



CITY OF CORONA

2020–2040 General Plan



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Resolution 2020-037

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Introduction

The General Plan for the City of Corona presents a vision for the City's future and a strategy to make that vision a reality. The plan is the result of thousands of hours of research and technical studies and the collective efforts of the elected decision-makers, individuals, and agencies that cumulatively guide and shape land use development and natural resource conservation as well as people throughout the community who have articulated their hopes and expectations for the City's future.

Corona's history dates back more than a century to its incorporation in 1896. From its historic agricultural past, the City has transformed into the 31st most populated city in California. Corona encompasses 39 square miles, has a residential population of 175,000, and offers a thriving business environment for industry and commerce. Noted for its schools, recreational opportunities, and historic/cultural amenities, the City is well known for offering one of the finest qualities of life in southern California.

The General Plan update comes at a juncture in Corona's history where it is approaching buildout on the limited vacant land in the city. Opportunities for new development are now moving into the redevelopment of underutilized properties in the city's downtown and transit areas to accommodate housing, business, and other uses. Further growth will still occur through reinvestment in housing, businesses, and infrastructure to keep pace with economic marketplaces and residents' changing needs. Despite this change, Corona has become a more balanced community for residents and workforce to work, shop, recreate, and be entertained without traveling to other cities.



Overlooking the City of Corona, 2019

INTRODUCTION

Corona's strategic location in southern California brings opportunities and challenges. The City is blessed with beautiful scenery and mild weather, a variety of housing choices, and a strong local economy. The City has a rich sense of history, cultural diversity, and a populace committed to keeping Corona a great place to live and work. Challenges remain, such as regional traffic congestion, housing prices, and demand for local jobs. Reinvestment in certain areas is needed, community service needs are growing, and the natural environmental resources remain fragile. These challenges must be addressed in order to capitalize on opportunities for greater prosperity.



The Corona General Plan provides a path for addressing contemporary challenges and opportunities. It is a comprehensive plan—providing a framework for the City's physical, economic, social, and environmental development. It is long range—looking ahead to 2040 while presenting policies to guide day-to-day decisions. It is sufficiently general to respond to current trends and unexpected changes, but specific enough to inform residents, businesses, staff, and city leaders on how land should be used and managed. Finally, the Plan is realistic. Recognizing that local government revenues are limited, it is imperative to clarify priorities and invest strategically.

CONTEXT FOR THE GENERAL PLAN

This General Plan has been prepared to comply with the requirements of California Government Code § 65300 et seq., which mandates that each California city have a comprehensive, long-range, internally consistent plan for its future development. The General Plan also addresses the provision of services needed and desired by the community to support its ultimate development. The Plan must address eight topics, usually referred to as elements. The required elements are land use, circulation, housing, open space, conservation, safety, noise, and environmental justice.¹

Local governments are given a vast range of flexibility in crafting the organization of the general plan and can address other topics of local importance. The Corona General Plan addresses five of these elective topics: economic development, community design, historic preservation, parks and recreation, and healthy community. Under state statute, these elective general plan elements carry the same weight of law as the general plan elements that are legally mandated. Together, both mandated and elective elements form the entirety of the Corona General Plan.

The State General Plan Guidelines recommend that general plans be updated every ten years to ensure that they remain relevant. This is important in order to reflect not only local physical and demographic changes, but broader changes in culture and technology. Accordingly, this general plan update was initiated in recognition of the considerable passage of time since the last comprehensive update in 2004. Once adopted, this Plan will supersede the 2004 Plan, providing a new blueprint for the City's future.

It should be noted that this update is considered an update to the 2004 General Plan. When originally prepared, the 2004 General Plan provided the blueprint for the City's physical development and distribution of land uses through the buildout of the community. The purpose of this update is to review various changes in state laws, contemporary planning trends and best practices, changes in community needs and values, and other contemporary criteria and to update the General Plan accordingly.

California law also requires that other local government programs be consistent with and support the general plan. For instance, the City's zoning and subdivision regulations, its capital improvement programs, its specific plans, its development agreements, its housing programs, its redevelopment programs, and even its economic development activities and service level priorities should further the achievement of General Plan goals. Thus, this Plan provides guidance on how other City programs and activities should be deleted, changed, or strengthened to best implement its policies.

¹ The General Plan's Housing Element was prepared and adopted on a separate timetable from the comprehensive update in this document, corresponding to deadlines set by the State Department of Housing and Community Development. Its goals and policies are incorporated into the main body of the plan's text, but the background analyses and programs required under State statute are presented only in the full text document, which is incorporated as an appendix of this document.

The Government Code requires that the general plan cover the entire area within the city's boundaries and any land outside its boundaries that "bears relation to its planning." The latter is typically referred to as the sphere of influence (SOI). The SOI includes Coronita, Home Gardens, El Cerrito, Temescal Valley, Eagle Valley, and other surrounding areas. These areas are determined by the Riverside County Local Agency Formation Commission. Taken together, the Corona General Plan covers all 39 square miles within the city limits and approximately 35 square miles in its SOI.

Figure I-1 illustrates the City's corporate boundaries and SOL.



