR-UF-19	Local Parks	Park Inventory and Master Plan 2012	-	300,000	-	-	300,000
PR-UF-20	Local Parks	Patterson Park/Playground	-	500,000	-	-	500,000
PR-UF-21	Local Parks	Pool Refurbishments - Various	-	1,300,000	-	-	1,300,000
PR-UF-22	Local Parks	Skate Parks - Future Sites	-	1,325,000	-	-	1,325,000
PR-UF-23	Local Parks	Taft/Playground	-	500,000	-	-	500,000
PR-UF-24	Local Parks	Thundersky/Playground	-	500,000	-	-	500,000
PR-UF-25	Local Parks	Trails	-	4,000,000	-	-	4,000,000
PR-UF-26	Local Parks	University Neighborhood Parks Master Plans (Mt. Vernon, Islander, Highlander)	-	3,200,000	-	-	3,200,000
PR-UF-27	Local Parks	Various Sites/Install Park and Progress Signs	-	150,000	-	-	150,000
PR-UF-28	Local Parks	Victoria-Cross Development/Additional	-	1,100,000	-	-	1,100,000
PR-UF-29	Local Parks	Victoria-Cross Development/Initial Development	-	4,200,000	-	-	4,200,000
PR-UF-30	Local Parks	Villegas Park - Phase II Improvements	-	-	2,900,000	-	2,900,000
PR-UF-31	Regional Parks	Challen Hill	-	-	1,875,000	-	1,875,000
PR-UF-32	Regional Parks	Fairmount Park Banks Intersection/Pedestrian Access	-	-	525,000	-	525,000
PR-UF-33	Regional Parks	Fairmount Park Dexter Parking Lot	-	-	1,417,500	-	1,417,500

Project Number	Project Type	Project Description	General Fund (101)	Local Park Fund (411)	Regional Park Fund (413)	Funding Source Not Identified	Total
PR-UF-34	Regional Parks	Fairmount/Historic Core Phase I (Bandshell, Amphitheater Renovation)	-	-	750,000	-	750,000
PR-UF-35	Regional Parks	Fairmount/Historic Core Phase II (Pedestrian Access, Restroom, Parking Improvements)	-	-	3,200,000	-	3,200,000
PR-UF-36	Regional Parks	Fairmount/Irrigation System Modifications		-	-	625,000	625,000
PR-UF-37	Regional Parks	Fairmount/Lighting & Lakeshore Access Improvements, Phase II	-	-	825,000	-	825,000
PR-UF-38	Regional Parks	Fairmount/Water Quality Improvements/Aeration - Phase I	-	-	100,000	-	100,000
PR-UF-39	Regional Parks	Fairmount/Water Quality Improvements/Aeration - Phase 2	-	-	900,000	-	900,000
PR-UF-40	Regional Parks	Hole Lake Park Site Development	-	-	2,200,000	-	2,200,000
PR-UF-41	Regional Parks	Indian Hill Acquisition	-	-	1,830,000	-	1,830,000
PR-UF-42	Regional Parks	MWD Box Springs Feeder	-	-	600,000	-	600,000
PR-UF-43	Regional Parks	Quail Run Fencing	-	-	50,000	-	50,000
PR-UF-44	Regional Parks	Savi Ranch Development	-	-	16,000,000	-	16,000,000
PR-UF-45	Regional Parks	Sycamore Canyon Property Fence	-	-	2,200,000	-	2,200,000
PR-UF-46	Regional Parks	Sycamore Canyon Trailhead	-	-	1,850,000	-	1,850,000
PR-UF-47	Regional Parks	Trail Projects - Including MWD Box Springs	-	-	19,625,000	-	19,625,000
		Total Unfunded Projects	**-**	**64,547,400**	**56,847,500**	**4,025,000**	**125,419,900**

Program Summary

2013/14	2014/15	2015/16	2016/17	2017/18	Total
22,170,000	19,310,000	9,860,000	8,760,000	9,210,000	69,310,000

Introduction

The FY 2013/14 to 2017/18 CIP is a planning document intended to prioritize and allocate City funds for transportation improvements. The program includes two major sections, Streets and Traffic Signals, at a total funded cost of $69.3 million. The proposed program is underfunded by $80.3 million.

Economic conditions have led to declines in sales tax and gas tax revenues. In addition, the formula for distribution of Measure A funds to cities for local streets and roads changed in 2009/10 to 29% of total Measure A, decreasing from the previous rate of 40%, a decline of 28%. Funding from Proposition 1B was one-time revenue. Little, if any, funding from State and federal sources is anticipated for traditional street projects. The City plans to issue bonds for paving projects that have been deferred due to economic conditions. The bonds will be repaid from local transportation funds.

Street Projects

The Streets program for FY 2013/14 to 2017/18 is designed to meet City Council priorities while reducing the backlog of uncompleted projects. Significant new projects added to the proposed CIP include: safety improvements on Arlington Avenue from Fairhaven to the western City limits, Market Street bridge replacement at the Santa Ana River, street widening on Canyon Crest Drive between Country Club and Via Vista, and street construction on Fairway Drive between McAllister Parkway and Van Buren along the southerly City limits.

Projects previously approved by the City Council include: rehabilitation of Arlington Avenue between Van Buren and State Route 91 and Main Street between Tenth and Fourteenth Streets, the extension of Collett Avenue from Napa Lane to Buchanan Street, and COP-funded paving projects.

Lower funding levels are proposed for the rehabilitation of local and arterial streets for 2015/16 through 2017/18. Bond funds are anticipated to be available those years for additional paving projects. Historic funding levels are proposed for the repair of curbs, gutters, and sidewalks. The program also includes increased funding for the construction of wheelchair ramps to comply with the Americans with Disabilities Act (ADA).

Traffic Signal Projects

The Traffic Signals program for FY 2013/14 to 2017/18 includes construction of new traffic signals and modifications to existing signals to add left turn phasing to existing signals to improve safety and traffic flow at the intersections. Other modifications include the replacement of obsolete signal controllers to more efficiently coordinate the signal system.

In keeping with the direction of the Citywide Strategic Plan, the five year CIP continues consideration of key programs in the face of declining revenues. The Traffic Management Center is apportioned $250,000, and the Arterial Interconnect Project is planned for $400,000. In addition, the CIP includes routine traffic signal loop detector, LED signal lenses and radio replacement funds.

Signal construction priorities are only established one year in advance. Future signal construction will be prioritized as traffic demand warrants. Intersection signalization needs will be determined by analyzing intersection traffic volumes, accident history, and vehicle delay data.

Key Revenues and Funding Sources

Revenues for the projects are provided primarily by State Gas Tax, Local Measure A, and City Development Impact fees. Beginning in FY 2010/11, the State replaced Proposition 42 funds with additional Gas Tax funds (Gas Tax Swap). These revenue sources experienced steep declines due to the recession, with Local Measure A funds further reduced by the change in the allocation formula that began in FY 2009/10. The City anticipates issuing bonds in 2012/13 that will provide funding for a backlog of street paving projects. The bonds will be repaid in future years from local transportation funds. The debt service obligation will reduce available funds for transportation

projects by an estimated $3 million per year for the estimated twenty year repayment term. The proposed CIP anticipates the City receiving little or no funding from such programs as the Congestion Mitigation Air Quality (CMAQ) Program and the State Transportation Improvement Program. Due to recent State budget shortfalls, the State and RCTC have obligated future funds for projects on the State highway system.

Future CIP Considerations

The City, as well as the region and State need to find additional and reliable funding sources to meet the needs to construct new transportation facilities as well as to maintain the existing infrastructure. City staff continues to evaluate available funding options and are working to find funding sources for the remaining unfunded project costs.

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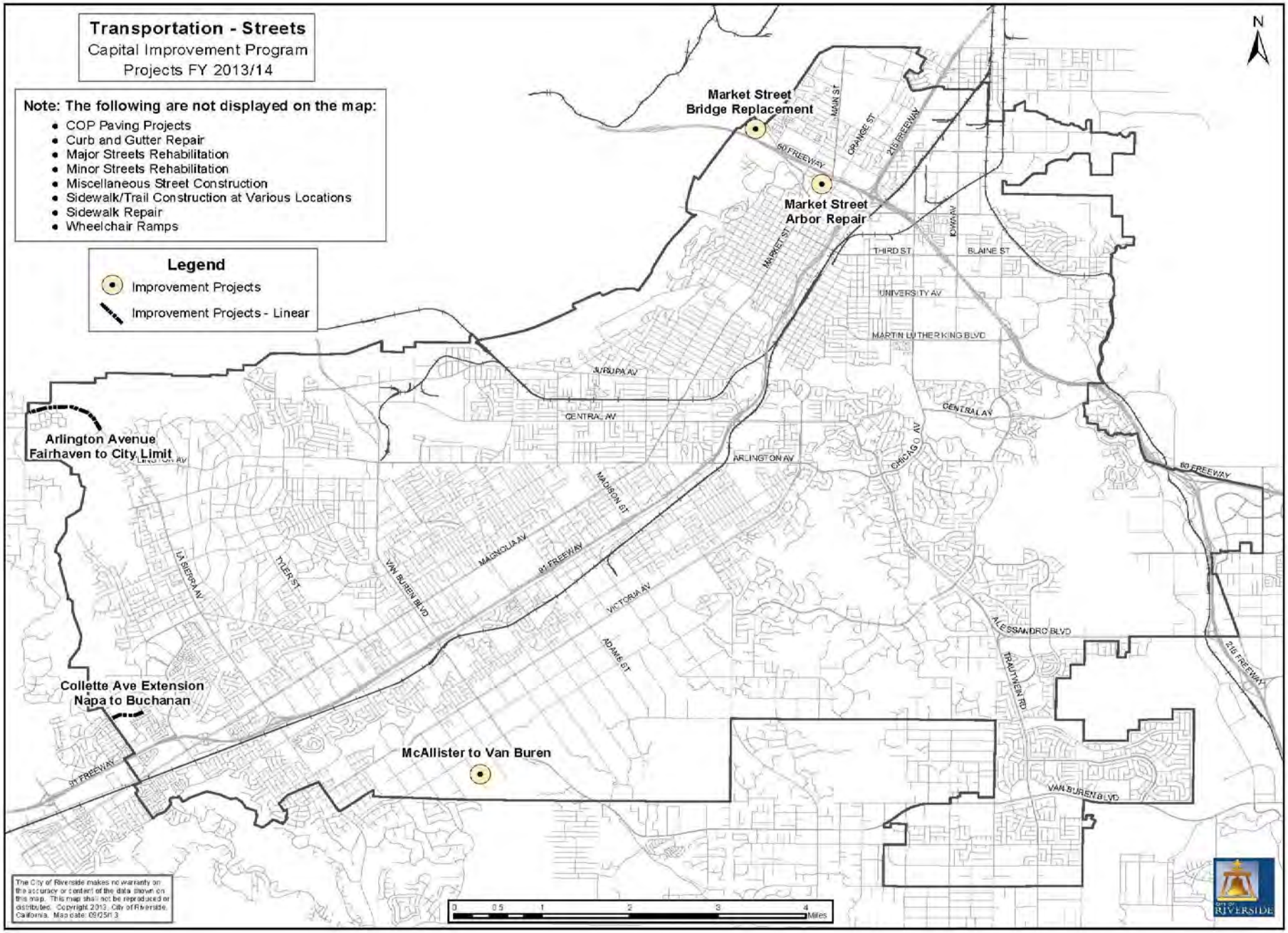
2013/14 to 2017/18

Capital Improvement Program - Transportation

Budgeted Projects - Year One

Project Number	Project Type	Project Description	General Fund (101)	City Transport. Funds	Restricted Non-City Funds	Total
TR-1	Street Construction	Arlington Avenue - Fairhaven to City Limit	-	500,000	-	500,000
TR-3	Street Construction	Certificates of Participation (COP) - Paving Projects	-	9,727,890	-	9,727,890
TR-4	Street Construction	COP Paving Projects (performed by Streets division)	-	1,272,110	-	1,272,110
TR-6	Street Construction	Collett Avenue Extension - Napa to Buchanan	-	1,900,000	-	1,900,000
TR-7	Street Construction	Fairway Drive - McAllister to Van Buren	-	250,000	-	250,000
TR-8	Street Construction	Market Street Arbor Repair south of SR-60	-	50,000	-	50,000
TR-9	Street Construction	Market Street Bridge Replacement at Santa Ana River	-	100,000	-	100,000
TR-10	Street Construction	Curb and Gutter Repair	-	200,000	-	200,000
TR-11	Street Construction	Major Streets Rehabilitation/Preservation	-	2,710,000	-	2,710,000
TR-12	Street Maintenance	Minor Streets Rehabilitation/Preservation	-	2,750,000	-	2,750,000
TR-13	Street Maintenance	Miscellaneous Street Construction	-	500,000	-	500,000
TR-14	Street Maintenance	Sidewalk / Trail Construction at Various Locations	-	500,000	-	500,000
TR-15	Street Maintenance	Sidewalk Repair	-	400,000	-	400,000
TR-16	Street Maintenance	Wheelchair Ramps	-	600,000	-	600,000
		Subtotal Street Projects	**-**	**21,460,000**	**-**	**21,460,000**
TR-18	New Signals	Lincoln-St. Lawrence	-	250,000	-	250,000
TR-19	Signal Interconnections	Traffic Management Center	-	50,000	-	50,000
TR-20	Signal Interconnections	14th/Martin Luther King - Market to I-215	-	50,000	-	50,000
TR-21	Signal Interconnections	University - Brockton to Campus Drive	-	50,000	-	50,000
TR-23	Signal Maintenance	Controller Assembly Replacement	-	40,000	-	40,000
TR-24	Signal Maintenance	LED Signal Lenses Replacement	-	50,000	-	50,000
TR-25	Signal Maintenance	Roadside Signs Upgrade		50,000	-	50,000
TR-26	Signal Maintenance	Spread Spectrum Radio Replacement		10,000	-	10,000
TR-27	Signal Maintenance	Striping and Markings Installations/Removals		25,000	-	25,000
TR-28	Signal Maintenance	Traffic Signal Loop Replacement	-	35,000	-	35,000
TR-29	Signal Modifications	Brockton from Central to Mission Inn (Protective/Permissive)	-	100,000	-	100,000
		Subtotal Signal Projects	**-**	**710,000**	**-**	**710,000**
						-
		Total	**-**	**22,170,000**	**-**	**22,170,000**


Transportation - Streets
Capital Improvement Program
Projects FY 2013/14
Note: The following are not displayed on the map:
COP Paving Projects
Curb and Gutter Repair
Major Streets Rehabilitation
Minor Streets Rehabilitation
Miscellaneous Street Construction
Sidewalk/Trail Construction at Various Locations
Sidewalk Repair
Wheelchair Ramps
Legend
Improvement Projects
Improvement Projects - Linear
N
Market Street Bridge Replacement
Market Street Arbor Repair
Arlington Avenue Fairhaven to City Limit
Collette Ave Extension Napa to Buchanan
McAllister to Van Buren
60 FREEWAY
215 FREEWAY
91 FREEWAY
MAIN ST
ORANGE ST
MARKET ST
IOWA AV
THIRD ST
BLAINE ST
UNIVERSITY AV
MARTIN LUTHER KING BLVD
JURUPA AV
CENTRAL AV
ARLINGTON AV
CHICAGO AV
MADISON ST
MAGNOLIA AV
VICTORIA AV
ADAMS ST
VAN BUREN BLVD
TYLER ST
LA SIERRA AV
ALESSANDRO BLVD
TRAUTWEIN RD
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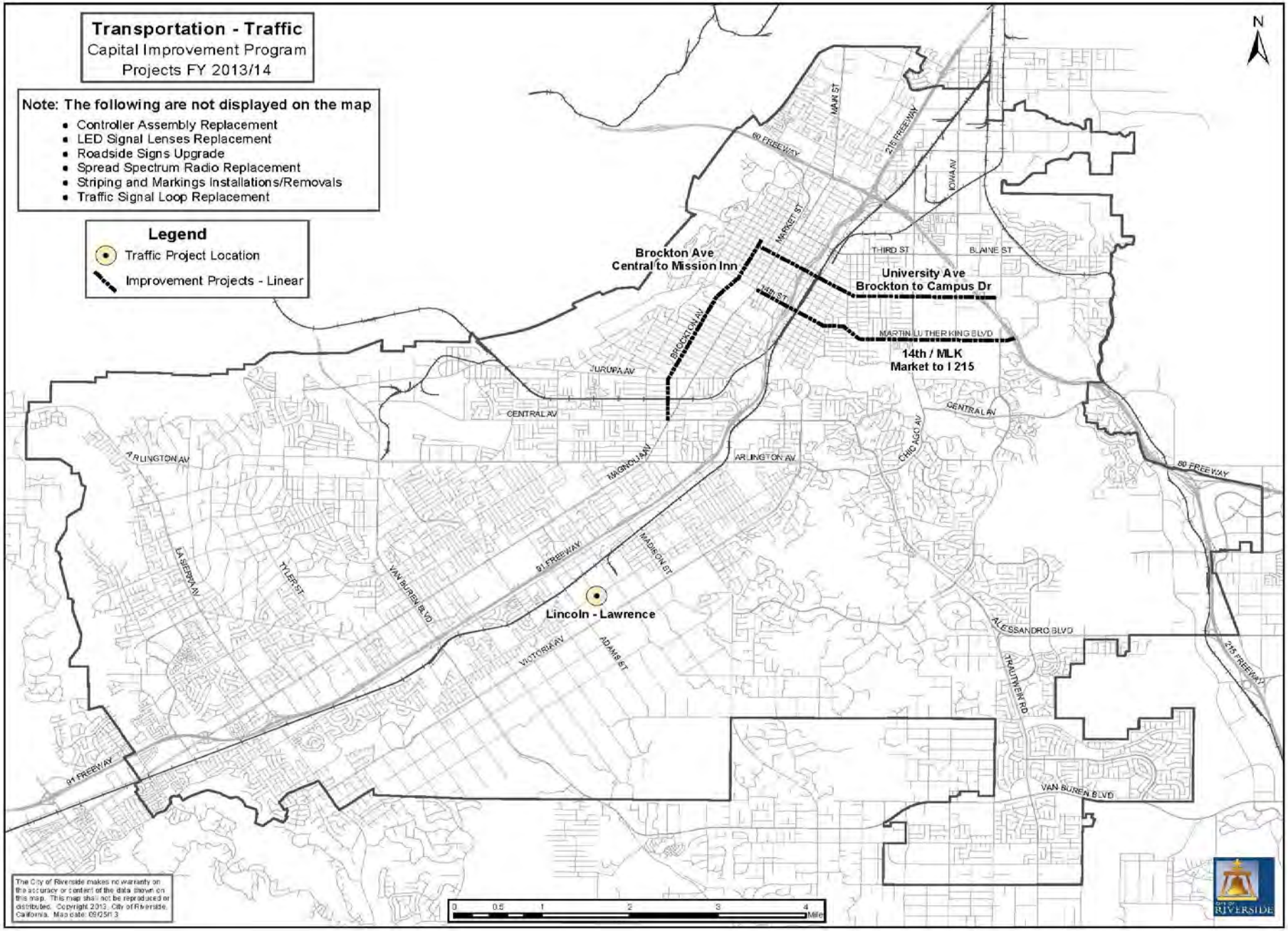
CITY OF RIVERSIDE


Transportation - Traffic
Capital Improvement Program
Projects FY 2013/14
Note: The following are not displayed on the map
Controller Assembly Replacement
LED Signal Lenses Replacement
Roadside Signs Upgrade
Spread Spectrum Radio Replacement
Striping and Markings Installations/Removals
Traffic Signal Loop Replacement
Legend
Traffic Project Location
Improvement Projects - Linear
N
Brockton Ave
Central to Mission Inn
University Ave
Brockton to Campus Dr
14th / MLK
Market to I 215
Lincoln - Lawrence
60 FREEWAY
91 FREEWAY
215 FREEWAY
MAIN ST
MARKET ST
IOWA AV
THIRD ST
BLAINE ST
14th ST
MARTIN LUTHER KING BLVD
BROCKTON AV
JURUPA AV
CENTRAL AV
ARLINGTON AV
MAGNOLIA AV
CHICAGO AV
MADISON ST
LA SIERRA AV
TYLER ST
VAN BUREN BLVD
VICTORIA AV
ADAMS ST
ALESSANDRO BLVD
TRAUTWEIN RD
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0 0.5 1 2 3 4 Mile
CITY OF RIVERSIDE

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2013/14 to 2017/18

Capital Improvement Program - Transportation

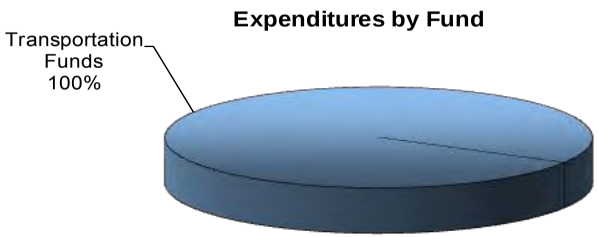
Capital Improvement Program Summary

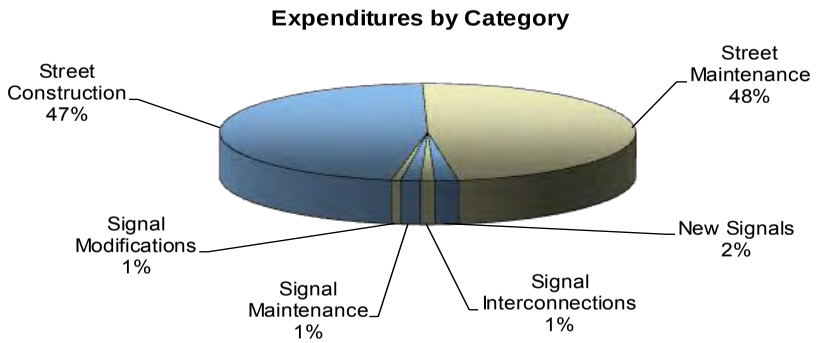
Projected Expenditures by Fund

Fund	Prior Fiscal Years	2013/14	2014/15	2015/16	2016/17	2017/18	Total	Unfunded
General Fund (101)	-	-	-	-	-	-	-	-
Transportation Funds (City and Non-City)	13,449,234	22,170,000	19,310,000	9,860,000	8,760,000	9,210,000	69,310,000	-
Funding Source Not Identified	546,727	-	-	-	-	-	-	80,266,499
Total	**13,995,961**	**22,170,000**	**19,310,000**	**9,860,000**	**8,760,000**	**9,210,000**	**69,310,000**	**80,266,499**

Projected Expenditures by Category

Project Category	Prior Fiscal Years	2013/14	2014/15	2015/16	2016/17	2017/18	Total	Unfunded
Street Construction	13,049,169	13,800,000	12,750,000	2,550,000	1,450,000	1,900,000	32,450,000	80,266,499
Street Maintenance	-	7,660,000	5,850,000	6,600,000	6,600,000	6,600,000	33,310,000	-
New Signals	400,000	250,000	250,000	250,000	250,000	250,000	1,250,000	-
Signal Interconnections	320,520	150,000	150,000	150,000	150,000	150,000	750,000	-
Signal Maintenance	-	210,000	210,000	210,000	210,000	210,000	1,050,000	-
Signal Modifications	226,272	100,000	100,000	100,000	100,000	100,000	500,000	-
Total	**13,995,961**	**22,170,000**	**19,310,000**	**9,860,000**	**8,760,000**	**9,210,000**	**69,310,000**	**80,266,499**





NOTE: Pie Charts do not included unfunded projects.
NOTE: Categories comprising less than 1% of total are not labeled

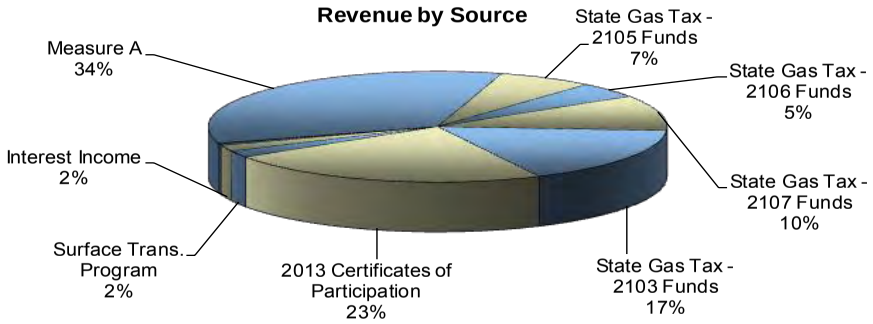
2013/14 to 2017/18

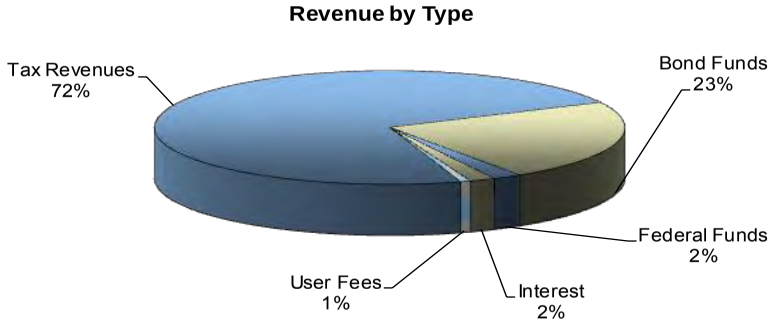
Capital Improvement Program - Transportation

Projected Capital Funding Revenue Sources by Fund

Transportation Funds (230, 430, 432, 433, & 434)

Revenue Type	Revenue Source	2013/14	2014/15	2015/16	2016/17	2017/18	Total
User Fees	Signal Mitigation Fees	75,000	75,000	75,000	75,000	75,000	375,000
User Fees	Transportation Impact Fees	50,000	50,000	50,000	50,000	50,000	250,000
Tax Revenues	Measure A, Local Roads	5,918,000	6,096,000	6,279,000	6,467,000	6,661,000	31,421,000
Tax Revenues	State Gas Tax - 2105 Funds (Proposition 111)	1,230,000	1,230,000	1,230,000	1,230,000	1,230,000	6,150,000
Tax Revenues	State Gas Tax - 2106 Funds	830,000	830,000	830,000	830,000	830,000	4,150,000
Tax Revenues	State Gas Tax - 2107 Funds	1,900,000	1,900,000	1,900,000	1,900,000	1,900,000	9,500,000
Tax Revenues	State Gas Tax - 2103 Funds (Gas Tax Swap for AB2928)	3,025,000	3,025,000	3,025,000	3,025,000	3,025,000	15,125,000
Bond Funds	2013 Certificates of Participation for Transportation Paving Projects	11,000,000	10,000,000	-	-	-	21,000,000
Federal Funds	Surface Transportation Program	1,810,000	-	-	-	-	1,810,000
Interest	Interest Income	320,000	320,000	320,000	320,000	320,000	1,600,000
	Total Funds Available for Capital Improvements from Revenue	**26,158,000**	**23,526,000**	**13,709,000**	**13,897,000**	**14,091,000**	**91,381,000**





NOTE: Categories comprising less than 1% of total are not labeled.

NOTE: The five Transportation Funds are combined together above to better illustrate the revenue sources that fund transportation projects. In actuality, revenues are related to the Funds as follows:

230 Fund - State Gas Tax Funds
430 Fund - Restricted Non-City Funds (Except for TUMF Funds)
432 Fund - Measure A Funds
433 Fund - Signal Mitigation Fees and Transportation Impact Fees
434 Fund - TUMF Funds

2013/14 to 2017/18

Capital Improvement Program - Transportation

Projected Capital Funding Appropriations by Fiscal Year

Sources of Funds	2013/14	2014/15	2015/16	2016/17	2017/18
Total Funds Available for Capital Improvements from Revenue - Transportation Funds (230, 430, 432, 433, & 434)	26,158,000	23,526,000	13,709,000	13,897,000	14,091,000
Fund Balance from Prior Year - Transportation Funds (230, 430, 432, 433. & 434)	4,711,879	3,391,110	2,432,510	1,088,610	1,013,910
Total Funds Available for Capital Improvements	**30,869,879**	**26,917,110**	**16,141,510**	**14,985,610**	**15,104,910**
Less: Adjustments for Non-Capital Expenditures					
Street Maintenance/Preservation	(1,090,000)	(1,090,000)	(1,090,000)	(1,090,000)	(1,090,000)
Street Maintenance - (RDA Backfill)	(50,709)	-	-	-	-
Traffic Management Center Personnel Costs	(101,260)	-	-	-	-
Transportation Planning	(50,000)	(50,000)	(50,000)	(50,000)	(50,000)
Traffic Planning and Investigations	(300,000)	(300,000)	(300,000)	(300,000)	(300,000)
Pavement Management System	(125,000)	(125,000)	(125,000)	(125,000)	(125,000)
Debt Service for 2013 Transportation Certificates of Participation	(3,000,000)	(3,000,000)	(3,000,000)	(3,000,000)	(3,000,000)
Railroad-related Projects Allocation (10% Measure A)	(591,800)	(609,600)	(627,900)	(646,700)	(666,100)
Adjusted Total Funds Available for Capital Improvements	**25,561,110**	**21,742,510**	**10,948,610**	**9,773,910**	**9,873,810**

Project Number	Project Type	Project Description	Prior Fiscal Years	2013/14	2014/15	2015/16	2016/17	2017/18	Total	Unfunded
TR-1	Street Construction	Arlington Avenue - Fairhaven to City Limit	(713,000)	(500,000)	-	-	-	-	(500,000)	-
TR-2	Street Construction	Arlington Avenue Pavement Rehab, Van Buren to SR 91	(100,000)	-	(2,000,000)	-	-	-	(2,000,000)	-
TR-3	Street Construction	Certificates of Participation (COP) - Paving Projects	(9,727,890)	(9,727,890)	(8,727,890)	-	-	-	(18,455,780)	-
TR-4	Street Construction	COP Paving Projects (performed by Streets division)	(1,272,110)	(1,272,110)	(1,272,110)	-	-	-	(2,544,220)	-
TR-5	Street Construction	Canyon Crest Widening - Country Club to Via Vista	(104,672)	-	-	(2,550,000)	(1,450,000)	(1,900,000)	(5,900,000)	-
TR-6	Street Construction	Collett Avenue Extension - Napa to Buchanan	(584,770)	(1,900,000)	-	-	-	-	(1,900,000)	-
TR-7	Street Construction	Fairway Drive - McAllister to Van Buren	-	(250,000)	(750,000)	-	-	-	(1,000,000)	-
TR-8	Street Construction	Market Street Arbor Repair south of SR-60	-	(50,000)	-	-	-	-	(50,000)	-
TR-9	Street Construction	Market Street Bridge Replacement at Santa Ana River	-	(100,000)	-	-	-	-	(100,000)	-
TR-10	Street Maintenance	Curb and Gutter Repair	-	(200,000)	(200,000)	(200,000)	(200,000)	(200,000)	(1,000,000)	-
TR-11	Street Maintenance	Major Streets Rehabilitation/Preservation	-	(2,710,000)	(1,400,000)	(1,400,000)	(1,400,000)	(1,400,000)	(8,310,000)	-
TR-12	Street Maintenance	Minor Streets Rehabilitation/Preservation	-	(2,750,000)	(2,250,000)	(3,000,000)	(3,000,000)	(3,000,000)	(14,000,000)	-
TR-13	Street Maintenance	Miscellaneous Street Construction	-	(500,000)	(500,000)	(500,000)	(500,000)	(500,000)	(2,500,000)	-
TR-14	Street Maintenance	Sidewalk / Trail Construction at Various Locations	-	(500,000)	(500,000)	(500,000)	(500,000)	(500,000)	(2,500,000)	-
TR-15	Street Maintenance	Sidewalk Repair	-	(400,000)	(400,000)	(400,000)	(400,000)	(400,000)	(2,000,000)	-
TR-16	Street Maintenance	Wheelchair Ramps	-	(600,000)	(600,000)	(600,000)	(600,000)	(600,000)	(3,000,000)	-
		Subtotal Street Projects	**(12,502,442)**	**(21,460,000)**	**(18,600,000)**	**(9,150,000)**	**(8,050,000)**	**(8,500,000)**	**(65,760,000)**	**-**
TR-17	New Signals	Traffic Signals (Prioritized Locations)	(400,000)	-	(250,000)	(250,000)	(250,000)	(250,000)	(1,000,000)	-
TR-18	New Signals	Lincoln-St. Lawrence	-	(250,000)	-	-	-	-	(250,000)	-
TR-19	Signal Interconnections	Traffic Management Center	(106,850)	(50,000)	(50,000)	(50,000)	(50,000)	(50,000)	(250,000)	-
TR-20	Signal Interconnections	14th/Martin Luther King - Market to I-215	-	(50,000)	-	-	-	-	(50,000)	-
TR-21	Signal Interconnections	University - Brockton to Campus Drive	-	(50,000)	-	-	-	-	(50,000)	-
TR-22	Signal Interconnections	Arterial Interconnect Project	(213,670)	-	(100,000)	(100,000)	(100,000)	(100,000)	(400,000)	-
TR-23	Signal Maintenance	Controller Assembly Replacement	-	(40,000)	(40,000)	(40,000)	(40,000)	(40,000)	(200,000)	-
TR-24	Signal Maintenance	LED Signal Lenses Replacement	-	(50,000)	(50,000)	(50,000)	(50,000)	(50,000)	(250,000)	-
TR-25	Signal Maintenance	Roadside Signs Upgrade	-	(50,000)	(50,000)	(50,000)	(50,000)	(50,000)	(250,000)	-
TR-26	Signal Maintenance	Spread Spectrum Radio Replacement	-	(10,000)	(10,000)	(10,000)	(10,000)	(10,000)	(50,000)	-
TR-27	Signal Maintenance	Striping and Markings Installations/Removals	-	(25,000)	(25,000)	(25,000)	(25,000)	(25,000)	(125,000)	-
TR-28	Signal Maintenance	Traffic Signal Loop Replacement	-	(35,000)	(35,000)	(35,000)	(35,000)	(35,000)	(175,000)	-
TR-29	Signal Modifications	Brockton from Central to Mission Inn (Protective/Permissive)	-	(100,000)	-	-	-	-	(100,000)	-
TR-30	Signal Modifications	Signal Revisions - Protective/Permissive Left Turns	(226,272)	-	(100,000)	(100,000)	(100,000)	(100,000)	(400,000)	-
		Subtotal Signal Projects	**(946,792)**	**(710,000)**	**(710,000)**	**(710,000)**	**(710,000)**	**(710,000)**	**(3,550,000)**	**-**

Project Number	Project Type	Project Description	Prior Fiscal Years	2013/14	2014/15	2015/16	2016/17	2017/18	Total	Unfunded
TR-UF-1	Street Construction	Arizona Extension/Cross Widening	(73,853)	-	-	-	-	-	-	(726,147)
TR-UF-2	Street Construction	Arlington Avenue Widening, Adams to Van Buren	-	-	-	-	-	-	-	(1,500,000)
TR-UF-3	Street Construction	Arlington Avenue Widening, Victoria to Alessandro	-	-	-	-	-	-	-	(16,600,000)
TR-UF-4	Street Construction	Chicago @ 215 Freeway	-	-	-	-	-	-	-	(1,000,000)
TR-UF-5	Street Construction	Chicago Medians - Le Conte to Martin Luther King	-	-	-	-	-	-	-	(1,800,000)
TR-UF-6	Street Construction	14th Street Widening, SR 91 to Martin Luther King	-	-	-	-	-	-	-	(24,000,000)
TR-UF-7	Street Construction	Iowa Avenue Widening - Martin Luther King to University	-	-	-	-	-	-	-	(1,000,000)
TR-UF-8	Street Construction	Magnolia Medians - Tyler to Buchanan	(363,226)	-	-	-	-	-	-	(7,000,000)
TR-UF-9	Street Construction	Van Buren Widening, Indiana to South City Limit	(109,648)	-	-	-	-	-	-	(26,640,352)
		Subtotal Unfunded Projects	**(546,727)**	**-**	**-**	**-**	**-**	**-**	**-**	**(80,266,499)**
		Total	**(13,995,961)**	**(22,170,000)**	**(19,310,000)**	**(9,860,000)**	**(8,760,000)**	**(9,210,000)**	**(69,310,000)**	**(80,266,499)**
		Unbudgeted Balance		**3,391,110**	**2,432,510**	**1,088,610**	**1,013,910**	**663,810**		

2013/14 to 2017/18

Capital Improvement Program - Transportation

Funded Capital Projects

Project Number	Project Type	Project Description	General Fund (101)	Special Gas Tax Fund (230)	Capital Outlay (COP) Fund 430	Measure A Fund (432)	Impact Fees (433)	Restricted Non-City Funds	Total	Funded in Prior Fiscal Years	Total Project Cost
TR-1	Street Construction	Arlington Avenue from Fairhaven Drive to western city limit safety improvements	-	-	-	500,000	-	-	500,000	713,000	1,213,000
TR-2	Street Construction	Arlington Avenue Pavement Rehabilitation from Van Buren Boulevard to State Route 91	-	2,000,000	-	-	-	-	2,000,000	100,000	2,100,000
TR-3	Street Construction	Certificates of Participation (COP) Paving Projects - Street paving projects funded with Transportation COP	-	-	18,455,780	-	-	-	18,455,780	9,727,890	28,183,670
TR-4	Street Construction	COP Paving Projects (performed by Streets division) - Street paving capital projects funded with Transportation COP with work performed by Streets Maintenance division	-	-	2,544,220	-	-	-	2,544,220	1,272,110	3,816,330
TR-5	Street Construction	Canyon Crest Widening - Widen Canyon Crest Drive between Country Club Drive and Via Vista Drive	-	2,850,000	-	1,800,000	1,250,000	-	5,900,000	104,672	6,004,672
TR-6	Street Construction	Collett Avenue Extension from Napa Lane to Buchanan Street	-	1,900,000	-	-	-	-	1,900,000	584,770	2,484,770
TR-7	Street Construction	Fairway Drive - McAllister to Van Buren - construct new street between McAllister Parkway and Van Buren Boulevard along the southerly City limits.	-	1,000,000	-	-	-	-	1,000,000	-	1,000,000
TR-8	Street Construction	Market Street Arbor Repair - south of SR-60	-	-	-	50,000	-	-	50,000	-	50,000
TR-9	Street Construction	Market Street Bridge Replacement at Santa Ana River - City contribution	-	-	-	100,000	-	-	100,000	-	100,000
TR-10	Street Maintenance	Curb and Gutter Repair - Replacement of curbs and gutters damaged by street trees.	-	1,000,000	-	-	-	-	1,000,000	-	1,000,000
TR-11	Street Maintenance	Major Streets Rehabilitation/Preservation - Removal, replacement, and overlay of deteriorated pavements on arterial roadways.	-	-	-	6,500,000	-	1,810,000	8,310,000	-	8,310,000
TR-12	Street Maintenance	Minor Streets Rehabilitation/Preservation - Removal, replacement, and overlay of deteriorated pavements on collector and local streets.	-	14,000,000	-	-	-	-	14,000,000	-	14,000,000
TR-13	Street Maintenance	Miscellaneous Street Construction - Construction of various small street projects and repair of damaged street facilities. In addition, funds may be used where the scope of work has expanded for projects previously budgeted.	-	2,500,000	-	-	-	-	2,500,000	-	2,500,000
TR-14	Street Maintenance	Sidewalk / Trail Construction at Various Locations - Construction of sidewalks and trails at various locations throughout the City. Projects will be constructed in order as ranked on the sidewalk priority list.	-	2,000,000	-	500,000	-	-	2,500,000	-	2,500,000
TR-15	Street Maintenance	Sidewalk Repair - Replacement of sidewalks damaged by street trees.	-	2,000,000	-	-	-	-	2,000,000	-	2,000,000
TR-16	Street Maintenance	Wheelchair Ramps - Construction of wheelchair ramps at various locations throughout the City. Projects will also be constructed using Community Development Block Grant funding (CDBG).	-	3,000,000	-	-	-	-	3,000,000	-	3,000,000
		Subtotal Street Projects	**-**	**32,250,000**	**21,000,000**	**9,450,000**	**1,250,000**	**1,810,000**	**65,760,000**	**12,502,442**	**78,262,442**

Project Number	Project Type	Project Description	General Fund (101)	Special Gas Tax Fund (230)	Capital Outlay (COP) Fund 430	Measure A Fund (432)	Impact Fees (433)	Restricted Non-City Funds	Total	Funded in Prior Fiscal Years	Total Project Cost
TR-17	New Signals	Traffic Signal (Prioritized Locations) - Installation of new signals and reconstruction of existing signals to improve safety and/or increase capacity. The locations of the improvements will be constructed as prioritized by the Traffic Division.	-	-	-	1,000,000	-	-	1,000,000	400,000	1,400,000
TR-18	New Signals	Lincoln-St. Lawrence - Install new traffic signal at Lincoln Avenue and St. Lawrence Street			-	250,000			250,000	-	250,000
TR-19	Signal Interconnections	14th/Martin Luther King - Market to I-215 - Coordinate traffic signals on 14th Street/Martin Luther King Boulevard from Market Street to Interstate 215	-	-	-	50,000	-	-	50,000	-	50,000
TR-20	Signal Interconnections	University - Brockton to Campus Drive - Coordinate traffic signals on University Avenue from Brockton Avenue to Campus Drive	-	-	-	50,000	-	-	50,000	-	50,000
TR-21	Signal Interconnections	Traffic Management Center	-	-	-	250,000	-	-	250,000	-	250,000
TR-22	Signal Interconnections	Arterial Interconnect Project - New signal coordination projects.	-	-	-	400,000	-	-	400,000	106,850	506,850
TR-23	Signal Maintenance	Controller Assembly Replacement - Replace obsolete traffic signal controllers for safety, traffic flow and maintenance reasons.	-	-	-	200,000	-	-	200,000	213,670	413,670
TR-24	Signal Maintenance	LED Signal Lenses Replacement			-	250,000			250,000	-	250,000
TR-25	Signal Maintenance	Roadside Signs Upgrade			-	250,000			250,000	-	250,000
TR-26	Signal Maintenance	Spread Spectrum Radio Replacement - Spread spectrum radio replacement parts for traffic signal coordination projects at various locations.	-	-	-	50,000	-	-	50,000	-	50,000
TR-27	Signal Maintenance	Striping and Markings Installations/Removals			-		125,000		125,000	-	125,000
TR-28	Signal Maintenance	Traffic Signal Loop Replacement - Replacement of damaged traffic signal loops at various locations.	-	-	-	175,000	-	-	175,000	-	175,000
TR-29	Signal Modifications	Brockton - Central to Mission Inn - Modify traffic signals on Brockton Avenue from Central Avenue to Mission Inn Avenue to allow protective/permissive left turns	-	-	-	100,000	-	-	100,000	-	100,000
TR-30	Signal Modifications	Misc. Signal Revisions - Modify existing traffic signals in various locations.	-	-	-	400,000	-	-	400,000	226,272	626,272
		Subtotal Signal Projects	**-**	**-**		**3,425,000**	**125,000**	**-**	**3,550,000**	**946,792**	**4,496,792**
		Total Funded Projects	**-**	**32,250,000**	**21,000,000**	**12,875,000**	**1,375,000**	**1,810,000**	**69,310,000**	**13,449,234**	**82,759,234**

2013/14 to 2017/18

Capital Improvement Program - Transportation

Unfunded Capital Projects

Project Number	Project Type	Project Description	General Fund (101)	City Transport. Funds	Restricted Non-City Funds	Funding Source Not Identified	Total	Funded in Prior Fiscal Years	Total Project Cost
TR-UF-1	Street Construction	Arizona Extension/Cross Widening	-	-	-	726,147	726,147	73,853	800,000
TR-UF-2	Street Construction	Arlington Avenue Widening, Adams to Van Buren	-	-	-	1,500,000	1,500,000	-	1,500,000
TR-UF-3	Street Construction	Arlington Avenue Widening, Victoria to Alessandro	-	-	-	16,600,000	16,600,000	-	16,600,000
TR-UF-4	Street Construction	Chicago @ 215 Freeway	-	-	-	1,000,000	1,000,000	-	1,000,000
TR-UF-5	Street Construction	Chicago Medians - Le Conte to Martin Luther King	-	-	-	1,800,000	1,800,000	-	1,800,000
TR-UF-6	Street Construction	14th Street Widening, SR 91 to Martin Luther King	-	-	-	24,000,000	24,000,000	-	24,000,000
TR-UF-7	Street Construction	Iowa Avenue Widening - Martin Luther King to University	-	-	-	1,000,000	1,000,000	-	1,000,000
TR-UF-8	Street Construction	Magnolia Medians - Tyler to Buchanan	-	-	-	7,000,000	7,000,000	363,226	7,363,226
TR-UF-9	Street Construction	Van Buren Widening, Indiana to South City Limit	-	-	-	26,640,352	26,640,352	109,648	26,750,000
		SubTotal Street Projects	**-**	**-**	**-**	**80,266,499**	**80,266,499**	**546,727**	**80,813,226**
		Total Unfunded Projects	**-**	**-**	**-**	**80,266,499**	**80,266,499**	**546,727**	**80,813,226**

2013/14 to 2017/18

Capital Improvement Program – Railroad-Related Projects

Program Summary

2013/14	2014/15	2015/16	2016/17	2017/18	Total
591,800	609,600	627,900	646,700	666,100	3,142,100

Introduction

Rail projects are being presented in an individual capital improvement program because of the high priority placed on these projects by the City Council and the complexity of funding for the projects. The five-year CIP for rail projects totals $3.1 million. The proposed 2013/14 CIP is $591,800. The proposed program is underfunded by $114.2 million.

The City continues to work to obtain state and federal funds for railroad grade separation and quiet zone projects. The CIP includes the design and construction of two railroad grade separation projects and one quiet zone project. Three grade separation projects and two quiet zone projects are unfunded.

Rail projects are a City Council priority. The projects promote public safety, quality of life, and economic vitality. Twenty-three at-grade railroad crossings must be mitigated within the City. The estimated cost of grade separating the 23 intersections is in excess of $800 million. The CIP includes the second phase of the department's grade separation program. A quiet zone for the BNSF/Union Pacific railroad corridor at Panorama and Cridge Streets is also included in the CIP, along with a Union Pacific quiet zone project at Brockton and Palm Avenues.

Key Revenues and Funding Sources

Local revenue for the projects is provided by a 10% allocation of the City's Local Measure A. Major non-City funding sources for the CIP include Proposition 1B Trade Corridor Improvement Fund (TCIF), California Public Utilities Commission Section 190 Grade Separation (PUC) funds, Federal grants, and private funds from railroads.

The complexity of funding sources and high cost per grade separation pose several challenges for the City. Funding from non-City sources may not be available in a timely manner to keep projects moving forward. To move projects forward, the City will need to be prepared to advance millions of dollars to projects in anticipation of reimbursement revenues that may not be available until years after expenditures are made. Engineering and right-of-way acquisition phases may be underfunded, because TCIF funds can only be used for construction and PUC funds are awarded only when a project is ready for construction. The perennial state budget crisis makes timing and availability of state funding sources uncertain. If any non-City funding sources fail to materialize in the amounts anticipated in the CIP and alternative funding is not obtained, the City may be faced with allocating significant City resources or delaying projects.

The City of Riverside is working with the Riverside County Transportation Commission and other stakeholders to help influence the debate in Sacramento and Washington, DC, and to promote the importance of local highway and railroad transportation projects.

Future CIP Considerations

The City, as well as the region and State need to find additional and reliable funding sources to meet the needs to construct grade separations and quiet zones. City staff continues to evaluate available funding options and are working to find funding sources for the remaining unfunded project costs.

City of Riverside

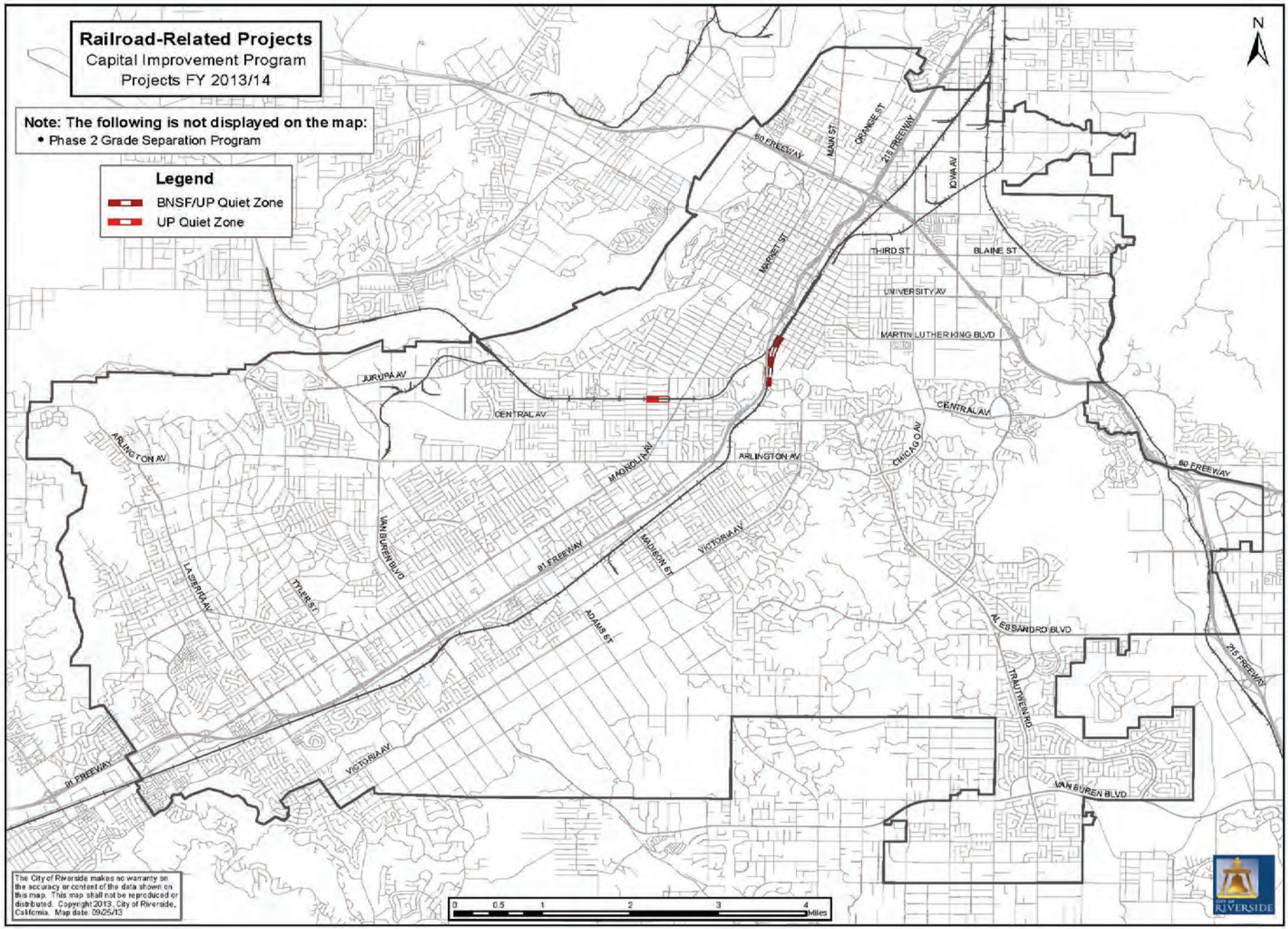
Table RR-1

2013/14 to 2017/18

Capital Improvement Program - Railroad-Related Projects

Budgeted Projects - Year One

Project Number	Project Type	Project Description	General Fund (101)	City Transport. Funds	Restricted Non-City Funds	Total
RR-1	Rail Projects	BNSF/UP Quiet Zone - Panorama & Cridge	-	291,800	-	291,800
RR-2	Rail Projects	Phase 2 Grade Separation Program	-	100,000	-	100,000
RR-3	Rail Projects	Union Pacific Quiet Zone - Brockton & Palm	-	200,000	-	200,000
		Total	**-**	**591,800**	**-**	**591,800**


Railroad-Related Projects
Capital Improvement Program
Projects FY 2013/14
Note: The following is not displayed on the map:
• Phase 2 Grade Separation Program
Legend
BNSF/UP Quiet Zone
UP Quiet Zone
N
60 FREEWAY
MAIN ST
ORANGE ST
215 FREEWAY
IOWA AV
MARKET ST
THIRD ST
BLAINE ST
UNIVERSITY AV
MARTIN LUTHER KING BLVD
JURUPA AV
CENTRAL AV
ARLINGTON AV
MAGNOLIA AV
CHICAGO AV
VAN BUREN BLVD
91 FREEWAY
MADISON ST
VICTORIA AV
LA SIERRA AV
TYLER ST
ADAMS ST
AL ESSANDRO BLVD
TRAUTWEIN RD
0 0.5 1 2 3 4 Miles
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CITY OF RIVERSIDE

City of Riverside

Table RR-2

2013/14 to 2017/18

Capital Improvement Program - Railroad-Related Projects

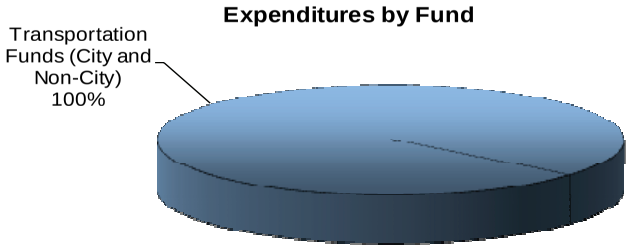
Capital Improvement Program Summary

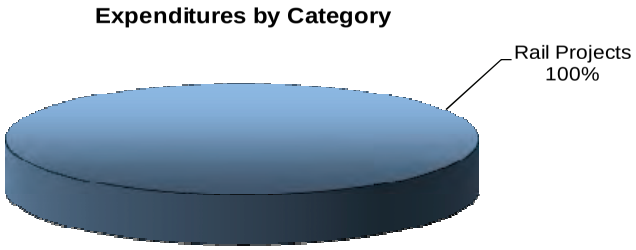
Projected Expenditures by Fund

Fund	Prior Fiscal Years	2013/14	2014/15	2015/16	2016/17	2017/18	Total	Unfunded
General Fund (101)	-	-	-	-	-	-	-	-
Transportation Funds (City and Non-City)	121,257	591,800	609,600	627,900	646,700	666,100	3,142,100	-
Funding Source Not Identified	-	-	-	-	-	-	-	114,256,700
Total	**121,257**	**591,800**	**609,600**	**627,900**	**646,700**	**666,100**	**3,142,100**	**114,256,700**

Projected Expenditures by Category

Project Category	Prior Fiscal Years	2013/14	2014/15	2015/16	2016/17	2017/18	Total	Unfunded
Rail Projects	121,257	591,800	609,600	627,900	646,700	666,100	3,142,100	114,256,700
Total	**121,257**	**591,800**	**609,600**	**627,900**	**646,700**	**666,100**	**3,142,100**	**114,256,700**





NOTE: Pie Charts do not included unfunded projects.
NOTE: Categories comprising less than 1% of total are not labeled

2013/14 to 2017/18

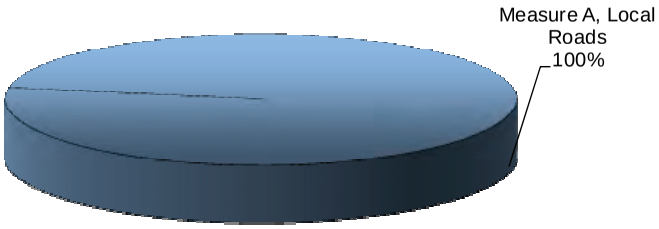
Capital Improvement Program - Railroad-Related Projects

Projected Capital Funding Revenue Sources by Fund

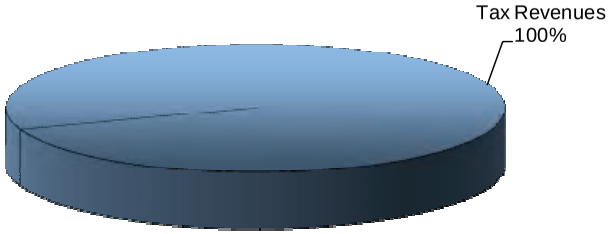
Transportation Funds (430, 432, & 434)

Revenue Type	Revenue Source	2013/14	2014/15	2015/16	2016/17	2017/18	Total
Tax Revenues	Measure A, Local Roads	591,800	609,600	627,900	646,700	666,100	3,142,100
State Funds	Proposition 1B Funds TCIF	-	-	-	-	-	-
State Funds	PUC Grade Separation Funds	-	-	-	-	-	-
Federal Funds	RCTC Set aside CMAQ	-	-	-	-	-	-
Regional Funds	RCTC PUC 190 Match	-	-	-	-	-	-
Private Funds	Railroad Contribution	-	-	-	-	-	-
	Total Funds Available for Capital Improvements from Revenue	**591,800**	**609,600**	**627,900**	**646,700**	**666,100**	**3,142,100**

Revenue by Source



Revenue by Type



NOTE: Categories comprising less than 1% of total are not labeled

NOTE: The three Grade Separation Funds are combined together above to better illustrate the revenue sources that fund transportation projects. In actuality, revenues are related to the Funds as follows:

430 Fund - Restricted Non-City Funds (Except for TUMF Funds)
432 Fund - Measure A Funds
434 Fund - TUMF Funds

City of Riverside

Table RR-4

2013/14 to 2017/18

Capital Improvement Program - Railroad-Related Projects

Projected Capital Funding Appropriations by Fiscal Year

Sources of Funds	2013/14	2014/15	2015/16	2016/17	2017/18
Total Funds Available for Capital Improvements from Revenue - Transportation Funds (430, 432, & 434)	591,800	609,600	627,900	646,700	666,100
Fund Balance from Prior Year - Transportation Funds (430, 432, & 434)	-	-	-	-	-
Total Funds Available for Capital Improvements	**591,800**	**609,600**	**627,900**	**646,700**	**666,100**
Less: Adjustments for Non-Capital Expenditures					
Debt Service - Rail Projects	-	-	-	-	-
Adjusted Total Funds Available for Capital Improvements	**591,800**	**609,600**	**627,900**	**646,700**	**666,100**

Project Number	Project Type	Project Description	Prior Fiscal Years	2013/14	2014/15	2015/16	2016/17	2017/18	Total	Unfunded
RR-UF-1	Rail Projects	BNSF Quiet Zone - Mission Inn, 3rd, Spruce	(20,000)	-	-	-	-	-	-	(4,100,000)
RR-1 / RR-UF-2	Rail Projects	BNSF/UP Quiet Zone - Panorama & Cridge	(101,257)	(291,800)	-	-	(384,200)	(666,100)	(1,342,100)	(256,700)
RR-2 / RR-UF-3	Rail Projects	Phase 2 Grade Separation Program	-	(100,000)	-	-	-	-	(100,000)	(109,900,000)
RR-3	Rail Projects	Union Pacific Quiet Zone - Brockton & Palm	-	(200,000)	(609,600)	(627,900)	(262,500)	-	(1,700,000)	-
		Total	**(121,257)**	**(591,800)**	**(609,600)**	**(627,900)**	**(646,700)**	**(666,100)**	**(3,142,100)**	**(114,256,700)**
		Unbudgeted Balance		**-**	**-**	**-**	**-**	**-**		

City of Riverside

Table RR-5

2013/14 to 2017/18

Capital Improvement Program - Railroad-Related Projects

Funded Capital Projects

Project Number	Project Type	Project Description	General Fund (101)	Measure A Fund (432)	Restricted Non-City Funds	Total	Funded in Prior Fiscal Years	Total Project Cost
RR-1	Rail Projects	BNSF Quiet Zone at Cridge Street and Union Pacific Railroad crossing at Panorama Road (Funded Component)	-	1,342,100	-	1,342,100	101,257	1,443,357
RR-2	Rail Projects	Phase 2 Grade Separation Program (Funded Component)	-	100,000	-	100,000	-	100,000
RR-3	Rail Projects	Union Pacific Quiet Zone - Brockton & Palm	-	1,700,000	-	1,700,000	-	1,700,000
		Total Funded Projects	**-**	**3,142,100**	**-**	**3,142,100**	**101,257**	**3,243,357**

2013/14 to 2017/18

Capital Improvement Program - Railroad-Related Projects

Unfunded Capital Projects

Project Number	Project Type	Project Description	General Fund (101)	City Transport. Funds	Restricted Non-City Funds	Funding Source Not Identified	Total
RR-UF-1	Rail Projects	BNSF Quiet Zone - Mission Inn Avenue, 3rd Street and Spruce Street (Unfunded Component)	-	-	-	4,100,000	4,100,000
RR-UF-2	Rail Projects	BNSF Quiet Zone at Cridge Street and Union Pacific Railroad crossing at Panorama Road (Unfunded Component)	-	-	-	256,700	256,700
RR-UF-3	Rail Projects	Phase 2 Grade Separation Program (Unfunded Component)	-	-	-	109,900,000	109,900,000
		Total Unfunded Projects	**-**	**-**	**-**	**114,256,700**	**114,256,700**

2013/14 to 2017/18
Capital Improvement Program – Sewer

Program Summary

2013/14	2014/15	2015/16	2016/17	2017/18	Total
2,235,000	1,875,000	36,460,000	40,265,000	9,640,000	90,475,000

Introduction

The five-year Capital Improvement Program (CIP) for the Sewer Fund totals $90.4 million. The proposed fiscal year 2013/14 CIP is $2.2 million.

The Capital Improvement Program for the Sewer Fund is comprised of three primary areas related to the collection and treatment of sewage. The three areas are:

- Treatment Plant Capacity / Replacements / Structures
- Compliance with Regulations
- Sewer Collection System Projects

Overall, the five-year budget reflects the significant investment needed to improve the City's sewer collection system and treatment facility. The Integrated Master Plan for Wastewater Collection and Treatment Facilities (Master Plan), completed in February 2008 and conceptually approved by the City Council on July 22, 2008, provides the foundation for the short and long-term CIP for both the collection system and treatment facilities necessary to support existing and future development sewage flows, replace aging infrastructure, and to address evolving Federal and State regulatory requirements.

To fund the future capital improvements, the Master Plan presented a financial plan that included a new user rate structure and the sale of revenue bonds. The financial plan and approval of the new user rate structure are complete. In 2009, the City sold approximately $240.9 million in revenue bonds. According to current budgetary projections, it is anticipated that additional bond issuances of approximately $250 million will be needed over the course of the five-year CIP. The City has also programmed $1,250,000 in the CIP for security system upgrades to the Water Quality Control Plant during fiscal year 2017/18.

Treatment Plant Capacity/Replacements/Structures
Projects within the Plant Capacity / Replacements / Structures category are designed to increase plant capacity or replace infrastructure that has become old and expensive to maintain.

The five-year Capital Improvement Program includes $24.2 million to complete upgrades to the treatment facility to increase plant capacity, improve treatment efficiency, reduce system maintenance, and comply with State and Federal regulations. The majority of this funding is programmed for in-house capital projects to replace and upgrade existing capital equipment and systems at the treatment plant.

Compliance with Regulations
Projects within the Compliance with Regulations category keep the plant up to date with evolving Federal and State regulatory requirements.

The Capital Improvement Program includes $2.4 million for rehabilitation of the Hidden Valley Wetlands natural treatment system. Plans included the possibility of constructing additional wetlands ponds for further nitrogen removal. However, the wetlands sustained significant damage as a result of a storm in December 2010. As a result and before any previously forecasted project can move forward, the damage will need to be assessed through an engineering study. The study will evaluate the extent of damage, recommend corrective actions, and propose costs for the various repairs. Once these items are identified, it is anticipated that the reserved funds will be used to complete the repairs and rehabilitate undamaged wetlands facilities.

The CIP also includes $15.8 million programmed for energy system upgrades to implement portions of the study during fiscal year 2016/17.

Sewer Collection System Projects
This five-year Capital Improvement Program includes $48.0 million to complete upgrades to the sewer collection system to increase capacity, replace deteriorated pipelines and manholes, and provide upgrades to sewer lift/pump stations. The design and construction of these improvements are based on the Master Plan, staff field experience, and pipeline video inspections.

Program Summary

Key Revenues and Funding Sources

The Sewer Fund Capital Improvement Program is funded by residential, commercial, and industrial sewer service charges. Fees collected from new developments and bond proceeds also provide funding for the sewer CIP.

Bond proceeds are shown in the Capital Improvement Program that will augment user fees allocated to capital projects. Use of these funds presumes the sale of revenue bonds. These revenue sources are included in the CIP budget to provide an accurate comparison of available funding to the projected capital project needs.

Future CIP Considerations

According to current budgetary projections, it is anticipated that additional bond issuances of approximately $250 million will be needed towards the end of fiscal year 2012/13 to fund CIP projects for the five-year term. As each year progresses, the City will continue to assess revenue and spending patterns to determine future funding requirements.

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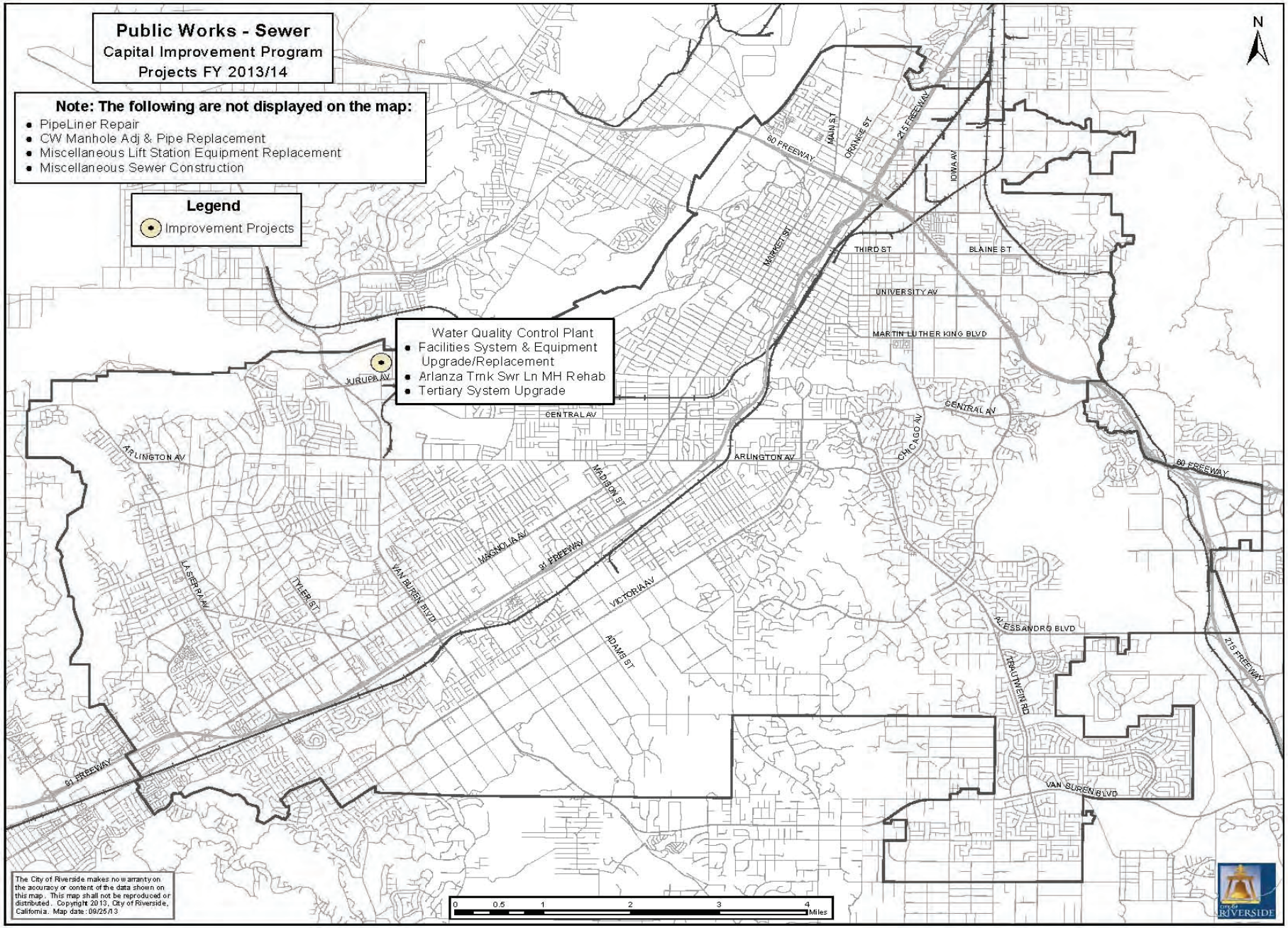
2013/14 to 2017/18

Capital Improvement Program - Sewer

Budgeted Projects - Year One

Project Number	Project Type	Project Description	General Fund (101)	Sewer Fund (550)	Total
SW-1	Plant Capacity/Repl.	Facility System and Equipment Upgrade/Replacement	-	625,000	625,000
SW-2	Plant Capacity/Repl.	Tertiary System Upgrade	-	250,000	250,000
SW-13	Sewer Projects	Miscellaneous Sewer Construction	-	1,000,000	1,000,000
SW-14	Sewer Projects	Pipe Liner Repair Various Locations	-	150,000	150,000
SW-15	Sewer Projects	Miscellaneous Lift Station Equipment Replacement	-	100,000	100,000
SW-16	Sewer Projects	CW Manhole Adj & Pipe Replacement	-	85,000	85,000
SW-17	Sewer Projects	Arlanza Trnk Swr Ln MH Rehab	-	25,000	25,000
		Total	**-**	**2,235,000**	**2,235,000**


Public Works - Sewer
Capital Improvement Program
Projects FY 2013/14
Note: The following are not displayed on the map:
PipeLiner Repair
CW Manhole Adj & Pipe Replacement
Miscellaneous Lift Station Equipment Replacement
Miscellaneous Sewer Construction
Legend
Improvement Projects
Water Quality Control Plant
Facilities System & Equipment Upgrade/Replacement
Arlanza Trnk Swr Ln MH Rehab
Tertiary System Upgrade
N
60 FREEWAY
MAIN ST
ORANGE ST
215 FREEWAY
IOWA AV
MARKET ST
THIRD ST
BLAINE ST
UNIVERSITY AV
MARTIN LUTHER KING BLVD
JURUPA AV
CENTRAL AV
ARLINGTON AV
CHICAGO AV
MADISON ST
MAGNOLIA AV
91 FREEWAY
VICTORIA AV
ADAMS ST
VAN BUREN BLVD
TYLER ST
LA SIERRA AV
ALESSANDRO BLVD
TRAUTWEIN RD
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0 0.5 1 2 3 4 Miles
CITY OF RIVERSIDE

City of Riverside

Table SW-2

2013/14 to 2017/18

Capital Improvement Program - Sewer

Capital Improvement Program Summary

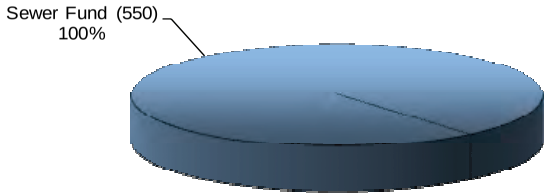
Projected Expenditures by Fund

Fund	Prior Fiscal Years	2013/14	2014/15	2015/16	2016/17	2017/18	Total	Unfunded
General Fund (101)	-	-	-	-	-	-	-	-
Sewer Fund (550)	41,812,540	2,235,000	1,875,000	36,460,000	40,265,000	9,640,000	90,475,000	-
Total	**41,812,540**	**2,235,000**	**1,875,000**	**36,460,000**	**40,265,000**	**9,640,000**	**90,475,000**	**-**

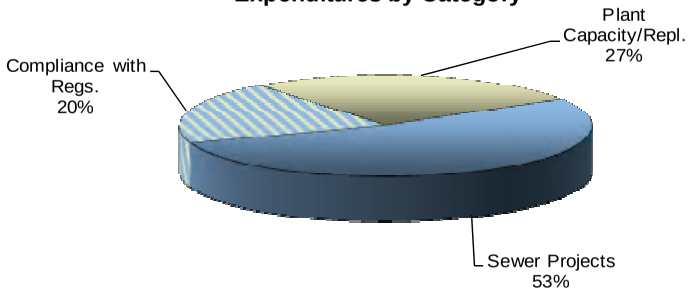
Projected Expenditures by Category

Project Category	Prior Fiscal Years	2013/14	2014/15	2015/16	2016/17	2017/18	Total	Unfunded
Compliance with Regs.	982,236	-	-	2,400,000	15,800,000	-	18,200,000	-
Plant Capacity/Repl.	8,321,639	875,000	625,000	3,175,000	16,145,000	3,375,000	24,195,000	-
Sewer Projects	32,508,665	1,360,000	1,250,000	30,885,000	8,320,000	6,265,000	48,080,000	-
Total	**41,812,540**	**2,235,000**	**1,875,000**	**36,460,000**	**40,265,000**	**9,640,000**	**90,475,000**	**-**

Expenditures by Fund



Expenditures by Category



NOTE: Pie Charts do not include unfunded projects.
NOTE: Categories comprising less than 1% are not labeled.

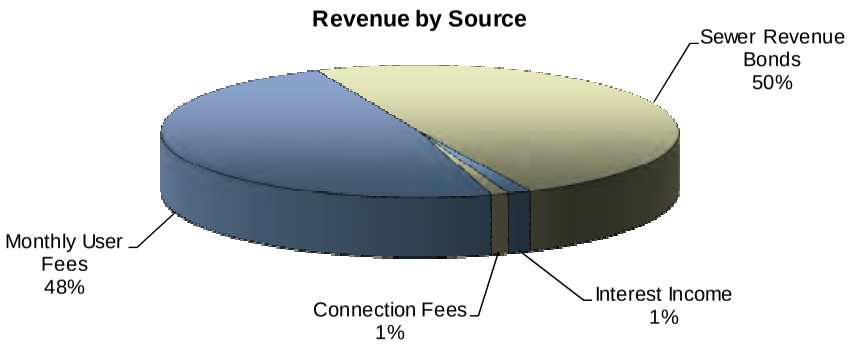
2013/14 to 2017/18

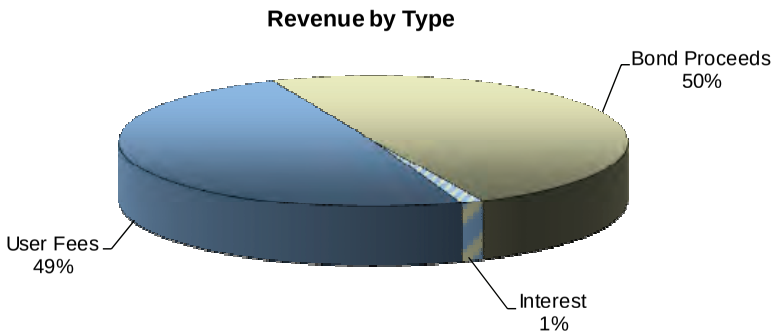
Capital Improvement Program - Sewer

Projected Capital Funding Revenue Sources by Fund

Sewer Fund (550)

Revenue Type	Revenue Source	2013/14	2014/15	2015/16	2016/17	2017/18	Total
User Fees	Connection Fees	1,035,294	1,066,353	1,098,343	1,131,294	1,165,233	5,496,517
User Fees	Monthly User Fees	44,999,204	46,642,547	48,347,432	50,116,196	51,951,264	242,056,643
Bond Proceeds	Sewer Revenue Bonds	150,000,000	-	100,000,000	-	-	250,000,000
Interest	Interest Income	2,070,000	1,370,000	1,675,000	1,210,000	950,000	7,275,000
	Total Funds Available for Capital Improvements from Revenue	**198,104,498**	**49,078,900**	**151,120,775**	**52,457,490**	**54,066,497**	**504,828,160**
	Less: Enterprise Fund Operating Expenditures	(30,371,163)	(31,282,298)	(32,220,767)	(33,187,390)	(34,183,012)	(161,244,629)
	Adjusted Total Funds Available for Capital Improvements from Revenue	**167,733,335**	**17,796,602**	**118,900,009**	**19,270,100**	**19,883,485**	**343,583,531**





NOTE: Categories comprising less than 1% are not labeled.

2013/14 to 2017/18

Capital Improvement Program - Sewer

Projected Capital Funding Appropriations by Fiscal Year

Sources of Funds	2013/14	2014/15	2015/16	2016/17	2017/18
Total Funds Available for Capital Improvements from Revenue - Sewer Fund (550)	167,733,335	17,796,602	118,900,009	19,270,100	19,883,485
Fund Balance from Prior Year - Sewer Fund (550)	37,892,524	37,333,859	36,838,461	37,446,470	38,424,570
2009 Bond Construction Proceeds from Prior Year	60,245,106	-	-	-	-
2013 Bond Construction Proceeds from Prior Year	-	97,696,171	31,220,233	-	-
2015 Bond Construction Proceeds from Prior Year	-	-	-	70,747,514	30,482,514
Less: Bond Draws for Completion of Existing Projects	(110,313,935)	(64,600,938)	(24,012,719)	-	-
Total Funds Available for Capital Improvements	**155,557,030**	**88,225,694**	**162,945,983**	**127,464,084**	**88,790,569**
Less: Adjustments for Non-Capital Expenditures					
Debt Service - State Loans	(817,000)	(817,000)	(817,000)	(817,000)	(817,000)
Debt Service - 2009 Sewer Revenue Bonds	(17,475,000)	(17,475,000)	(17,475,000)	(17,475,000)	(17,475,000)
Adjusted Total Funds Available for Capital Improvements	**137,265,030**	**69,933,694**	**144,653,983**	**109,172,084**	**70,498,569**

Project Number	Project Type	Project Description	Prior Fiscal Years	2013/14	2014/15	2015/16	2016/17	2017/18	Total	Unfunded
SW-1	Plant Capacity/Repl.	Facility System and Equipment Upgrade/Replacement	(6,195,236)	(625,000)	(625,000)	(625,000)	(625,000)	(625,000)	(3,125,000)	-
SW-2	Plant Capacity/Repl.	Tertiary System Upgrade	(250,000)	(250,000)	-	-	(2,000,000)	-	(2,250,000)	-
SW-3	Plant Capacity/Repl.	Solids Handling Upgrade Phase II	(1,050,000)	-	-	(1,250,000)	(1,500,000)	(1,500,000)	(4,250,000)	-
SW-4	Plant Capacity/Repl.	Transformers T-1 and T-2 / Switch Gear A and B Replacement	(170,000)	-	-	(1,000,000)	-	-	(1,000,000)	-
SW-5	Plant Capacity/Repl.	Influent Flow Control Valves	(200)	-	-	(200,000)	-	-	(200,000)	-
SW-6	Plant Capacity/Repl.	Concrete Installation and Rehabilitation	-	-	-	(100,000)	-	-	(100,000)	-
SW-7	Plant Capacity/Repl.	Flow Meters	(321,173)	-	-	-	(8,430,000)		(8,430,000)	-
SW-8	Plant Capacity/Repl.	Admin Building HVAC Replacement	(8,986)	-	-	-	(1,290,000)	-	(1,290,000)	-
SW-9	Plant Capacity/Repl.	Plant 2 RAS/WAS Pump Station 10 Valve Replacement	-	-	-	-	(500,000)	-	(500,000)	-
SW-10	Plant Capacity/Repl.	Potable/Recycled Water Pipeline Upgrade	-	-	-	-	(300,000)	-	(300,000)	-
SW-11	Plant Capacity/Repl.	Plant Recycled Water System Improvements	-	-	-	-	(1,500,000)	-	(1,500,000)	-
SW-12	Plant Capacity/Repl.	WQCP Security System Upgrade	(326,045)	-	-	-	-	(1,250,000)	(1,250,000)	-
SW-13	Sewer Projects	Miscellaneous Sewer Construction	(935,627)	(1,000,000)	(1,000,000)	(1,000,000)	(4,200,000)	(5,965,000)	(13,165,000)	-
SW-14	Sewer Projects	Pipe Liner Repair Various Locations	(839,493)	(150,000)	(150,000)	(150,000)	(150,000)	(150,000)	(750,000)	-
SW-15	Sewer Projects	Miscellaneous Lift Station Equipment Replacement	(489,846)	(100,000)	(100,000)	(100,000)	(100,000)	(100,000)	(500,000)	-
SW-16	Sewer Projects	CW Manhole Adj & Pipe Replacement	(660,000)	(85,000)	-	-	-	-	(85,000)	-
SW-17	Sewer Projects	Arlanza Trnk Swr Ln MH Rehab	(60,000)	(25,000)	-	-	-	-	(25,000)	-
SW-18	Sewer Projects	Santa Ana River Trunk Replacement	(16,980,000)	-	-	(16,600,000)	-	-	(16,600,000)	-
SW-19	Sewer Projects	Teq./Arroyo Trunk Line	(12,102,910)	-	-	(13,000,000)	-	-	(13,000,000)	-
SW-20	Sewer Projects	Lift Station Automation & Cont	(106,721)	-	-	(35,000)	-	-	(35,000)	-
SW-21	Sewer Projects	Sewer Main Replacement 9th St	(328,067)	-	-	-	(3,870,000)	-	(3,870,000)	-
SW-22	Sewer Projects	Lakewood/Darkwood Lift Station Improvement	(6,000)	-	-	-	-	(50,000)	(50,000)	-
SW-23	Compliance with Regs.	Hidden Valley Wetlands Improvement	(47,509)	-	-	(2,400,000)	-	-	(2,400,000)	-
SW-24	Compliance with Regs.	Energy System Upgrades	(934,727)	-	-	-	(15,800,000)	-	(15,800,000)	-
		Total	**(41,812,540)**	**(2,235,000)**	**(1,875,000)**	**(36,460,000)**	**(40,265,000)**	**(9,640,000)**	**(90,475,000)**	**-**
		Unbudgeted Balance		**135,030,030**	**68,058,694**	**108,193,983**	**68,907,084**	**60,858,569**		

2013/14 to 2017/18

Capital Improvement Program - Sewer

Funded Capital Projects

Project Number	Project Type	Project Description	General Fund (101)	Sewer Fund (550)	Total	Funded in Prior Fiscal Years	Total Project Cost
SW-1	Plant Capacity/Repl.	Facility System and Equipment Upgrade/Replacement	-	3,125,000	3,125,000	6,195,236	9,320,236
SW-2	Plant Capacity/Repl.	Tertiary System Upgrade	-	2,250,000	2,250,000	250,000	2,500,000
SW-3	Plant Capacity/Repl.	Solids Handling Upgrade Phase II	-	4,250,000	4,250,000	1,050,000	5,300,000
SW-4	Plant Capacity/Repl.	Transformers T-1 and T-2 / Switch Gear A and B Replacement	-	1,000,000	1,000,000	170,000	1,170,000
SW-5	Plant Capacity/Repl.	Influent Flow Control Valves	-	200,000	200,000	200	200,200
SW-6	Plant Capacity/Repl.	Concrete Installation and Rehabilitation	-	100,000	100,000	-	100,000
SW-7	Plant Capacity/Repl.	Flow Meters	-	8,430,000	8,430,000	321,173	8,751,173
SW-8	Plant Capacity/Repl.	Admin Building HVAC Replacement	-	1,290,000	1,290,000	8,986	1,298,986
SW-9	Plant Capacity/Repl.	Plant 2 RAS/WAS Pump Station 10 Valve Replacement	-	500,000	500,000	-	500,000
SW-10	Plant Capacity/Repl.	Potable/Recycled Water Pipeline Upgrade	-	300,000	300,000	-	300,000
SW-11	Plant Capacity/Repl.	Plant Recycled Water System Improvements	-	1,500,000	1,500,000	-	1,500,000
SW-12	Plant Capacity/Repl.	WQCP Security System Upgrade	-	1,250,000	1,250,000	326,045	1,576,045
SW-13	Sewer Projects	Miscellaneous Sewer Construction	-	13,165,000	13,165,000	935,627	14,100,627
SW-14	Sewer Projects	Pipe Liner Repair Various Locations	-	750,000	750,000	839,493	1,589,493
SW-15	Sewer Projects	Miscellaneous Lift Station Equipment Replacement	-	500,000	500,000	489,846	989,846
SW-16	Sewer Projects	CW Manhole Adj & Pipe Replacement	-	85,000	85,000	660,000	745,000
SW-17	Sewer Projects	Arlanza Trnk Swr Ln MH Rehab	-	25,000	25,000	60,000	85,000
SW-18	Sewer Projects	Santa Ana River Trunk Replacement	-	16,600,000	16,600,000	16,980,000	33,580,000
SW-19	Sewer Projects	Teq./Arroyo Trunk Line	-	13,000,000	13,000,000	12,102,910	25,102,910
SW-20	Sewer Projects	Lift Station Automation & Cont	-	35,000	35,000	106,721	141,721
SW-21	Sewer Projects	Sewer Main Replacement 9th St	-	3,870,000	3,870,000	328,067	4,198,067
SW-22	Sewer Projects	Lakewood/Darkwood Lift Station Improvement	-	50,000	50,000	6,000	56,000
SW-23	Compliance with Regs.	Hidden Valley Wetlands Improvement	-	2,400,000	2,400,000	47,509	2,447,509
SW-24	Compliance with Regs.	Energy System Upgrades	-	15,800,000	15,800,000	934,727	16,734,727
		Total Funded Projects	**-**	**90,475,000**	**90,475,000**	**41,812,540**	**132,287,540**

City of Riverside

Table SW-6

2013/14 to 2017/18

Capital Improvement Program - Sewer

Unfunded Capital Projects

Project Number	Project Type	Project Description	General Fund (101)	Sewer Fund (550)	Total
		There are no unfunded capital projects currently identified.			
		Total Unfunded Projects	**-**	**-**	**-**

Program Summary

2013/14	2014/15	2015/16	2016/17	2017/18	Total
150,000	150,000	150,000	150,000	150,000	750,000

Introduction

The five-year Capital Improvement Program for the Storm Drain Fund totals $750,000. The FY 2013/14 CIP totals $150,000.

Storm drain improvement projects being proposed in the five-year Capital Improvement Program include Miscellaneous Storm Drain Construction at $750,000 spread over the five year period.

Storm drain improvement projects are prioritized in a manner that ensures installation of drainage improvements in concert with street improvement projects, in coordination with Riverside County Flood Control District projects, and in support of economic development projects.

Key Revenues and Funding Sources

Storm drain capital improvements are funded out of the Storm Drain Fund, established by Section 16.08.050 of the Riverside Municipal Code. The revenues are derived from storm drain fees collected with the issuance of building permits.

Future CIP Considerations

The Storm Drain Program includes projects that eliminate flooding during major storm events. The City's storm drain needs outweigh the available funding sources at this point.

The existing Monticello Channel between Magnolia and Van Buren is in excess of 50 years old and requires replacement. The channel is constructed of un-reinforced concrete and is regularly damaged during heavy rains. Although the channel is regularly maintained and repaired, replacement is the only long term alternative. The estimated replacement cost is approximately $20 million, which is beyond the resources of the Storm Drain Fund. Since this facility is regional in nature, the Riverside County Flood Control District has agreed to fund its replacement and assume ownership of the facility.