HOW TO USE THE GENERAL PLAN

The City of Corona General Plan is intended for use by all members of the community—residents, businesses, stakeholders, and other interested individuals or groups.

If you are a Corona resident, the Plan identifies actions the City will take to balance growth and ensure that public services and infrastructure are in place to maintain and enhance quality of life. The Plan indicates the general types of uses permitted around your home, place of work, or business; the long-range plans that may affect your area; and policies the City will use to evaluate development applications. The Plan also informs you about plans to improve transportation, parks, schools, police, fire, and other public services; attract businesses and jobs; protect valued open spaces and environmental resources; and protect residents and businesses from hazards.

If you are a Corona business, the Plan outlines the measures the City will take to protect your investment and encourage your future success. Expectations of the City's business districts are provided, while policies ensure that business operations will be compatible with other businesses and nearby residential areas. Strategies to attract new investment and improve the appearance and vitality of the City's downtown, North Main Street, and commercial corridors are also defined. Plans include improvements to streets, new land uses, water systems, and other infrastructure systems. An entire chapter dedicated to economic development is also provided.

If you are interested in how the General Plan guides the City, the General Plan is also a tool to help City staff, City commissions, and the City Council make land use and public investment decisions. It provides the framework for the City's Zoning Ordinance. It identifies the economic development, transportation improvements, community service and facility improvements, and environmental programs needed to sustain and improve the quality of life in the city. Future development decisions must be consistent with the Plan. Finally, the Plan is intended to help other public agencies—from Caltrans to our local school districts—as they contemplate future actions in Corona.

While the Plan's narrative text and maps frame the key proposals, the essence of the Plan lies in its goals, policies, and implementation actions. These are declarative statements of the City's approach to various issues.

- » **Goals** describe ideal future conditions for a particular topic, such as the Downtown, traffic congestion, or affordable housing. Goals tend to be very general and broad.
- » **Policies** provide guidance to assist the City decision-makers as they make more specific decisions relating to measures that further each goal.
- » **Actions** identify steps to implement the Plan, such as revisions of ordinances and codes, plans and capital improvements, programs, financing, and other measures.

The Plan is a legal document, and much of its content is dictated by statutory requirements relating to background data, analysis, maps, and exhibits. The legal adequacy of the General Plan is critical because many City actions and programs are subject to legal challenge if the Plan is found to be deficient.

GENERAL PLAN UPDATE PROCESS

The update of the Corona General Plan involved seven steps.

1. A Vision and Guiding Principles. Reflecting the collective input of the community, a vision for the City’s future was crafted to guide the intended functional role, character, and quality of the built city and its natural environment. Guiding principles were drafted to define a framework of expected outcomes of the General Plan policies.

2. Technical Studies. Information was compiled and analyzed regarding existing conditions, trends, and projected future conditions for the City’s and SOI’s physical, economic, social, and environmental resources. The Technical Background Report is physically incorporated into a separate volume and is used to inform the General Plan.

3. Land Use Plan and Forecasts. The preferred growth and land use plan is consistent with the vision, guiding principles, and objectives of the Plan. The land use plan in this update does not increase the density and/or intensity of land uses beyond the currently adopted land use plan.

4. General Plan Update. Policies and implementation actions were updated to be consistent with the vision, guiding principles, and land use plan; to reflect current issues and community needs; to be practical and feasible; to reflect state-of-the-art practices; to comply with current laws and court decisions; and to maintain community values.

5. Public Review. The Draft General Plan was released for public review with the incorporated background data and projections; vision and guiding principles; and goals, policies, and implementing actions. Comments were received in writing and in oral testimony at Planning Commission and City Council hearings.

6. Environmental Clearance. A draft environmental impact report (EIR) was prepared in accordance with the requirements of the California Environmental Quality Act. It was circulated for a 45-day period for public review and comment. Responses to comments were prepared and incorporated into the final EIR, which was reviewed and certified by the City Council.

7. Plan Adoption. Public hearings on the General Plan and EIR were held by the Planning Commission and City Council. In consideration of the public input, the Commission made recommendations to the City Council for the Plan’s content and EIR. The City Council considered all recommendations prior to adopting the General Plan and final EIR. The adopted Corona General Plan is published.



Corona General Plan Update Process

Community Outreach on General Plan

General Plan 2004

The 2004 General Plan was comprehensive; it involved an update to the seven mandatory general plan elements and the addition of optional elements. Goals and policies were created based on the vision that emerged from public outreach efforts conducted at the outset of the update. At that time, outreach methods consisted of numerous interviews with the community and stakeholders to identify key planning issues and challenges as well as strategies to address them. Surveys were distributed to households and businesses, and community workshops were held to further identify issues and receive input on how Corona should evolve in the future. These venues resulted in a solid vision and plan for Corona's future.