City of Riverside

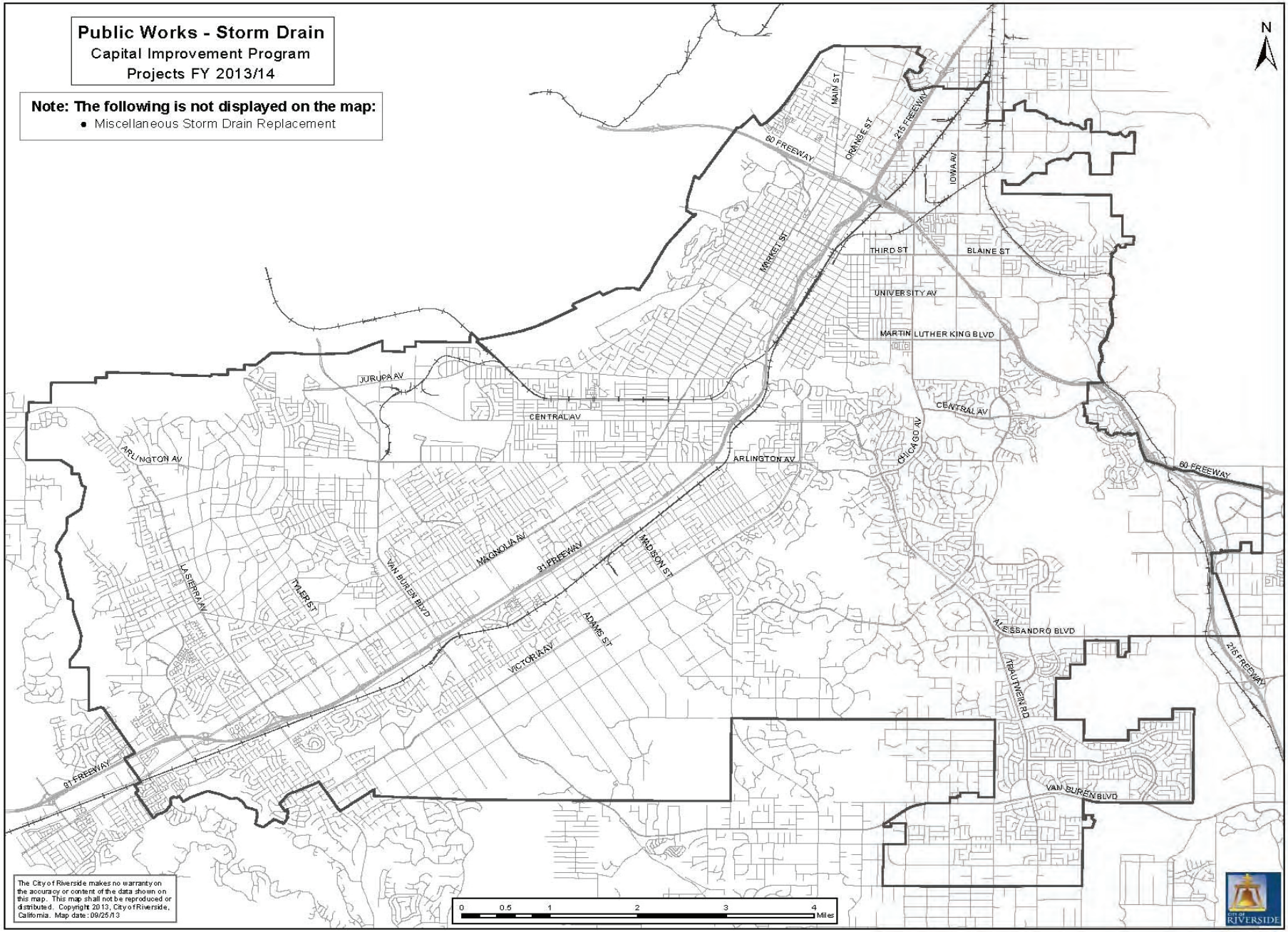
Table SD-1

2013/14 to 2017/18

Capital Improvement Program - Storm Drain

Budgeted Projects - Year One

Project Number	Project Type	Project Description	General Fund (101)	Storm Drain Fund (410)	Total
SD-1	Recurring Projects	Miscellaneous Storm Drain Construction	-	150,000	150,000
		Total	**-**	**150,000**	**150,000**


Public Works - Storm Drain
Capital Improvement Program
Projects FY 2013/14
Note: The following is not displayed on the map:
• Miscellaneous Storm Drain Replacement
N
60 FREEWAY
MAIN ST
ORANGE ST
215 FREEWAY
IOWA AV
MARKET ST
THIRD ST
BLAINE ST
UNIVERSITY AV
MARTIN LUTHER KING BLVD
JURUPA AV
CENTRAL AV
ARLINGTON AV
CHICAGO AV
ALESSANDRO BLVD
TRAUTMAN RD
VAN BUREN BLVD
MAGNOLIA AV
91 FREEWAY
MADISON ST
ADAMS ST
VICTORIA AV
TYLER ST
LA SIERRA AV
0 0.5 1 2 3 4 Miles
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CITY OF RIVERSIDE

2013/14 to 2017/18

Capital Improvement Program - Storm Drain

Capital Improvement Program Summary

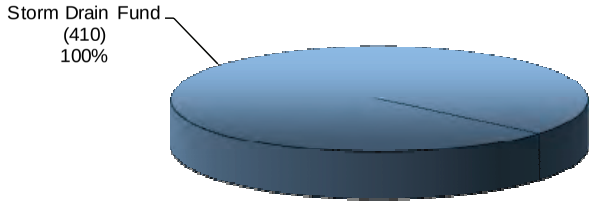
Projected Expenditures by Fund

Fund	2013/14	2014/15	2015/16	2016/17	2017/18	Total	Unfunded
General Fund (101)	-	-	-	-	-	-	-
Storm Drain Fund (410)	150,000	150,000	150,000	150,000	150,000	750,000	-
Total	**150,000**	**150,000**	**150,000**	**150,000**	**150,000**	**750,000**	**-**

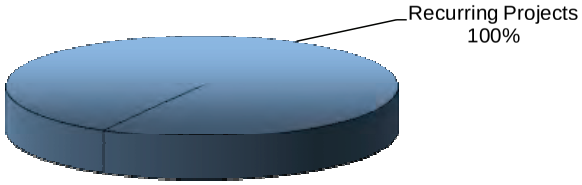
Projected Expenditures by Category

Project Category	2013/14	2014/15	2015/16	2016/17	2017/18	Total	Unfunded
Construction	-	-	-	-	-	-	-
Recurring Projects	150,000	150,000	150,000	150,000	150,000	750,000	-
Total	**150,000**	**150,000**	**150,000**	**150,000**	**150,000**	**750,000**	**-**

Expenditures by Fund



Expenditures by Category



NOTE: Pie Charts do not included unfunded projects.
NOTE: Categories comprising less than 1% are not labeled.

2013/14 to 2017/18

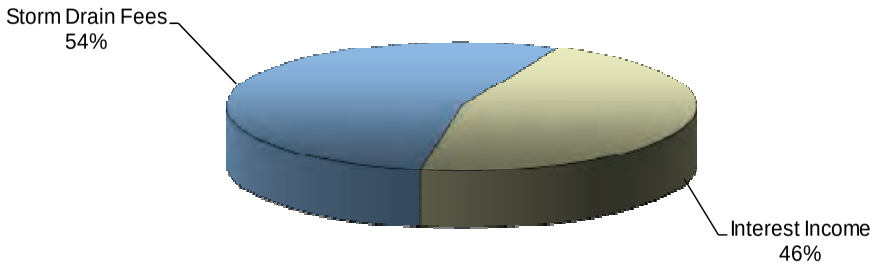
Capital Improvement Program - Storm Drain

Projected Capital Funding Revenue Sources by Fund

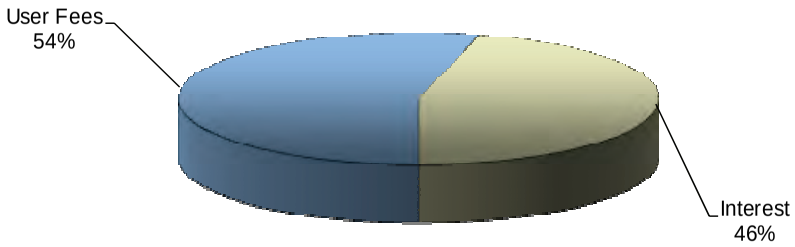
Storm Drain Fund (410)

Revenue Type	Revenue Source	2013/14	2014/15	2015/16	2016/17	2017/18	Total
User Fees	Storm Drain Fees	100,000	100,000	100,000	100,000	100,000	500,000
Interest	Interest Income	25,000	100,000	100,000	100,000	100,000	425,000
	Total Funds Available for Capital Improvements from Revenue	**125,000**	**200,000**	**200,000**	**200,000**	**200,000**	**925,000**

Revenue by Source



Revenue by Type



NOTE: Categories comprising less than 1% are not labeled.

2013/14 to 2017/18

Capital Improvement Program - Storm Drain

Projected Capital Funding Appropriations by Fiscal Year

Sources of Funds	2013/14	2014/15	2015/16	2016/17	2017/18
Total Funds Available for Capital Improvements from Revenue - Storm Drain Fund (410)	125,000	200,000	200,000	200,000	200,000
Fund Balance from Prior Year - Storm Drain Fund (410)	426,094	351,094	351,094	351,094	351,094
Total Funds Available for Capital Improvements	**551,094**	**551,094**	**551,094**	**551,094**	**551,094**
Less: Adjustments for Non-Capital Expenditures					
Land Development/Permit Processing	-	-	-	-	-
Drainage Studies	(50,000)	(50,000)	(50,000)	(50,000)	(50,000)
Adjusted Total Funds Available for Capital Improvements	**501,094**	**501,094**	**501,094**	**501,094**	**501,094**

Project Number	Project Type	Project Description	2013/14	2014/15	2015/16	2016/17	2017/18	Total	Unfunded
SD-1	Recurring Projects	Miscellaneous Storm Drain Construction	(150,000)	(150,000)	(150,000)	(150,000)	(150,000)	(750,000)	-
		Total	**(150,000)**	**(150,000)**	**(150,000)**	**(150,000)**	**(150,000)**	**(750,000)**	**-**
		Unbudgeted Balance	**351,094**	**351,094**	**351,094**	**351,094**	**351,094**		

City of Riverside

Table SD-5

2013/14 to 2017/18

Capital Improvement Program - Storm Drain

Funded Capital Projects

Project Number	Project Type	Project Description	General Fund (101)	Storm Drain Fund (410)	Total
SD-1	Recurring Projects	Miscellaneous Storm Drain Construction - Construct miscellaneous storm drain improvements at various locations. In addition, funds may be used for previously budgeted projects when the scope of work has expanded.	-	750,000	750,000
		Total Funded Projects	**-**	**750,000**	**750,000**

City of Riverside

Table SD-6

2013/14 to 2017/18

Capital Improvement Program - Storm Drain

Unfunded Capital Projects

Project Number	Project Type	Project Description	General Fund (101)	Storm Drain Fund (410)	Restricted Non-City Funds	Total
		There are no unfunded capital projects currently identified.				
		Total Unfunded Projects	-	-	-	-

Program Summary

2013/14	2014/15	2015/16	2016/17	2017/18	Total
-0-	-0-	-0-	-0-	-0-	-0-

Introduction

The five-year capital improvement program for the Refuse Fund totals $0, as there are no budgeted capital projects currently identified.

The Refuse CIP was developed for the closure and long-term maintenance of the landfill. The State required capital improvements at the Tequesquite Landfill for the closure have been completed. Only equipment upgrades / replacements for the gas generation complex to ensure system reliability are included in the CIP.

The landfill requires routine maintenance to correct settlement and erosion of the cover. In addition, the State requires quarterly ground water monitoring and effective removal of methane gas collected under the permanent cover. These expenditures are reflected within the CIP as non-capital improvement expenditures.

Key Revenues and Funding Sources

Funding for the Refuse Fund capital improvement program is derived from the collection of a user fee on commercial trash disposal throughout the City.

Future CIP Considerations

State required capital improvements at the Tequesquite Landfill have been completed. The requirement for future projects will be determined from mandated gas and groundwater monitoring currently being undertaken.

City of Riverside

Table RF-1

2013/14 to 2017/18

Capital Improvement Program - Refuse

Budgeted Projects - Year One

Project Number	Project Type	Project Description	General Fund (101)	Refuse Collection Fund (540)	Total
		There are no first year budgeted capital projects currently identified.	-	-	-
		Total	**-**	**-**	**-**

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City of Riverside

Table RF-2

2013/14 to 2017/18

Capital Improvement Program - Refuse

Capital Improvement Program Summary

Projected Expenditures by Fund

Fund	2013/14	2014/15	2015/16	2016/17	2017/18	Total	Unfunded
General Fund (101)	-	-	-	-	-	-	-
Refuse Collection Fund (540)	-	-	-	-	-	-	-
Total	**-**	**-**	**-**	**-**	**-**	**-**	**-**

Projected Expenditures by Category

Project Category	2013/14	2014/15	2015/16	2016/17	2017/18	Total	Unfunded
Compliance with Regs	-	-	-	-	-	-	-
Total	**-**	**-**	**-**	**-**	**-**	**-**	**-**

There are no budgeted capital projects currently identified.

City of Riverside

Table RF-3

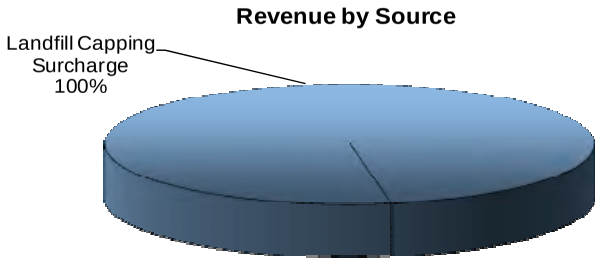
2013/14 to 2017/18

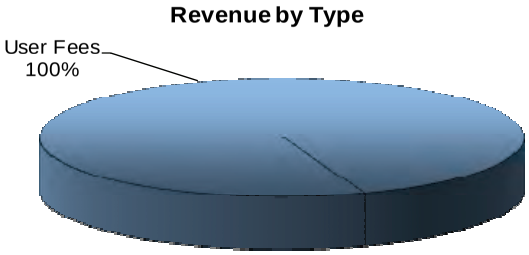
Capital Improvement Program - Refuse

Projected Capital Funding Revenue Sources by Fund

Refuse Collection Fund (540)

Revenue Type	Revenue Source	2013/14	2014/15	2015/16	2016/17	2017/18	Total
Private Funds	Landfill Capping Surcharge	438,430	449,391	460,626	472,141	483,945	2,304,533
Interest	Interest Income	-	-	-	-	-	-
	Total Funds Available for Capital Improvements from Revenue	**438,430**	**449,391**	**460,626**	**472,141**	**483,945**	**2,304,533**





NOTE: Categories comprising less than 1% are not labeled.

2013/14 to 2017/18

Capital Improvement Program - Refuse

Projected Capital Funding Appropriations by Fiscal Year

Sources of Funds	2013/14	2014/15	2015/16	2016/17	2017/18
Total Funds Available for Capital Improvements from Revenue - Refuse Collection Fund (540)	438,430	449,391	460,626	472,141	483,945
Fund Balance from Prior Year - Refuse Collection Fund (540)	1,714,859	1,813,617	1,917,835	2,027,506	2,142,605
Total Funds Available for Capital Improvements	**2,153,289**	**2,263,008**	**2,378,461**	**2,499,647**	**2,626,550**
Less: Adjustments for Non-Capital Expenditures					
Ground Water Testing & Monitoring	(80,000)	(80,800)	(81,608)	(82,424)	(83,248)
Landfill Cover Maintenance	(25,000)	(27,500)	(30,250)	(33,275)	(36,603)
Landfill Operations and Maintenance	(35,000)	(35,350)	(35,704)	(36,061)	(36,421)
Rule 1150.1 Compliance (Surface Gas Monitoring)	(141,300)	(142,713)	(144,140)	(145,582)	(147,037)
General Fund Allocation Charges	(14,532)	(14,532)	(14,532)	(14,532)	(14,532)
Storm Water Annual Permits for Landfill	(43,840)	(44,278)	(44,721)	(45,168)	(45,620)
Adjusted Total Funds Available for Capital Improvements	**1,813,617**	**1,917,835**	**2,027,506**	**2,142,605**	**2,263,089**

Project Number	Project Type	Project Description	2013/14	2014/15	2015/16	2016/17	2017/18	Total	Unfunded
		There are no budgeted capital projects currently identified.	-	-	-	-	-	-	-
			-	-	-	-	-	-	-
		Total	**-**	**-**	**-**	**-**	**-**	**-**	**-**
		Unbudgeted Balance	**1,813,617**	**1,917,835**	**2,027,506**	**2,142,605**	**2,263,089**		

City of Riverside

Table RF-5

2013/14 to 2017/18

Capital Improvement Program - Refuse

Funded Capital Projects

Project Number	Project Type	Project Description	General Fund (101)	Refuse Collection Fund (540)	Total
			-	-	-
		There are no funded capital projects currently identified.			
			-	-	-
		Total Funded Projects	**-**	**-**	**-**

City of Riverside

Table RF-6

2013/14 to 2017/18

Capital Improvement Program - Refuse

Unfunded Capital Projects

Project Number	Project Type	Project Description	General Fund (101)	Refuse Collection Fund (540)	Total
		There are no unfunded capital projects currently identified.			
		Total Unfunded Projects	**-**	**-**	**-**

2013/14 to 2017/18

Capital Improvement Program – Public Parking

Program Summary

2013/14	2014/15	2015/16	2016/17	2017/18	Total
250,000	-0-	-0-	-0-	-0-	250,000

Introduction

The five-year Capital Improvement Program (CIP) for the Parking Services Fund totals $250,000. One project is proposed for fiscal year 2013/14 in the amount of $250,000 for improvements to Lot 33. The improvements will be coordinated with the Convention Center expansion and renovation project.

Parking management strategies are classified as short, medium, and long-term recommendations designed to address additional parking demands as suggested in the Comprehensive Downtown Parking Study. The Comprehensive Downtown Parking Study completed in 2000 was updated in spring 2006 to better reflect the needs of the downtown area.

Key Revenues and Funding Sources

Funding for the CIP is derived solely from parking revenues, which include lots, garages, meters, office space leasing, and parking fines.

Future CIP Considerations

Public Works staff will continue to evaluate the City's parking facilities and will add new projects to the CIP as required.

City of Riverside

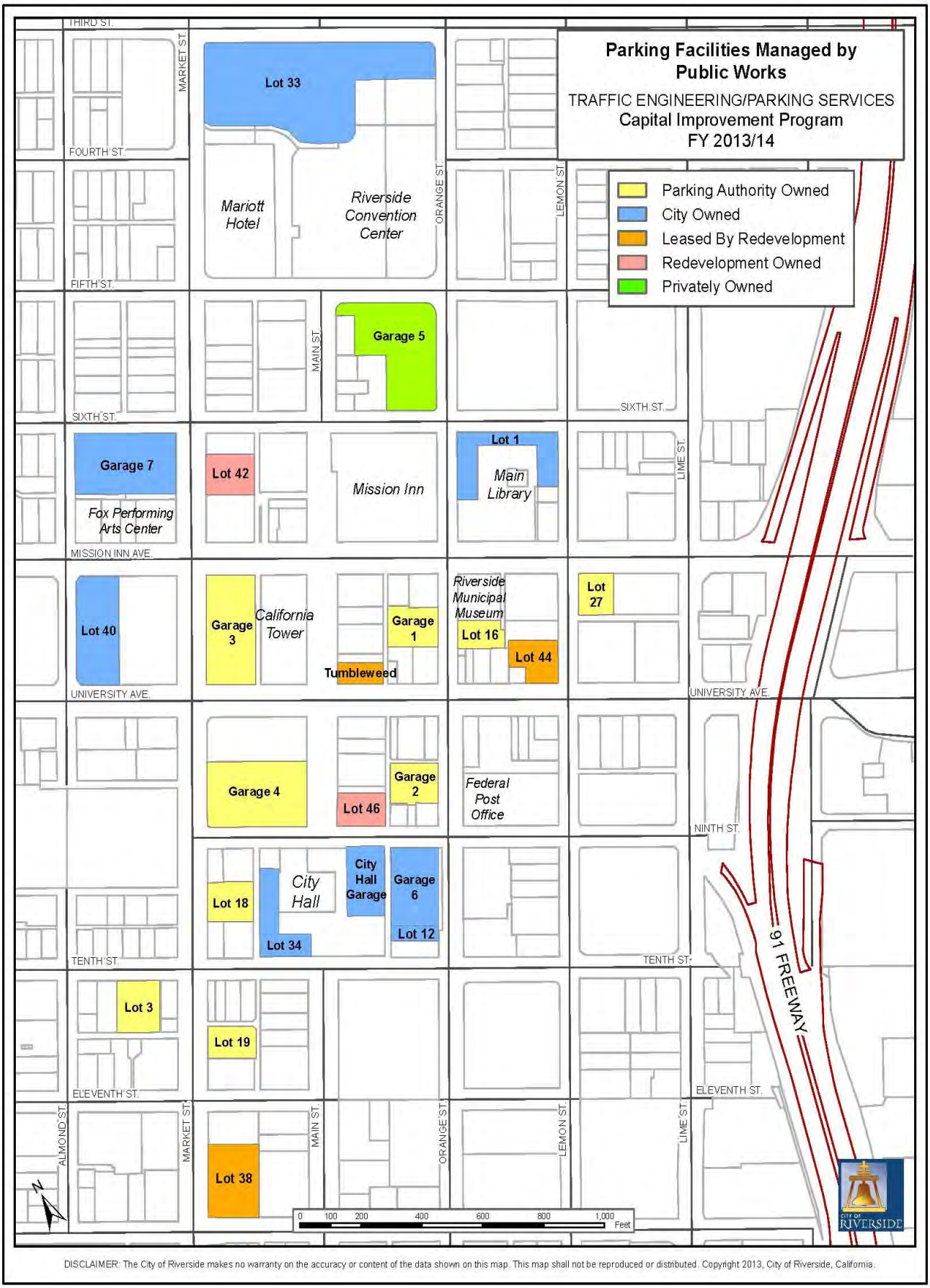
Table PA-1

2013/14 to 2017/18

Capital Improvement Program - Public Parking

Budgeted Projects - Year One

Project Number	Project Type	Project Description	General Fund (101)	Public Parking Fund (570)	Total
PA-1	Lot Improvements	Lot 33 Improvements coordinated with Convention Center expansion project	-	250,000	250,000
		Total	**-**	**-**	**-**



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2013/14 to 2017/18

Capital Improvement Program - Public Parking

Capital Improvement Program Summary

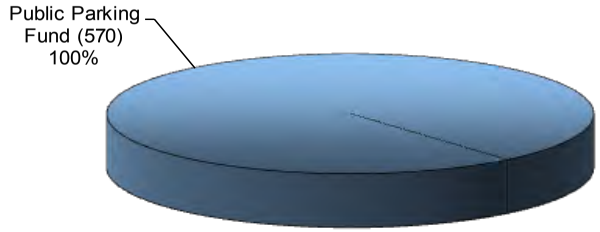
Projected Expenditures by Fund

Fund	2013/14	2014/15	2015/16	2016/17	2017/18	Total	Unfunded
General Fund (101)	-	-	-	-	-	-	-
Public Parking Fund (570)	250,000	-	-	-	-	250,000	-
Total	**250,000**	**-**	**-**	**-**	**-**	**250,000**	**-**

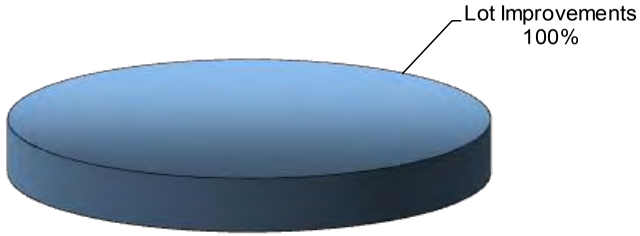
Projected Expenditures by Category

Project Category	2013/14	2014/15	2015/16	2016/17	2017/18	Total	Unfunded
Lot Improvements	250,000	-	-	-	-	250,000	-
Total	**250,000**	**-**	**-**	**-**	**-**	**250,000**	**-**

Expenditures by Fund



Expenditures by Category



NOTE: Pie Charts do not included unfunded projects.
NOTE: Categories comprising less than 1% are not labeled.

2013/14 to 2017/18

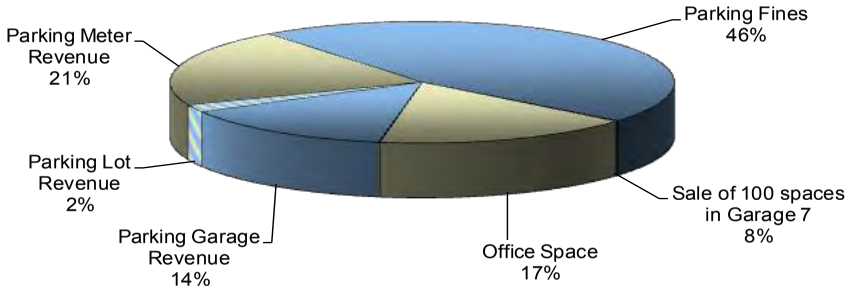
Capital Improvement Program - Public Parking

Projected Capital Funding Revenue Sources by Fund

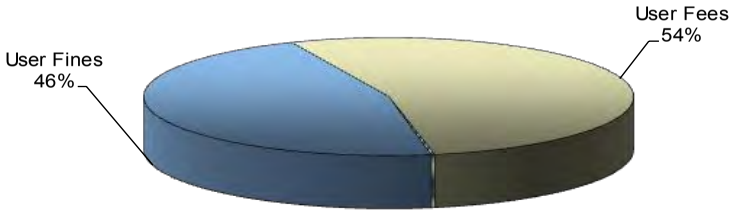
Public Parking Fund (570)

Revenue Type	Revenue Source	2013/14	2014/15	2015/16	2016/17	2017/18	Total
User Fees	Office Space	887,010	1,131,397	1,167,355	1,203,352	1,239,710	5,628,824
User Fees	Other Parking Receipts	5,000	5,000	5,000	5,000	5,000	25,000
User Fees	Parking Garage Revenue	1,006,744	943,967	975,225	971,481	895,704	4,793,121
User Fees	Parking Lot Revenue	179,360	127,800	123,690	123,690	123,690	678,230
User Fees	Parking Meter Revenue	1,400,000	1,400,000	1,416,820	1,416,820	1,416,820	7,050,460
User Fines	Parking Fines	3,018,000	3,028,000	3,228,000	3,228,000	3,228,000	15,730,000
Interest	Interest Income	20,000	9,000	12,000	15,000	20,000	76,000
	Total Funds Available for Capital Improvements from Revenue	**6,516,114**	**6,645,164**	**6,928,090**	**6,963,343**	**6,928,924**	**33,981,635**
Less: Enterprise Fund Operating Expenditures		(4,549,727)	(4,468,522)	(4,563,772)	(4,623,523)	(4,843,906)	(23,049,450)
	Adjusted Total Funds Available for Capital Improvements from Revenue	**1,966,387**	**2,176,642**	**2,364,318**	**2,339,820**	**2,085,018**	**10,932,185**

Revenue by Source



Revenue by Type



NOTE: Categories comprising less than 1% are not labeled.

2013/14 to 2017/18

Capital Improvement Program - Public Parking

Projected Capital Funding Appropriations by Fiscal Year

Sources of Funds	2013/14	2014/15	2015/16	2016/17	2017/18
Total Funds Available for Capital Improvements from Revenue - Public Parking Fund (570)	1,966,387	2,176,642	2,364,318	2,339,820	2,085,018
Fund Balance from Prior Year - Public Parking Fund (570)	1,092,187	166,569	443,402	907,911	1,347,922
Total Funds Available for Capital Improvements	**3,058,574**	**2,343,211**	**2,807,720**	**3,247,731**	**3,432,940**
Less: Adjustments for Non-Capital Expenditures					
Debt Service - Parking Garage 6 COPS	(750,000)	(750,000)	(750,000)	(750,000)	(750,000)
Debt Service - Parking Garage 7 Bank Loan	(1,746,705)	(1,028,809)	(1,028,809)	(1,028,809)	(1,028,809)
Debt Service - Parking Garages 1 & 2 Interfund Loan #1	(24,300)	-	-	-	-
Debt Service - Parking Garages 1 & 2 Interfund Loan #2	(121,000)	(121,000)	(121,000)	(121,000)	(81,800)
Adjusted Total Funds Available for Capital Improvements	**416,569**	**443,402**	**907,911**	**1,347,922**	**1,572,331**

Project Number	Project Type	Project Description	2013/14	2014/15	2015/16	2016/17	2017/18	Total	Unfunded
PA-1	Lot Improvements	Lot 33 Improvements	(250,000)	-	-	-	-	(250,000)	-
		Total	**(250,000)**	**-**	**-**	**-**	**-**	**(250,000)**	**-**
		Unbudgeted Balance	**166,569**	**443,402**	**907,911**	**1,347,922**	**1,572,331**		

Table PA-5

2013/14 to 2017/18

Capital Improvement Program - Public Parking

Funded Capital Projects

Project Number	Project Type	Project Description	General Fund (101)	Public Parking Fund (570)	Total	Funded in Prior Fiscal Years	Total Project Cost
PA-1	Lot Improvements	Lot 33 Improvements coordinated with Convention Center expansion project	-	250,000	250,000	-	250,000
		Total Funded Projects	**-**	**250,000**	**250,000**	**-**	**250,000**

City of Riverside

Table PA-6

2013/14 to 2017/18

Capital Improvement Program - Public Parking

Unfunded Capital Projects

Project Number	Project Type	Project Description	General Fund (101)	Public Parking Fund (570)	Total
		There are no unfunded capital projects currently identified.			
		Total Unfunded Projects	**-**	**-**	**-**

2013/14 to 2017/18
Capital Improvement Program – Airport

Program Summary

2013/14	2014/15	2015/16	2016/17	2017/18	Total
3,540,000	8,325,000	4,525,000	3,125,000	2,625,000	22,140,000

Introduction

The five-year Capital Improvement Program for the Airport totals $22,140,000. The FY 2013/14 CIP is proposed to be $3,540,000. The FY 2013/14 CIP includes projects such as site the gas line relocation and annual pavement preservation.

The Airport Department continues to follow its strategic plan, the elements of which are financed through the implementation of this CIP. Since 1995, this process has resulted in carefully targeted expenditures from the Airport Fund (530) achieving substantial growth consistent with the goals set forth in the 2009 Airport Master Plan.

Airport CIP projects consist of airfield projects that are 90% funded through the Federal Aviation Administration's (FAA) Airport Improvement Program and Airport in-house projects that are funded through the Airport's Fund Balance. Federal funding requests for airfield project funding are submitted each year to FAA. FAA projects compete for priority status with other airports in the FAA's Western-Pacific Region. The Airport's in-house projects are funded on an as needed basis from the Airport's Fund Balance.

Key Revenues and Funding Sources

For 2013/14, $219,700 of the CIP will be funded from the Airport Fund (530) Balance, with the remainder coming from State and Federal grants. Over the five-year plan, 5.93% (or $1,312,200) of the $22 million dollar program is funded from the Airport's Fund Balance.

Future CIP Considerations

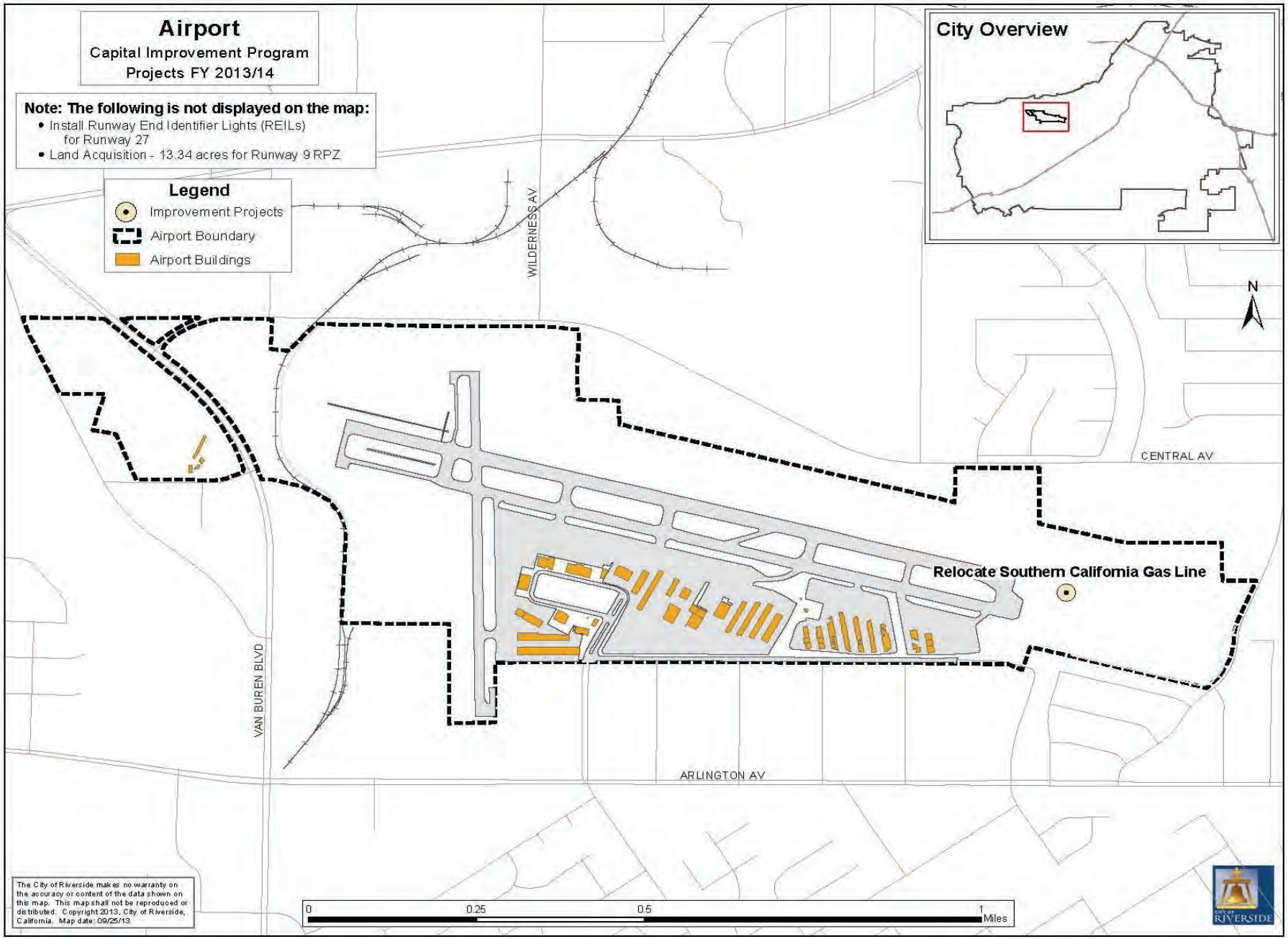
No unfunded capital projects have been identified at this time. Airport staff will continue to evaluate the Airport's facilities and will add new projects to the CIP as required.

2013/14 to 2017/18

Capital Improvement Program - Airport

Budgeted Projects - Year One

Project Number	Project Type	Project Description	General Fund (101)	Airport Fund (530)			Total
				City	CALTRANS	FAA	
AP-1	Construction	Relocate Southern California Gas Line	-	44,000	36,000	720,000	800,000
AP-2	Construction	Land Acquistion 13.34 acres for Runway 9 RPZ	-	148,500	121,500	2,430,000	2,700,000
AP-3	Development	Install Runway End Identifier Lights (REILs) for Runway 27	-	2,200	1,800	36,000	40,000
		Total	**-**	**194,700**	**159,300**	**3,186,000**	**3,540,000**


Airport
Capital Improvement Program
Projects FY 2013/14
Note: The following is not displayed on the map:
• Install Runway End Identifier Lights (REILs) for Runway 27
• Land Acquisition - 13.34 acres for Runway 9 RPZ
Legend
Improvement Projects
Airport Boundary
Airport Buildings
City Overview
N
WILDERNESS AV
CENTRAL AV
VAN BUREN BLVD
ARLINGTON AV
Relocate Southern California Gas Line
0
0.25
0.5
1
Miles
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City of RIVERSIDE

City of Riverside

Table AP-2

2013/14 to 2017/18

Capital Improvement Program - Airport

Capital Improvement Program Summary

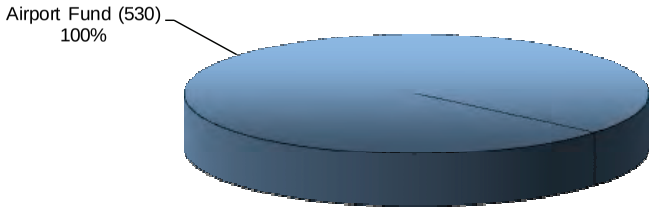
Projected Expenditures by Fund

Fund	2013/14	2014/15	2015/16	2016/17	2017/18	Total	Unfunded
General Fund (101)	-	-	-	-	-	-	-
Airport Fund (530)	3,540,000	8,325,000	4,525,000	3,125,000	2,625,000	22,140,000	-
Total	**3,540,000**	**8,325,000**	**4,525,000**	**3,125,000**	**2,625,000**	**22,140,000**	**-**

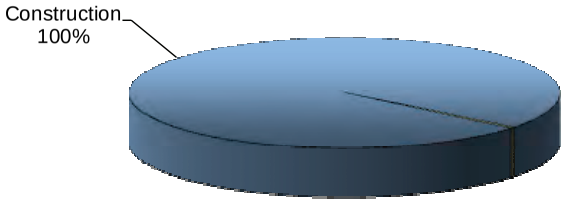
Projected Expenditures by Category

Project Category	2013/14	2014/15	2015/16	2016/17	2017/18	Total	Unfunded
Construction	3,540,000	8,300,000	4,500,000	3,100,000	2,600,000	22,040,000	-
Recurring Projects	-	25,000	25,000	25,000	25,000	100,000	-
Total	**3,540,000**	**8,325,000**	**4,525,000**	**3,125,000**	**2,625,000**	**22,140,000**	**-**

Expenditures by Fund



Expenditures by Category



NOTE: Pie Charts do not included unfunded projects.
NOTE: Categories comprising less than 1% are not labeled.

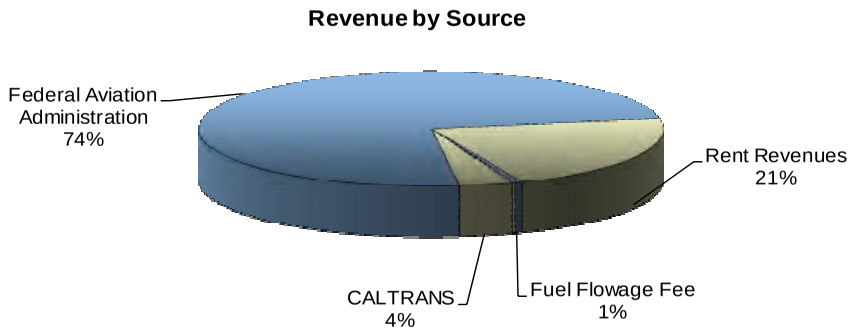
2013/14 to 2017/18

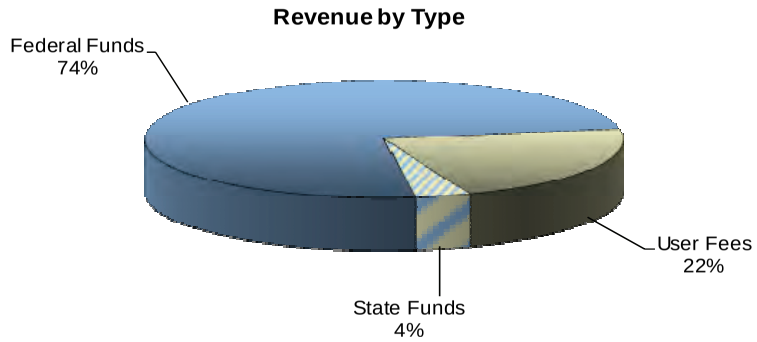
Capital Improvement Program - Airport

Projected Capital Funding Revenue Sources by Fund

Airport Fund (530)

Revenue Type	Revenue Source	2013/14	2014/15	2015/16	2016/17	2017/18	Total
User Fees	Rent Revenues	938,700	1,032,570	1,135,827	1,249,410	1,374,351	5,730,858
User Fees	Landing and Tie Down Fees	200	206	212	219	225	1,062
User Fees	Fuel Flowage Fee	24,000	24,720	25,462	26,225	27,012	127,419
Tax Revenues	Non-Commercial Aircraft Tax	11,000	11,330	11,670	12,020	12,381	58,401
State Funds	CALTRANS	159,300	373,500	202,500	139,500	117,000	991,800
Federal Funds	Federal Aviation Administration	3,186,000	7,470,000	4,050,000	2,790,000	2,340,000	19,836,000
	Total Funds Available for Capital Improvements from Revenue	**4,319,200**	**8,912,326**	**5,425,671**	**4,217,374**	**3,870,969**	**26,745,540**
Less: Enterprise Fund Operating Expenditures		(958,026)	(986,767)	(1,016,370)	(1,046,861)	(1,078,267)	(5,086,290)
	Adjusted Total Funds Available for Capital Improvements from Revenue	**3,361,174**	**7,925,559**	**4,409,301**	**3,170,513**	**2,792,702**	**21,659,250**





NOTE: Categories comprising less than 1% are not labeled.

2013/14 to 2017/18

Capital Improvement Program - Airport

Projected Capital Funding Appropriations by Fiscal Year

Sources of Funds	2013/14	2014/15	2015/16	2016/17	2017/18
Total Funds Available for Capital Improvements from Revenue - Airport Fund (530)	3,361,174	7,925,559	4,409,301	3,170,513	2,792,702
Fund Balance from Prior Year - Airport Fund (530)	205,534	26,708	(372,733)	(488,432)	(442,918)
Total Funds Available for Capital Improvements	**3,566,708**	**7,952,267**	**4,036,568**	**2,682,082**	**2,349,784**

Project Number			2013/14	2014/15	2015/16	2016/17	2017/18	Total	Unfunded
AP-1	Construction	Relocate Southern California Gas Line	(800,000)	-	-	-	-	(800,000)	-
AP-2	Construction	Land Acquistion 13.34 acres for Runway 9 RPZ	(2,700,000)	-	-	-	-	(2,700,000)	-
AP-3	Construction	Install Runway End Identifier Lights (REILs) for Runway 27	(40,000)	-	-	-	-	(40,000)	-
AP-4	Construction	Grading for North Parallel Taxiway & Runway 9/27 RSA		(4,000,000)	-	-	-	(4,000,000)	-
AP-5	Construction	Construct Electrical Vault - Including Generator		(300,000)	-	-	-	(300,000)	-
AP-6	Construction	Construct North Parallel Taxiway inluding Lighting & Signs	-	(4,000,000)	-	-	-	(4,000,000)	-
AP-7	Construction	Construct Perimeter Road - Runway Incursion Prevention	-		(2,000,000)	-	-	(2,000,000)	-
AP-8	Construction	Apron Rehabilitation Including Drainage Improvements, Phase 1	-	-	(2,500,000)	-	-	(2,500,000)	-
AP-9	Construction	Runway 16/34 Overlay and Marking	-	-		(600,000)	-	(600,000)	-
AP-10	Construction	Apron Rehabilitation, Including Drainage Improvements, Phase 2	-	-	-	(2,500,000)	-	(2,500,000)	-
AP-11	Construction	Install Runway 9/27 Medium Intensity Runway Lights	-	-	-		(1,200,000)	(1,200,000)	-
AP-12	Construction	Runway 9/27 RSA Improvement: Relocate Railroad Tracks	-	-	-		(1,000,000)	(1,000,000)	-
AP-13	Development	Westside Apron Project	-	-	-		(400,000)	(400,000)	-
AP-14	Recurring Projects	Annual Pavement Preservation	-	(25,000)	(25,000)	(25,000)	(25,000)	(100,000)	-
		Total	**(3,540,000)**	**(8,325,000)**	**(4,525,000)**	**(3,125,000)**	**(2,625,000)**	**(22,140,000)**	**-**
		Unbudgeted Balance	**26,708**	**(372,733)**	**(488,432)**	**(442,918)**	**(275,216)**		

2013/14 to 2017/18

Capital Improvement Program - Airport

Funded Capital Project Descriptions

Project Number	Project Type	Project Description	General Fund (101)	Airport Fund (530)			Total
				City	CALTRANS	FAA	
AP-1	Construction	Relocate Southern California Gas Line	-	44,000	36,000	720,000	800,000
AP-2	Construction	Land Acquistion 13.34 acres for Runway 9 RPZ	-	148,500	121,500	2,430,000	2,700,000
AP-3	Construction	Install Runway End Identifier Lights (REILs) for Runway 27	-	2,200	1,800	36,000	40,000
AP-4	Construction	Grading for North Parallel Taxiway & Runway 9/27 RSA		220,000	180,000	3,600,000	4,000,000
AP-5	Construction	Construct Electrical Vault - Including Generator	-	16,500	13,500	270,000	300,000
AP-6	Construction	Construct North Parallel Taxiway inluding Lighting & Signs	-	220,000	180,000	3,600,000	4,000,000
AP-7	Construction	Construct Perimeter Road - Runway Incursion Prevention	-	110,000	90,000	1,800,000	2,000,000
AP-8	Construction	Apron Rehabilitation Including Drainage Improvements, Phase 1	-	137,500	112,500	2,250,000	2,500,000
AP-9	Construction	Runway 16/34 Overlay and Marking	-	33,000	27,000	540,000	600,000
AP-10	Construction	Apron Rehabilitation, Including Drainage Improvements, Phase 2	-	137,500	112,500	2,250,000	2,500,000
AP-11	Construction	Install Runway 9/27 Medium Intensity Runway Lights	-	66,000	54,000	1,080,000	1,200,000
AP-12	Construction	Runway 9/27 RSA Improvement: Relocate Railroad Tracks	-	55,000	45,000	900,000	1,000,000
AP-13	Construction	Westside Apron Project	-	22,000	18,000	360,000	400,000
AP-14	Recurring Projects	Annual Pavement Preservation	-	100,000	-	-	100,000
		Total Funded Projects	**-**	**1,312,200**	**991,800**	**19,836,000**	**22,140,000**

City of Riverside

Table AP-6

2013/14 to 2017/18

Capital Improvement Program - Airport

Unfunded Capital Project Descriptions

Project Number	Project Type	Project Description	General Fund (101)	Airport Fund (530)			Total
				City	CALTRANS	FAA	
		There are no unfunded capital projects currently identified.					
		Total Unfunded Projects	-	-	-	-	-

Program Summary

2013/14	2014/15	2015/16	2016/17	2017/18	Total
35,316,000	35,356,000	35,092,000	32,983,000	35,291,000	174,038,000

Introduction

The five-year Capital Improvement Program (CIP) for the electric system totaling $174,038,000 is required to replace aging facilities, serve new growth, and install infrastructure to ensure reliability of the electric system.

The CIP assumes that electric consumption will grow at an average annual rate of approximately 1.0 percent. The improvements included in the CIP are to serve areas that are within the City's limits and scheduled for development in accordance with the City's current General Plan. In addition, the CIP incorporates conclusions and recommendations outlined in the Electric System Master Plan.

The CIP is within the established targets included in the latest strategic financial plan. Maintaining competitive rates is an important goal for the Utility; however, this must be balanced against the need for system improvements to ensure reliability and adequate capacity. The City Council approved Electric Rate Plan will fund the Riverside Transmission Reliability Project, additional generation at the Riverside Energy Resource Center, and other transmission and distribution projects.

The Electric CIP consists of seven main sections: System Improvements, Recurring Projects, Power Resources, Generation, Projects Driven by Others, Special Projects, and Other Projects.

System Improvements

Electric System Improvements consist of identifiable major transmission and distribution projects totaling $86.6 million. Major projects that were included as part of last year's CIP and retained in the Plan include:

- Replacement of deteriorating underground cable for $6.2 million
- Conversion of 4 kV distribution lines to 12 kV to replace deteriorated facilities and prevent overloading the 4 kV system at various substations for $8.6 million
- Replacement of obsolete equipment and additions at various substations for $9.5 million
- Installation of power transformer additions to support load growth at various substations for $13.2 million
- Installation of commercial and residential tract main feeders for $1.0 million
- Installation of distribution feeder equipment for $9.8 million
- Relocate 69kV major transmission line out of the Santa Ana riverbed for $1.7 million
- Expansion of the City's fiber communication system for $5.8 million
- Rehabilitation or replacement of deteriorating underground and overhead equipment related to GO165 for $14.0 million.
- SCADA system upgrades for $1.8 million
- SCE condemnation costs for $3.6 million
- Pre-engineering and design costs for system improvement projects for $7.4 million

Additionally, the largest electric system transmission and distribution improvement project in the Utility's history is the Riverside Transmission Reliability Project (RTRP). The 2009/10 through 2013/14 capital plan included $16.0 million of City Funds for RTRP, in addition to the 2007/08 capital plan's appropriation of $90.2 million. The RTRP funding supports both the Sub-Transmission Project (STP) and the RTRP. The licensing and permitting phase of RTRP has resulted in project delays. As such, no additional expenditures for RTRP were included in the 2013/14 CIP.

Estimated expenditures for the period 2013/14 through 2017/18 are $5.8 million more than the equivalent period in last year's CIP, excluding expenditures for RTRP and STP.

Recurring Projects

Recurring Projects consist of small system improvements, services to customers, and purchases of certain types of equipment including wood poles, transformers, meters, capacitors, and minor substation equipment. Recurring Projects include:

Program Summary

- Installation/extension of main overhead and underground distribution lines for $13.2 million
- Installation of transformers and system upgrades for $10.0 million
- Replacement of obsolete and deteriorated distribution lines for $6.1 million
- Installation of meters, street lighting and miscellaneous repairs for $7.7 million
- Pre-engineering and design costs for $2.6 million

Total expenditures over the five-year planning period for recurring projects are estimated to be $40.3 million. Estimated expenditures for 2013/14 through 2017/18 are $3.3 million higher than the equivalent period in last year's CIP.

Power Resources
The Power Resources Projects included in the CIP total $8.9 million, of which $8.8 million represents the City's ownership interest for additions and betterments at the San Onofre Nuclear Generating Station (SONGS). This amount is set by Southern California Edison, the operating agent and majority owner, and adjustments are not within the control of Riverside Public Utilities. This estimate is $11.6 million lower than the estimate reflected in the 2012/13 CIP, due to the initial shutdown of the plant in January 2012, and subsequent announcement in June 2013 of the plant's permanent closure.

Generation
Generation projects include funding of $10.3 million for North American Electric Reliability Corporation (NERC) facility security compliance and upgrades.

Projects Driven by Others
Projects Driven by Others generally result from street-widening or rehabilitation projects, which may or may not require replacement, relocation or undergrounding of existing electric facilities, and also overhead-to-underground beautification efforts, and neighborhood street light retrofit. Total expenditures for the period of 2013/14 through 2017/18 are $17.8 million; or $1.7 million more than last year's comparable CIP.

Special Projects
Special Projects are one time projects tailored to the City's overall objectives. Therefore, the timing of completion is more speculative than projects identified in other categories. The projects total $10.0 million for the period 2013/14 through 2017/18. Final approval of each project will be requested as more definitive schedules are established.

Other Projects
There are no projects which fall under this section within the proposed CIP.

Key Revenues and Funding Sources

The five-year Electric CIP will be supported by various funding sources. Approximately $143.6 million will be funded with bond proceeds; $24.1 million will be funded from rates and/or reserves, and $6.3 million will be funded from contributions in aid of construction and outside entities.

Future CIP Considerations

Unfunded projects totaled $25.0 million. These are projects desired by the Utility or driven by others, and do not have an identified funding source. Because the timing of these projects is uncertain, they are presented as unfunded. Feasibility and need for the project will be key factors used to determine if these projects will supersede an existing project or continue to be deferred until a funding source can be identified. Approvals for these projects will be sought individually with the funding and Capital Improvement Plan impacts discussed at that time.

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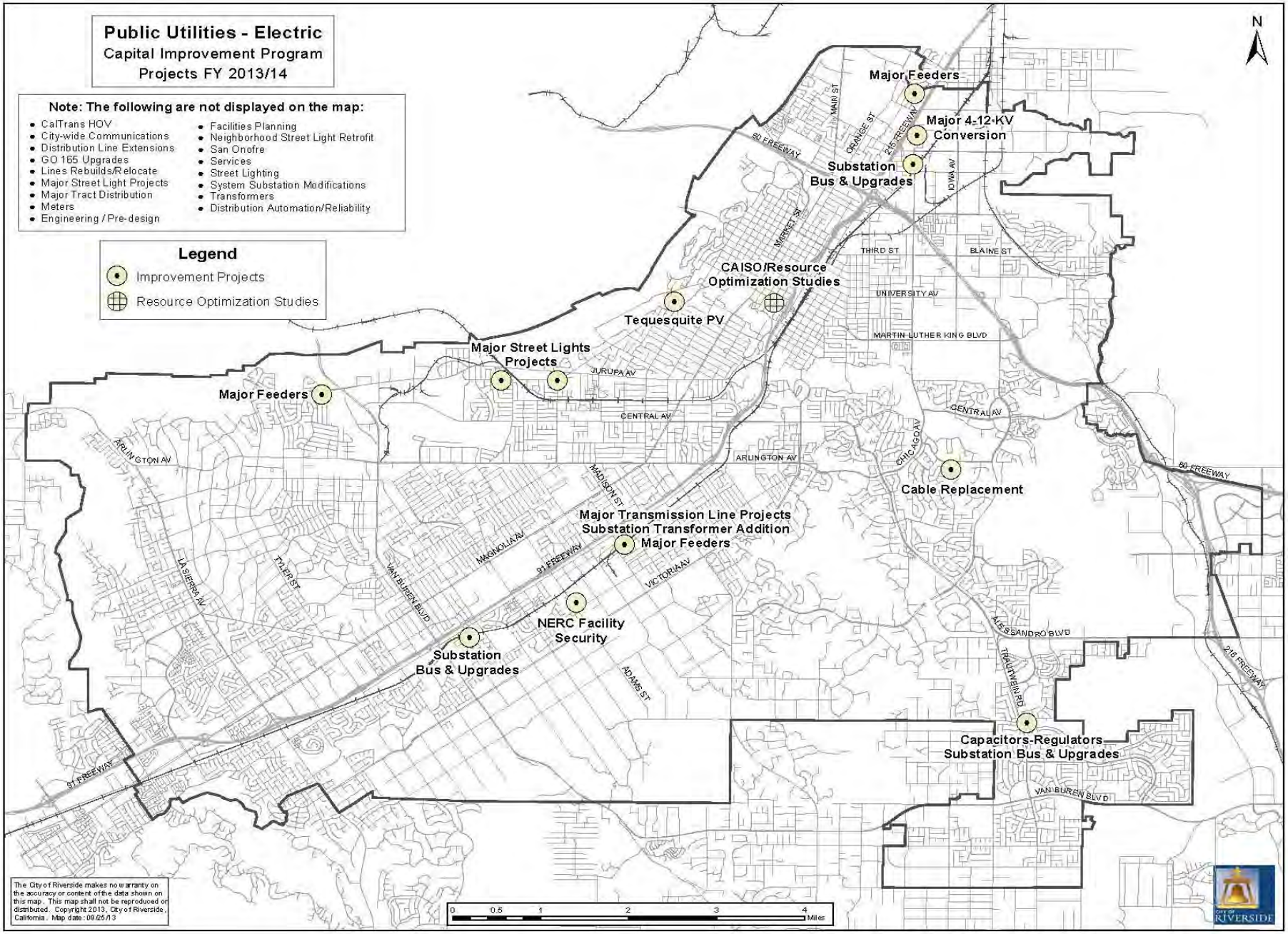
Table EL-1

2013/14 to 2017/18

Capital Improvement Program - Public Utilities / Electric

Budgeted Projects - Year One

Project Number	Project Type	Project Description	General Fund (101)	Electric Fund (510)	Total
EL-1	Driven by Others	Engineering/Pre-Design	-	362,000	362,000
EL-2	Driven by Others	Major OH/UG Conversions	-	1,643,000	1,643,000
EL-3	Driven by Others	Cable Replacement - PW Street Rehab.	-	400,000	400,000
EL-4	Driven by Others	Major Street Light Projects	-	360,000	360,000
EL-5	Driven by Others	Neighborhood Street Light Retrofit (Riverside Renaissance)	-	765,000	765,000
EL-6	Driven by Others	CalTrans HOV- Non-Reimbursable	-	100,000	100,000
EL-7	Power Resources	CAISO/Resource Optimization Studies (Load Mgmt)	-	100,000	100,000
EL-8	Power Resources	San Onofre	-	2,105,000	2,105,000
EL-9	Generation	Facility Compliance/Upgrades	-	2,396,000	2,396,000
EL-10	System Improvements	Engineering/Pre-Design	-	1,575,000	1,575,000
EL-11	System Improvements	Cable Replacement	-	1,157,000	1,157,000
EL-12	System Improvements	City-wide Communications	-	1,966,000	1,966,000
EL-13	System Improvements	Distribution Automation/Reliability	-	250,000	250,000
EL-14	System Improvements	GO 165 Upgrades /Line Rebuilds / Relocate	-	1,204,000	1,204,000
EL-15	System Improvements	Major 4-12 kV Conversion	-	1,739,000	1,739,000
EL-16	System Improvements	Major Feeders	-	2,180,000	2,180,000
EL-17	System Improvements	Major Tract Distribution	-	144,000	144,000
EL-18	System Improvements	SCADA	-	900,000	900,000
EL-19	System Improvements	SCE Condemnation Costs	-	560,000	560,000
EL-20	System Improvements	Substation Bus & Upgrades	-	3,055,000	3,055,000
EL-21	System Improvements	Substation Transformer Addition	-	2,732,000	2,732,000
EL-23	Recurring Projects	Engineering/Pre-Design	-	482,000	482,000
EL-24	Recurring Projects	Capacitors-Regulators	-	50,000	50,000
EL-25	Recurring Projects	Distribution Line Extensions	-	2,295,000	2,295,000
EL-26	Recurring Projects	Lines Rebuilds / Relocate	-	1,235,000	1,235,000
EL-27	Recurring Projects	Meters	-	800,000	800,000
EL-28	Recurring Projects	Services	-	383,000	383,000
EL-29	Recurring Projects	Street Lighting	-	315,000	315,000
EL-30	Recurring Projects	System Substation Modifications	-	63,000	63,000
EL-31	Recurring Projects	Transformers	-	2,000,000	2,000,000
EL-32	Special Projects	Special Project - Facilities Planning	-	2,000,000	2,000,000
		Total	**-**	**35,316,000**	**35,316,000**


Public Utilities - Electric
Capital Improvement Program
Projects FY 2013/14
Note: The following are not displayed on the map:
CalTrans HOV
City-wide Communications
Distribution Line Extensions
GO 165 Upgrades
Lines Rebuilds/Relocate
Major Street Light Projects
Major Tract Distribution
Meters
Engineering / Pre-design
Facilities Planning
Neighborhood Street Light Retrofit
San Onofre
Services
Street Lighting
System Substation Modifications
Transformers
Distribution Automation/Reliability
Legend
Improvement Projects
Resource Optimization Studies
N
Major Feeders
Major 4-12-KV Conversion
Substation Bus & Upgrades
CAISO/Resource Optimization Studies
Tequesquite PV
Major Street Lights Projects
Major Feeders
Cable Replacement
Major Transmission Line Projects
Substation Transformer Addition
Major Feeders
NERC Facility Security
Substation Bus & Upgrades
Capacitors-Regulators
Substation Bus & Upgrades
60 FREEWAY
215 FREEWAY
91 FREEWAY
MAIN ST
ORANGE ST
MARKET ST
IOWA AV
THIRD ST
BLAINE ST
UNIVERSITY AV
MARTIN LUTHER KING BLVD
JURUPA AV
CENTRAL AV
ARLINGTON AV
CHICAGO AV
MADISON ST
MAGNOLIA AV
VICTORIA AV
VAN BUREN BLVD
LA SIERRA AV
TYLER ST
ADAMS ST
ALESSANDRO BLVD
TRAUTWEIN RD
218 FREEWAY
0 0.5 1 2 3 4 Miles
The City of Riverside makes no warranty on the accuracy or content of the data shown on this map. This map shall not be reproduced or distributed. Copyright 2013, City of Riverside, California. Map date: 09/25/13
CITY OF RIVERSIDE

2013/14 to 2017/18

Capital Improvement Program - Public Utilities / Electric

Capital Improvement Program Summary

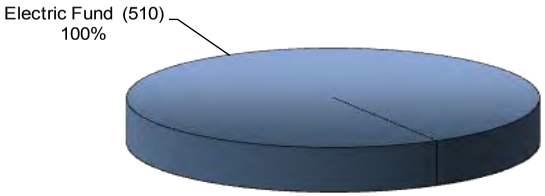
Projected Expenditures by Fund

Fund	2013/14	2014/15	2015/16	2016/17	2017/18	Total	Unfunded
General Fund (101)	-	-	-	-	-	-	-
Electric Fund (510)	35,316,000	35,356,000	35,092,000	32,983,000	35,291,000	174,038,000	25,000,000
Total	**35,316,000**	**35,356,000**	**35,092,000**	**32,983,000**	**35,291,000**	**174,038,000**	**25,000,000**

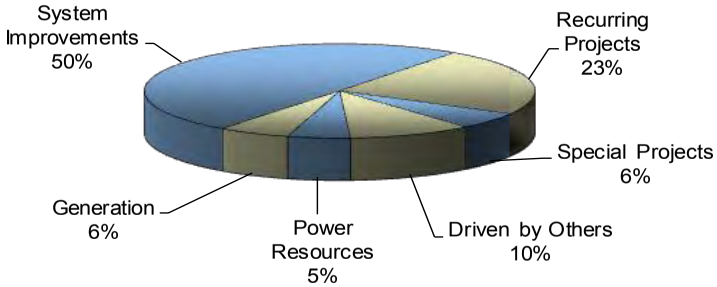
Projected Expenditures by Category

Project Category	2013/14	2014/15	2015/16	2016/17	2017/18	Total	Unfunded
Driven by Others	3,630,000	3,630,000	3,520,000	3,520,000	3,520,000	17,820,000	25,000,000
Power Resources	2,205,000	2,316,000	1,945,000	1,584,000	912,000	8,962,000	-
Generation	2,396,000	1,734,000	1,714,000	1,914,000	2,586,000	10,344,000	-
System Improvements	17,462,000	17,824,000	17,815,000	15,605,000	17,913,000	86,619,000	-
Recurring Projects	7,623,000	7,852,000	8,098,000	8,360,000	8,360,000	40,293,000	-
Special Projects	2,000,000	2,000,000	2,000,000	2,000,000	2,000,000	10,000,000	-
Total	**35,316,000**	**35,356,000**	**35,092,000**	**32,983,000**	**35,291,000**	**174,038,000**	**25,000,000**

Expenditures by Fund



Expenditures by Category



NOTE: Pie Charts do not included unfunded projects.
NOTE: Categories comprising less than 1% are not labeled.

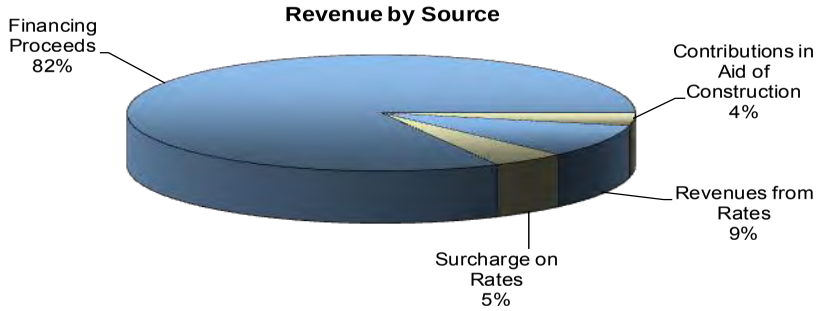
2013/14 to 2017/18

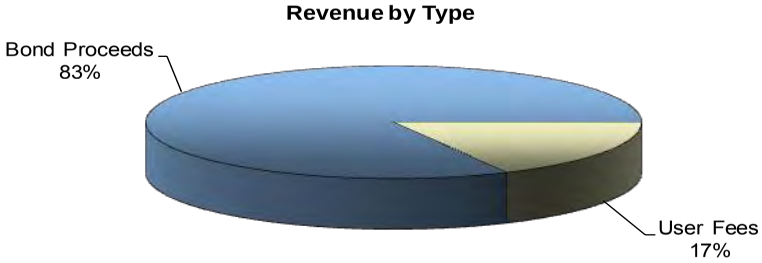
Capital Improvement Program - Public Utilities / Electric

Projected Capital Funding Revenue Sources by Fund

Electric Fund (510)

Revenue Type	Revenue Source	2013/14	2014/15	2015/16	2016/17	2017/18	Total
User Fees	Contributions in Aid of Construction	1,000,000	1,175,000	1,250,000	1,350,000	1,500,000	6,275,000
User Fees	Revenues from Rates	4,419,000	4,343,000	2,369,000	2,393,000	2,393,000	15,917,000
User Fees	OH/UG and Cable Replacement 0.5% Surcharge on Rates	1,497,000	1,586,000	1,666,000	1,716,000	1,768,000	8,233,000
Bond Proceeds	Financing Proceeds	28,400,000	28,252,000	29,807,000	27,524,000	29,630,000	143,613,000
	Total Funds Available for Capital Improvements from Revenue	**35,316,000**	**35,356,000**	**35,092,000**	**32,983,000**	**35,291,000**	**174,038,000**





NOTE: Categories comprising less than 1% are not labeled.

2013/14 to 2017/18

Capital Improvement Program - Public Utilities / Electric

Projected Capital Funding Appropriations by Fiscal Year

Sources of Funds	2013/14	2014/15	2015/16	2016/17	2017/18
Total Funds Available for Capital Improvements from Revenue - Electric Fund (510)	35,316,000	35,356,000	35,092,000	32,983,000	35,291,000
Fund Balance from Prior Year [1]	-	-	-	-	-
Total Funds Available for Capital Improvements	**35,316,000**	**35,356,000**	**35,092,000**	**32,983,000**	**35,291,000**

Project Number	Project Type	Project Description	2013/14	2014/15	2015/16	2016/17	2017/18	Total	Unfunded
	Driven by Others								
EL-1	Driven by Others	Engineering/Pre-Design	(362,000)	(362,000)	(352,000)	(352,000)	(352,000)	(1,780,000)	-
EL-2	Driven by Others	Major OH/UG Conversions	(1,643,000)	(1,643,000)	(1,643,000)	(1,643,000)	(1,643,000)	(8,215,000)	-
EL-UF-1	Driven by Others	Major OH/UG Conversions-Magnolia Ave/Brockton Ave west to City limits	-	-	-	-	-	-	(25,000,000)
EL-3	Driven by Others	Cable Replacement - PW Street Rehab.	(400,000)	(400,000)	(400,000)	(400,000)	(400,000)	(2,000,000)	-
EL-4	Driven by Others	Major Street Light Projects	(360,000)	(360,000)	(360,000)	(360,000)	(360,000)	(1,800,000)	-
EL-5	Driven by Others	Neighborhood Street Light Retrofit (Riverside Renaissance)	(765,000)	(765,000)	(765,000)	(765,000)	(765,000)	(3,825,000)	-
EL-6	Driven by Others	CalTrans HOV- Non-Reimbursable	(100,000)	(100,000)	-	-	-	(200,000)	-
		SubTotal	**(3,630,000)**	**(3,630,000)**	**(3,520,000)**	**(3,520,000)**	**(3,520,000)**	**(17,820,000)**	**(25,000,000)**
									-
	Power Resources								-
EL-7	Power Resources	CAISO/Resource Optimization Studies (Load Mgmt)	(100,000)	-	-	-	-	(100,000)	-
EL-8	Power Resources	San Onofre	(2,105,000)	(2,316,000)	(1,945,000)	(1,584,000)	(912,000)	(8,862,000)	-
		SubTotal	**(2,205,000)**	**(2,316,000)**	**(1,945,000)**	**(1,584,000)**	**(912,000)**	**(8,962,000)**	**-**
	Generation								-
EL-9	Generation	Facility Compliance/Upgrades	(2,396,000)	(1,734,000)	(1,714,000)	(1,914,000)	(2,586,000)	(10,344,000)	-
		SubTotal	**(2,396,000)**	**(1,734,000)**	**(1,714,000)**	**(1,914,000)**	**(2,586,000)**	**(10,344,000)**	**-**
									-
	System Improvements								
EL-10	System Improvements	Engineering/Pre-Design	(1,575,000)	(1,553,000)	(1,513,000)	(1,211,000)	(1,611,000)	(7,463,000)	-
EL-11	System Improvements	Cable Replacement	(1,157,000)	(1,223,000)	(1,384,000)	(1,247,000)	(1,198,000)	(6,209,000)	-
EL-12	System Improvements	City-wide Communications	(1,966,000)	(967,000)	(967,000)	(967,000)	(967,000)	(5,834,000)	-
EL-13	System Improvements	Distribution Automation/Reliability	(250,000)	(500,000)	(900,000)	(1,300,000)	(900,000)	(3,850,000)	-
EL-14	System Improvements	GO 165 Upgrades /Line Rebuilds / Relocate	(1,204,000)	(2,501,000)	(2,670,000)	(4,459,000)	(3,210,000)	(14,044,000)	-
EL-15	System Improvements	Major 4-12 kV Conversion	(1,739,000)	(2,115,000)	(1,575,000)	(1,575,000)	(1,575,000)	(8,579,000)	-
EL-16	System Improvements	Major Feeders	(2,180,000)	(2,387,000)	(1,823,000)	(1,876,000)	(1,557,000)	(9,823,000)	-
EL-17	System Improvements	Major Tract Distribution	(144,000)	(216,000)	(216,000)	(216,000)	(216,000)	(1,008,000)	-
EL-18	System Improvements	SCADA	(900,000)	(450,000)	(463,000)	(14,000)	-	(1,827,000)	-
EL-19	System Improvements	SCE Condemnation Costs	(560,000)	(890,000)	(880,000)	(1,295,000)	-	(3,625,000)	
EL-20	System Improvements	Substation Bus & Upgrades	(3,055,000)	(1,805,000)	(1,217,000)	(1,445,000)	(1,945,000)	(9,467,000)	
EL-21	System Improvements	Substation Transformer Addition	(2,732,000)	(2,947,000)	(4,207,000)	-	(3,285,000)	(13,171,000)	-
EL-22	System Improvements	Major Transmission Line Projects	-	(270,000)	-	-	(1,449,000)	(1,719,000)	-
		SubTotal	**(17,462,000)**	**(17,824,000)**	**(17,815,000)**	**(15,605,000)**	**(17,913,000)**	**(86,619,000)**	**-**

Project Number	Project Type	Project Description	2013/14	2014/15	2015/16	2016/17	2017/18	Total	Unfunded
	Recurring Projects								
EL-23	Recurring Projects	Engineering/Pre-Design	(482,000)	(505,000)	(530,000)	(556,000)	(556,000)	(2,629,000)	-
EL-24	Recurring Projects	Capacitors-Regulators	(50,000)	(50,000)	(50,000)	(50,000)	(50,000)	(250,000)	-
EL-25	Recurring Projects	Distribution Line Extensions	(2,295,000)	(2,479,000)	(2,677,000)	(2,891,000)	(2,891,000)	(13,233,000)	-
EL-26	Recurring Projects	Lines Rebuilds / Relocate	(1,235,000)	(1,235,000)	(1,235,000)	(1,235,000)	(1,235,000)	(6,175,000)	-
EL-27	Recurring Projects	Meters	(800,000)	(800,000)	(800,000)	(800,000)	(800,000)	(4,000,000)	-
EL-28	Recurring Projects	Services	(383,000)	(405,000)	(428,000)	(450,000)	(450,000)	(2,116,000)	-
EL-29	Recurring Projects	Street Lighting	(315,000)	(315,000)	(315,000)	(315,000)	(315,000)	(1,575,000)	-
EL-30	Recurring Projects	System Substation Modifications	(63,000)	(63,000)	(63,000)	(63,000)	(63,000)	(315,000)	-
EL-31	Recurring Projects	Transformers	(2,000,000)	(2,000,000)	(2,000,000)	(2,000,000)	(2,000,000)	(10,000,000)	-
		SubTotal	**(7,623,000)**	**(7,852,000)**	**(8,098,000)**	**(8,360,000)**	**(8,360,000)**	**(40,293,000)**	**-**
	Special Projects (One-Time)								
EL-32	Special Projects	Special Project - Facilities Planning	(2,000,000)	(2,000,000)	(2,000,000)	(2,000,000)	(2,000,000)	(10,000,000)	-
		SubTotal	**(2,000,000)**	**(2,000,000)**	**(2,000,000)**	**(2,000,000)**	**(2,000,000)**	**(10,000,000)**	**-**
		Total	**(35,316,000)**	**(35,356,000)**	**(35,092,000)**	**(32,983,000)**	**(35,291,000)**	**(174,038,000)**	**(25,000,000)**
		Unbudgeted Balance	**-**	**-**	**-**	**-**	**-**		

[1] The Public Utilities / Electric CIP is not funded from any funding sources that retain a year-end balance. Projected expenditures are equal to projected appropriations.

2013/14 to 2017/18

Capital Improvement Program - Public Utilities / Electric

Funded Capital Projects

Project Number	Project Type	Project Description	General Fund (101)	Electric Fund (510)	Total
EL-1	Driven by Others	Engineering/Pre-Design - For various projects driven by others.	-	1,780,000	1,780,000
EL-2	Driven by Others	Major OH/UG Conversions - Convert various overhead feeders to underground facilities for road widening projects and as a part of other projects.	-	8,215,000	8,215,000
EL-3	Driven by Others	Cable Replacement (PW Street Rehab) - Replace aging distribution and feeder cable in conjunction with PW street rehabilitation projects.	-	2,000,000	2,000,000
EL-4	Driven by Others	Major Street Light Projects - Relocate/upgrade street lights for road widening projects and as a part of other projects.	-	1,800,000	1,800,000
EL-5	Driven by Others	Neighborhood Street Light Retrofit (Riverside Renaissance).	-	3,825,000	3,825,000
EL-6	Driven by Others	CalTrans - HOV, Non-Reimbursable.	-	200,000	200,000
EL-7	Power Resources	ISO/Resource Optimization Studies (Load Mgmt) - Development and implementation of resource optimization load studies.	-	100,000	100,000
EL-8	Power Resources	San Onofre - Steam Generator replacements and betterments.	-	8,862,000	8,862,000
EL-9	Generation	NERC Facility Security	-	10,344,000	10,344,000
EL-10	System Improvements	Engineering/Pre-Design - For various system improvements.	-	7,463,000	7,463,000
EL-11	System Improvements	Cable Replacement - Replace aging distribution and feeder cable in the Canyon Crest area and other areas with high incidence of HMPE/CIC-type cable.	-	6,209,000	6,209,000
EL-12	System Improvements	City-wide Communications - Fiber extensions between Freeman and Orangecrest Substations and other routes.	-	5,834,000	5,834,000
EL-13	System Improvements	Distribution Automation/Reliability - Automation of overhead and underground sectionalizing devices. Remote monitoring distribution equipment.	-	3,850,000	3,850,000
EL-14	System Improvements	GO 165 Upgrades/Line rebuilds/Relocate - Rehabilitation or replacement of underground and overhead equipment identified as a result of detailed inspections.	-	14,044,000	14,044,000
EL-15	System Improvements	Major 4-12 kV Conversion - Upgrade aging, obsolete 4 kV facilities to 12 kV in the Magnolia and Plaza Substation service areas.	-	8,579,000	8,579,000
EL-16	System Improvements	Major Feeders - Construct major overhead and underground feeders in the Plaza, La Colin and Harvey Lynn Substation service areas and at other various locations. Includes extensions to annexation areas.	-	9,823,000	9,823,000
EL-17	System Improvements	Major Tract Distribution - Construct distribution feeders in new major residential and commercial tract developments.	-	1,008,000	1,008,000
EL-18	System Improvements	SCADA - SCADA.NET upgrade. Dispatch wall mapping w/interface capability.	-	1,827,000	1,827,000
EL-19	System Improvements	SCE Condemnation Costs - Friendly condemnation of existing SCE facilities in annexation areas.	-	3,625,000	3,625,000

Project Number	Project Type	Project Description	General Fund (101)	Electric Fund (510)	Total
EL-20	System Improvements	Substation Bus & Upgrades - Replace failing equipment, install additional equipment and improve operability and safety of La Colina and Hunter Substations. Also includes replacement of 69kV oil circuit breakers and SPCC plan update and installation.	-	9,467,000	9,467,000
EL-21	System Improvements	Substation Transformer Additions - Install new substation power transformers and associated equipment at Plaza and La Colina Substations.	-	13,171,000	13,171,000
EL-22	System Improvements	Major Transmission Line Projects - Rebuild the Vista - Mountain View and Riverside - RERC 69 kV transmission lines.	-	1,719,000	1,719,000
EL-23	Recurring Projects	Engineering/Pre-Design - For various recurring projects.	-	2,629,000	2,629,000
EL-24	Recurring Projects	Capacitors-Regulators - Purchase of new capacitors/regulators to improve voltage and power factor on feeders in the Orangecrest area.	-	250,000	250,000
EL-25	Recurring Projects	Distribution Line Extensions - Installation/extension of primary overhead and underground distribution lines to serve new residential, commercial and industrial customers.	-	13,233,000	13,233,000
EL-26	Recurring Projects	Lines Rebuilds / Relocate - Replacing of obsolete and deteriorated distribution line equipment, relocation of overhead and underground distribution lines.	-	6,175,000	6,175,000
EL-27	Recurring Projects	Meters - Purchase and installation of meter equipment for new residential, commercial and industrial services.	-	4,000,000	4,000,000
EL-28	Recurring Projects	Services - Installation of new services to residential, commercial and industrial customers and increase in capacity of existing customers, as necessary.	-	2,116,000	2,116,000
EL-29	Recurring Projects	Street Lighting - Installation of street lights. Does not include major street light projects.	-	1,575,000	1,575,000
EL-30	Recurring Projects	System Substation Modifications - General modifications, replacements and improvements of substation equipment and relaying.	-	315,000	315,000
EL-31	Recurring Projects	Transformers - Purchase of distribution transformers for new residential, commercial and industrial customers as well as system upgrade projects.	-	10,000,000	10,000,000
EL-32	Special Projects	Special Project - Facilities Planning	-	10,000,000	10,000,000
		Total Funded Projects	**-**	**174,038,000**	**174,038,000**

City of Riverside

Table EL-6

2013/14 to 2017/18

Capital Improvement Program - Public Utilities / Electric

Unfunded Capital Projects

Project Number	Project Type	Project Description	General Fund (101)	Electric Fund (510)	Total
EL-UF-1	Driven by Others	Major OH/UG Conversions - Magnolia Ave./Brockton to the west City limits	-	25,000,000	25,000,000
		Total Unfunded Projects	**-**	**25,000,000**	**25,000,000**

Program Summary

2013/14	2014/15	2015/16	2016/17	2017/18	Total
7,945,000	19,338,000	14,513,000	15,513,000	16,513,000	73,472,000

Introduction

The five-year Capital Improvement Program (CIP) for the water system of $73,472,000 is required to maintain system reliability, secure new water resources, serve new residential and commercial developments, relocate facilities for transportation improvements, and refurbish the water system.

The CIP incorporates portions of the Water Master, Water Supply, Urban Water Management, and Asset Management Plans developed by the Water Division.

As adopted by the City Council on March 28, 2006, a Safe W.A.T.E.R. Rate Plan was implemented consisting of a twelve percent rate increase beginning November 1, 2006, followed by four consecutive ten percent rate increases effective November 1, 2007, 2008, 2009, and 2010. This plan will fund the replacements and refurbishments necessary to provide safe, reliable water to Riverside's customers.

The CIP addresses the need to replace and refurbish portions of Riverside's aging water infrastructure from 2013/14 through 2017/18, by including funding to replace existing leaking and/or undersized mains, construct an aquifer storage and recovery system, refurbish wells and booster stations, and construct a groundwater treatment plant.

The Water CIP consists of three main sections: Water System Improvements, Recurring Projects, and Other Projects.

Water System Improvements
Water system improvements totaling $58.4 million include construction of both new and replacement facilities consisting of distribution and transmission pipelines, domestic water wells, booster stations, an aquifer storage and recovery system, and a groundwater treatment plant. Major water system improvement projects in this CIP include:

- Design and construction of various water distribution mains totaling $33.1 million to replace leaking and undersized mains throughout the system (partially funded by a cumulative four percent rate adder).
- An estimated $15.2 million to rehabilitate water facilities, including pumps, wells, buildings, canals, security, and site landscape items.
- Implementation of the active and enhanced groundwater recharge project to augment existing groundwater supplies for an estimated cost of $9.4 million.
- Rehabilitation of three pump stations for an estimated cost of $0.6 million.

Recurring Projects
Recurring projects totaling $13.6 million include construction and purchase of equipment that occur on a regular basis. These expenditures also include replacement of water supply and distribution facilities. Significant recurring projects include:

- Design and construction of system expansion to serve new customers totaling $5.5 million.
- Design and construction of distribution system facilities replacement totaling $3.3 million.
- Water meter replacement program totaling $4.3 million. This program will provide for pro-active replacement of approximately 8,000 small meters and replace/refurbish over 80 large meters per year. Meter replacements will be scheduled based on selection criteria such as age of the meter, and should increase metering accuracy and related revenues.
- Installation of fire hydrant check valves at various locations throughout the City totaling $0.5 million.
- Other routine expenditures include purchase of water stock.

Other Projects
Other projects consist of $1.5 million for implementation of an operational data management system.

Key Revenues and Funding Sources

The five year Water CIP will be supported by various funding sources. Approximately $48.4 million will be funded from bond proceeds, $21.4 million will be funded

from rates and/or reserves, and $3.5 million will be funded from contributions in aid of construction.

Future CIP Considerations

There are no unfunded capital projects for this section currently identified. These are projects desired by the Utility or by others, and do not have an identified funding source. Because the timing of such projects is uncertain, they are presented as unfunded. Feasibility and need for the project will be key factors used to determine if these projects will supersede an existing project or continue to be deferred until a funding source (e.g. State or Federal grants, partnerships with Western Municipal Water District and/or other water agencies, etc.) can be identified. Approvals for these projects will be requested individually with the funding and Capital Improvement Plan impacts discussed at that time.

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City of Riverside

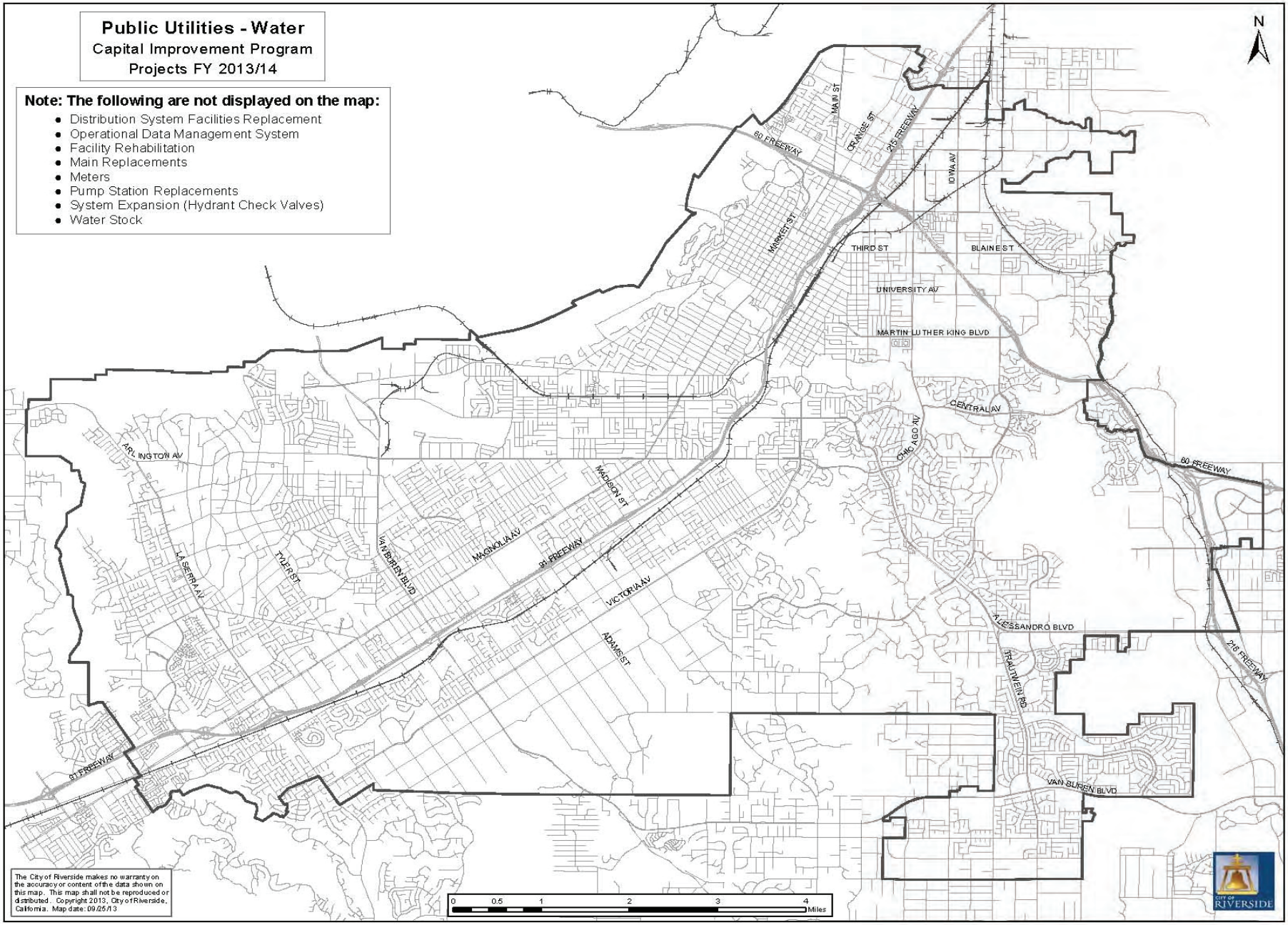
Table WA-1

2013/14 to 2017/18

Capital Improvement Program - Public Utilities / Water

Budgeted Projects - Year One

Project Number	Project Type	Project Description	General Fund (101)	Water Fund (520)	Total
WA-1	System Improvements	Main Replacements	-	2,300,000	2,300,000
WA-2	System Improvements	Pump Station Replacements	-	635,000	635,000
WA-3	System Improvements	Facility Rehabilitation	-	2,293,000	2,293,000
WA-5	Recurring Projects	System Expansion (New Customer Construction)	-	1,100,000	1,100,000
WA-6	Recurring Projects	Meters	-	850,000	850,000
WA-7	Recurring Projects	Water Stock	-	10,000	10,000
WA-8	Recurring Projects	Distribution System Facilities Replacements	-	657,000	657,000
WA-9	Recurring Projects	Hydrant Check Valves	-	100,000	100,000
		Total	**-**	**7,945,000**	**7,945,000**


Public Utilities - Water
Capital Improvement Program
Projects FY 2013/14
Note: The following are not displayed on the map:
Distribution System Facilities Replacement
Operational Data Management System
Facility Rehabilitation
Main Replacements
Meters
Pump Station Replacements
System Expansion (Hydrant Check Valves)
Water Stock
N
60 FREEWAY
MAIN ST
ORANGE ST
215 FREEWAY
IOWA AV
MARKET ST
THIRD ST
BLAINE ST
UNIVERSITY AV
MARTIN LUTHER KING BLVD
CENTRAL AV
CHICAGO AV
ARLINGTON AV
MADISON ST
MAGNOLIA AV
91 FREEWAY
LA SIERRA AV
TYLER ST
VAN BUREN BLVD
VICTORIA AV
ADAMS ST
ALESSANDRO BLVD
TRAUTWEIN RD
VAN BUREN BLVD
60 FREEWAY
215 FREEWAY
91 FREEWAY
0 0.5 1 2 3 4 Miles
The City of Riverside makes no warranty on the accuracy or content of the data shown on this map. This map shall not be reproduced or distributed. Copyright 2013, City of Riverside, California. Map date: 09/25/13
CITY OF RIVERSIDE

City of Riverside

Table WA-2

2013/14 to 2017/18

Capital Improvement Program - Public Utilities / Water

Capital Improvement Program Summary

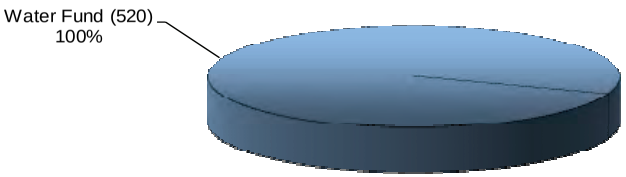
Projected Expenditures by Fund

Fund	2013/14	2014/15	2015/16	2016/17	2017/18	Total	Unfunded
General Fund (101)	-	-	-	-	-	-	-
Water Fund (520)	7,945,000	19,338,000	14,513,000	15,513,000	16,163,000	73,472,000	-
Total	**7,945,000**	**19,338,000**	**14,513,000**	**15,513,000**	**16,163,000**	**73,472,000**	**-**

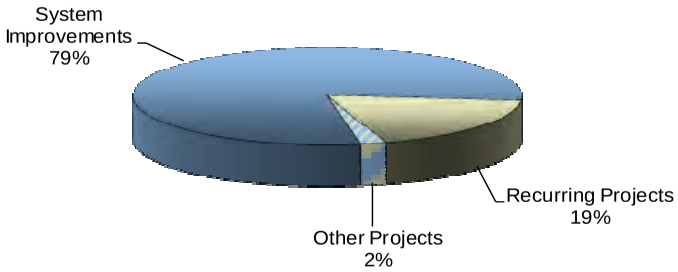
Projected Expenditures by Category

Project Category	2013/14	2014/15	2015/16	2016/17	2017/18	Total	Unfunded
System Improvements	5,228,000	15,121,000	11,796,000	12,796,000	13,446,000	58,387,000	-
Recurring Projects	2,717,000	2,717,000	2,717,000	2,717,000	2,717,000	13,585,000	-
Other Projects	-	1,500,000	-	-	-	1,500,000	-
Total	**7,945,000**	**19,338,000**	**14,513,000**	**15,513,000**	**16,163,000**	**73,472,000**	**-**

Expenditures by Fund



Expenditures by Category



NOTE: Pie Charts do not included unfunded projects.
NOTE: Categories comprising less than 1% are not labeled.

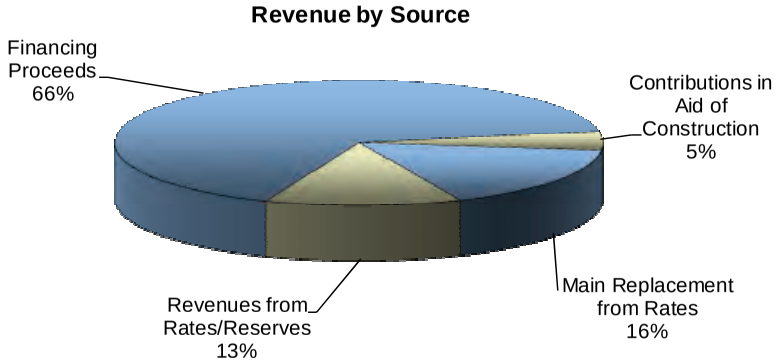
2013/14 to 2017/18

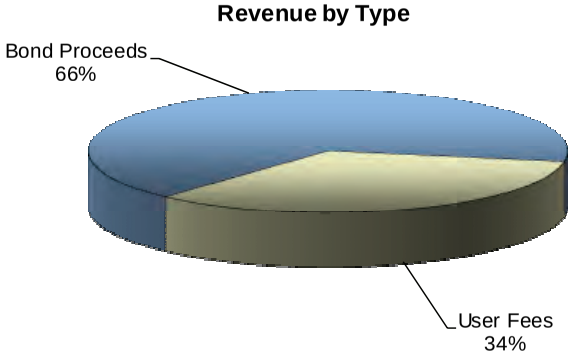
Capital Improvement Program - Public Utilities / Water

Projected Capital Funding Revenue Sources by Fund

Water Fund (520)

Revenue Type	Revenue Source	2013/14	2014/15	2015/16	2016/17	2017/18	Total
User Fees	Contributions in Aid of Construction	500,000	750,000	750,000	750,000	750,000	3,500,000
User Fees	Main Replacement from Rates (Surcharge)	2,300,000	2,320,000	2,355,000	2,425,000	2,498,000	11,898,000
User Fees	Revenues from Rates/Reserves	1,617,000	3,117,000	1,617,000	1,617,000	1,617,000	9,585,000
Bond Proceeds	Financing Proceeds	3,528,000	13,151,000	9,791,000	10,721,000	11,298,000	48,489,000
	Total Funds Available for Capital Improvements from Revenue	**7,945,000**	**19,338,000**	**14,513,000**	**15,513,000**	**16,163,000**	**73,472,000**





NOTE: Categories comprising less than 1% are not labeled.

2013/14 to 2017/18

Capital Improvement Program - Public Utilities / Water

Projected Capital Funding Appropriations by Fiscal Year

Sources of Funds	2013/14	2014/15	2015/16	2016/17	2017/18
Total Funds Available for Capital Improvements from Revenue - Water Fund (520)	7,945,000	19,338,000	14,513,000	15,513,000	16,163,000
Fund Balance from Prior Year [1]	-	-	-	-	-
Total Funds Available for Capital Improvements	**7,945,000**	**19,338,000**	**14,513,000**	**15,513,000**	**16,163,000**

Project Number	Project Type	Project Description	2013/14	2014/15	2015/16	2016/17	2017/18	Total	Unfunded
	System Improvements								
WA-1	System Improvements	Main Replacements	(2,300,000)	(5,000,000)	(8,600,000)	(8,600,000)	(8,600,000)	(33,100,000)	-
WA-2	System Improvements	Pump Station Replacements	(635,000)	-	-	-	-	(635,000)	-
WA-3	System Improvements	Facility Rehabilitation	(2,293,000)	(3,121,000)	(3,196,000)	(4,196,000)	(2,446,000)	(15,252,000)	-
WA-4	System Improvements	Seven Oaks Dam Conservation - Active/Enhanced Recharge	-	(7,000,000)	-	-	(2,400,000)	(9,400,000)	(10,160,000)
		SubTotal	**(5,228,000)**	**(15,121,000)**	**(11,796,000)**	**(12,796,000)**	**(13,446,000)**	**(58,387,000)**	**(10,160,000)**
	Recurring Projects								
WA-5	Recurring Projects	System Expansion (New Customer Construction)	(1,100,000)	(1,100,000)	(1,100,000)	(1,100,000)	(1,100,000)	(5,500,000)	-
WA-6	Recurring Projects	Meters	(850,000)	(850,000)	(850,000)	(850,000)	(850,000)	(4,250,000)	-
WA-7	Recurring Projects	Water Stock	(10,000)	(10,000)	(10,000)	(10,000)	(10,000)	(50,000)	-
WA-8	Recurring Projects	Distribution System Facilities Replacements	(657,000)	(657,000)	(657,000)	(657,000)	(657,000)	(3,285,000)	-
WA-9	Recurring Projects	Hydrant Check Valves	(100,000)	(100,000)	(100,000)	(100,000)	(100,000)	(500,000)	-
		SubTotal	**(2,717,000)**	**(2,717,000)**	**(2,717,000)**	**(2,717,000)**	**(2,717,000)**	**(13,585,000)**	**-**
	Other Projects								
WA-10	Other Projects	Operational Data Management System	-	(1,500,000)	-	-	-	(1,500,000)	(5,000,000)
		SubTotal	**-**	**(1,500,000)**	**-**	**-**	**-**	**(1,500,000)**	**(5,000,000)**
		Total	**(7,945,000)**	**(19,338,000)**	**(14,513,000)**	**(15,513,000)**	**(16,163,000)**	**(73,472,000)**	**(15,160,000)**
		Unbudgeted Balance	**-**	**-**	**-**	**-**	**-**		

[1] The Public Utilities / Water CIP is not funded from any funding sources that retain a year-end balance. Projected expenditures are equal to projected appropriations.

Table WA-5

2013/14 to 2017/18

Capital Improvement Program - Public Utilities / Water

Funded Capital Projects

Project Number	Project Type	Project Description	General Fund (101)	Water Fund (520)	Total
WA-1	System Improvements	Main Replacements - Design and construct water main replacements throughout the distribution system.	-	33,100,000	33,100,000
WA-2	System Improvements	Pump Station Replacements - Design and construct pump station replacements throughout the distribution system.	-	635,000	635,000
WA-3	System Improvements	Facility Rehabilitation - Design, purchase and construct pump, well, building, security and site landscaping items necessary to rehabilitate water facilities.	-	15,252,000	15,252,000
WA-4	System Improvements	Seven Oaks Dam Conservation (Active and Enhanced Recharge) - Implementation of the active and enhanced groundwater recharge project to augment existing groundwater supplies.	-	9,400,000	9,400,000
WA-5	System Improvements	System Expansion (New Customer Construction) - Construct water distribution facilities to serve new customers.	-	5,500,000	5,500,000
WA-6	System Improvements	Meters - Purchase meters for new customers and replacement meters.	-	4,250,000	4,250,000
WA-7	Recurring Projects	Water Stock - Purchase water stock for water rights acquisition.	-	50,000	50,000
WA-8	Recurring Projects	Distribution System Facilities Replacements - Replace meters, services, fire hydrants booster pumps, valves, etc.	-	3,285,000	3,285,000
WA-9	Recurring Projects	Hydrant Check Valves - Procurement and installation of hydrant check valves at critical locations within the City	-	500,000	500,000
WA-10	Recurring Projects	Operational Data Management System	-	1,500,000	1,500,000
		Total Funded Projects	**-**	**73,472,000**	**73,472,000**

City of Riverside

Table WA-6

2013/14 to 2017/18

Capital Improvement Program - Public Utilities / Water

Unfunded Capital Projects

Project Number	Project Type	Project Description	General Fund (101)	Water Fund (520)	Total
		There are no unfunded capital projects currently identified.			
		Total Unfunded Projects	**-**	**-**	**-**

Glossary

Appropriation – A City Council authorization to permit the City to incur obligations to make expenditures for specific purposes.

Assessed Valuation – A value that is established by the County of Riverside for real and personal property for use as a basis for levying property taxes.

Bond – A long-term "IOU" or promise to pay a sum of money on a specific date, at a specific interest rate. The most common types of bonds are: general obligation, revenue, and special improvement district bonds.

Bond Refinancing – The payoff and re-issuance of bonds to obtain lower interest rates and/or more favorable terms.

Capital Improvements – Construction or major repair of municipal buildings and facilities, such as City Hall, libraries, parks, recreational facilities, the museum, storm drains, the airport, streets, the sewer system, electric and water utilities, etc.

Capital Improvement Program (CIP) – A multi-year financial plan in which needed improvements to the City's facilities and infrastructure are identified, priced, and prioritized.

Capital Project – Major construction, acquisition, or renovation activities that add value to the City's physical assets or significantly increase asset functionality.

Certificates of Participation – lease financing agreements in the form of tax exempt securities similar to bonds.

Debt Service – The cost of paying principal and interest on borrowed money according to a predetermined schedule.

Department – An organizational unit comprised of programs or divisions, such as Human Resources, Police, or Public Works.

Expenditure – The cost for personnel, materials, equipment, and contractual obligations required for a department to operate or for a capital program to be completed.

Fee – A general term used for any charge levied by the City for providing a service or permitting an activity.

Fiscal Year – A 12-month period of time designated for accounting and budgeting purposes (July 1 through June 30 for the City of Riverside).

Fixed Assets – Resources owned by the City which are intended for long-term use, such as land, buildings, and machinery.

Fund – An accounting entity with a self-balancing set of accounts recording financial resources and transactions for specific activities.

General Fund – Used to account for all financial resources except those required to be accounted for in another fund.

General Obligation Bond – A bond backed by the full faith, credit, and taxing power of the City.

Infrastructure – The physical assets of a City (e.g., streets, water, sewer, public buildings, and parks).

Operating Budget – That portion of the budget which deals with recurring expenditures, such as salaries, utilities, postage, printing, and fuels.

Restricted Non-City Funds – Restricted Non-City Funds are funds requested from non-City sources that have not yet been guaranteed. These funds are project-specific and must be utilized for the project for which they are designated.

Glossary

Revenue Bonds – A bond backed by revenues generated from the project(s) to be constructed.

Riverside County Transportation Commission (RCTC) – RCTC is the regional planning organization responsible for the distribution of Federal, State, and Local transportation funds.

Unfunded Capital Projects – Projects for which funding is currently unavailable.

APPENDIX E-STORM DRAIN INITIAL STUDY

SEE ATTACHMENT
Storm Drain Study Document pages 1-54

Community Development Department
Planning Division

DRAFT MITIGATED NEGATIVE DECLARATION

WARD: 1

1. **Case Number:** P11-0415

2. **Project Title:** La Rivera Development - Surface Drainage Improvement Project

3. **Cycle Date:** March 16, 2012

4. **Lead Agency:** City of Riverside
Community Development Department
Planning Division
3900 Main Street, 3rd Floor
Riverside, CA 92522

5. **Contact Person:** Yvette M. Sennewald, Senior Planner
Phone Number: (951) 826-5168

6. **Project Location:** Southern terminus of Salmon River Road in the La Rivera residential development (Tracts 30922-3 and 30922-4) in the City of Riverside, and in unincorporated County of Riverside, California

7. **Project Applicant/Project Sponsor's Name and Address:**

Kevin Lea
GeoKinetics
77 Bunsen Drive
Irvine, CA 92618

8. **General Plan Designation:** City of Riverside: Medium Density Residential; County of Riverside: Open Space-Water (OS-W); County of Riverside: W-1 (Watercourse, Watershed & Conservation Areas)

9. **Zoning:** City of Riverside: Residential

10. **Description of Project:** (Describe the whole action involved, including but not limited to later phases of the project, and any secondary, support, or off-site features necessary for its implementation. Attach additional sheets if neessary.)

The project is proposed to improve existing drainage conditions within the La Rivera residential development (Tracts 30922-3 and 30922-4) and adjacent areas. The La Rivera residential development is impacted by storm flow runoff from existing uses; drainage improvements would alleviate potential flooding at the southern terminus of Salmon River Road during seasonal rain storms. The proposed project would allow for the installation and operation of approximately 316 linear feet of storm drains resulting in an impact area of approximately 0.34 acre; of this 0.062 acre would impact open wash within the Santa Ana River. As shown in Exhibit 2-3, Storm Drain Construction Details, an inlet structure and catch basin would be installed at the southern terminus of Salmon River Road within the La Rivera residential development. The inlet structure and catch basin would collect runoff from Salmon River Road that is currently collected by an existing 42-inch reinforced concrete pipe (RCP). The storm drain would traverse an existing multi-purpose trail (in the residential development) beginning at the southern terminus of Salmon River Road and would be oriented in a northwesterly direction. Runoff would be conveyed to a proposed 2-foot-high by 5.5-foot-wide box culvert then to a 54-inch storm drain. A reinforced concrete transition structure would be installed to separate the box culvert from the 54-inch storm drain. The reinforced concrete transition structure would be located at the toe of the slope of the Santa Ana River levee. The transition structure would have a manhole at the surface with a locking device, which would provide for maintenance access. The proposed 54-inch storm

drain would continue underneath the Santa Ana River Trail and levee in a northwesterly direction. Runoff would outlet in the Santa Ana River through a 54-inch diameter flap gate into a 6-inch thick concrete outlet channel (approximately 46 feet long). The proposed project initially included the relocation of the existing rock groin[1] to an area immediately north of the proposed outlet channel within the Santa Ana River and the restoration of all disturbed areas within the Santa Ana River to their pre-construction conditions. In an effort to minimize impacts on Riparian/Riverine resources and associated species, the Project Applicant redesigned the project to utilize the existing rock groin structure and to shorten the outlet drain structure (Exhibit 2-3). Engineered project plans depicting project details are available for review at City of Riverside Community Development Department, Planning Division during regular business hours.

Construction of the storm drain and related improvements is expected to be completed within approximately 70 working days from the initiation of project construction. However, construction may occur outside of the rainy season. Construction activities (including trenching and backfilling) would be confined to the existing multi-purpose trail extending to the Santa Ana River Trail and Santa Ana River with the exception of the inlet structure and catch basin. The inlet structure and catch basin would be located in the existing sidewalk at the southern terminus of Salmon River Road. The construction staging area is proposed to be located at the terminus of Salmon River Road. Excavation (trenching) would occur as part of project construction; no grading or rock blasting would be required. The top of the Santa Ana River levee would be excavated where the storm drain would be installed and subsequently covered and repaired. The Santa Ana River Trail would be temporarily closed to bicycle and pedestrian traffic during construction activities. During this closure period, bicyclists and pedestrians would be diverted to the existing vehicle maintenance road that runs parallel to levee and at the toe of the levee.

11. Surrounding land uses and setting: Briefly describe the project's surroundings:

The project site is located within a developed area. Within the City, land uses in the project area include the City-designated equestrian, bike, and pedestrian trail (multi-purpose trail) and residences. The multi-purpose trail begins at Strong Street and Rivera Street, continues to the alley between residential uses, and connects to the Santa Ana River Trail. The predominant land use to the north, east, and south is single-family residential. The Santa Ana River Trail atop the Santa Ana River levee and the Santa Ana River are in unincorporated Riverside County. The Santa Ana River is within the County of Riverside Flood Control and Water Conservation District right-of-way.

12. Other public agencies whose approval is required (e.g., permits, financial approval, or participation agreement.):

Agency/Party	Permit or Approval	Estimated Timeframe
City of Riverside	Initial Study/Mitigated Negative Declaration and Project approval	
Riverside County Flood Control and Water Conservation District	Right-of-Way Permit	45 days
Riverside Conservation Authority	Determination of Biologically Equivalent or Superior Preservation (DBESP)	Review completed March 9, 2012
Regional Water Quality Control Board	401 Water Quality Certification	120 to 180 days
U.S. Army Corps of Engineers	Section 404 Permit	120 days
California Department of Fish and Game	Section 1602 Streambed Alteration Agreement	90 days
State Water Resources Control Board	National Pollutant Discharge Elimination System (NPDES) Construction Storm Water Program (small linear underground/overhead project disturbing over one acre but less than five acres)	The project is less than one acre. Therefore, a NPDES permit is not required.

[1] Rock groin is also known as riprap and is a rock structure used to prevent and/or reduce erosion.

13. Documents used and/or referenced in this review:

BonTerra Consulting. 2012a (January). *Habitat Assessment for La Rivera Development Surface Drainage Improvement Project Assessor Parcel Numbers: 178-050-007, 178-050-018, 178-050-031, 206-283-022, and 207-210-042 (0.5-Acre Property, Total Area Surveyed: 9.04 Acres) Salmon River Road in the City of Riverside Fontana and San Bernardino South USGS 7.5 Minute Series Map Township 2S, Range 5W, Section 11.* Costa Mesa, CA: BonTerra Consulting.

———. 2012b (January). *Jurisdictional Delineation Report La Rivera Development Surface Drainage Improvement Project, Riverside County, California.* Costa Mesa, CA: BonTerra Consulting.

———. 2011 (December). *Determination of Biologically Equivalent or Superior Preservation Report La Rivera Development Surface Drainage Improvement Project, Riverside County, California*. Irvine, CA: BonTerra Consulting.

California Air Resources Board (CARB). 2011 (June 6, last reviewed). Area Designation Maps/State and National. Sacramento, CA: CARB. www.arb.ca.gov/desig/adm/adm.htm/.

California Department of Conservation, Farmland Mapping and Monitoring Program (FMMP). 20. Farmland Mapping and Monitoring Program (FMMP) Farmland Map: Orange County, California. Sacramento, CA: FMMP.

California Department of Transportation (Caltrans). 2007 (December 7, last update). California Scenic Highway Mapping System. Sacramento, CA: Caltrans. http://www.dot.ca.gov/hq/LandArch/scenic_highways/index.htm.

California Environmental Protection Agency (CalEPA). 2011 (Last accessed September 28). *Cortese List Data Resources*. http://www.calepa.ca.gov/SiteCleanup/CorteseList/ default.htm.

California Geological Survey (CGS). 2007. Alquist-Priolo Earthquake Fault Zone Maps (search for "Salmon River Road, Riverside, CA, which is on the San Bernardino South Quadrangle). Sacramento, CA: CGS. http://www.quake.ca.gov/gmaps/ap/ap_maps.htm.

Dudek and Associates, Inc. (Dudek). 2003. Western Riverside County Multiple Species Habitat Conservation Plan (Prepared for the Riverside County Integrated Project). Encinitas, CA: Dudek. http://www.wrc-rca.org/Permits_Docs.html.

Eastern Information Center (EIC). 2011 (March 24). Cultural Resources Records Search for the La Rivera Project (a letter from M.P. Loyd at the EIC to P. Maxon of BonTerra Consulting) (Appendix C).

Ecological Sciences. 2011a (August). *Habitat Assessment for the San Bernardino Kangaroo Rat and Los Angeles Pocket Mouse.* Santa Paula, CA: Ecological Sciences.

———. 2011b (September). *Live-Trapping Survey for the San Bernardino Kangaroo Rat and the Los Angeles Pocket Mouse, La Rivera Development Surface Drainage Improvement Project*. Santa Paula, CA: Ecological Sciences.

Forde Biological Consultants. 2011a (July). *La Rivera Development Surface Drainage Improvement Project Species-Specific Survey Results for San Diego ambrosia (Ambrosia pumila), Brand's star phacelia (Phacelia stellaris), Parry's spineflower (Chorizanthe parryi var. parryi), and chaparral sand-verbena (Abronia villosa var. aurita)*. Camarillo, CA: Forde Biological Consultants.

———. 2011b (August). *Species-Specific Survey Vireo bellii pusillus (Least Bell's Vireo), La Rivera Development Surface Drainage Improvement Project*. Camarillo, CA: Forde Biological Consultants.

Lea, K. 2011 (May 24). Personal communication. Telephone conversation between K. Lea (GeoKinetics) and G. Medeiros (BonTerra Consulting).

Natural History Museum of Los Angeles County (LACM). 2011 (March 7). Paleontological Resources for the proposed La Rivera Development Surface Drainage Improvement Project, in the City of Riverside, Riverside County, project area (a letter from S.A. McLeon, Ph.D. of the LACM to P. Maxon of BonTerra Consulting) (Appendix C).

Riverside, City of. 2011. *City of Riverside Municipal Code* (Title 7, Noise Control). Riverside, CA: the City. http://www.riversideca.gov/municode/title7.asp.

———. 2007 (November). *City of Riverside General Plan 2025*. Riverside, CA: the City.

Riverside, County of. 2008. *County of Riverside General Plan.* Riverside, CA: the County.

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South Coast Air Quality Management District (SCAQMD). 2011 (March). *SCAQMD Air Quality Significance Thresholds*. Diamond Bar, CA: SCAQMD. http://www.aqmd.gov/ceqa/handbook/signthres.pdf.

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———. 1993. *CEQA Air Quality Handbook*. Diamond Bar, CA: SCAQMD.

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State Water Resources Control Board (SWRCB). 2011. GeoTracker (database search for "Salmon River Road, Riverside, CA). Sacramento, CA: SWRCB. http://geotracker.swrcb.ca.gov/.

———. 2012 (March 12) Response letter from USFWS and CDFG to the City of Riverside concerning the *Determination of Biologically Equivalent or Superior Preservation for the La Rivera Development Surface Drainage Improvement Project, Riverside County, California.* (Appendix B)

14. Acronyms

AAQS	ambient air quality standards
AB	Assembly Bill
ac	acre(s)
AM	morning (before noon)
APCD	Air Pollution Control District
AQMD	Air Quality Management District
AQMP	Air Quality Management Plan
BMP	Best Management Practices
CAA	Clean Air Act (federal)
CalEPA	California Environmental Protection Agency
CARB	California Air Resources Board
CDFG	California Department of Fish and Game
CEQA	California Environmental Quality Act of 1970
CESA	California Endangered Species Act
CETAP	Community and Environmental Transportation Acceptability Process
CMP	Congestion Management Plan (or Program)
CNDDB	California Natural Diversity Database
CNPS	California Native Plant Society
CO	carbon monoxide
CO_2	carbon dioxide
COG	Council of Governments
CRHR	California Register of Historical Resources
CWA	Clean Water Act

cy	cubic yard(s)
dB	decibel
dBA	decibel, A-weighted
DBESP	Determination of Biologically Equivalent or Superior Preservation
Diesel PM	Diesel Particulate Matter
DTSC	Department of Toxic Substance Control
EIC	Eastern Information Center
FCAA	Federal Clean Air Act
FESA	Federal Endangered Species Act
GHGs	Greenhouse Gases
GIS	Geographic Information Systems
GP	General Plan
HCP	Habitat Conservation Plan
I-215	Interstate 215
IS	Initial Study (CEQA)
LACM	Natural History Museum of Los Angeles County
lbs/day	pounds per day
L_{dn}	Day-Night Average Sound Level
L_{eq}	Sound Energy Equivalent Noise Level
L_{max}	maximum noise level
LOS	Level of Service (traffic flow rating)
LST	localized significance threshold
LUP	Land Use Plan
MBTA	Migratory Bird Treaty Act
MM	Mitigation Measure
$MMTCO_2e$	Million Metric Ton Carbon Dioxide Equivalent
MND	Mitigated Negative Declaration (CEQA)
Mpg	miles per gallon
mph	miles per hour
MRZ	Mineral Resource Zone
Msl	mean sea level
MSHCP	Multiple Species Habitat Conservation Plan
$MTCO_2e/yr$	Metric Ton of Carbon Dioxide Equivalent per year
NAAQS	National Ambient Air Quality Standards
NAHC	Native American Heritage Commission
NCCP	Natural Community Conservation Plan
NO_2	nitrogen dioxide
NOx	oxides of nitrogen (nitric oxide and nitrogen dioxide)
NOA	Notice of Availability (CEQA)
NOC	Notice of Completion (CEQA)
NOD	Notice of Determination (CEQA)
NOI	Notice of Intent
NOP	Notice of Preparation (CEQA)
NPDES	National Pollutant Discharge Elimination System
NRHP	National Register of Historic Places
O_3	ozone
OPR	Office of Planning and Research, State of California
OS-W	Open Space-Water
Pb	lead
PDF	Project Design Feature
PM	evening (after noon)
PM2.5	respirable particulate matter less than 2.5 micrometers in diameter
PM10	respirable particulate matter less than 10 micrometers in diameter
ppm	parts per million
PRC	Public Resources Code
RARE	Rare, threatened, or endangered species
RCA	Riverside Conservation Authority
RCHCA	Riverside County Habitat Conservation Agency
RCP	reinforced concrete pipe

RWQCB	Regional Water Quality Control Board
SAWA	Santa Ana River Watershed Association
SB	Senate Bill
SC	Standard Condition and Requirement
SCAG	Southern California Association of Governments
SCAQMD	South Coast Air Quality Management District
SCAQMP	South Coast Air Quality Management Plan
SCH	State Clearinghouse, State of California
sf	square foot (or feet)
SO_2	sulfur dioxide
SoCAB	South Coast Air Basin
SR-60	State Route 60
SWPPP	Storm Water Pollution Prevention Plan
SWRCB	State Water Resources Control Board
TAC	toxic air contaminant
USACE	U.S. Army Corps of Engineers
USEPA	U.S. Environmental Protection Agency
USFWS	U.S. Fish and Wildlife Service
USGS	U.S. Geological Survey
VOCs	volatile organic compounds
WDID	Waste Discharge Identification
WDR	Waste Discharge Requirement
WILD	wildlife habitat
WQMP	Water Quality Management Plan
WRCOG	Western Riverside Council of Governments
WRMSHCP	Western Riverside County Multiple Species Habitat Conservation Plan

ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED:

The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a "Potentially Significant Impact" as indicated by the checklist on the following pages.

☐ Aesthetics	☐ Agriculture & Forest Resources	☐ Air Quality
☒ Biological Resources	☒ Cultural Resources	☐ Geology/Soils
☐ Greenhouse Gas Emissions	☐ Hazards & Hazardous Materials	☐ Hydrology/Water Quality
☒ Land Use/Planning	☐ Mineral Resources	☐ Noise
☐ Population/Housing	☐ Public Service	☐ Recreation
☐ Transportation/Traffic	☐ Utilities/Service Systems	☒ Mandatory Findings of Significance

DETERMINATION: (To be completed by the Lead Agency)

On the basis of this initial evaluation which reflects the independent judgment of the City of Riverside, it is recommended that:

The City of Riverside finds that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared. ☐

The City of Riverside finds that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared. ☒

The City of Riverside finds that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required. ☐

The City of Riverside finds that the proposed project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed. ☐

The City of Riverside finds that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required. ☐

Signature _____ Date _____

Printed Name & Title _____ For City of Riverside

EVALUATION OF ENVIRONMENTAL IMPACTS:

1) A brief explanation is required for all answers except "No Impact" answers that are adequately supported by the information sources a lead agency cites in the parentheses following each question. A "No Impact" answer is adequately supported if the referenced information sources show that the impact simply does not apply to projects like the one involved (e.g., the project falls outside a fault rupture zone). A "No Impact" answer should be explained where it is based on project-specific factors as well as general standards (e.g., the project will not expose sensitive receptors to pollutants, based on a project-specific screening analysis).

2) All answers must take account of the whole action involved, including off-site as well as on-site, cumulative as well as project-level, indirect as well as direct, and construction as well as operational impacts.

3) Once the lead agency has determined that a particular physical impact may occur, then the checklist answers must indicate whether the impact is potentially significant, less than significant with mitigation, or less than significant. "Potentially Significant Impact" is appropriate if there is substantial evidence that an effect may be significant. If there are one or more "Potentially Significant Impact" entries when the determination is made, an EIR is required.

4) "Negative Declaration: Less Than Significant With Mitigation Incorporated" applies where the incorporation of mitigation measures has reduced an effect from "Potentially Significant Impact" to a "Less Than Significant Impact." The lead agency must describe the mitigation measures, and briefly explain how they reduce the effect to a less than significant level (mitigation measures from "Earlier Analyses," as described in (5) below, may be cross-referenced).

5) Earlier analyses may be used where, pursuant to the tiering, program EIR, or other CEQA process, an effect has been adequately analyzed in an earlier EIR or negative declaration. Section 15063(c)(3)(D). In this case, a brief discussion should identify the following:

   a. **Earlier Analysis Used.** Identify and state where they are available for review.

   b. **Impacts Adequately Addressed.** Identify which effects from the above checklist were within the scope of and adequately analyzed in an earlier document pursuant to applicable legal standards, and state whether such effects were addressed by mitigation measures based on the earlier analysis.

   c. **Mitigation Measures.** For effects that are "Less than Significant with Mitigation Measures Incorporated," describe the mitigation measure which were incorporated or refined from the earlier document and the extent to which they address site-specific conditions for the project.

6) Lead agencies are encouraged to incorporate into the checklist references to information sources for potential impacts (e.g., general plans, zoning ordinances). Reference to a previously prepared or outside document should, where appropriate, include a reference to the page or pages where the statement is substantiated.

7) Supporting Information Sources: A source list should be attached, and other sources used or individuals contacted should be cited in the discussion.

8) The explanation of each issue should identify:

   a. the significance criteria or threshold, if any, used to evaluate each question; and

   b. the mitigation measure identified, if any, to reduce the impact to less than significance.

ISSUES (AND SUPPORTING INFORMATION SOURCES):	Potentially Significant Impact	Less Than Significant Impact with Mitigation Incorporated	Less Than Significant Impact	No Impact
1. AESTHETICS. Would the project:				
a. Have a substantial adverse effect on a scenic vista?	☐	☐	☐	☒
1a. Response: ***(Source: County of Riverside General Plan Jurupa Area Plan, California Scenic Highway Mapping System, County of Riverside General Plan)*** The project site is located in unincorporated Riverside County within the Jurupa Area Plan and the northwestern portion of the City of Riverside. As stated in the Jurupa Area Plan, this area is situated within a valley that provides distant mountain views and a scenic natural setting. Based on a review of the Jurupa Area Plan, there are no scenic vistas or local or State scenic highways within the vicinity of the project site (Riverside County 2003). In addition, according to the California Department of Transportation (Caltrans) website, there are no State Scenic Highways or County Scenic Highways within the vicinity of the project site (Caltrans 2007). While the City of Riverside's Open Space and Conservation Element states that the Santa Ana River and other waterways provide scenic resources in the City, the project site is void of scenic resources such as trees, rock outcroppings, and historic buildings within a State scenic highway (Riverside County 2008). The project improvements would not significantly alter the views of the Santa Ana River. The proposed project would not have an adverse effect on a scenic vista, and would not damage scenic resources within a local or State Scenic Highway. ***No impact*** would occur and no mitigation is required.				
b. Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	☐	☐	☐	☒
1b. Response: ***(Source: County of Riverside General Plan Jurupa Area Plan, California Scenic Highway Mapping System, County of Riverside General Plan)*** Please refer to Checklist Response 1a above.				
c. Substantially degrade the existing visual character or quality of the site and its surroundings?	☐	☐	☐	☒
1c. Response: ***(Source:)*** The proposed project would allow for the installation and operation of an underground storm drain system with a catch basin that would include inlet and outlet structures to convey storm flows into the Santa Ana River. The project would also include the relocation of the existing rock groin within the Santa Ana River. The only aboveground project components would be the outlet structure and rock groin. Implementation of the project would not create any significant notable aboveground visual changes and therefore would not result in long-term changes that would substantially degrade the existing visual quality of the project site or its vicinity. During construction activities at the site, there would be views of construction equipment resulting in temporary construction impacts. This potential impact is less than significant because of its temporary nature and because the view would be typical of construction sites for projects in an urban environment. ***No impact*** would occur and no mitigation is required.				
d. Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	☐	☐	☐	☒
1d. Response: ***(Source:)*** Implementation of the proposed project would not create a new source of substantial light or glare; no permanent lighting is associated with the project. All construction activities would occur during daylight hours. ***No impact*** would occur and no mitigation is required.				

ISSUES (AND SUPPORTING INFORMATION SOURCES):	Potentially Significant Impact	Less Than Significant Impact with Mitigation Incorporated	Less Than Significant Impact	No Impact
2. AGRICULTURE AND FOREST RESOURCES:				
In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effect, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment project; and the forest carbon measurement methodology provided in the Forest Protocols adopted by the California Air Resources Board. Would the project:				
a. Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	☐	☐	☐	☒
2a. Response: ***(Source: County of Riverside General Plan, Riverside General Plan 2025, Farmland Mapping Program)*** *The County of Riverside General Plan's* land use designation for the project site is Open Space – Water, and the *City of Riverside General Plan 2025's* land use designation for the project site is Medium Density Residential (Riverside County 2008; City of Riverside 2007). With respect to agricultural resources, both the County's and City's General Plans classify the project area as "Urban Built-up Land" (Riverside County 2008; City of Riverside 2007). According to the 2008 California Department of Conservation, Farmland Mapping and Monitoring Program, no portion of the project site is located on land designated as Prime Farmland, Unique Farmland, or Farmland of Statewide Importance, nor is any portion covered by a Williamson Act Contract. In addition, the site is not located within or in the vicinity of existing agricultural operations. The project site does not contain designated forest land or timberland as defined in Sections 12220[g] and 4526 of the *California Public Resources Code*. Therefore, ***no impacts*** to agricultural resources, forest land, or timberland would result from project implementation, and no mitigation is required.				
b. Conflict with existing zoning for agricultural use, or a Williamson Act contract?	☐	☐	☐	☒
2b. Response: ***(Source: County of Riverside General Plan, Riverside General Plan 2025, Farmland Mapping Program)*** Refer to Checklist Response 2a above.				
c. Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)) timberland (as defined in Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?	☐	☐	☐	☒
2c. Response: ***(Source: County of Riverside General Plan, Riverside General Plan 2025, Farmland Mapping Program)*** Refer to Checklist Response 2a above.				

ISSUES (AND SUPPORTING INFORMATION SOURCES):	Potentially Significant Impact	Less Than Significant Impact with Mitigation Incorporated	Less Than Significant Impact	No Impact
d. Result in the loss of forest land or conversion of forest land to non-forest use?	☐	☐	☐	☒
2d. Response: ***(Source: County of Riverside General Plan, Riverside General Plan 2025, Farmland Mapping Program)*** Refer to Checklist Response 2a above.				
e. Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?	☐	☐	☐	☒
2e. Response: ***(Source: County of Riverside General Plan, City of Riverside General Plan 2025, Farmland Mapping Program)*** Refer to Checklist Response 2a above.				
3. AIR QUALITY.				
Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. Would the project:				
a. Conflict with or obstruct implementation of the applicable air quality plan?	☐	☐	☐	☒

3a. Response: ***(Source: SCAQMD 2007 Air Quality Management Plan, SCAQMD CEQA Air Quality Handbook)***

The regional plan applicable to the proposed project is the South Coast Air Quality Management District's (SCAQMD's) *Air Quality Management Plan* (AQMP). The SCAQMD's CEQA Handbook (Handbook) states that "New or amended General Plan Elements (including land use zoning and density amendments), Specific Plans, and significant projects must be analyzed for consistency with the AQMP" (SCAQMD 1993). The proposed project does not require any of these actions; however, a consistency analysis has been prepared to ensure that the project would not conflict with or obstruct implementation of the AQMP. A proposed project would be considered to be consistent with the AQMP if it furthers one or more policies and does not obstruct other policies. The Handbook identifies two key indicators of consistency which are evaluated below (SCAQMD 1993):

(1) Whether the project will result in an increase in the frequency or severity of existing air quality violations or cause or contribute to new violations, or delay timely attainment of air quality standards or the interim emission reductions specified in the AQMP.

Based on the air quality modeling analysis conducted for the proposed project (see the discussion provided below under Checklist Response III.b), the project would not result in significant impacts based on the SCAQMD thresholds of significance. Construction activities would not increase the frequency or severity of existing air quality violations due to required compliance with SCAQMD Rules and Regulations. The proposed project is not projected to contribute to the exceedance of any air pollutant concentration standards, and there would be no short- or long-term local air quality impacts. Therefore, the project is consistent with the AQMP for the first criterion.

The second criterion evaluates:

(2) Whether the project will exceed the assumptions in the AQMP in 2010[2] or increments based on the year of project buildout and phase.

Consistency with the AQMP assumptions is determined by performing an analysis of a project with the assumptions in the AQMP. Therefore, the emphasis of this criterion is to ensure that the analyses conducted for the project are based on the same forecasts as the AQMP. The project would not generate any new long-term air pollutant emissions, increase

[2] The Handbook was written in 1993. At that time, 2010 referred to the horizon year for traffic projections.

ISSUES (AND SUPPORTING INFORMATION SOURCES):	Potentially Significant Impact	Less Than Significant Impact with Mitigation Incorporated	Less Than Significant Impact	No Impact
population or employment in the area, or exceed assumptions in the AQMP. Therefore, project emissions would be consistent with the AQMP assumptions; the proposed project is consistent with the AQMP for the second criterion. The project would not conflict with or obstruct implementation of the AQMP. ***No impact*** would result and no mitigation is required.				
b. Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	☐	☐	☒	☐

3b. Response: ***(Source: CARB Area Designation Maps/State and National, SCAQMD Air Quality Significance Thresholds, SCAQMD Final Localized Significance Threshold Methodology, SCAQMD Rule 403: Fugitive Dust)***

A project may have a significant impact where project-related emissions would exceed federal, State, or regional standards or thresholds, or where project-related emissions would substantially contribute to an existing or projected air quality violation.

The Federal Clean Air Act (42 United States Code [USC] §§7401–7671) requires the adoption of National Ambient Air Quality Standards (NAAQS) to protect public health and welfare from the effects of air pollution related to seven air pollutants: ozone (O3), carbon monoxide (CO), nitrogen dioxide (NO2), sulfur dioxide (SO2), inhalable particulate matter 10 microns or less in diameter (PM10), fine particulate matter 2.5 microns or less in diameter (PM2.5), and lead. The California Air Resources Board (CARB) has established additional State standards, which are generally more stringent than the NAAQS.

Regional air quality is described by whether the area has attained State and federal standards, as determined by monitoring. Areas that have been designated as being in nonattainment are required to prepare plans and implement measures to bring the region into attainment. When an area has been reclassified from nonattainment to attainment for a federal standard, the status is identified as "maintenance", and there must be a plan and measures that will keep the region in attainment for the following ten years. Table 1 summarizes the attainment status in the South Coast Air Basin (SoCAB) for the seven criteria pollutants.

TABLE 1
ATTAINMENT STATUS OF CRITERIA POLLUTANTS IN THE SOUTH COAST AIR BASIN

Pollutant	State of California	Federal
O_3 (1 hour)	Nonattainment	No Standard
O_3 (8 hour)		Extreme Nonattainment[a]
PM10	Nonattainment	Serious Nonattainment[b]
PM2.5	Nonattainment	Nonattainment
CO	Attainment	Attainment/Maintenance
NO_2	Nonattainment[c]	Attainment/Maintenance
SO_2	Attainment	Attainment
Lead	Attainment/Nonattainment[d]	Attainment
All others	Attainment/Unclassified	No Standards

[a] The USEPA redesignated the South Coast Air Basin (SoCAB) from Severe 17 to Extreme Nonattainment effective June 4, 2010.
[b] On April 10, 2010, CARB requested the USEPA to designate SoCAB as an attainment area for the PM10 federal standard.
[c] SoCAB was reclassified from attainment to nonattainment for NO_2 on March 25, 2010.
[d] Los Angeles County was reclassified from attainment to nonattainment for lead on March 25, 2010; the remainder of SoCAB is in attainment of the State standard.

Source: CARB 2011.

ISSUES (AND SUPPORTING INFORMATION SOURCES):	Potentially Significant Impact	Less Than Significant Impact with Mitigation Incorporated	Less Than Significant Impact	No Impact

CARB regulations define a toxic air contaminant (TAC) as one which may cause or contribute to an increase in deaths or serious illnesses, or which may pose a present or potential hazard to human health.[3] TACs are considered under a different regulatory process than criteria pollutants. Health effects from TACs may occur at extremely low levels, and it is typically difficult to identify levels of exposure that do not produce adverse health effects. Therefore, there are no ambient concentration standards for TACs. According to the California Almanac of Emissions and Air Quality, the majority of the estimated health risk from TACs can be attributed to relatively few compounds, the most important being particulate matter from diesel-fueled engines (diesel PM) (CARB 2010).

This section includes an evaluation of short-term construction and long-term air quality impacts that would occur with implementation of the Project.

Construction – Mass Daily Emissions

Construction of the storm drain improvement project is anticipated to summer 2012 for approximately 70 working days. However, construction may need to occur outside the rainy season. It is anticipated that the total area disturbed would be approximately 0.34 acre, and heavy construction equipment would consist of an excavator and a dump truck. It is anticipated there would be approximately 378 cubic yards of soil export to occur for a period of approximately 40 days, with 1 or 2 daily truck loads. Standard Condition (SC) AQ-1 specifies project compliance with SCAQMD Rule 403, Fugitive Dust, which requires control measures as necessary to limit the emissions of dust and particulate matter (SCAQMD 2005).

Air pollutant emissions would occur as a result of (1) the use of on-site construction equipment; (2) fugitive dust from earth work activities; and (3) emissions from vehicles driven to and from the site for soil export construction materials import, and from construction worker vehicles. A project with daily emission rates below the SCAQMD's established air quality significance thresholds (shown in Table 2 below) would have a less than significant effect on regional air quality. An assessment of project-generated, short-term air pollutant emissions was conducted using the URBEMIS2007, Version 9.2.4 computer model to quantify regional emissions (refer to Appendix A for the URBEMIS2007 calculations). Table 2 presents the estimated maximum daily emissions with application of SC AQ-1 for dust control during the proposed project construction, and compares the estimated emissions with the SCAQMD daily mass emission thresholds. As shown in the table, short-term emissions generated by the proposed project would be less than the SCAQMD regional thresholds of significance. Therefore, the impact would be ***less than significant*** and project-specific mitigation for maximum daily emissions is not required during construction activities.

TABLE 2
ESTIMATED MAXIMUM DAILY CONSTRUCTION EMISSIONS (LBS/DAY)

Year	VOC	NOx	CO	SOx	PM10	PM2.5
2011	2	12	7	<1	2	1
SCAQMD Thresholds	***75***	***100***	***550***	***150***	***150***	***55***
Exceeds SCAQMD Thresholds?	**No**	**No**	**No**	**No**	**No**	**No**

lbs/day: pounds per day; VOC: volatile organic compounds; NOx: oxides of nitrogen; CO: carbon monoxide; SOx: oxides of sulfur; PM10: large particulate matter (diameter of 10 microns or less); PM2.5: fine particulate matter (diameter of 2.5 microns or less).

Source: SCAQMD 2011 (See Appendix A for URBEMIS calculations).

Construction – Localized Significance Thresholds/Ambient Air Quality

In addition to the SCAQMD-established mass daily emissions thresholds, short-term, on-site emissions of NO2, CO, PM10, and PM2.5 are examined for local impacts to nearby sensitive receptors based on SCAQMD localized significance thresholds (LST) methodology. To assess local air quality impacts for projects without requiring complex dispersion modeling, the SCAQMD developed screening (lookup) tables to assist lead agencies in evaluating impacts. The LST methodology is recommended to be limited to projects of 5 acres or less; the project site disturbance area is approximately 0.34 acre, although the disturbed area close to any individual residence would be much smaller. For the purposes of a

[3] The USEPA uses the terminology "hazardous air pollutant" (HAP), which has a similar definition.

ISSUES (AND SUPPORTING INFORMATION SOURCES):	Potentially Significant Impact	Less Than Significant Impact with Mitigation Incorporated	Less Than Significant Impact	No Impact

CEQA analysis, the SCAQMD considers a sensitive receptor to be a receptor such as a residence, hospital, or convalescent facility, or other facility where it is possible that an individual could remain for 24 hours. Commercial and industrial facilities are not included in the definition of a sensitive receptor because employees do not typically remain on site for a full 24 hours. The closest receptors would be the single-family residences located approximately 25 feet from the project site boundary.

Table 3 shows the maximum daily on-site emissions for construction activities compared with the SCAQMD thresholds. The table shows the emissions thresholds for local pollutants with receptors at 25 meters (82 feet); the SCAQMD methodology prescribes the use of the 25-meter factor for all receptors within 25 meters. As shown in Table 3, the local emissions from the proposed project would be less than the thresholds for a one-acre site, which has the lower thresholds. SC AQ-1 would assure that dust-control measures are implemented during construction. With implementation of SC AQ-1, the local pollutant impact from construction activities would be ***less than significant***.

TABLE 3
LOCAL SIGNIFICANCE THRESHOLD EMISSIONS

	NOx	CO	PM10	PM2.5
	Emissions (lbs/day)			
LST Thresholds: 1-acre site[a]	118	550	4	3
Project maximum daily on-site emissions	12	7	2	1
Exceed 1-acre threshold?	**No**	**No**	**No**	**No**

lbs/day: pounds per day; NOx: nitrogen oxides; CO: carbon monoxide; PM10: particulate matter with a diameter of 10 microns or less; PM2.5: particulate matter with a diameter 2.5 microns or less; lbs: pounds; LST: localized significance threshold

a. Source: SCAQMD 2008, Source Receptor Area 23, Metropolitan Riverside County.

Mitigation Program

Standard Conditions and Requirements

SC AQ-1 During construction of the project, the City of Riverside and its contractors shall be required to comply with SCAQMD Rules 402 and 403, which shall assist in reducing short-term air pollutant emissions. SCAQMD Rule 402 requires that air pollutant emissions not be a nuisance off site. SCAQMD Rule 403 requires that fugitive dust be controlled with the best available control measures so that the presence of such dust does not remain visible in the atmosphere beyond the property line of the emission source. This requirement shall be included as notes on the contractor specifications.

c. Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?	☐	☐	☒	☐

3c. Response: ***(Source: SCAQMD 2007 Air Quality Management Plan, CARB Area Designation Maps/State and National, SCAQMD Air Quality Significance Thresholds, SCAQMD Final Localized Significance Threshold Methodology)***

Riverside County is a nonattainment area for PM10, PM2.5, NO_2, and O_3. The proposed project would generate these pollutants during construction activities. As noted under Checklist Response III.a above, the proposed project would not conflict with the 2007 AQMP. In addition, as detailed in response to Checklist Response III.b, with implementation of SC AQ-1, short-term emissions would be substantially less than the SCAQMD regional and localized significance thresholds. There are no known projects anticipated to be constructed concurrent with the project within 1,000 feet of the project site. Because emissions for construction activities are well below SCAQMD significance criteria and because no known projects in the vicinity of the site are anticipated to be constructed concurrent to the proposed project, the project would not result in emissions approaching significance thresholds. Therefore, with implementation of SC AQ-1, the proposed project's contribution of PM10, PM2.5, NO_2, and O_3 would not be cumulatively considerable and the impact would be ***less than significant***.

ISSUES (AND SUPPORTING INFORMATION SOURCES):	Potentially Significant Impact	Less Than Significant Impact with Mitigation Incorporated	Less Than Significant Impact	No Impact
d. Expose sensitive receptors to substantial pollutant concentrations?	☐	☐	☒	☐

3d. Response: ***(Source: CARB Area Designation Maps/State and National, SCAQMD Air Quality Significance Thresholds, SCAQMD Final Localized Significance Threshold Methodology)***

A significant impact may occur when a project would generate pollutant concentrations to a degree that would significantly affect sensitive receptors, which include populations that are more susceptible to the effects of air pollution than the population at large. Exposure of sensitive receptors is addressed for four situations: CO hotspots; diesel exhaust emissions; local emissions of nitrogen oxides (NOx), CO, PM10, and PM2.5; and asbestos and lead paint during demolition. A CO hotspot is an area of localized CO pollution caused by severe vehicle congestion on major roadways, typically near intersections. A quantitative screening is required if a project would (1) increase average delay at signalized intersections operating at Level of Service (LOS) E or F or (2) cause an intersection that would operate at LOS D or better without the project to operate at LOS E or F with the project. The project would generate one to two daily truck trips during construction activities. This amount of short-term traffic would not generate localized CO impacts.

Construction activities would result in short-term diesel exhaust emissions from heavy-duty equipment on site. CARB identified particulate exhaust emissions from diesel-fueled engines (diesel PM) as TACs in 1998. Construction activities would generate diesel PM emissions through the use of off-road and on-road diesel equipment used to transport materials from the project site. Exposure is a combination of the emissions rate and the length of time exposed, with exposures calculated over periods of 70 years. The proposed project would have relatively little diesel equipment, and the construction period would be less than 4 months, which is considerably less than the 70-year exposure timeframe. The exposure to nearby individuals would be less than threshold levels. The impact would be ***less than significant*** and no mitigation is required.

Exposure of persons to NOx, CO, PM10, and PM2.5 emissions is discussed in response to Checklist Response III.b above. Impacts would be ***less than significant*** with implementation of SC AQ-1.

There would be no demolition associated with the project; therefore, there would be no potential for exposure to asbestos and lead paint materials.

e. Create objectionable odors affecting a substantial number of people?	☐	☐	☒	☐

3e. Response: ***(Source:)***

The project would involve the temporary operation of construction equipment and vehicles. Construction activities may generate odors perceptible by residents located in the immediate vicinity of the project site. However, project activities would be temporary in nature; project-related odors would be quickly dispersed into the atmosphere and dissipate within a short distance from the project site. The project would result in a ***less than significant*** impact related to creation of odors and no mitigation is required.

4. BIOLOGICAL RESOURCES.

Would the project:

a. Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	☐	☒	☐	☐

4a. Response: ***(Source: Habitat Assessment (BonTerra Consulting 2012a); Focused Survey for Special Status Plant Species (Forde Biological Consulting 2011a); Focused Survey for Least Bell's Vireo (Forde Biological Consulting 2011b); Focused Habitat Assessment for Los Angeles Pocket Mouse and San Bernardino Kangaroo Rat (Ecological Sciences Inc. 2011a); Focused Trapping for Los Angeles Pocket Mouse and San Bernardino Kangaroo Rat (Ecological Sciences Inc. 2011b); Determination of Biologically Equivalent or Superior Preservation (BonTerra Consulting 2011); Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP) Sections 6.1.2 (Protection of Species Associated with Riparian/Riverine Areas and Vernal***

ISSUES (AND SUPPORTING INFORMATION SOURCES):	Potentially Significant Impact	Less Than Significant Impact with Mitigation Incorporated	Less Than Significant Impact	No Impact

Pools), 6.1.3 (Protection of Narrow Endemic Plant Species), 6.3.2 (Additional Survey Needs and Procedures)

The project site is located within the Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP), which establishes criteria areas (i.e., reserves) to adequately conserve many species listed as Threatened or Endangered by the U.S. Fish and Wildlife Service (USFWS) and the California Department of Fish and Game (CDFG). The project site is not located in a designated Criteria Area for the MSHCP; therefore, the project site is not a potential MSHCP reserve area.

The survey area for the biological studies consists of the project impact area plus a 250-foot-wide buffer around the project site (in order to evaluate potential indirect effects). The following vegetation types and other areas occur in the survey area: (1) southern willow scrub/mule fat scrub occurs within the Santa Ana River floodplain; (2) open wash occurs within the Santa Ana River floodplain; (3) a disturbed area occurs along the outer bank of the Santa Ana River levee; and (4) a developed/ornamental area occurs within the residential development with its associated landscaping. The developed area includes the Santa Ana River Trail located at the top of the Santa Ana River levee and the riprap on the inner bank. All biological technical reports are included in Appendix B.

Special Status Plant Species

A focused survey was conducted by Dr. Edith Read for Forde Biological Consulting in April, May, and June 2011 (Forde Biological Consulting 2011a). The surveys focused on San Diego ambrosia (*Ambrosia pumila*) (federally Endangered, California Native Plant Society [CNPS] List 1B.1), Brand's star phacelia (*Phacelia stellaris*) (federal Candidate, CNPS List 1B.1), Parry's spineflower (*Chorizanthe parryi* var. *parryi*) (CNPS List 1B.1), and chaparral sand-verbena (*Abronia villosa* var. *aurita*) (CNPS List 1B.1). None of these species were observed during the surveys. Therefore, there would be ***no impact*** on these species and no mitigation would be required.

Riparian/Riverine Resources

The entire portion of the Santa Ana River floodplain that is located within the project survey area meets the definition of riparian/riverine, as defined by the MSHCP. The MSHCP recommends avoidance of riparian/riverine areas. Because avoidance is not feasible based on the nature of the project (i.e., placement of drainage structures into the Santa Ana River), per requirements in Section 6.1.2 of the MSHCP, a Determination of Biologically Equivalent or Superior Preservation (DBESP) was prepared, as described by Mitigation Measure (MM) Bio-1. The DBESP outlined a mitigation strategy to provide riparian/riverine resources of equivalent or superior habitat value to those being impacted. The DBESP was reviewed by the City of Riverside, Riverside County Flood Control and Water Conservation District, and the Riverside Conservation Authority (RCA), the latter which consists of federal and State resource agencies (i.e., USFWS and CDFG); their comments on the DBESP will be incorporated if comments are provided by these agencies. The DBESP included measures that must be implemented to reduce impacts on these species to a less than significant level. Implementation of MM BIO-1 would reduce impacts on riparian/riverine resources to a ***less than significant*** level.

Portions of the Santa Ana River provide potentially suitable habitat for the Santa Ana sucker (*Catostomus santaanae*) (federally Threatened, California Species of Special Concern), and this species is known to occur within the river in the project vicinity. This species is not expected to occur within the limits of the survey area due to the current lack of flowing water. However, if a future storm event changed the path of the active channel and open water were present in the survey area, this species may be indirectly impacted by potential effects on water quality during construction and operation of the project (e.g., sedimentation from construction runoff and petroleum or other chemical runoff during construction or operation). Because the project involves placing drainage structures into the Santa Ana River, the project cannot avoid impacts on riparian/riverine resources. Consistent with the requirements in Section 6.1.2 of the MSHCP, potential indirect impacts on the Santa Ana sucker were addressed in the DBESP. Implementation of MM BIO-1 would reduce this impact to a ***less than significant*** level.

Portions of the Santa Ana River provide potentially suitable habitat for the least Bell's vireo (*Vireo bellii pusillus*) (federally and State-listed Endangered). Focused surveys for the least Bell's vireo were conducted from April through July 2011 according to the USFWS protocol for this species by Andrew Forde and Elias Elias of Forde Biological Consulting (Forde Biological Consulting 2011b). Several least Bell's vireos were detected during the surveys. None of the least Bell's vireo nested within the project's permanent or temporary impact area; however, least Bell's vireos were detected adjacent to the temporary impact area (within 100 feet) on multiple survey visits (Forde Biological Consulting 2011b). The nearest territory was located approximately 400 feet northwest of the temporary impact area, and this pair of vireos successfully fledged young (Forde Biological Consulting 2011b). Four additional territories were located along the river in the project vicinity,

ISSUES (AND SUPPORTING INFORMATION SOURCES):	Potentially Significant Impact	Less Than Significant Impact with Mitigation Incorporated	Less Than Significant Impact	No Impact

located from 700 to 1,000 feet away from the temporary impact area (Forde Biological Consulting 2011b). Least Bell's vireo would be less likely to nest within the permanent or temporary impact area because the habitat consists of open wash and small stature willows and mule fat scrub; however, they could forage within the permanent or temporary impact areas (Forde Biological Consulting 2011b). Least Bell's vireo could also be indirectly impacted by noise during construction if the construction occurs during the breeding season (March 15 to September 15). Because the project involves placing drainage structures into the Santa Ana River, the project cannot avoid impacts on riparian/riverine resources. Per the requirements of the MSHCP, the DBESP included an analysis of impacts on the least Bell's vireo. Implementation of MM BIO-1 would reduce this impact to a ***less than significant*** level.

MSHCP Additional Survey Needs Species

Burrowing Owl: The burrowing owl (*Athene cunicularia*) is a California Species of Special Concern and burrow sites are protected. This species is considered an Additional Survey Needs species under the MSHCP. Section 6.3.2 of the MSHCP requires focused surveys for burrowing owl for sites within the designated Additional Survey Area. Although potentially suitable habitat is present in the survey area, no suitable burrows (e.g., California ground squirrel burrows) were observed during the Habitat Assessment (BonTerra Consulting 2011). Therefore, burrowing owl is not expected to occur in the survey area, and focused surveys are not required for this species. However, pursuant to MSHCP requirements, a pre-construction survey is required 30 days prior to construction to confirm the absence of this species. Implementation of MM BIO-2 would reduce this impact to a ***less than significant*** level.

Special Status Mammals: The Los Angeles pocket mouse (*Perognathus longimembris brevinasus*) is a California Species of Special Concern and the San Bernardino kangaroo rat (*Dipodomys merriami parvus*) is a federally listed Endangered species and a California Species of Special Concern. These species are also considered Additional Survey Needs species under the MSHCP. Section 6.3.2 of the MSHCP requires focused surveys for the Los Angeles pocket mouse and the San Bernardino kangaroo rat for sites within the designated Additional Survey Area. A portion of the project survey area falls within a designated Additional Survey Area for the Los Angeles pocket mouse and the San Bernardino kangaroo rat, and potentially suitable habitat is present within the survey area. A habitat assessment was conducted by Scott Cameron of Ecological Sciences Inc. in August 2011 (Ecological Sciences Inc. 2011a) and determined that the site included suitable habitat for both species and trapping would be required. A focused five-night trapping effort was conducted by Scott Cameron and Phil Brylski in September 2011 (Ecological Sciences Inc. 2011b). No San Bernardino kangaroo rat or kangaroo rat burrows were observed during the surveys. Therefore, there would be ***no impact*** on the San Bernardino kangaroo rat and no mitigation would be required. Los Angeles pocket mouse was captured on two nights of the trapping. The MSHCP recommends avoidance of 90 percent of those portions of the property that provide for long-term conservation value for the Los Angeles pocket mouse (i.e., southern willow scrub/mule fat scrub and open wash). If the 90 percent threshold is not met, then the DBESP would also include an analysis of impacts on and require measures to mitigate significant impacts to this species. Implementation of MM BIO-1 would reduce this impact to a ***less than significant*** level.

In response to the listing of the Stephens' kangaroo rat (*Dipodomys stephensi*), the Riverside County Habitat Conservation Agency (RCHCA) was formed. Its purpose is to acquire and manage habitat for the Stephens' kangaroo rat and other associated special status species. The RCHCA Stephens' Kangaroo Rat Habitat Conservation Plan (HCP) was developed to meet the requirements of the program's Federal Endangered Species Act Section 10(a) permit. The HCP for this species is managed by the RCHCA. The HCP establishes a Reserve System where activities within the core reserves are limited and/or restricted. Areas outside the Reserve System are within a designated Fee Area. The survey area is located within the HCP-designated Fee Area. For projects within a Fee Area, focused surveys for the Stephens' kangaroo rat are not required and all potential impacts are mitigated through the current fee program of the RCHCA. Projects that participate in the fee program through the RCHCA are not required to obtain any additional federal and/or State permits for the project pertaining to potential impacts on the Stephens' kangaroo rat. The current fee would be paid and is applicable to any undeveloped parcel regardless of the presence or absence of the Stephens' kangaroo rat. Implementation of MM BIO-3 would reduce this impact to a ***less than significant*** level.

Mitigation Measures

MM BIO-1 Prior to the initiation of any construction activities, the City of Riverside Zoning Administrator, in consultation with the Director of Riverside County Flood Control and Water Conservation District, shall ensure that the mitigation provided for U.S. Army Corps of Engineers (USACE), California Department of Fish and Game (CDFG), and Regional Water Quality Control Board (RWQCB) permitting is adequate

ISSUES (AND SUPPORTING INFORMATION SOURCES):	Potentially Significant Impact	Less Than Significant Impact with Mitigation Incorporated	Less Than Significant Impact	No Impact
to satisfy requirements of Section 6.1.2 of the Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP) (i.e., riparian/riverine). A Determination of Biologically Equivalent or Superior Preservation (DBESP) was prepared and included and required the implementation of measures to avoid and minimize impacts on the riparian/riverine resources, potential indirect impacts on the Santa Ana sucker, direct and indirect impacts on the least Bell's vireo, direct and indirect impacts on the Los Angeles pocket mouse, impacts on "Core" habitat along the Santa Ana River, and impacts on Public/Quasi-Public Lands. Mitigation strategies included in the DBESP included measures to protect water quality during construction and operation of the project, construction outside the least Bell's vireo nesting season (March 15 to September 15), exclusion of Los Angeles pocket mouse from the impact area (in combination with pre-construction trapping and relocation), and biological monitoring during vegetation removal and construction. The USFWS and CDFG further require that Los Angeles Pocket Mouse survey months be performed when Los Angeles pocket mouse are most active above ground [May through October] and if trapping must occur outside the optimal survey months [before May], a test trap line which intersects the entire site will be performed to check for Los Angeles pocket mouse activity. If no Los Angeles pocket mouse is captured, during the test survey, then relocating Los Angeles pocket mouse must wait until the Los Angeles pocket mouse is active above ground. Any Los Angeles pocket mouse captured during pre-construction surveys shall be relocated outside of the exclusion fencing during the night (e.g., around midnight) to provide several hours of darkness for Los Angeles pocket mouse to find cover from predators to increase survivability. In addition, mitigation for the loss of jurisdictional areas, Riparian/Riverine resources, and Public/Quasi-Public lands may include (1) payment of an in-lieu mitigation fee to the Santa Ana Watershed Authority; (2) preservation of existing riparian habitat (preferably within or adjacent to an area identified as a Criteria Area, Core, or Linkage by the MSHCP) and dedication to the Western Riverside County RCA; or (3) restoration of riparian habitat (preferably within or adjacent to an area identified as a Criteria Area, Core, or Linkage by the MSHCP) and dedication to the Western Riverside County RCA. In the DBESP response letter from the CDFG and USFWS, the agencies have determined that implementation of any one of these three mitigation options at a 1:1 ratio would be acceptable mitigation. In addition, invasive plant species removal within the temporary impact areas shall be monitored for five years. The details for temporary impact mitigation shall be approved by the USFWS and CDFG prior to construction. The mitigation ratio of mitigation credits/preservation/restoration shall be determined regulatory permitting. **MM BIO-2** The City of Riverside Zoning Administrator shall ensure that a pre-construction survey for burrowing owl shall be conducted 30 days prior to construction in accordance with Section 6.3.2 of the Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP). If burrowing owl is present in the impact area during the breeding season (March 1 to August 31), the burrow shall be protected until nesting activity has ended. If burrowing owl is present in the impact area during the non-breeding season (September 1 to February 28), the burrowing owl will be flushed from the burrow and the burrow will be closed using California Department of Fish and Game–approved burrow-closing procedures. **MM BIO-3** Prior to the initiation of any project-related construction activities, the City of Riverside Zoning Administrator shall ensure that the Project Applicant has paid the Stephens' kangaroo rat per–acre mitigation fee to the Riverside County Habitat Conservation Agency; no surveys or permitting shall be required.				
b. Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	☐	☒	☐	☐

4b. Response: ***(Source: Habitat Assessment (BonTerra Consulting 2012a); Jurisdictional Delineation (BonTerra Consulting 2012b); Determination of Biologically Equivalent or Superior Preservation (BonTerra Consulting 2011); Western Riverside MSHCP Section 6.1.2 (Protection of Species Associated with Riparian/Riverine Areas and Vernal Pools); Clean Water Act, Section 404; California Fish and Game Code, Section 1600.)***

As described in Checklist Response 4a above, the proposed project would impact riparian/riverine resources, which are

ISSUES (AND SUPPORTING INFORMATION SOURCES):	Potentially Significant Impact	Less Than Significant Impact with Mitigation Incorporated	Less Than Significant Impact	No Impact

protected by the MSHCP. As shown in Table 4, the project would impact 0.062 acre of open wash; it would not impact any riparian vegetation. As shown in Table 5, the project would impact 0.060 acre of non-wetland "Waters of the U.S." under the jurisdiction of the U.S. Army Corps of Engineers (USACE) and Regional Water Quality Control Board (RWQCB) and 0.118 acre of "Waters of the State" under the jurisdiction of CDFG would be impacted by the proposed project (refer to the Jurisdictional Delineation Report in Appendix B). In accordance with the Western Riverside MSHCP, a DBESP has been prepared to address impacts on riparian resources. The City of Riverside transmitted the DBESP to the USFWS, CDFG, and Western Riverside Regional Conservation Authority for a 60-day review period. The 60-day review began on January 12, 2012, and comments were received on March 12, 2012. In addition, regulatory authorizations would be required by the USACE, CDFG, and the RWQCB. Implementation of MMs BIO-1 and BIO-4 would reduce impacts to riparian habitats or other sensitive communities to a ***less than significant*** level.

TABLE 4
VEGETATION IMPACTS OF THE REVISED PROJECT

Vegetation Types and Other Areas	Existing (Acres)	Permanent Impact[a] (Acres)	Temporary Impact (Acres)	Total Impact (Acres)
Riparian/Riverine Areas				
Southern Willow Scrub/Mule Fat Scrub	1.641	0.000	0.000	0.000
Open Wash	1.616	0.007	0.055	0.062
Developed[1]	0.653	0.007	0.067	0.074
Total Riparian/Riverine	*3.910*	*0.014*	*0.122*	*0.136*
Upland Areas				
Disturbed	0.727	0.008	0.069	0.077
Developed/Ornamental	4.399	0.031	0.098	0.129
Total Upland Areas	*5.126*	*0.039*	*0.167*	*0.206*
Total	**9.036**	**0.053**	**0.289**	**0.342**

[1] This category denotes both the riprap bank and Santa Ana River Trail.

TABLE 5
PROJECT IMPACTS ON USACE JURISDICTIONAL "WATERS OF THE U.S." AND CDFG JURISDICTIONAL "WATERS OF THE STATE"

Jurisdiction	Existing (Acres)	Temporary Impact (Acres)	Permanent Impact[a] (Acres)	Total Impact (Acres)
Non-wetland "Waters of the U.S."	3.26	0.053	0.007	0.060
Non-wetland "Waters of the State"	3.71	0.106	0.012	0.118

[a] Permanent impacts involve the relocation of the rock groin (riprap) and the construction of a new outlet structure at the toe of the levee within the Santa Ana River.

Mitigation Measures

MM BIO-4 Prior to the initiation of any project-related construction activities, the City of Riverside Zoning Administrator, in consultation with the Director of Riverside County Flood Control and Water Conservation District, shall ensure that the City of Riverside has obtained all appropriate permits for impacts to project areas containing U.S. Army Corps of Engineers (USACE) and California Department of Fish and Game (CDFG) jurisdictional resources. Mitigation for the loss of jurisdictional areas, Riparian/Riverine resources, and Public/Quasi-Public lands may include (1) payment of an in-lieu mitigation fee to the Santa Ana Watershed Authority; or (2) preservation of existing riparian habitat (preferably within or adjacent to an area identified as a Criteria Area, Core, or Linkage by the MSHCP) and dedication to the Western Riverside County RCA; or (3) restoration of riparian habitat (preferably

ISSUES (AND SUPPORTING INFORMATION SOURCES):	Potentially Significant Impact	Less Than Significant Impact with Mitigation Incorporated	Less Than Significant Impact	No Impact
within or adjacent to an area identified as a Criteria Area, Core, or Linkage by the MSHCP) and dedication to the Western Riverside County RCA. If the Project Applicant chooses to mitigate Riparian/Riverine habitat through the purchase or restoration acreage shall be of equivalent or superior quality habitat at no less than a 1:1 ratio. The resource agencies will review the proposed acquisition during the permitting process to ensure that the lands to be acquired by the Project Applicant are of equivalent or superior quality to the resources impacted by the Proposed Project. The dedicated lands will be managed by the Western Riverside County RCA in a manner that is consistent with the goals of the MSHCP. Prior to the initiation of any construction-related activities, the Project Applicant shall pay the in-lieu mitigation fee to a mitigation bank/enhancement program or prepare and submit a detailed restoration program for USACE and CDFG approval for all disturbed areas within the Santa Ana River. If the Proposed Project would mitigate for impacts on Riparian/Riverine resources through restoration of riparian habitat, a detailed restoration program will be prepared for approval by the USACE and the CDFG prior to construction and will contain the following items: • ***Responsibilities and qualifications of the personnel to implement and supervise the plan.*** The responsibilities of the Landowner, Specialists, and Maintenance Personnel that would supervise and implement the plan shall be specified. • ***Site selection.*** The mitigation site shall be determined in coordination with the City of Riverside, the Riverside County Flood Control District, and the above-listed resource agencies. The site shall either be located on the project site in a dedicated open space area or land shall be purchased off the site. • ***Site preparation and planting implementation.*** Site preparation shall include: (1) protection of existing native species; (2) trash and weed removal; (3) native species salvage and reuse (i.e., duff); (4) soil treatments (i.e., imprinting, decompacting); (5) temporary irrigation installation; (6) erosion-control measures (i.e., rice or willow wattles); (7) seed mix application; and (8) container species planting. • ***Schedule.*** A schedule shall be developed which includes planting in late fall and early winter, between October 1 and January 30. • ***Maintenance plan/guidelines.*** The Maintenance Plan shall include: (1) weed control; (2) herbivory control; (3) trash removal; (4) irrigation system maintenance; (5) maintenance training; and (6) replacement planting. • ***Monitoring plan.*** The Monitoring Plan shall include: (1) qualitative monitoring (i.e., photographs and general observations); (2) quantitative monitoring (i.e., randomly placed transects); (3) performance criteria, as approved by the above-listed resource agencies; (4) monthly reports for the first year and reports every other month thereafter; and (5) annual reports for five years, which shall be submitted to the resource agencies on an annual basis. The site shall be monitored and maintained for five years to ensure successful establishment of riparian habitat within the restored and created areas. • ***Long-term preservation.*** Long-term preservation of the site shall also be outlined in the conceptual Mitigation Plan to ensure the mitigation site is not impacted by future development.				
c. Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	☐	☒	☐	☐
4c. Response: ***(Source: Habitat Assessment (BonTerra Consulting 2012a); Jurisdictional Delineation (BonTerra Consulting 2012b); Determination of Biologically Equivalent or Superior Preservation (BonTerra Consulting 2011[December]); Western Riverside MSHCP Section 6.1.2 (Protection of Species Associated with Riparian/Riverine Areas and Vernal Pools); Clean Water Act, Section 404; California Fish and Game Code, Section 1600)*** The survey area for the jurisdictional delineation includes the project impact area plus a 250-foot-wide buffer around the				

ISSUES (AND SUPPORTING INFORMATION SOURCES):	Potentially Significant Impact	Less Than Significant Impact with Mitigation Incorporated	Less Than Significant Impact	No Impact
project site (in order to evaluate potential indirect effects). As shown in Table 4 above, 0.060 acre of non-wetland "Waters of the U.S." (0.053 acre temporary, 0.007 acre permanent) under the jurisdiction of the USACE and RWQCB would be impacted by the proposed project and 0.118 acre of "Waters of the State" (0.106 acre temporary, 0.012 acre permanent) under the jurisdiction of CDFG would be impacted by the proposed project. Implementation of Mitigation Measure BIO-4 would reduce impacts to jurisdictional resources to a ***less than significant*** level.				
d. Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	☐	☐	☒	☐
4d. Response: ***(Source: Habitat Assessment (BonTerra Consulting 2012a); Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP) Section 3.2.3 (Description of Cores and Linkages within the MSHCP Conservation Area).***				
Although the project site is located within an urban setting, the Santa Ana River is a wildlife movement corridor. The MSHCP has designated the river as a "Core"[4] habitat that also functions as a "Linkage"[5] that connects Orange County to the west with San Bernardino County to the north. The river is constrained on all sides by existing development; therefore, wildlife is expected to be constrained to moving along the river. The proposed project is not expected to reduce the area available to wildlife for local or regional movement because its design would not impede wildlife movement. Construction activities may temporarily deter wildlife from moving through the project area; however, construction would occur during the day and most wildlife moves at night. Due to the small scale of the proposed project and the short duration of proposed construction activities, the disruption of wildlife movement is expected to be minimal. Therefore, impacts on wildlife movement would be considered ***less than significant*** and no mitigation is required.				
e. Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	☐	☐	☒	☐
4e. Response: ***(Source: Habitat Assessment (BonTerra Consulting 2012a); Migratory Bird Treaty Act; California Fish and Game Code Sections 3503, 3503.5, and 3513 (Protection of Nesting Raptors); Western Riverside MSHCP Section 7.5.3 (Construction Guidelines)***				
Palm trees (*Washingtonia* sp.) in the survey area have the potential to be used for nesting by raptors. California regulations prohibit activities that "take, possess or destroy" any raptor nest or egg (*California Fish and Game Code* §§3503, 3503.5, and 3513). No trees would be directly impacted by the proposed project; however, construction activities, including noise, may disturb nesting raptors if present immediately adjacent to the project impact area. Therefore, if construction is initiated during the raptor nesting season (February 1 to June 30), project impacts on nesting raptors would be considered potentially significant. Implementation of MM BIO-5 would reduce this impact to ***less than significant*** level. The project area has the potential to support nesting birds subject to the Migratory Bird Treaty Act (MBTA). The MBTA prohibits activities that would impact an active nest. Therefore, if construction is initiated during the peak nesting season (March 1 to June 30), project impacts on nesting birds would be considered potentially significant. Implementation of MM BIO-6 would reduce this impact to ***less than significant*** level. ***Mitigation Measures*** **MM BIO-5** The City of Riverside Zoning Administrator shall ensure that a survey for active raptor nests shall be conducted prior to commencement of any construction activities (within seven days) during the raptor nesting season (February 1 to June 30). Restrictions may be placed on construction activities in the vicinity of any active nest until the nest is no longer active, as determined by a qualified Biologist;				

[4] A "Core" is a block of habitat of appropriate size, configuration, and vegetation characteristics to generally support the life history requirements of one or more Covered Species.

[5] A "Linkage" is a connection between Core areas that generally provides for gene flow (and thus functions as a movement corridor) and live-in habitat for one or more species.

ISSUES (AND SUPPORTING INFORMATION SOURCES):	Potentially Significant Impact	Less Than Significant Impact with Mitigation Incorporated	Less Than Significant Impact	No Impact
typically, a 300- to 500-foot-wide buffer zone is designated around. Once the nest is no longer active, construction can proceed within the buffer zone. **MM BIO-6** The City of Riverside Zoning Administrator shall ensure that project construction activities avoid impacts on other bird species and that vegetation-clearing activities in the survey area shall occur outside the peak nesting season (March 1 to June 30) in accordance with the Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP) Construction Guidelines. If vegetation clearing occurs between March 1 and June 30, a qualified Biologist shall conduct a pre-construction survey (or possibly multiple surveys) prior to construction (within three days) to identify any active nesting locations. Restrictions may be placed on construction activities in the vicinity of any active nest observed until the nest is no longer active as determined by a qualified Biologist.				
f. Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	☐	☒	☐	☐

4f. Response: ***(Source: Habitat Assessment (BonTerra Consulting 2012a); Focused Survey for Least Bell's Vireo (Forde Biological Consulting 2011b); Focused Trapping for Los Angeles Pocket Mouse and San Bernardino Kangaroo Rat (Ecological Sciences Inc. 2011b); Determination of Biologically Equivalent or Superior Preservation (BonTerra Consulting 2011[December]); Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP) Sections 3.2.3 (Description of Cores and Linkages within the MSHCP Conservation Area), 6.1.2 (Protection of Species Associated with Riparian/Riverine Areas and Vernal Pools), 6.3.2 (Additional Survey Needs and Procedures), 6.1.4 (Guidelines Pertaining to Urban/Wildlands Interface), 7.2.4 (Future Facilities Within Public/Quasi-Public Lands), 7.5.3 (Construction Guidelines)***

The proposed project would impact approximately 0.062 acre of Riparian/Riverine resources (open wash), as described in the MSHCP. Impacts on Riparian/Riverine resources would be considered significant. A DBESP was prepared and reviewed by the RCA and the resource agencies. Implementation of MM BIO-1 would reduce this impact to a ***less than significant*** level.

Public/Quasi-Public lands are lands within public or private ownership that are expected to be managed for open space value and/or in a manner that contributes to the conservation of Covered Species. The proposed project would permanently impact 0.04 acre and would temporarily impact 0.28 acre of Public/Quasi-Public lands in the Santa Ana River Channel under the jurisdiction of the Riverside County Flood Control and Water Conservation District. This impact would be considered a potentially significant impact on the assembly of the MSHCP Reserve, and may require purchase and dedication of an equivalent amount of land into the MSHCP Reserve pursuant to Section 7.2.4 of the MSHCP. The DBESP would include an analysis of impacts on Public/Quasi-Public Lands. Implementation of MM BIO-1 would reduce this impact to a ***less than significant*** level.

The survey area is not located within an MSHCP Criteria Area, but is partially located within the MSHCP Existing Core A (i.e., the Santa Ana River). The City should follow the Urban/Wildlands Interface Guidelines in Section 6.1.4 of the MSHCP to minimize urban/wildlands interface issues. These include measures related to indirect impacts such as water quality (drainage), use of toxics, night lighting, indirect noise, invasive plant and wildlife species, protection of habitat areas (barriers), and land development adjacent to habitat areas. Implementation of MM BIO-7 would reduce this impact to a ***less than significant*** level.

Mitigation Measures

MM BIO-7 The City of Riverside Zoning Administrator shall ensure that the following Construction Guidelines (Section 7.5.3 of the Western Riverside County Multiple Species Habitat Conservation Plan [MSHCP]) are implemented during project construction, as appropriate, to minimize impacts on biological resources during construction:

- Plans for water pollution and erosion control shall be prepared for all Discretionary Projects involving the movement of earth in excess of 50 cubic yards. The plans shall describe sediment and hazardous materials control, dewatering or diversion structures, fueling and equipment management practices, and use of plant material for erosion control. Plans shall be reviewed and approved by the

ISSUES (AND SUPPORTING INFORMATION SOURCES):	Potentially Significant Impact	Less Than Significant Impact with Mitigation Incorporated	Less Than Significant Impact	No Impact

City and participating jurisdiction prior to construction.

- Timing of construction activities shall consider seasonal requirements for breeding birds and migratory non-resident species. Habitat clearing shall be avoided during species active breeding season defined as March 1 to June 30.
- Sediment- and erosion-control measures shall be implemented until such time soils are determined to be successfully stabilized.
- Silt fencing or other sediment trapping materials shall be installed at the downstream end of construction activities to minimize the transport of sediments off site.
- Settling ponds where sediment is collected shall be cleaned in a manner that prevents sediment from re-entering the stream or damaging/disturbing adjacent areas. Sediment from settling ponds shall be removed to a location where sediment cannot re-enter the stream or surrounding drainage area. Care shall be exercised during removal of silt fencing to minimize release of debris or sediment into streams.
- No erodible materials shall be deposited into water courses. Brush, loose soils, or other debris material shall not be stockpiled within stream channels or on adjacent banks.
- The footprint of disturbance shall be minimized to the maximum extent feasible. Access to sites shall occur on pre-existing access routes to the greatest extent possible.
- Equipment storage, fueling, and staging areas shall be sited on non-sensitive upland habitat types with minimal risk of direct discharge into riparian areas or other sensitive habitat types.
- The limits of disturbance, including the upstream, downstream and lateral extents, shall be clearly defined and marked in the field. Monitoring personnel shall review the limits of disturbance prior to initiation of construction activities.
- During construction, the placement of equipment within the stream or on adjacent banks or adjacent upland habitats occupied by Covered Species that are outside of the project footprint shall be avoided.
- Exotic species removed during construction shall be properly handled to prevent sprouting or regrowth.
- Training of construction personnel shall be provided.
- Ongoing monitoring and reporting shall occur for the duration of the construction activity to ensure implementation of best management practices.
- When work is conducted during the fire season (as identified by the Riverside County Fire Department) adjacent to coastal sage scrub or chaparral vegetation, appropriate fire-fighting equipment (e.g., extinguishers, shovels, water tankers) shall be available on the site during all phases of project construction to help minimize the chance of human-caused wildfires. Shields, protective mats, and/or other fire preventative methods shall be used during grinding, welding, and other spark-inducing activities. Personnel trained in fire hazards, preventative actions, and responses to fires shall advise contractors regarding fire risk from all construction-related activities.
- Active construction areas shall be watered regularly to control dust and to minimize impacts to adjacent vegetation.
- All equipment maintenance, staging, and dispensing of fuel, oil, coolant, or any other toxic substances shall occur only in designated areas within the proposed construction limits of the project site. These designated areas shall be clearly marked and located in such a manner as to contain run-off.
- Waste, dirt, rubble, or trash shall not be deposited in the Conservation Area or on native habitat.

ISSUES (AND SUPPORTING INFORMATION SOURCES):	Potentially Significant Impact	Less Than Significant Impact with Mitigation Incorporated	Less Than Significant Impact	No Impact
5. CULTURAL RESOURCES. Would the project:				
a. Cause a substantial adverse change in the significance of a historical resource as defined in § 15064.5?	☐	☐	☐	☒

5a. Response: ***(Source:)***

The project site is located within the La Rivera residential development and would be constructed within the right-of-way of an existing multi-purpose trail and would extend underneath Santa Ana River Trail located at the top of the Santa Ana River levee, then into the Santa Ana River. None of these land uses are considered a historical resource. No known historical resources would be impacted by the proposed project. The single-family homes in the vicinity of the project site are less than 50 years of age. Therefore, the proposed project would not result in a substantial adverse change to a historical resource; ***no impact*** would occur and mitigation is not required.

b. Cause a substantial adverse change in the significance of an archeological resource pursuant to § 15064.5?	☐	☒	☐	☐

5b. Response: ***(Source: EIC 2011)***

A cultural resources record search for the project area, including a one-mile radius buffer, was conducted by staff at the Eastern Information Center (EIC) at the University of California, Riverside (see Appendix C). The EIC is the designated repository of the California Historical Resources Information System (CHRIS) for records concerning archaeological and historical resources and associated studies in Riverside County.

The records search revealed that 43 cultural resources have been recorded within 1 mile of the project area; however, no resources have been recorded within the boundaries of the project site. The literature review also identified 30 cultural resources studies undertaken within 1 mile of the project site; only 2 of the reports (Report Nos. RI-02307 and RI-05748 as shown in Appendix C) included at least a portion of the project site, but no resources were recorded. A cultural resources field survey of the project site was conducted on March 1, 2011, as a part of the preparation of this Initial Study. The ground surface was visually examined for evidence of prehistoric (Native American) or historic (non-Native American) archaeological resources by walking the site. The project site and vicinity have been disturbed by numerous past activities, and no cultural resources or human remains were observed during the site visit. The previous construction of the levee along the Santa Ana River likely destroyed or at least covered any resources that may have existed along the waterway. The construction of the La Rivera residential neighborhood east of the river also likely destroyed any resources or sites that may have existed.

The proposed project would not impact any known archaeological resources, and much of the surface (to an unknown depth) of the project site has been graded for the construction of the residential community to the north, south, and east and the Santa Ana River levee to the west. However, given the fact that prehistoric populations are known to have lived along the river, it is likely that they made use of the area. Therefore, excavation for the project could impact unknown archaeological resources related to the prehistoric and historic use of the project area. Implementation of MM CUL-1 would reduce potential impacts to a level considered **less than significant**.

Mitigation Measures

MM CUL-1 Should archaeological or historical resources be found during ground-disturbing activities for the project, all construction activities shall cease in the immediate area of the discovery and further disturbance must be prevented by the City of Riverside, in consultation with a qualified Project Archaeologist. The Project Archaeologist shall be approved in writing by the City of Riverside Zoning Administrator, in consultation with the Director of Riverside County Flood Control and Water Conservation District.

The City's Historic Preservation Specialist shall be informed of the discovery immediately. A Project Archaeologist shall be retained to first determine whether an archaeological resource uncovered during construction is a "unique archaeological resource" pursuant to Section 21083.2(g) of the *California Public Resources Code* (PRC) or a "historical resource" pursuant to Section 15064.5(a) of the CEQA Guidelines (*California Code of Regulations* [CCR], Title 14). If the archaeological resource is determined to be a "unique archaeological resource" or a "historical resource", the Archaeologist shall recommend disposition of the site and shall formulate, in consultation with the City, a mitigation plan that satisfies the requirements of Section 21083.2 of the PRC and Section 15064.5 of the CEQA Guidelines. The applicant

ISSUES (AND SUPPORTING INFORMATION SOURCES):	Potentially Significant Impact	Less Than Significant Impact with Mitigation Incorporated	Less Than Significant Impact	No Impact
shall pay all costs associated with the discovery, evaluation, and ultimate disposition of the find. If the Archaeologist determines that the archaeological resource is not a "unique archaeological resource" or "historical resource", s/he shall record the site and submit the recordation form to the CHRIS at the EIC at the University of California, Riverside. The Archaeologist shall prepare a report of the results of any study prepared as part of a testing or mitigation plan, following accepted professional practice. The report shall follow guidelines of the California Office of Historic Preservation. Copies of the report shall be submitted to the City of Riverside and to the CHRIS at the EIC.				
c. Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	☐	☒	☐	☐

5c. Response: ***(Source: LACM 2011)***

A paleontological resources records search was conducted for the project site at the Natural History Museum of Los Angeles County (LACM); results indicate that no known fossil localities have been previously recorded within the study area boundaries, but fossil localities have been found nearby in Older Alluvial sedimentary deposits that are similar to those that may occur in the study area (LACM 2011). Because excavation for the storm drain improvements is expected to extend only four to five feet below the present surface, it is extremely unlikely that paleontological resources would be encountered or impacted. However, in the event that construction activities uncover unknown paleontological resources, implementation of MM CUL-2 would reduce potential impacts to a level considered ***less than significant***.

Mitigation Measures

MM CUL-2 Should paleontological resources be found during ground-disturbing activities for the project, all ground-disturbing activities in the vicinity of the discovery shall be halted or diverted until a qualified Paleontologist (approved in writing by the City of Riverside Zoning Administrator in consultation with the Director of Riverside County Flood Control and Water Conservation District) inspects the find and evaluates it for significance. Further disturbance to the discovery must be prevented by the City in consultation with the Paleontologist. The City's Historic Preservation Specialist shall be informed of the discovery immediately.

If determined significant, the paleontologist shall have the authority to quickly and efficiently salvage and remove the fossil from its locality, as appropriate, before ground-disturbing activities resume in the area.

Any paleontological work at the site shall be conducted under the direction of a qualified Paleontologist. If a fossil discovery occurs during excavation operations when a Paleontological Monitor is not present, excavation shall be diverted around the area until the Monitor can survey the area. Any fossils recovered during the development, along with their contextual stratigraphic data, shall be offered to the County of Riverside, City of Riverside, or other appropriate institution with an educational and research interest in the materials. The Paleontologist shall prepare a report of the results of any findings as part of a testing or mitigation plan following accepted professional practice.

d. Disturb any human remains, including those interred outside of formal cemeteries?	☐	☒	☐	☐

5d. Response: ***(Source:)***

There is no indication that human remains are present within the boundaries of the project site. Native American tribes were given an opportunity to reveal the existence of any remains; background research failed to find any potential for remains; and the project site was physically inspected. The limited nature of the planned ground disturbance makes it extremely unlikely that resources would be unearthed during project construction. However, in the event that excavation activities inadvertently discover unknown archaeological resources or buried human remains, implementation of SC CUL-1 and MM CUL-1 would reduce potential impacts to a level considered ***less than significant***.

<u>Mitigation Program</u>

ISSUES (AND SUPPORTING INFORMATION SOURCES):	Potentially Significant Impact	Less Than Significant Impact with Mitigation Incorporated	Less Than Significant Impact	No Impact
Standard Conditions and Requirements				
SC CUL-1 In accordance with Section 7050.5 of the *California Health and Safety Code*, if human remains are found, the Riverside County Coroner shall be notified within 24 hours of the discovery. No further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent remains shall occur until the County Coroner has determined, within two working days of notification of the discovery, the appropriate treatment and disposition of the human remains. If the County Coroner determines that the remains are or are believed to be Native American, s/he shall notify the NAHC in Sacramento within 48 hours. In accordance with *California Public Resources Code*, Section 5097.98, the NAHC must immediately notify those persons it believes to be the most likely descended from the deceased Native American. The descendents shall complete their inspection within 48 hours of being granted access to the site. The designated Native American representative would then determine, in consultation with the property owner, the disposition of the human remains.				
6. GEOLOGY AND SOILS. Would the project:				
a. Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:				
i. Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.	☐	☐	☒	☐

6a(i). Response: ***(Source: Riverside General Plan 2025, County of Riverside General Plan Jurupa Area Plan)***

The project site, as with the entire Southern California region, is subject to secondary effects from earthquakes. According to the California Geologic Survey – Alquist-Priolo Earthquake Fault Zoning Map (2010), the project site and immediate vicinity are not located in an area identified as an Alquist-Priolo Earthquake Fault Zone. According to the *City of Riverside General Plan's* Public Safety Element, known faults in the area include the San Andreas Fault, Elsinore Fault, and the San Jacinto Fault (City of Riverside 2007). The Jurupa Area Plan indicates that there are no known seismic faults within the Jurupa Planning Area (Riverside County 2003).

Although the project area would potentially be subject to seismic ground shaking due to earthquakes, the project does not propose construction of any structures including habitable structures. The construction of the project would be in compliance with current City standards and engineering practices and would not result in a substantial increase in the risk of damage or injury from seismic ground shaking. Therefore, any impacts related to strong seismic ground shaking would be less than significant and no mitigation is required.

Subsidence is defined as settlement of under-consolidated soils and occurs during earthquake shaking. According to the *County of Riverside General Plan's* Safety Element (Figure S-7, Documented Subsidence Areas), the project site and vicinity are located in an area susceptible to subsidence (Riverside County 2008). As discussed in Checklist Response 6.a(iv) below, the project site is not located in an area subject to on- or off-site landslides. Liquefaction potential is discussed in Checklist Response 6.a(iii) below. Lateral spreading is a function of ground shaking and may occur during an earthquake. Seismic ground shaking impacts, including subsidence and lateral spreading are considered ***less than significant*** because standard engineering practices would be used. No mitigation is required.

ii. Strong seismic ground shaking?	☐	☐	☒	☐

6a(ii). Response: ***(Source: Riverside General Plan 2025, County General Plan Jurupa Area Plan)***

Please refer to Checklist Response 6i above.

iii. Seismic-related ground failure, including liquefaction?	☐	☐	☒	☐

6a(iii). Response: ***(Source: Riverside General Plan 2025, County of Riverside General Plan Jurupa Area Plan, Lea 2011)***

ISSUES (AND SUPPORTING INFORMATION SOURCES):	Potentially Significant Impact	Less Than Significant Impact with Mitigation Incorporated	Less Than Significant Impact	No Impact
Liquefaction occurs when strong ground shaking (e.g., during an earthquake) causes water-saturated soils to become fluid and lose strength. As illustrated in Figure 10, Jurupa Area Plan Seismic Hazards, in the Jurupa Area Plan, the project site is located in an area with a very high potential for liquefaction, indicative of potentially shallow groundwater (Riverside County 2003). Most of the proposed project elements (with the exception of the rock groin) would be placed below ground and would not likely be affected by liquefaction-related events resulting from a seismic event. Also, no dewatering activities would be necessary as part of project construction (Lea 2011). The construction of the proposed project would be in compliance with current City standards and engineering practices and subject to approval by the City of Riverside's Public Works Department prior to final project design. Although the project area would potentially be subject to liquefaction-related effects resulting from a seismic event, the project does not propose construction of habitable structures of any kind. Therefore, potential liquefaction impacts would be considered ***less than significant*** and no mitigation is required.				
iv. Landslides?	☐	☐	☐	☒
6iv. Response: ***(Source: County of Riverside General Plan Jurupa Area Plan)*** The topography of the project site is relatively flat and no landslides have occurred or have been documented on or near the site. Figure 11, Jurupa Area Plan Steep Slope, in the Jurupa Area Plan illustrates that the project site is located in an area with less than a 15 percent slope angle and would therefore not be subject to seismically induced landslides (Riverside County 2003). The potential for landslides on the project site is considered low. ***No impacts*** would occur and no mitigation is required.				
b. Result in substantial soil erosion or the loss of topsoil?	☐	☐	☒	☐
6b. Response: ***(Source:)*** The proposed project would not result in a permanent change to pervious or impervious surfaces within the project area. However, it would improve existing drainage conditions within the La Rivera residential development (Tracts 30922-3 and 30922-4) with the construction of the storm drain beginning at the southern terminus of Salmon River Road to divert flows generally northeast to the Santa Ana River. During construction activities, temporary exposure of soils and soil erosion may occur. In addition, soil erosion due to rainfall and wind may occur if soil is left unprotected during construction. Potential erosion during construction of the proposed project would be managed through the preparation of a Storm Water Pollution Prevention Plan (SWPPP) as discussed below in Section 8, Hydrology and Water Quality.				
c. Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	☐	☐	☒	☐
6c. Response: ***(Source:)*** Please refer to Checklist Response 6a(i) above.				
d. Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?	☐	☐	☒	☐
6d. Response: ***(Source:)*** Please refer to Checklist Response 6a(i) above.				
e. Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?	☐	☐	☐	☒
6e. Response: ***(Source:)*** The project does not require septic tanks or alternative wastewater systems. ***No impacts*** would occur and no mitigation is required.				

ISSUES (AND SUPPORTING INFORMATION SOURCES):	Potentially Significant Impact	Less Than Significant Impact with Mitigation Incorporated	Less Than Significant Impact	No Impact
7. GREENHOUSE GAS EMISSIONS. Would the project:				
a. Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	☐	☐	☒	☐

7a. Response: ***(Source)***

Construction activities are anticipated to begin in Summer 2012 and would occur over approximately 70 working days. The principal source of greenhouse gas (GHG) emissions would be the internal combustion engines of construction equipment, on-road construction vehicles, and workers' commuting vehicles. Carbon dioxide (CO_2) emissions were calculated using the URBEMIS model described under Section 3, Air Quality. GHG emissions from proposed construction activities are estimated at 50 metric tons of carbon dioxide equivalent ($MTCO_2e$.) There would be no operational emissions with the project. GHG calculation worksheets are provided in Appendix A.

There are no established quantitative federal, State, regional, or local CEQA significance criteria for GHG emissions, except for industrial projects where the SCAQMD is the lead agency. The threshold for those projects is 10,000 $MTCO_2e$ per year. For residential and commercial projects, suggested thresholds from various air quality agencies have ranged from 900 to 10,000 $MTCO_2e$ per year. Estimated GHG emissions for the proposed project would be substantially less than suggested and adopted thresholds. The impact would *be* ***less than significant*** and no mitigation is required.

b. Conflict with any applicable plan, policy or regulation of an agency adopted for the purpose of reducing the emissions of greenhouse gases?	☐	☐	☐	☒

7b. Response: ***(Source:)***

The principal State plan and policy related to GHG emissions is Assembly Bill (AB) 32, the California Global Warming Solutions Act of 2006. AB 32 establishes a State goal of reducing GHG emissions to 1990 levels by the year 2020. The plans, policies, and regulations adopted to support the AB 32 goals primarily address (1) reducing transportation GHGs with standards such as vehicle fuel efficiency standards and low carbon fuels and (2) reducing GHGs from energy generation and consumption with actions including renewable energy generation and energy efficient buildings. The majority of the plans, policies, and regulations address operational features or projects and are not applicable to the proposed project. There are no applicable regional, City, or County plans, policies, or regulations adopted for the purposes of reducing GHG emissions.

Construction activities associated with the proposed project would consume fuel and generate GHGs, as described in response to Checklist Response 3a. Estimated GHG emissions for the proposed project would be substantially lower than the suggested and adopted thresholds. There are no project elements that would conflict with applicable plans or policies adopted for the purpose of GHG emissions reductions.

The proposed project would not conflict with any applicable plan, policy, or regulation adopted for the purpose of reducing GHG emissions. ***No impact*** would occur and no mitigation is required.

8. HAZARDS & HAZARDOUS MATERIALS. Would the project:				
a. Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	☐	☐	☐	☒

8a. Response: ***(Source:)***

The proposed project involves storm drain system improvements and does not have the potential to create a significant hazard to the public and environment through the routine transport, use or disposal of hazardous materials. Any hazardous materials used during construction activities (e.g., gasoline, oil, or other fluids) would be transported, used, and disposed of according to State and local requirements. Operation of the proposed project would not involve the routine use, transport, or disposal of hazardous materials. ***No impact*** would occur and no mitigation is required.

ISSUES (AND SUPPORTING INFORMATION SOURCES):	Potentially Significant Impact	Less Than Significant Impact with Mitigation Incorporated	Less Than Significant Impact	No Impact
b. Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	☐	☐	☒	☐
8b. Response: ***(Source:)*** Due to the nature of the construction activities, there would be a limited number of vehicles and equipment present on site during construction. However, there is a limited risk of accidental release of hazardous materials such as gasoline, oil, or other fluids during the operation and maintenance of construction equipment. Compliance with State and local construction requirements would reduce the risk of any damage or injury from these potential hazards to a ***less than significant*** level. Operation of the proposed project would not create significant hazards to the public because operational uses would primarily be related to periodic maintenance activities on an as needed basis. No mitigation is required.				
c. Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	☐	☐	☐	☒
8c. Response: ***(Source: Riverside General Plan 2025)*** There are no public schools located within a one-quarter mile radius of the project site (City of Riverside 2008). The proposed storm drain improvement project does not include the development of any uses that would involve the use, storage, or transport of hazardous materials and would not, therefore, result in hazardous emissions or require the handling of hazardous or acutely hazardous materials. ***No impact*** would occur and no mitigation is required.				
d. Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	☐	☐	☐	☒
8d. Response: ***(Source: CalEPA Cortese List Data Resources, SWRCB GeoTracker)*** Section 65962.5 of the *California Government Code* requires the California Department of Toxic Substances Control (DTSC) to compile and update a list of hazardous materials sites (Cortese Hazardous Waste and Substance Sites List [Cortese]). Based on a review of DTSC Cortese lists, there are no DTSC site clean-up activities being initiated at the project site or in the immediate vicinity of the project site (CalEPA 2011). A review of the State Water Resources Control Board's (SWRCB) environmental database—GeoTracker, which manages sites that impact groundwater—did not identify any violations at the project site or in the immediate vicinity (SWRCB 2011). The proposed project is not expected to uncover any hazardous materials as defined by Section 65962.5 of the California Government Code and would not create a significant hazard to the public. ***No impact*** would occur and no mitigation is required.				
e. For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?	☐	☐	☐	☒
8e. Response: ***(Source: Riverside General Plan 2025)*** The project site is not located within two miles of a public or private airport or airstrip (Riverside 2008). The project would not involve the construction of structures of any height that would have the potential to interfere with the operation of an airport or that would expose people residing or working in the area to significant safety hazards associated with an airport. ***No impact*** would occur and no mitigation is required.				
f. For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?	☐	☐	☐	☒
8f. Response: ***(Source: Riverside General Plan 2025)*** Refer to Checklist Response 8e above.				

ISSUES (AND SUPPORTING INFORMATION SOURCES):	Potentially Significant Impact	Less Than Significant Impact with Mitigation Incorporated	Less Than Significant Impact	No Impact
g. Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	☐	☐	☐	☒

8g. Response: ***(Source:)***

The proposed project involves construction activities that would last approximately 70 working days. As described below in Checklist Response 16, Transportation and Traffic, the proposed project would not result in a significant impact to existing roadways during construction activities; therefore, it would neither interfere with nor impact the implementation of the City's existing emergency response or evacuation plans. **No impact** would occur and no mitigation is required.

h. Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?	☐	☐	☐	☒

8h. Response: ***(Source: Riverside General Plan 2025, County of Riverside General Plan Jurupa Area Plan)***

The proposed project is a storm drain improvement project and does not have the capacity to expose people or structures to wildland fires. According to the City of Riverside's Public Safety Element and the Jurupa Area Plan, the project site is not located in a fire hazard area (City of Riverside 2007; Riverside County 2003). No impact would occur and no mitigation is required.

9. HYDROLOGY AND WATER QUALITY.

Would the project:

a. Violate any water quality standards or waste discharge requirements?	☐	☐	☒	☐

9a. Response: ***(Source:)***

<u>Short-Term Construction-Related Water Quality Impacts</u>

The proposed project would not involve any waste discharges; however, the proposed project could result in short-term impacts to surface water quality from construction activities. Construction activities would result in the disturbance of soils at the project site, and could result in increased erosion. Storm water runoff from the project site during construction could contain soils and sediments from these activities. Spills or leaks from heavy equipment and machinery or construction staging areas could also enter runoff, which typically includes petroleum products such as fuel, oil and grease, and heavy metals. Compliance with the National Pollutant Discharge Elimination System (NPDES) Construction Storm Water Program and the preparation and implementation of a Storm Water Pollution Prevention Plan (SWPPP) would ensure that any impacts to downstream waters resulting from construction activities associated with the proposed project would be less than significant. Erosion-control and treatment Best Management Practices (BMPs) would be implemented in accordance with NPDES requirements. Compliance with applicable local, State, and federal regulations would reduce water quality impacts associated with construction to a ***less than significant*** level (SC WQ-1).

<u>Long-Term Water Quality Impacts</u>

Currently, runoff from the La Rivera residential development (Tracts 30922-3 and 30922-4) is collected by an existing inlet grate and conveyed to a 42-inch reinforced concrete pipe (RCP) that is located just south of Salmon River Road in Enrico Way and Julia Way. The proposed project consists of the construction of an inlet grate in Salmon River Road to collect runoff that would be conveyed to a proposed 2-foot-high by 5.5-foot-wide box culvert, then conveyed to a 54-inch storm drain that would outlet into the Santa Ana River. Typical urban pollutants such as soils, sediments, and trash/debris that enter the existing storm drain from adjacent areas could enter the proposed storm drain system. As part of the project, erosion-control measures would be implemented to control debris entering the storm drain after construction is completed. With implementation of erosion-control measures, long-term water quality impacts would be ***less than significant***.

Compliance with local, State, and federal water quality regulations and implementation of erosion-control measures would result in ***less than significant*** construction-related and long-term water quality impacts.

ISSUES (AND SUPPORTING INFORMATION SOURCES):	Potentially Significant Impact	Less Than Significant Impact with Mitigation Incorporated	Less Than Significant Impact	No Impact
<u>Mitigation Program</u> ***Standard Conditions and Requirements*** **SC WQ-1** Prior to the approval of the project plans, the City of Riverside's Zoning Administrator, in consultation with the Director of Riverside County Flood Control and Water Conservation District, shall confirm that the project plans demonstrate compliance under California's General Permit for Stormwater Discharges Associated with Construction Activity (Construction Activities General NPDES Permit) by providing a copy of the Notice of Intent submitted to the State Water Resources Control Board and a copy of the subsequent notification of the issuance of a Waste Discharge Identification Number (or other proof of filing) in a manner meeting the satisfaction of the City Zoning Administrator, in consultation with the Director of Riverside County Flood Control and Water Conservation District. Projects subject to this requirement shall prepare and implement a Storm Water Pollution Prevention Plan (SWPPP). A copy of the SWPPP shall be kept at the project site and be available for City and County review on request. Pursuant to the permit requirements, the City Zoning Administrator, in consultation with the Director of Riverside County Flood Control and Water Conservation District, shall ensure that all BMPs applicable to the project, as described in the NPDES permit, shall be followed during construction and any maintenance activities. These BMPs are expected to include Mitigation Measure BIO-10 (Construction Minimization Measures listed in Section 7.5.3 of the Western Riverside MSHCP).				
b. Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?	☐	☐	☐	☒
9b. Response: ***(Source:)*** As stated in Checklist Response 6.a(iii) above, no dewatering would be necessary as part of project construction. The proposed project would not deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level. Therefore, ***no impact*** would result and no mitigation is required.				
c. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?	☐	☐	☒	☐
9c. Response: ***(Source:)*** The purpose of the proposed project is to relieve potential flooding within the La Rivera residential development (Tracts 30922-3 and 30922-4) and adjacent areas during seasonal rain storms with construction of the proposed storm drain system. The storm drain would be installed underneath the Santa Ana River levee and would outlet into the Santa Ana River. There are no other watercourses in the area. Flows are currently collected in the existing inlet grate and conveyed to a 42-inch RCP located just south of Salmon River Road in Enrico Way and Julia Way, and would be diverted to the proposed 54-inch storm drain. Similar to existing conditions, storm flows would be diverted to the public storm drain system. Implementation of the storm drain improvement project would not alter the course of a stream or river, resulting in substantial erosion or siltation on site or off site, nor would it alter the topography of the area. As previously indicated in Checklist Response 8.a above, the proposed project would result in long-term and short-term, temporary construction-related erosion and sedimentation; however, compliance with standard BMPs and NPDES requirements would reduce potential effects to less than significant (refer to SC WQ-1). The project is proposed to relieve potential flooding at the southern terminus of Salmon River Road within the La Rivera residential development and adjacent areas (at the existing 42-inch RCP) and would not result in flooding on site or off site. The proposed project would not increase runoff beyond the current condition. ***No impact*** would occur and no mitigation is required.				

ISSUES (AND SUPPORTING INFORMATION SOURCES):	Potentially Significant Impact	Less Than Significant Impact with Mitigation Incorporated	Less Than Significant Impact	No Impact
d. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?	☐	☐	☒	☐
9d. Response: ***(Source :)*** Refer to Checklist Response 9c above.				
e. Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?	☐	☐	☒	☐
9e. Response: ***(Source:)*** As noted above, the purpose of the proposed project is to relieve potential flooding within the La Rivera residential development (Tracts 30922-3 and 30922-4) and adjacent areas during seasonal rain storms with construction of the proposed storm drain system. Additionally, implementation of BMPs associated with the NPDES Construction General Permit would ensure that pollutants related to construction activities would not significantly impact storm water flows (refer to SC WQ-1). Implementation of the proposed project would reduce the potential for erosion and would reduce excess amounts of sediment to enter storm water. Therefore, impacts related to storm water flow would be ***less than significant***, and no mitigation is required.				
f. Otherwise substantially degrade water quality?	☐	☐	☒	☐
9f. Response: ***(Source:)*** Please refer to Checklist Response 9a above.				
g. Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?	☐	☐	☐	☒
9g. Response: ***(Source: County of Riverside General Plan)*** Although the project site is located within the 100-year flood zone and 500-year flood zone (Riverside County 2003), the proposed project does not involve the construction of housing or structures and would not expose people or structures to a flood hazard. The project site is relatively flat and situated well inland from the Pacific Ocean; it would not be susceptible to risks associated with seiche, tsunami, or mudflow. ***No significant impact*** would occur and no mitigation is required.				
h. Place within a 100-year flood hazard area structures which would impede or redirect flood flows?	☐	☐	☐	☒
9h. Response: ***(Source: County of Riverside General Plan)*** Please refer to Checklist Response 9g above.				
i. Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?	☐	☐	☐	☒
9i. Response: ***(Source: County of Riverside General Plan)*** Please refer to Checklist Response 9g above.				
j. Inundation by seiche, tsunami, or mudflow?	☐	☐	☐	☒
9j. Response: ***(Source: County of Riverside General Plan)*** Please refer to Checklist Response 9g above.				

ISSUES (AND SUPPORTING INFORMATION SOURCES):	Potentially Significant Impact	Less Than Significant Impact with Mitigation Incorporated	Less Than Significant Impact	No Impact
10. LAND USE AND PLANNING: Would the project:				
a. Physically divide an established community?	☐	☐	☐	☒
10a.Response: ***(Source:)*** The project site is located in an urban setting with residential development to the north, south, east, and the Santa Ana River Trail and Santa Ana River to the west. The project would be constructed within the right-of-way of an existing multi-use trail in an established residential community and would extend northwesterly to the Santa Ana River. The project provides for the improvement of the existing storm drain system in the existing La Rivera residential development and adjacent. Implementation of the proposed project would not disrupt or divide the physical arrangement of the established community, including land uses and circulation patterns. Therefore, ***no impact*** would occur and no mitigation is required.				
b. Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?	☐	☐	☐	☒
10b. Response: ***(Source: County of Riverside General Plan, Riverside General Plan 2025)*** The western portion of the project site is located in unincorporated Riverside County. The current *County of Riverside General Plan* land use designation for western portion of the project site within the Santa Ana River is Open Space-Water (OS-W) and the zoning designation is W-1 (Riverside County 2008). The project site would be subject to the Riverside County Integrated Project (RCIP), which governs the unincorporated areas of Riverside County and oversees regional planning programs which include compliance with the County's General Plan, Western Riverside Council of Governments (WRCOG), Community and Environmental Transportation Acceptability Process (CETAP), Coachella Valley Association of Governments (CVAG) and the Riverside Multiple Species Habitat Conservation Plan (MSHCP). The project site is located within the Jurupa Area Plan, a component of the *County of Riverside General Plan*, and would be subject to specific policies within the Jurupa Area Plan. The Jurupa Area Plan provides more detailed land use and policy direction regarding local issues, such as land use, circulation, and open space. Within the Jurupa Area Plan, a portion of the project site is located within the Santa Ana River Corridor. The proposed project involves the installation of storm drain improvements beginning at the southern terminus of Salmon River Road and extending underneath the Santa Ana River Trail into the Santa Ana River. The purpose of the project is to relieve potential flooding within the La Rivera residential development and adjacent areas. According to the *County of Riverside General Plan's* Land Use Element, one of the County's objectives is to cooperate regionally on issues of clean water and adequate infrastructure. Riverside County and its cities have experienced population growth in recent years. This growth has placed a demand on Riverside County to balance a growing population with the provision of the necessary infrastructure, services, and resources in a cooperative manner with appropriate agencies. It is a goal for land to be used wisely and efficiently, and to provide for adequate flood control facilities. In addition, maintaining clean water is vital in keeping with the vision in Riverside County General Plan. The storm drain improvement project would therefore be consistent with the *County of Riverside General Plan's* objectives, goals, and policies. The eastern portion of the project site is located in the City of Riverside. The *City of Riverside General Plan* land use designation for the eastern portion of the project site is Medium Density Residential and the zoning designation is Residential (City of Riverside 2007). Implementation of the proposed project would not conflict with the City's General Plan goals and policies. The *City of Riverside General Plan's* Public Facilities Element identifies two important considerations regarding storm drains: (1) ensuring adequate capacity to collect and carry storm water and thereby avoid flooding and (2) working to improve water quality in surface water. The storm drain improvement project would therefore be consistent with the *City of Riverside General Plan* objectives, goals, and policies. The proposed project would have no ***significant impact*** on land use or land use policies and no mitigation is required.				

ISSUES (AND SUPPORTING INFORMATION SOURCES):	Potentially Significant Impact	Less Than Significant Impact with Mitigation Incorporated	Less Than Significant Impact	No Impact
c. Conflict with any applicable habitat conservation plan or natural community conservation plan?	☐	☒	☐	☐

10c. Response: ***(Habitat Assessment (BonTerra Consulting 2011a); Focused Survey for Least Bell's Vireo (Forde Biological Consulting 2011b); Focused Trapping for Los Angeles Pocket Mouse and San Bernardino Kangaroo Rat (Ecological Sciences Inc. 2011b); Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP) Sections 3.2.3 (Description of Cores and Linkages within the MSHCP Conservation Area), 6.1.2 (Protection of Species Associated with Riparian/Riverine Areas and Vernal Pools), 6.3.2 (Additional Survey Needs and Procedures), 6.1.4 (Guidelines Pertaining to Urban/Wildlands Interface), 7.2.4 (Future Facilities Within Public/Quasi-Public Lands), 7.5.3 (Construction Guidelines)***

Refer to Checklist Response 4f in Biological Resources.

11. MINERAL RESOURCES. Would the project:				
a. Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	☐	☐	☒	☐

11a. Response: ***(Source: Riverside General Plan 2025)***

The County of Riverside General Plan's Multipurpose Open Space Element identifies the project site as being located in an MRZ-3 Mineral Resource Zone (MRZ). An MRZ-3 classification indicates an area where the available geologic information indicates that mineral deposits are likely to exist, but the significance of the deposit is undetermined. The City of Riverside General Plan's Open Space and Conservation Element identifies the project site as being located in a State-classified MRZ-2. A MRZ-2 classification indicates areas with potentially significant sand and gravel resources. However, project-related construction would be limited to approximately 0.34 acre and approximately 1,169 cubic yards (cy) of cut with approximately 378 cy of soil export. Construction of the proposed project is not anticipated to result in the loss of the availability of mineral resources that could potentially be of value locally or regionally. Therefore, the impact related to mineral resources is considered to be less than significant and no mitigation is required.

b. Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?	☐	☐	☒	☐

11b. Response: ***(Source: Riverside General Plan 2025)***

Refer to Checklist Response 11a above.

12. NOISE. Would the project result in:				
a. Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	☐	☐	☒	☐

12a. Response: ***(Source: City of Riverside Municipal Code [Title 7 – Noise Code])***

The project site is located in the vicinity of a residential area, approximately 1,000 feet from the nearest major road. The major source of noise in the area is background traffic noise from Market Street and SR-60 (other noise sources would include local City streets in the immediate project vicinity). The existing noise environment in the vicinity of the proposed project is typical suburban residential in the range of 45 to 55 A-weighted decibels (dBA) on the average noise level (Leq). The following evaluates potential noise increases during construction and operation of the project.

Construction Noise

As outlined in Title 7 of the City of Riverside Municipal Code, the following noise standards apply to impacts on residential land uses: Exterior noise levels are not to exceed 55 dBA from 7:00 AM to 10:00 PM and 50 dBA from 10:00 PM to 7:00 AM. Section 7.35.010 of the City's Municipal Code prohibits the operation of any tools or equipment used in construction,

ISSUES (AND SUPPORTING INFORMATION SOURCES):	Potentially Significant Impact	Less Than Significant Impact with Mitigation Incorporated	Less Than Significant Impact	No Impact

drilling, repair, alteration, grading or demolition work between the hours of 7:00 PM and 7:00 AM on weekdays; between the hours of 5:00 PM and 8:00 AM on Saturdays; and at any time on Sundays or a City-recognized holidays such that the sound creates a noise disturbance across a residential or commercial property line or that, at any time, exceeds the maximum permitted noise level for the underlying land use category, except for emergency work or by variance. The proposed project work would occur during the hours allowed by the Municipal Code (refer to SC N-1).

Construction of the project is estimated to last approximately 70 working days, and soil export would occur for a period of approximately 40 days, with 1 or 2 daily truck loads. For linear construction (such as roadways, pipelines, and channels), construction noise is assessed from the centerline of the alignment. The site is located immediately adjacent to the rear yards of some residences; the structures are located approximately 25 feet from the center of alignment and are as near as 15 feet from the edge of the site where construction activity could occur. The loudest equipment would include equipment such as excavators and dump trucks, which can generate maximum noise levels (Lmax) of up to 85 dBA and 84 dBA at 50 feet, respectively. Assuming an excavator and a dump truck would operate simultaneously at a distance of 25 feet, the combined maximum short-duration noise level at the nearest home backyard adjacent to the site can reach levels of up to 94 dBA Lmax. Construction equipment noise levels could cause temporary disturbances to residents. However, this equipment is mobile and would operate throughout the construction area at varying distances from the residences; the equipment would operate intermittently at varying power levels throughout the workday. Noise from localized point sources (such as construction) decreases by approximately 6 dBA with each doubling of distance from source to receptor. The impacts of construction noise at residences farther away diminish with distance and with the attenuation provided by the homes adjacent to the site. A noise level of 94 dBA measured at 25 feet from the noise source to the receptor would be reduced to 88 dBA at 50 feet from the source to the receptor, and would be further reduced to 82 dBA at 100 feet from the source to the receptor. When heavy equipment is operating at the western end of the site, maximum noise levels would reach 76 dBA Lmax at the nearest homes. These levels would be well above the existing ambient noise. Construction activities would be heard above the existing noise levels and would create temporary annoyance; however, maximum noise levels at any specific residence would typically last a few minutes per day during excavation and trenching activities, which would occur only sporadically during the daytime hours.

While the implementation of the proposed project would result in a temporary increase in ambient noise resulting from the use of construction equipment, any increase in noise levels would cease upon completion of construction. Due to the short-term nature of the construction activities, this is considered to be a less than significant impact. However, the applicant or its designee would provide notice to residents when construction is scheduled to occur near their homes (refer to MM N-1). While noise levels could reach up to 94 dBA Lmax at the nearest backyards 25 feet from construction activity, the noise impacts at other residences rapidly diminishes with distance. Since the potential noise impacts during construction would occur for a short period and would cease when construction is over, construction noise impacts are considered to be ***less than significant.***

Long-Term Operational Noise

The project would implement storm drainage improvements. Long-term potential noise impacts would be related to maintenance activities. It is expected that most of the repair and maintenance would be performed with hand tools, occasionally with backhoes, and possibly with heavy dump trucks for any potential major repairs. While perceptible when maintenance-related noise activities would occur, it would be sporadic. As such, no permanent increases in long-term noise would occur within the project vicinity. Non-emergency construction activities must comply with the hours included in Section 7.35.010 of the City's Municipal Code. The impact would be ***less than significant*** and no additional mitigation is required.

Mitigation Program

Standard Conditions and Requirements

SC N-1 The City of Riverside Zoning Administrator, in consultation with the Riverside County Flood Control and Water Conservation District, shall ensure that noise-generating project construction activities shall not occur between the hours of 7:00 PM and 7:00 AM on weekdays, between the hours of 5:00 PM and 8:00 AM on Saturdays, and at any time on Sundays or City-recognized holidays in compliance with City of Riverside Municipal Code.

ISSUES (AND SUPPORTING INFORMATION SOURCES):	Potentially Significant Impact	Less Than Significant Impact with Mitigation Incorporated	Less Than Significant Impact	No Impact
Mitigation Measures				
MM N-1 Within two weeks prior to the start of construction activities, the applicant or its designee, in consultation with the Riverside County Flood Control and Water Conservation District, shall ensure that each residence adjacent to the project site is notified of the scheduled dates and hours of construction near the residence and the potential for temporary noise disturbance during those construction times.				
b. Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?	☐	☐	☒	☐
12b. Response: ***(Source:)*** The nearest vibration-sensitive structures are the single-family homes adjacent to the site, approximately 25 feet from the center of alignment and as near as 15 feet from the edge of the site where construction activity would occur. The proposed project would involve typical construction activities but would not include vibratory compaction equipment, pile driving or blasting, which are the construction activities that generate the highest vibration levels. During trenching and excavation activities, the operation of heavy construction equipment (e.g., backhoes, excavators and loaded trucks) has the potential to occasionally generate perceptible vibration levels to adjacent residents. Because vibration levels that could be perceptible to nearby residents would be sporadic and would only occur for a few days, no damage from vibration impacts would be anticipated and no mitigation is required. Impacts would *be* ***less than significant***.				
c. A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	☐	☐	☒	☐
12c. Response: ***(Source: City of Riverside Municipal Code [Title 7 – Noise Code])*** Refer to Checklist Response 12a above.				
d. A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	☐	☐	☒	☐
12d. Response: ***(Source: City of Riverside Municipal Code [Title 7 – Noise Code])*** Refer to Checklist Response 12a above.				
e. For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☐	☒
12e. Response: ***(Source: Riverside General Plan 2025)*** The proposed project is not located within an airport land use plan or within two miles of a public airport. In addition, the project site is not in the vicinity of a private airstrip; therefore, ***no noise impacts*** related to public airports or private airstrip operations would occur and no mitigation is required.				
f. For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☐	☒
12f. Response: ***(Source: Riverside General Plan 2025)*** Refer to Checklist Response 12e above.				
13. POPULATION AND HOUSING Would the project:				
a. Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	☐	☐	☐	☒
13a. Response: ***(Source:)***				

ISSUES (AND SUPPORTING INFORMATION SOURCES):	Potentially Significant Impact	Less Than Significant Impact with Mitigation Incorporated	Less Than Significant Impact	No Impact
The proposed project would result in the improvement of the existing storm drain system; it would not result in direct or indirect population growth, nor would it displace existing housing or people or require the construction of replacement housing elsewhere. The project would result in ***no impacts*** related to population and housing and no mitigation is required.				
b. Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒
13b. Response: ***(Source:)*** Refer to Checklist Response 13a above.				
c. Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒
13c. Response: ***(Source:)*** Refer to Checklist Response 13a above.				
14. PUBLIC SERVICES.				
Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:				
a. Fire protection?	☐	☐	☐	☒
14a. Response: ***(Source:)*** No development which would generate new population in the City is proposed. Due to the nature of the project, no new demand for public services such as schools, fire protection, public safety, libraries, or other services would occur. ***No impact*** would occur and no mitigation is required.				
b. Police protection?	☐	☐	☐	☒
14b. Response: ***(Source:)*** Refer to Checklist Response 14a above.				
c. Schools?	☐	☐	☐	☒
14c. Response: ***(Source:)*** Refer to Checklist Response 14a above.				
d. Parks?	☐	☐	☐	☒
14d. Response: ***(Source:)*** Refer to Checklist Response 14a above.				
e. Other public facilities?	☐	☐	☐	☒
14e. Response: ***(Source:)*** Refer to Checklist Response 14a above.				
15. RECREATION				
a. Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	☐	☐	☒	☐
15a. Response: ***(Source: Riverside County General Plan)*** Demand for recreational facilities is primarily generated by permanent residents. The proposed project would allow for storm drain improvements and does not include residential or other development that would result in either direct or indirect				

ISSUES (AND SUPPORTING INFORMATION SOURCES):	Potentially Significant Impact	Less Than Significant Impact with Mitigation Incorporated	Less Than Significant Impact	No Impact
impacts to existing regional parks or other recreational facilities. The project does not include the development of new recreational facilities or require the construction or expansion of other recreational facilities. The project site is located in the Santa Ana River Corridor, which includes the Santa Ana River Trail (Riverside County 2003). The Santa Ana River Trail is classified as a Class I Bike Path/Regional Trail in the Jurupa Area Plan (Riverside County 2003). As part of the project, the top of the Santa Ana levee would be excavated and subsequently covered and repaired. During construction, the Santa Ana River Trail would be temporarily closed to bicycle and pedestrian traffic; however, users would be diverted to the existing vehicle maintenance road that runs parallel to the levee located at the toe of the levee. The multi-purposes trail would also be closed to equestrian, bicycle, and pedestrian use temporarily during construction. Users of this multi-use trail could be diverted northeast along Salmon River Road where it intersects with Snake River Road and then access the Santa Ana River Trail via the alley between residential uses. Due to the short-term nature of the construction activities, this impact would be ***less than significant***. However, to ensure the movement of pedestrians and bicyclists around construction, a Traffic Management Plan would be prepared and followed during construction (refer to MM TRF-1 in Section 16, Transportation/Traffic below). After construction activities cease, the project would not alter or preclude the use of the Santa Ana River Trail or the multi-purpose trail. The proposed project would not result in an increase in the use of local or regional parks, nor would it adversely impact the existing Santa Ana River Trail. With implementation of MM TRF-1, temporary construction-related impacts on the Santa Ana River Trail and the multi-purpose trail would be less than significant.				
b. Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	☐	☐	☒	☐
15b. Response: ***(Source: Riverside County General Plan)*** Refer to Checklist Response 15a above.				
16. TRANSPORTATION/TRAFFIC Would the project result in:				
a. Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?	☐	☐	☒	☐
16a. Response: ***(Source:)*** Implementation of the proposed project would generate vehicle trips associated with construction activities. As previously described, construction of the project is estimated to last approximately 70 working days, and soil export would occur for a period of approximately 40 days, with 1 or 2 daily trucks trips per day. Due to the small amount of construction-generated traffic (approximately 1 or 2 truck trips per day), the short-term nature of the construction activities, and compliance with the City's requirements related to commercial vehicles, no construction-related traffic delays are anticipated and construction traffic would not significantly impact roadway operations, the impact would be ***less than significant***. However, to facilitate the movement of construction traffic (specifically along Salmon River Road) and to minimize potential disruptions, a construction traffic management plan would be prepared and followed during construction (refer to MM TRF-1). Because the proposed project would contribute a small amount of construction-generated traffic, it would not conflict with applicable congestion management plans, ordinances, or policies related to the circulation system. There are existing sidewalks along the terminus of Salmon River Road (where the catch basin would be installed); the proposed construction activities would not preclude pedestrians and cyclists from traveling along Salmon River Road. The temporary impact to pedestrians and cyclists would be ***less than significant***. However, as identified in MM TRF-1, temporary routes for pedestrians and bicyclists to avoid construction activities would be identified. As discussed above in Checklist Response 15, Recreation, construction activities would require the temporary closure of the Santa Ana River Trail and the multi-purpose trail to equestrian, pedestrians, and cyclists. MM TRF-1 would identify temporary routes for				

ISSUES (AND SUPPORTING INFORMATION SOURCES):	Potentially Significant Impact	Less Than Significant Impact with Mitigation Incorporated	Less Than Significant Impact	No Impact
pedestrians and bicyclists to avoid construction on the Santa Ana River Trail and the multi-purpose trail. Since construction staging may occur at the southern terminus of Salmon River Road, measures to offset the temporary, short-term impacts related to construction activities and staging area would be developed as a part of the Traffic Management Plan to address this potential impact. The Traffic Management Plan would include the requirement for appropriate signage to be posted in the project area before project construction. Implementation of MM TRF-1 would facilitate traffic flow into and out of the project area; therefore, emergency access to the project site would not be impacted. Once construction of the project is complete, there would be no increase in traffic or a permanent change in existing transportation circulation systems. Therefore, the project would not conflict with adopted policies, plans, or programs supporting alternate transportation. ***No impact*** would occur and no mitigation is required. **<u>Mitigation Program</u>** **MM TRF-1** Prior to the initiation of construction activities, the City of Riverside's Zoning Administrator, in consultation with the Riverside County Flood Control and Water Conservation District, shall ensure that the contractor submits a Construction Traffic Management Plan (Plan) for review and approval. The Plan shall include, but not be limited to (1) identification of construction haul routes that follow the City's approved truck routes; (2) identification of emergency access points/routes; (3) duration and location of lane closures (if any); (4) location of parking for the public and construction workers during construction; (5) the use of a flagperson(s); (6) temporary routes for pedestrians and bicyclists using the Santa Ana River Trail; and (7) notification to residential property owners and local emergency service providers regarding the proposed construction location, schedule, and duration. Notification shall occur two weeks prior to start of construction. The Plan shall be implemented during construction activities. The contractor specifications shall include the requirements outlined in the Plan and this shall be verified by the City of Riverside's Zoning Administrator, in consultation with the Riverside County Flood Control and Water Conservation District.				
b. Conflict with an applicable congestion management program, including but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?	☐	☐	☒	☐
16b. Response: ***(Source:)*** Refer to Checklist Response 16a above.				
c. Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?	☐	☐	☐	☒
16c. Response: ***(Source:)*** Due to the nature of the proposed project, no change in air traffic patterns would occur, nor would it result in an increase in the amount of air traffic. There would be ***no impact*** and no mitigation is required.				
d. Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	☐	☐	☐	☒
16d. Response: ***(Source:)*** The proposed project involves the improvement to the existing storm drain system; no change to the existing circulation patterns would occur. The project does not include any uses or design features that would increase roadway hazards. There would be ***no impact*** to roadway design or design features and no mitigation is required.				
e. Result in inadequate emergency access?	☐	☐	☒	☐
16e. Response: ***(Source:)*** Refer to Checklist Response 16a above.				
f. Conflict with adopted policies, plans or programs regarding public transit, bicycle, or pedestrian facilities, or	☐	☐	☒	☐

ISSUES (AND SUPPORTING INFORMATION SOURCES):	Potentially Significant Impact	Less Than Significant Impact with Mitigation Incorporated	Less Than Significant Impact	No Impact
otherwise decrease the performance or safety of such facilities)?				
16f. Response: ***(Source)*** Refer to Checklist Response 16a above.				
17. UTILITIES AND SYSTEM SERVICES Would the project:				
a. Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	☐	☐	☐	☒
17a. Response: ***(Source:)*** The proposed project would not involve the treatment of wastewater or be subject to the wastewater treatment requirements of a Regional Water Quality Control Board. Therefore, ***no impact*** would result and no mitigation is required.				
b. Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	☐	☐	☐	☒
17b. Response: ***(Source:)*** The proposed project is a storm drain improvement project to help alleviate flooding in the La Rivera residential development and adjacent areas. Due to the nature of the project, implementation would not result in the need for additional storm water drainage facilities or expansion of existing facilities, require water supplies, or result in the need for solid waste services. Because no demolition activities would be required for the project, solid waste disposal created by construction activity is not anticipated to generate a significant amount of solid waste. Therefore, ***no impacts*** to utilities and service systems are anticipated and no mitigation is required.				
c. Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	☐	☐	☐	☒
17c. Response: ***(Source:)*** Please refer to Checklist Response 17b above.				
d. Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?	☐	☐	☐	☒
17d. Response: ***(Source:)*** Please refer to Checklist Response 17b above.				
e. Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	☐	☐	☐	☒
17e. Response: ***(Source:)*** Please refer to Checklist Response 17a above.				
f. Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?	☐	☐	☐	☒
17f. Response: ***(Source:)*** Please refer to Checklist Response 17b above.				
g. Comply with federal, state, and local statutes and regulations related to solid waste?	☐	☐	☐	☒

ISSUES (AND SUPPORTING INFORMATION SOURCES):	Potentially Significant Impact	Less Than Significant Impact with Mitigation Incorporated	Less Than Significant Impact	No Impact
17g. Response: ***(Source:)*** Please refer to Checklist Response 17b above.				
18. MANDATORY FINDINGS OF SIGNIFICANCE				
a. Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or an endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	☐	☒	☐	☐
18a. Response: ***(Source: Habitat Assessment (BonTerra Consulting 2011a); Focused Survey for Special Status Plant Species (Forde Biological Consulting 2011a); Focused Survey for Least Bell's Vireo (Forde Biological Consulting 2011b); Focused Habitat Assessment for Los Angeles Pocket Mouse and San Bernardino Kangaroo Rat (Ecological Sciences Inc. 2011a); Focused Trapping for Los Angeles Pocket Mouse and San Bernardino Kangaroo Rat (Ecological Sciences Inc. 2011b); Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP) Sections 6.1.2 (Protection of Species Associated with Riparian/Riverine Areas and Vernal Pools), 6.1.3 (Protection of Narrow Endemic Plant Species), 6.3.2 (Additional Survey Needs and Procedures)*** Mitigation for loss of riparian/riverine habitat has been developed to reduce impacts to less than significant levels (refer to Section 4, Biological Resources). Mitigation requirements would be coordinated with the resource agencies (i.e., the USFWS and the CDFG) through their respective regulatory processes. In addition, a DBESP has been prepared for Riverside Conservation Authority approval. Implementation of mitigation measures and requirements for these permits/agreements/approvals would reduce impacts on biological resources to ***less than significant*** levels. In addition, there are no historic resources on the project site that would be impacted by implementation of the proposed project.				
b. Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?	☐	☐	☐	☒
18b. Response: ***(Source:)*** All project-specific impacts associated with the project have been determined to be less than significant or mitigated to a level considered ***less than significant***. The project would not cumulatively contribute to any significant cumulative effects.				
c. Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	☐	☐	☒	☐
18c. Response: ***(Source:)*** All project-level impacts associated with the project have been determined to be less than significant or mitigated to a level considered ***less than significant*** and none of the impacts would cause substantial adverse effects on people, either directly or indirectly.				

List of Mitigation Measures/Standard Conditions

Impact Category	Mitigation Measures/Standard Conditions	Implementation Timing	Responsible Monitoring Party[6]	Monitoring/Reporting Method
Air Quality	**SC AQ-1:** During construction of the project, the City of Riverside and its contractors shall be required to comply with SCAQMD Rules 402 and 403, which shall assist in reducing short-term air pollutant emissions. SCAQMD Rule 402 requires that air pollutant emissions not be a nuisance off site. SCAQMD Rule 403 requires that fugitive dust be controlled with the best available control measures so that the presence of such dust does not remain visible in the atmosphere beyond the property line of the emission source. This requirement shall be included as notes on the contractor specifications.	Ongoing during construction	City of Riverside Planning Division	Compliance with notes on contractor specifications
Biological Resources	**MM BIO-1: MM BIO-1** Prior to the initiation of any construction activities, the City of Riverside Zoning Administrator, in consultation with the Director of Riverside County Flood Control and Water Conservation District, shall ensure that the mitigation provided for U.S. Army Corps of Engineers (USACE), California Department of Fish and Game (CDFG), and Regional Water Quality Control Board (RWQCB) permitting is adequate to satisfy requirements of Section 6.1.2 of the Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP) (i.e., riparian/riverine). A Determination of Biologically Equivalent or Superior Preservation (DBESP) was prepared and included and required the implementation of measures to avoid and minimize impacts on the riparian/riverine resources, potential indirect impacts on the Santa Ana sucker, direct and indirect impacts on the least Bell's vireo, direct and indirect impacts on the Los Angeles pocket mouse, impacts on "Core" habitat along the Santa Ana River, and impacts on Public/Quasi-Public Lands. Mitigation strategies included in the DBESP included measures to protect water quality during construction and operation of the project, construction outside the least Bell's vireo	Prior to initiation of construction	The City of Riverside Zoning Administrator in consultation with the Director of the Riverside County Flood Control and Water Conservation District	DBESP Report

[6] All agencies are City of Riverside Departments/Divisions unless otherwise noted.

Impact Category	Mitigation Measures/Standard Conditions	Implementation Timing	Responsible Monitoring Party[6]	Monitoring/Reporting Method
	nesting season (March 15 to September 15), exclusion of Los Angeles pocket mouse from the impact area (in combination with pre-construction trapping and relocation), and biological monitoring during vegetation removal and construction. The USFWS and CDFG further require that Los Angeles Pocket Mouse survey months be performed when Los Angeles pocket mouse are most active [May through October] and if trapping must occur outside the optimal survey months [before May], a test trap line which intersects the entire site will be performed to check for Los Angeles pocket mouse activity. If the Los Angeles pocket mouse is not captured, during the test survey, then relocating Los Angeles pocket mouse must wait until Los Angeles pocket mouse is active above ground. Any Los Angeles pocket mouse captured during pre-construction surveys shall be relocated outside of the exclusion fencing during the night (e.g., around midnight) to provide several hours of darkness for Los Angeles pocket mouse to find cover from predators to increase survivability. In addition, mitigation for the loss of jurisdictional areas, Riparian/Riverine resources, and Public/Quasi-Public lands may include (1) payment of an in-lieu mitigation fee to the Santa Ana Watershed Authority; (2) preservation of existing riparian habitat (preferably within or adjacent to an area identified as a Criteria Area, Core, or Linkage by the MSHCP) and dedication to the Western Riverside County RCA; or (3) restoration of riparian habitat (preferably within or adjacent to an area identified as a Criteria Area, Core, or Linkage by the MSHCP) and dedication to the Western Riverside County RCA. In the DBESP response letter from the CDFG and USFWS, the agencies have determined that implementation of any one of these three mitigation options at a 1:1 ratio would be acceptable mitigation. In addition, invasive plant species removal within the temporary impact areas shall be monitored for five years. The details for temporary impact mitigation shall be approved by the USFWS and CDFG prior to construction. The mitigation ratio of mitigation			

Impact Category	Mitigation Measures/Standard Conditions	Implementation Timing	Responsible Monitoring Party[6]	Monitoring/Reporting Method
	credits/preservation/restoration shall be determined regulatory permitting.			
	MM BIO-2: The City of Riverside Zoning Administrator shall ensure that a pre-construction survey for burrowing owl shall be conducted 30 days prior to construction in accordance with Section 6.3.2 of the Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP). If burrowing owl is present in the impact area during the breeding season (March 1 to August 31), the burrow shall be protected until nesting activity has ended. If burrowing owl is present in the impact area during the non-breeding season (September 1 to February 28), the burrowing owl will be flushed from the burrow and the burrow will be closed using California Department of Fish and Game–approved burrow-closing procedures.	Within 30 days prior to construction	The City of Riverside Zoning Administrator	Pre-construction Burrowing Owl Survey Report
	MM BIO-3: Prior to the initiation of any project-related construction activities, the City of Riverside Zoning Administrator shall ensure that the Project Applicant has paid the Stephens' kangaroo rat per-acre mitigation fee to the Riverside County Habitat Conservation Agency (RCHCA); no surveys or permitting shall be required.	Prior to construction	The City of Riverside Zoning Administrator	Proof of Fee Payment to RCHCA
	MM BIO-4: Prior to the initiation of any project-related construction activities, the City of Riverside Zoning Administrator, in consultation with the Director of Riverside County Flood Control and Water Conservation District, shall ensure that the City of Riverside has obtained all appropriate permits for impacts to project areas containing U.S. Army Corps of Engineers (USACE) and California Department of Fish and Game (CDFG) jurisdictional resources. Mitigation for the loss of jurisdictional areas, Riparian/Riverine resources, and Public/Quasi-Public lands may include (1) payment of an in-lieu mitigation fee to the Santa Ana Watershed Authority; or (2) preservation of existing riparian habitat (preferably within or adjacent to an area identified as a Criteria Area, Core, or Linkage by the MSHCP) and dedication to the Western Riverside County RCA; or (3) restoration of riparian habitat (preferably within or	Prior to construction	The City of Riverside Zoning Administrator in consultation with the Director of the Riverside County Flood Control and Water Conservation District	Section 404 Permit, 401 Water Quality Certification, and CDFG Streambed Alteration Agreement

Impact Category	Mitigation Measures/Standard Conditions	Implementation Timing	Responsible Monitoring Party[6]	Monitoring/Reporting Method
	adjacent to an area identified as a Criteria Area, Core, or Linkage by the MSHCP) and dedication to the Western Riverside County RCA. If the Project Applicant chooses to mitigate Riparian/Riverine habitat through the purchase or restoration acreage shall be of equivalent or superior quality habitat at no less than a 1:1 ratio. The resource agencies will review the proposed acquisition during the permitting process to ensure that the lands to be acquired by the Project Applicant are of equivalent or superior quality to the resources impacted by the Proposed Project. The dedicated lands will be managed by the Western Riverside County RCA in a manner that is consistent with the goals of the MSHCP. Prior to the initiation of any construction-related activities, the Project Applicant shall pay the in-lieu mitigation fee to a mitigation bank/enhancement program or prepare and submit a detailed restoration program for USACE and CDFG approval for all disturbed areas within the Santa Ana River. If the Proposed Project would mitigate for impacts on Riparian/Riverine resources through restoration of riparian habitat, a detailed restoration program will be prepared for approval by the USACE and the CDFG prior to construction and will contain the following items: • *Responsibilities and qualifications of the personnel to implement and supervise the plan.* The responsibilities of the Landowner, Specialists, and Maintenance Personnel that would supervise and implement the plan shall be specified. • *Site selection.* The mitigation site shall be determined in coordination with the City of Riverside, the Riverside County Flood Control District, and the above-listed resource agencies. The site shall either be located on the project site in a dedicated open space area or land shall be purchased off the site. • *Site preparation and planting implementation.*			

Impact Category	Mitigation Measures/Standard Conditions	Implementation Timing	Responsible Monitoring Party[6]	Monitoring/Reporting Method
	Site preparation shall include: (1) protection of existing native species; (2) trash and weed removal; (3) native species salvage and reuse (i.e., duff); (4) soil treatments (i.e., imprinting, decompacting); (5) temporary irrigation installation; (6) erosion control measures (i.e., rice or willow wattles); (7) seed mix application; and (8) container species planting. • *Schedule.* A schedule shall be developed which includes planting in late fall and early winter, between October 1 and January 30. • *Maintenance plan/guidelines.* The Maintenance Plan shall include: (1) weed control; (2) herbivory control; (3) trash removal; (4) irrigation system maintenance; (5) maintenance training; and (6) replacement planting. • *Monitoring plan.* The Monitoring Plan shall include: (1) qualitative monitoring (i.e., photographs and general observations); (2) quantitative monitoring (i.e., randomly placed transects); (3) performance criteria, as approved by the above-listed resource agencies; (4) monthly reports for the first year and reports every other month thereafter; and (5) annual reports for five years, which shall be submitted to the resource agencies on an annual basis. The site shall be monitored and maintained for five years to ensure successful establishment of riparian habitat within the restored and created areas. • *Long-term preservation.* Long-term preservation of the site shall also be outlined in the conceptual Mitigation Plan to ensure the mitigation site is not impacted by future development.			

Impact Category	Mitigation Measures/Standard Conditions	Implementation Timing	Responsible Monitoring Party[6]	Monitoring/Reporting Method
	MM BIO-5: The City of Riverside Zoning Administrator shall ensure that a survey for active raptor nests shall be conducted prior to commencement of any construction activities (within seven days) during the raptor nesting season (February 1 to June 30). Restrictions may be placed on construction activities in the vicinity of any active nest until the nest is no longer active, as determined by a qualified Biologist; typically, a 300- to 500-foot buffer zone is designated around. Once the nest is no longer active, construction can proceed within the buffer zone.	Immediately prior to construction (within seven days)	The City of Riverside Zoning Administrator	Pre-construction Nesting Raptor Survey Report
	MM BIO-6: The City of Riverside Zoning Administrator shall ensure that project construction activities avoid impacts on other bird species and that vegetation-clearing activities in the survey area shall occur outside the peak nesting season (March 1 to June 30) in accordance with the Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP) Construction Guidelines. If vegetation clearing occurs between March 1 and June 30, a qualified Biologist shall conduct a pre-construction survey (or possibly multiple surveys) prior to construction (within three days) to identify any active nesting locations. Restrictions may be placed on construction activities in the vicinity of any active nest observed until the nest is no longer active as determined by a qualified Biologist.	Immediately prior to construction (within three days)	The City of Riverside Zoning Administrator	Pre-construction Nesting Bird Survey Report
	MM BIO-7: The City of Riverside Zoning Administrator shall ensure that the following Construction Guidelines (Section 7.5.3 of the Western Riverside County Multiple Species Habitat Conservation Plan [MSHCP]) are implemented during project construction, as appropriate, to minimize impacts on biological resources during construction: • Plans for water pollution and erosion control shall be prepared for all Discretionary Projects involving the movement of earth in excess of 50 cubic yards. The plans shall describe sediment and hazardous materials control, dewatering or	During construction	The City of Riverside Zoning Administrator	Biological Monitoring Summary Reports

Impact Category	Mitigation Measures/Standard Conditions	Implementation Timing	Responsible Monitoring Party[6]	Monitoring/Reporting Method
	diversion structures, fueling and equipment management practices, and use of plant material for erosion control. Plans shall be reviewed and approved by the City and participating jurisdiction prior to construction. • Timing of construction activities shall consider seasonal requirements for breeding birds and migratory non-resident species. Habitat clearing shall be avoided during species active breeding season defined as March 1 to June 30. • Sediment- and erosion-control measures shall be implemented until such time soils are determined to be successfully stabilized. • Silt fencing or other sediment trapping materials shall be installed at the downstream end of construction activities to minimize the transport of sediments off site. • Settling ponds where sediment is collected shall be cleaned in a manner that prevents sediment from re-entering the stream or damaging/disturbing adjacent areas. Sediment from settling ponds shall be removed to a location where sediment cannot re-enter the stream or surrounding drainage area. Care shall be exercised during removal of silt fencing to minimize release of debris or sediment into streams. • No erodible materials shall be deposited into water courses. Brush, loose soils, or other debris material shall not be stockpiled within stream channels or on adjacent banks. • The footprint of disturbance shall be minimized to the maximum extent feasible. Access to sites shall occur on pre-existing access routes to the greatest extent possible.			

Impact Category	Mitigation Measures/Standard Conditions	Implementation Timing	Responsible Monitoring Party[6]	Monitoring/Reporting Method
	• Equipment storage, fueling, and staging areas shall be sited on non-sensitive upland habitat types with minimal risk of direct discharge into riparian areas or other sensitive habitat types. • The limits of disturbance, including the upstream, downstream and lateral extents, shall be clearly defined and marked in the field. Monitoring personnel shall review the limits of disturbance prior to initiation of construction activities. • During construction, the placement of equipment within the stream or on adjacent banks or adjacent upland habitats occupied by Covered Species that are outside of the project footprint shall be avoided. • Exotic species removed during construction shall be properly handled to prevent sprouting or regrowth. • Training of construction personnel shall be provided. • Ongoing monitoring and reporting shall occur for the duration of the construction activity to ensure implementation of best management practices. • When work is conducted during the fire season (as identified by the Riverside County Fire Department) adjacent to coastal sage scrub or chaparral vegetation, appropriate fire-fighting equipment (e.g., extinguishers, shovels, water tankers) shall be available on the site during all phases of project construction to help minimize the chance of human-caused wildfires. Shields, protective mats, and/or other fire preventative methods shall be used during grinding, welding, and other spark-inducing activities. Personnel trained in fire hazards, preventative actions, and			

Impact Category	Mitigation Measures/Standard Conditions	Implementation Timing	Responsible Monitoring Party[6]	Monitoring/Reporting Method
	responses to fires shall advise contractors regarding fire risk from all construction-related activities. • Active construction areas shall be watered regularly to control dust and to minimize impacts to adjacent vegetation. • All equipment maintenance, staging, and dispensing of fuel, oil, coolant, or any other toxic substances shall occur only in designated areas within the proposed construction limits of the project site. These designated areas shall be clearly marked and located in such a manner as to contain run-off. • Waste, dirt, rubble, or trash shall not be deposited in the Conservation Area or on native habitat.			
Cultural Resources	**SC CUL-1:** In accordance with Section 7050.5 of the California Health and Safety Code, if human remains are found, the Riverside County Coroner shall be notified within 24 hours of the discovery. No further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent remains shall occur until the County Coroner has determined, within two working days of notification of the discovery, the appropriate treatment and disposition of the human remains. If the County Coroner determines that the remains are or are believed to be Native American, s/he shall notify the NAHC in Sacramento within 48 hours. In accordance with California Public Resources Code, Section 5097.98, the NAHC must immediately notify those persons it believes to be the most likely descended from the deceased Native American. The descendents shall complete their inspection within 48 hours of being granted access to the site. The designated Native American representative would then determine, in consultation with the property owner, the disposition of the human remains.	Ongoing during ground-disturbing activities	City of Riverside Zoning Administrator	

Impact Category	Mitigation Measures/Standard Conditions	Implementation Timing	Responsible Monitoring Party[6]	Monitoring/Reporting Method
	MM CUL-1: Should archaeological or historical resources be found during ground-disturbing activities for the project, all construction activities shall cease in the immediate area of the discovery and further disturbance must be prevented by the City of Riverside, in consultation with a qualified Project Archaeologist. The Project Archaeologist shall be approved in writing by the City of Riverside Zoning Administrator, in consultation with the Director of Riverside County Flood Control and Water Conservation District. The City's Historic Preservation Specialist shall be informed of the discovery immediately. A Project Archaeologist shall be retained to first determine whether an archaeological resource uncovered during construction is a "unique archaeological resource" pursuant to Section 21083.2(g) of the *California Public Resources Code* (PRC) or a "historical resource" pursuant to Section 15064.5(a) of the CEQA Guidelines (*California Code of Regulations* [CCR], Title 14). If the archaeological resource is determined to be a "unique archaeological resource" or a "historical resource", the Archaeologist shall recommend disposition of the site and shall formulate, in consultation with the City, a mitigation plan that satisfies the requirements of Section 21083.2 of the PRC and Section 15064.5 of the CEQA Guidelines. The applicant shall pay all costs associated with the discovery, evaluation, and ultimate disposition of the find. If the Archaeologist determines that the archaeological resource is not a "unique archaeological resource" or "historical resource", s/he shall record the site and submit the recordation form to the CHRIS at the EIC at the University of California, Riverside. The Archaeologist shall prepare a report of the results of any study prepared as part of a testing or mitigation plan, following accepted professional practice. The report shall follow guidelines of the California Office of Historic Preservation. Copies of the report shall be submitted to the City of Riverside and to the CHRIS at	Ongoing during ground-disturbing activities	City of Riverside Zoning Administrator, in consultation with the Director of Riverside County Flood Control and Water Conservation District.	

Impact Category	Mitigation Measures/Standard Conditions	Implementation Timing	Responsible Monitoring Party[6]	Monitoring/Reporting Method
	the EIC.			
	MM CUL-2: Should paleontological resources be found during ground-disturbing activities for the project, all ground-disturbing activities in the vicinity of the discovery shall be halted or diverted until a qualified Paleontologist (approved in writing by the City of Riverside Zoning Administrator in consultation with the Director of Riverside County Flood Control and Water Conservation District) inspects the find and evaluates it for significance. Further disturbance to the discovery must be prevented by the City in consultation with the Paleontologist. The City's Historic Preservation Specialist shall be informed of the discovery immediately. If determined significant, the paleontologist shall have the authority to quickly and efficiently salvage and remove the fossil from its locality, as appropriate, before ground-disturbing activities resume in the area. Any paleontological work at the site shall be conducted under the direction of a qualified Paleontologist. If a fossil discovery occurs during excavation operations when a Paleontological Monitor is not present, excavation shall be diverted around the area until the Monitor can survey the area. Any fossils recovered during the development, along with their contextual stratigraphic data, shall be offered to the County of Riverside, City of Riverside, or other appropriate institution with an educational and research interest in the materials. The Paleontologist shall prepare a report of the results of any findings as part of a testing or mitigation plan following accepted professional practice.	Ongoing during ground-disturbing activities	City of Riverside Zoning Administrator in consultation with the Director of Riverside County Flood Control and Water Conservation District	
Hydrology/Water Quality	**SC WQ-1:** Prior to the approval of the project plans, the City of Riverside's Zoning Administrator, in consultation with the Director of Riverside County Flood Control and Water Conservation District, shall confirm that the project plans demonstrate compliance under California's General Permit for Stormwater Discharges Associated with Construction Activity (Construction Activities	Prior to approval of project plans	City of Riverside Zoning Administrator in consultation with the Director of Riverside County Flood Control and Water Conservation District	Compliance with notes on contractor specifications

Impact Category	Mitigation Measures/Standard Conditions	Implementation Timing	Responsible Monitoring Party[6]	Monitoring/Reporting Method
	General NPDES Permit) by providing a copy of the Notice of Intent submitted to the State Water Resources Control Board and a copy of the subsequent notification of the issuance of a Waste Discharge Identification Number (or other proof of filing) in a manner meeting the satisfaction of the City Zoning Administrator, in consultation with the Director of Riverside County Flood Control and Water Conservation District. Projects subject to this requirement shall prepare and implement a Storm Water Plan. A copy of the SWPPP shall be kept at the project site and be available for City and County review on request. Pursuant to the permit requirements, the City Zoning Administrator, in consultation with the Director of Riverside County Flood Control and Water Conservation District, shall ensure that all BMPs applicable to the project, as described in the NPDES permit, shall be followed during construction and any maintenance activities. These BMPs are expected to include Mitigation Measure BIO-10 (Construction Minimization Measures listed in Section 7.5.3 of the Western Riverside MSHCP).			
Noise	**SC N-1:** The City of Riverside Zoning Administrator, in consultation with the Riverside County Flood Control and Water Conservation District, shall ensure that noise-generating project construction activities shall not occur between the hours of 7:00 PM and 7:00 AM on weekdays, between the hours of 5:00 PM and 8:00 AM on Saturdays, and at any time on Sundays or City-recognized holidays in compliance with City of Riverside Municipal Code.	Ongoing during construction	City of Riverside Zoning Administrator, in consultation with the Riverside County Flood Control and Water Conservation District	Compliance with notes on contractor specifications
	MM N-1: Within two weeks prior to the start of construction activities, the applicant or its designee, in consultation with the Riverside County Flood Control and Water Conservation District, shall ensure that each residence adjacent to the project site is notified of the scheduled dates and hours of construction near the residence and the potential for temporary noise disturbance during those construction times.	Within two weeks prior to the start of construction activities	The applicant or its designee, in consultation with the Riverside County Flood Control and Water Conservation District	
Transportatio	**MM TRF-1:** Prior to the initiation of construction	Prior to the initiation of	City of Riverside Zoning	

Impact Category	Mitigation Measures/Standard Conditions	Implementation Timing	Responsible Monitoring Party[6]	Monitoring/Reporting Method
n/Traffic	activities, the City of Riverside's Zoning Administrator, in consultation with the Riverside County Flood Control and Water Conservation District, shall ensure that the contractor submits a Construction Traffic Management Plan (Plan) for review and approval. The Plan shall include, but not be limited to (1) identification of construction haul routes that follow the City's approved truck routes; (2) identification of emergency access points/routes; (3) duration and location of lane closures (if any); (4) location of parking for the public and construction workers during construction; (5) the use of a flagperson(s); (6) temporary routes for pedestrians and bicyclists using the Santa Ana River Trail; and (7) notification to residential property owners and local emergency service providers regarding the proposed construction location, schedule, and duration. Notification shall occur two weeks prior to start of construction. The Plan shall be implemented during construction activities. The contractor specifications shall include the requirements outlined in the Plan and this shall be verified by the City of Riverside's Zoning Administrator, in consultation with the Riverside County Flood Control and Water Conservation District.	construction activities	Administrator, in consultation with the Riverside County Flood Control and Water Conservation District	

APPENDIX F – PLAN REVIEW TOOL/CROSSWALK

SEE ATTACHMENT
Pages 1-13

APPENDIX F:
LOCAL MITIGATION PLAN REVIEW TOOL

The *Local Mitigation Plan Review Tool* demonstrates how the Local Mitigation Plan meets the regulation in 44 CFR §201.6 and offers States and FEMA Mitigation Planners an opportunity to provide feedback to the community.

- The Regulation Checklist provides a summary of FEMA's evaluation of whether the Plan has addressed all requirements.
- The Plan Assessment identifies the plan's strengths as well as documents areas for future improvement.
- The Multi-jurisdiction Summary Sheet is an optional worksheet that can be used to document how each jurisdiction met the requirements of the each Element of the Plan (Planning Process; Hazard Identification and Risk Assessment; Mitigation Strategy; Plan Review, Evaluation, and Implementation; and Plan Adoption).

The FEMA Mitigation Planner must reference this *Local Mitigation Plan Review Guide* when completing the *Local Mitigation Plan Review Tool*.

Jurisdiction: City of Riverside	**Title of Plan:** Local Hazard Mitigation Plan	**Date of Plan:** August 2012
Local Point of Contact: Mark D. Annas	**Address:** 3085 St. Lawrence Street Riverside, CA 92504	
Title: Emergency Operations Coordinator		
Agency: City of Riverside		
Phone Number: 951-320-8103	**E-Mail:** mannas@riversideca.gov	

State Reviewer:	**Title:**	**Date:**

FEMA Reviewer:	**Title:**	**Date:**
Date Received in FEMA Region *(insert #)*		
Plan Not Approved		
Plan Approvable Pending Adoption		
Plan Approved		

SECTION 1:
REGULATION CHECKLIST

INSTRUCTIONS: The Regulation Checklist must be completed by FEMA. The purpose of the Checklist is to identify the location of relevant or applicable content in the Plan by Element/sub-element and to determine if each requirement has been 'Met' or 'Not Met.' The 'Required Revisions' summary at the bottom of each Element must be completed by FEMA to provide a clear explanation of the revisions that are required for plan approval. Required revisions must be explained for each plan sub-element that is 'Not Met.' Sub-elements should be referenced in each summary by using the appropriate numbers (A1, B3, etc.), where applicable. Requirements for each Element and sub-element are described in detail in this *Plan Review Guide* in Section 4, Regulation Checklist.

1. REGULATION CHECKLIST **Regulation** (44 CFR 201.6 Local Mitigation Plans)	**Location in Plan** (section and/or page number)	**Met**	**Not Met**
ELEMENT A. PLANNING PROCESS			
A1. Does the Plan document the planning process, including how it was prepared and who was involved in the process for each jurisdiction? (Requirement §201.6(c)(1))	Part I – Section 2.0 pp. 19-24		
A2. Does the Plan document an opportunity for neighboring communities, local and regional agencies involved in hazard mitigation activities, agencies that have the authority to regulate development as well as other interests to be involved in the planning process? (Requirement §201.6(b)(2))	Part I – Section 2.0 pp. 19-24		
A3. Does the Plan document how the public was involved in the planning process during the drafting stage? (Requirement §201.6(b)(1))	Part I – Section 2.0 pp. 19-24		
A4. Does the Plan describe the review and incorporation of existing plans, studies, reports, and technical information? (Requirement §201.6(b)(3))	Part I - Section 9 pp. 107		
A5. Is there discussion of how the community(ies) will continue public participation in the plan maintenance process? (Requirement §201.6(c)(4)(iii))	Part I - Section 10.0 pp. 110		
A6. Is there a description of the method and schedule for keeping the plan current (monitoring, evaluating and updating the mitigation plan within a 5-year cycle)? (Requirement §201.6(c)(4)(i))	Part I – Section 8 and 10 pp. 106, 110		
ELEMENT A: REQUIRED REVISIONS			

1. REGULATION CHECKLIST **Regulation** (44 CFR 201.6 Local Mitigation Plans)	**Location in Plan** (section and/or page number)	**Met**	**Not Met**
ELEMENT B. HAZARD IDENTIFICATION AND RISK ASSESSMENT			
B1. Does the Plan include a description of the type, location, and extent of all natural hazards that can affect each jurisdiction(s)? (Requirement §201.6(c)(2)(i))	Part I – Section 3.2 pp. 24-26, Section 4.0 pp. 30-87		
B2. Does the Plan include information on previous occurrences of hazard events and on the probability of future hazard events for each jurisdiction? (Requirement §201.6(c)(2)(i))	Section 4.0 pp. 30-87, Part I , Section 2.3 pp. 21, Section 3.2 pp. 25-26		
B3. Is there a description of each identified hazard's impact on the community as well as an overall summary of the community's vulnerability for each jurisdiction? (Requirement §201.6(c)(2)(ii))	Part I , Section 2.3 pp. 21, Section 4.3 pp. 33-86, Appendix C 124-143		
B4. Does the Plan address NFIP insured structures within the jurisdiction that have been repetitively damaged by floods? (Requirement §201.6(c)(2)(ii))	Part I - Section 5.0 pp. 89		
ELEMENT B: REQUIRED REVISIONS			
ELEMENT C. MITIGATION STRATEGY			
C1. Does the plan document each jurisdiction's existing authorities, policies, programs and resources and its ability to expand on and improve these existing policies and programs? (Requirement §201.6(c)(3))	Part I - Section 6.0-6.4 pp. 90-92 and Section 9.0 pp. 107-109		
C2. Does the Plan address each jurisdiction's participation in the NFIP and continued compliance with NFIP requirements, as appropriate? (Requirement §201.6(c)(3)(ii))	Part I - Section 5.0 pp. 88-89		
C3. Does the Plan include goals to reduce/avoid long-term vulnerabilities to the identified hazards? (Requirement §201.6(c)(3)(i))	Part I – Section 6.4 pp. 91-92, Section 7.1-7.2 pp. 93-104		
C4. Does the Plan identify and analyze a comprehensive range of specific mitigation actions and projects for each jurisdiction being considered to reduce the effects of hazards, with emphasis on new and existing buildings and infrastructure? (Requirement §201.6(c)(3)(ii))	Part I – Section 3.3 pp 27-29, Appendix D – CIP		
C5. Does the Plan contain an action plan that describes how the actions identified will be prioritized (including cost benefit review), implemented, and administered by each jurisdiction? (Requirement §201.6(c)(3)(iv)); (Requirement §201.6(c)(3)(iii))	Part I – Section 7.2 96-104		
C6. Does the Plan describe a process by which local governments will integrate the requirements of the mitigation plan into other planning mechanisms, such as comprehensive or capital improvement plans, when appropriate? (Requirement §201.6(c)(4)(ii))	Part I – Section 9.0 pp. 106-108 , Appendix D – CIP		
ELEMENT C: REQUIRED REVISIONS			

1. REGULATION CHECKLIST **Regulation** (44 CFR 201.6 Local Mitigation Plans)	**Location in Plan** (section and/or page number)	**Met**	**Not Met**
ELEMENT D. PLAN REVIEW, EVALUATION, AND IMPLEMENTATION (applicable to plan updates only)			
D1. Was the plan revised to reflect changes in development? (Requirement §201.6(d)(3))	Part I – Section 1.0-1.8 pp. 7-18		
D2. Was the plan revised to reflect progress in local mitigation efforts? (Requirement §201.6(d)(3))	Part I – Section 3.1 pp.24, Section 3.3 pp. 27-28		
D3. Was the plan revised to reflect changes in priorities? (Requirement §201.6(d)(3))	Appendix B-2 – pp. 115-122		
ELEMENT D: REQUIRED REVISIONS			
ELEMENT E. PLAN ADOPTION			
E1. Does the Plan include documentation that the plan has been formally adopted by the governing body of the jurisdiction requesting approval? (Requirement §201.6(c)(5))	Part I – Page 3 and Section 2.6 pp. 24		
E2. For multi-jurisdictional plans, has each jurisdiction requesting approval of the plan documented formal plan adoption? (Requirement §201.6(c)(5))	Part I – Page 3 and Section 2.6 pp. 24		
ELEMENT E: REQUIRED REVISIONS			
ELEMENT F. ADDITIONAL STATE REQUIREMENTS (OPTIONAL FOR STATE REVIEWERS ONLY; NOT TO BE COMPLETED BY FEMA)			
F1.			
F2.			
ELEMENT F: REQUIRED REVISIONS			

SECTION 2:
PLAN ASSESSMENT

INSTRUCTIONS: The purpose of the Plan Assessment is to offer the local community more comprehensive feedback to the community on the quality and utility of the plan in a narrative format. The audience for the Plan Assessment is not only the plan developer/local community planner, but also elected officials, local departments and agencies, and others involved in implementing the Local Mitigation Plan. The Plan Assessment must be completed by FEMA. The Assessment is an opportunity for FEMA to provide feedback and information to the community on: 1) suggested improvements to the Plan; 2) specific sections in the Plan where the community has gone above and beyond minimum requirements; 3) recommendations for plan implementation; and 4) ongoing partnership(s) and information on other FEMA programs, specifically RiskMAP and Hazard Mitigation Assistance programs. The Plan Assessment is divided into two sections:

1. Plan Strengths and Opportunities for Improvement
2. Resources for Implementing Your Approved Plan

Plan Strengths and Opportunities for Improvement is organized according to the plan Elements listed in the Regulation Checklist. Each Element includes a series of italicized bulleted items that are suggested topics for consideration while evaluating plans, but it is not intended to be a comprehensive list. FEMA Mitigation Planners are not required to answer each bullet item, and should use them as a guide to paraphrase their own written assessment (2-3 sentences) of each Element.

The Plan Assessment must not reiterate the required revisions from the Regulation Checklist or be regulatory in nature, and should be open-ended and to provide the community with suggestions for improvements or recommended revisions. The recommended revisions are suggestions for improvement and are not required to be made for the Plan to meet Federal regulatory requirements. The italicized text should be deleted once FEMA has added comments regarding strengths of the plan and potential improvements for future plan revisions. It is recommended that the Plan Assessment be a short synopsis of the overall strengths and weaknesses of the Plan (no longer than two pages), rather than a complete recap section by section.

Resources for Implementing Your Approved Plan provides a place for FEMA to offer information, data sources and general suggestions on the overall plan implementation and maintenance process. Information on other possible sources of assistance including, but not limited to, existing publications, grant funding or training opportunities, can be provided. States may add state and local resources, if available.

A. Plan Strengths and Opportunities for Improvement

This section provides a discussion of the strengths of the plan document and identifies areas where these could be improved beyond minimum requirements.

Element A: Planning Process

How does the Plan go above and beyond minimum requirements to document the planning process with respect to:

- *Involvement of stakeholders (elected officials/decision makers, plan implementers, business owners, academic institutions, utility companies, water/sanitation districts, etc.);*
- *Involvement of Planning, Emergency Management, Public Works Departments or other planning agencies (i.e., regional planning councils);*
- *Diverse methods of participation (meetings, surveys, online, etc.); and*
- *Reflective of an open and inclusive public involvement process.*

Element B: Hazard Identification and Risk Assessment

In addition to the requirements listed in the Regulation Checklist, 44 CFR 201.6 Local Mitigation Plans identifies additional elements that should be included as part of a plan's risk assessment. The plan should describe vulnerability in terms of:

1) *A general description of land uses and future development trends within the community so that mitigation options can be considered in future land use decisions;*
2) *The types and numbers of existing and future buildings, infrastructure, and critical facilities located in the identified hazard areas; and*
3) *A description of potential dollar losses to vulnerable structures, and a description of the methodology used to prepare the estimate.*

How does the Plan go above and beyond minimum requirements to document the Hazard Identification and Risk Assessment with respect to:

- *Use of best available data (flood maps, HAZUS, flood studies) to describe significant hazards;*
- *Communication of risk on people, property, and infrastructure to the public (through tables, charts, maps, photos, etc.);*
- *Incorporation of techniques and methodologies to estimate dollar losses to vulnerable structures;*
- *Incorporation of Risk MAP products (i.e., depth grids, Flood Risk Report, Changes Since Last FIRM, Areas of Mitigation Interest, etc.); and*
- *Identification of any data gaps that can be filled as new data became available.*

Element C: Mitigation Strategy

How does the Plan go above and beyond minimum requirements to document the Mitigation Strategy with respect to:

- *Key problems identified in, and linkages to, the vulnerability assessment;*
- *Serving as a blueprint for reducing potential losses identified in the Hazard Identification and Risk Assessment;*
- *Plan content flow from the risk assessment (problem identification) to goal setting to mitigation action development;*
- *An understanding of mitigation principles (diversity of actions that include structural projects, preventative measures, outreach activities, property protection measures, post-disaster actions, etc);*
- *Specific mitigation actions for each participating jurisdictions that reflects their unique risks and capabilities;*
- *Integration of mitigation actions with existing local authorities, policies, programs, and resources; and*
- *Discussion of existing programs (including the NFIP), plans, and policies that could be used to implement mitigation, as well as document past projects.*

Element D: Plan Update, Evaluation, and Implementation (*Plan Updates Only*)

How does the Plan go above and beyond minimum requirements to document the 5-year Evaluation and Implementation measures with respect to:

- *Status of previously recommended mitigation actions;*
- *Identification of barriers or obstacles to successful implementation or completion of mitigation actions, along with possible solutions for overcoming risk;*
- *Documentation of annual reviews and committee involvement;*
- *Identification of a lead person to take ownership of, and champion the Plan;*
- *Reducing risks from natural hazards and serving as a guide for decisions makers as they commit resources to reducing the effects of natural hazards;*
- *An approach to evaluating future conditions (i.e. socio-economic, environmental, demographic, change in built environment etc.);*
- *Discussion of how changing conditions and opportunities could impact community resilience in the long term; and*
- *Discussion of how the mitigation goals and actions support the long-term community vision for increased resilience.*

B. Resources for Implementing Your Approved Plan

Ideas may be offered on moving the mitigation plan forward and continuing the relationship with key mitigation stakeholders such as the following:

- *What FEMA assistance (funding) programs are available (for example, Hazard Mitigation Assistance (HMA)) to the jurisdiction(s) to assist with implementing the mitigation actions?*
- *What other Federal programs (National Flood Insurance Program (NFIP), Community Rating System (CRS), Risk MAP, etc.) may provide assistance for mitigation activities?*
- *What publications, technical guidance or other resources are available to the jurisdiction(s) relevant to the identified mitigation actions?*
- *Are there upcoming trainings/workshops (Benefit-Cost Analysis (BCA), HMA, etc.) to assist the jurisdictions(s)?*
- *What mitigation actions can be funded by other Federal agencies (for example, U.S. Forest Service, National Oceanic and Atmospheric Administration (NOAA), Environmental Protection Agency (EPA) Smart Growth, Housing and Urban Development (HUD) Sustainable Communities, etc.) and/or state and local agencies?*

SECTION 3:
MULTI-JURISDICTION SUMMARY SHEET (OPTIONAL)

INSTRUCTIONS: For multi-jurisdictional plans, a Multi-jurisdiction Summary Spreadsheet may be completed by listing each participating jurisdiction, which required Elements for each jurisdiction were 'Met' or 'Not Met,' and when the adoption resolutions were received. This Summary Sheet does not imply that a mini-plan be developed for each jurisdiction; it should be used as an optional worksheet to ensure that each jurisdiction participating in the Plan has been documented and has met the requirements for those Elements (A through E).

MULTI-JURISDICTION SUMMARY SHEET												
#	Jurisdiction Name	Jurisdiction Type (city/borough/ township/ village, etc.)	Plan POC	Mailing Address	Email	Phone	Requirements Met (Y/N)					
							A. Planning Process	B. Hazard Identification & Risk Assessment	C. Mitigation Strategy	D. Plan Review, Evaluation & Implementation	E. Plan Adoption	F. State Require-ments
1												
2												
3												
4												
5												
6												
7												
8												
9												

MULTI-JURISDICTION SUMMARY SHEET												
#	Jurisdiction Name	Jurisdiction Type (city/borough/ township/ village, etc.)	Plan POC	Mailing Address	Email	Phone	Requirements Met (Y/N)					
							A. Planning Process	B. Hazard Identification & Risk Assessment	C. Mitigation Strategy	D. Plan Review, Evaluation & Implementation	E. Plan Adoption	F. State Require-ments
10												
11												
12												
13												
14												
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17												
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MULTI-JURISDICTION SUMMARY SHEET												
#	Jurisdiction Name	Jurisdiction Type (city/borough/ township/ village, etc.)	Plan POC	Mailing Address	Email	Phone	Requirements Met (Y/N)					
							A. Planning Process	B. Hazard Identification & Risk Assessment	C. Mitigation Strategy	D. Plan Review, Evaluation & Implementation	E. Plan Adoption	F. State Require-ments
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MULTI-JURISDICTION SUMMARY SHEET												
#	Jurisdiction Name	Jurisdiction Type (city/borough/ township/ village, etc.)	Plan POC	Mailing Address	Email	Phone	Requirements Met (Y/N)					
							A. Planning Process	B. Hazard Identification & Risk Assessment	C. Mitigation Strategy	D. Plan Review, Evaluation & Implementation	E. Plan Adoption	F. State Require-ments
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MULTI-JURISDICTION SUMMARY SHEET												
#	Jurisdiction Name	Jurisdiction Type (city/borough/ township/ village, etc.)	Plan POC	Mailing Address	Email	Phone	Requirements Met (Y/N)					
							A. Planning Process	B. Hazard Identification & Risk Assessment	C. Mitigation Strategy	D. Plan Review, Evaluation & Implementation	E. Plan Adoption	F. State Require-ments
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APPENDIX G – PLAN ADOPTION/RESOLUTION

SEE ATTACHMENT
Pages 1-2

RESOLUTION NO. 22826

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF RIVERSIDE, CALIFORNIA, ADOPTING THE RIVERSIDE COUNTY OPERATIONAL AREA MULTI-JURSIDICATIONAL LOCAL HAZARD MITIGATION PLAN AND THE CITY OF RIVERSIDE LOCAL HAZARD MITIGATION PLAN ANNEX AS REQUIRED BY THE FEDERAL DISASTER MITIGATION ACT OF 2000.

WHEREAS, President William J. Clinton signed H.R. 707, the Disaster Mitigation Act of 2000, into law on October 30, 2000.

WHEREAS, the Disaster Mitigation Act of 2000 requires all jurisdictions to be covered by a Local Hazard Mitigation Plan to be eligible for Federal Emergency Management Agency post-disaster funds; and

WHEREAS, The City of Riverside has committed to participate in the development of the Riverside County Operational Area Multi-Jurisdictional Local Hazard Mitigation Plan; and

WHEREAS, the Riverside Fire Department – Office of Emergency Management coordinated the development of the City of Riverside Local Hazard Mitigation Plan Annex; and

WHEREAS, the City of Riverside is concerned about mitigating potential losses from natural disasters before they occur, and

WHEREAS, the plan identifies potential hazards, potential loses and potential mitigation measures to limit loses, and

WHEREAS, the California Governor's Office of Emergency Services and Federal Emergency Management Agency have reviewed the plan; and

WHEREAS, formal adoption of the plan by the City of Riverside is required before final approval of the plan can be obtained from the Federal Emergency Management Agency; and

WHEREAS, The Riverside Fire Department – Office of Emergency Management has determined that it would be in the best interest of the City of Riverside to adopt the Riverside County Operational Area Multi-Jurisdictional Local Hazard Mitigation Plan and the City of Riverside Local Hazard Mitigation Plan Annex.

NOW, THEREFORE, BE IT RESOLVED by the City Council of the City of Riverside, California, as follows:

Section 1: Adopt the Riverside County Operational Area Multi-Jurisdictional Local Hazard Mitigation Plan and the City of Riverside Local Hazard Mitigation Plan Annex to meet the requirements of the Disaster Mitigation Act of 2000, and direct the Riverside Fire Department – Office of Emergency Management to forward the Local Hazard Mitigation Plan Annex to the Riverside County Fire Department – Office of Emergency Services, the California Governor's Office of Emergency Services and to the Federal Emergency Management Agency on behalf of the City of Riverside for final approval.

ADOPTED by the City Council this 17th day of March, 2015.

WILLIAM R. BAILEY, III
Mayor of the City of Riverside

Attest:

COLLEEN J. NICOL
City Clerk of the City of Riverside

I, Colleen J. Nicol, City Clerk of the City of Riverside, California, hereby certify that the foregoing resolution was duly and regularly adopted at a meeting of the City Council of said City at its meeting held on the 17th day of March, 2015, by the following vote, to wit:

Ayes: Councilmembers Gardner, Melendrez, Soubirous, Davis, Mac Arthur, Perry, and Adams

Noes: None

Absent: None

Abstained: None

IN WITNESS WHEREOF, I have hereunto set my hand and affixed the official seal of the City of Riverside, California, this 18th day of March, 2015.

COLLEEN J. NICOL
City Clerk of the City of Riverside

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