General Plan 2020

This General Plan update is different from the 2004 General Plan. The update does not re-create the vision or change the distribution of land uses. It does, however, update the Land Use Map to include General Plan amendments that have been approved by the City since 2004. The update accommodates changes to certain goals and policies in the General Plan elements, addresses new state laws and regulations enacted by the state legislature (e.g., environmental justice, climate change, resiliency, and complete streets) and updated transportation and traffic modeling based on updates of existing conditions and projected future growth. Outreach methods included:

- » **General Plan Website.** A web page was created on the city's website so that residents, business, and other interested stakeholders could view the 2004 General Plan, housing element, and other documents related to the update. The community was invited to participate by subscribing to e-mail notifications and following on Facebook and Twitter to see the latest news from the City.



To Cherish Our Past, To Plan Our Future »

Corona's General Plan Technical Update

What is a General Plan?

A General Plan is a long-range policy and planning document that guides the physical development and resource management of the City. The General Plan is required to be prepared in accordance with the requirements of California Government Codes Section 65300 et seq. The Plan addresses the seven mandatory elements of the California Government Code, which are land use, circulation, housing, open space, conservation, safety and noise. Specifically, it establishes goals and policy direction to ensure that a high quality of life is preserved and enhanced for Corona residents, businesses, and visitors. State law requires every city and county to adopt a General Plan to layout the jurisdictions' future—looking ahead 20 years or more.

The last comprehensive update was completed in 2004. However, the Housing Element has been periodically updated since 2004 with the last update done in 2013. State law requires the Housing Element to be updated every eight years. The City's current Housing Element is for the period 2013 through 2021.

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- » **Initial City Council Study Session.** A study session was held in March 2018 to brief the City Council on the scope of work involved in the update, its purpose, and the technical aspects of the process that would result in an updated General Plan. The study session was a public meeting.
- » **Community Survey.** City staff conducted an extensive community survey on topics of health and wellness. More than 700 individuals responded to the survey, indicating their priorities for improving the quality of life and the health and well-being of residents in the city.
- » **Healthy Community Meeting.** The City hosted a General Plan Healthy Community meeting in June 2018.
- » **EIR Scoping Meeting.** The City held a public scoping meeting in August 2018 for the General Plan update's EIR. The EIR was also reviewed as part of the public hearings for adoption, noted below.
- » **Public Hearings for Adoption.** Formal public hearings for the adoption of the General Plan Update and Environmental Impact Report were held by the Planning and Housing Commission at their meeting on May 11, 2020, and by the City Council at their meeting on June 3, 2020.

ORGANIZATION OF THE PLAN

Structure of the General Plan

The updated Corona General Plan addresses the eight mandatory elements required by state law—land use, housing, circulation, conservation and open space (included as environmental resources), noise, safety, and environmental justice—as stand-alone chapters. As allowed by state law, the General Plan also includes elective elements that relate to the physical development of the city. The elective elements—community design, historic resources, parks and recreation, infrastructure/utilities, police and fire, and healthy community—carry the same legal weight as the mandatory elements.

Table I-1 compares the City's updated General Plan with topics required by state law.

Table I-1 General Plan Organization

General Plan Elements	Mandatory General Plan Elements								Elective
	Land Use	Housing	Circulation	Conservation	Open Space	Noise	Safety	Environmental Justice	
Land Use	X								
Housing		X							
Community Design									X
Historic Resources									X
Economic Development									X

General Plan Elements	Mandatory General Plan Elements								Elective
	Land Use	Housing	Circulation	Conservation	Open Space	Noise	Safety	Environmental Justice	
Parks, Recreation, Cultural, Arts, and Education					X				X
Circulation			X						
Infrastructure and Utilities			X						
Public Safety							X		
Noise						X			
Healthy Community								X	X
Environmental Resources				X	X				X

The Plan also includes separately bound technical background reports (TBR) containing background data and analyses pertaining to all Plan elements. The TBR is not formally adopted by the City Council and may be modified as needed without a general plan amendment. Finally, as required by the California Environmental Quality Act, an EIR was prepared for the General Plan. The EIR describes environmental conditions in the City and SOI, assesses the possible effects that the General Plan adoption will have on these, identifies actions to be undertaken to reduce these impacts, and evaluates the comparative impacts of alternatives. Most of the EIR's mitigation has been included as policy into the General Plan; therefore, the Plan is considered "self-mitigating."

Reader's Guide to Goal and Policy Numbers

Each chapter or element of Corona's General Plan has a wide variety of goals and policies relevant to individual topics, such as land use, housing, and so forth. These goals and policies will be used by the City to guide future land use, development, and environmental protection decisions. A goal is a statement that describes in general terms a desired future condition or "end" state for a particular topic, and they tend to be very general and broad. A policy is a clear and unambiguous statement that guides a specific course of action for decision-makers to achieve a desired goal. As described later, these goals and policies are furthered by implementation programs.

A simple system distinguishes each topic or "element," goals, policies, and implementation programs. Each Plan topic is assigned a letter designation. For example, Land Use is "LU," and Community Design is "CD." In addition to the letter designation, goals are assigned a number—e.g., the first goal for land use is numbered "LU-1" and the second "LU-2." Policies are assigned an additional number—e.g., the first policy relating to the first Land Use goal is "LU-1.1," and the second policy relating to the first goal is "LU-1.2." All Plan policies are followed by a set of numbers in parentheses that reference implementation programs.

Implementing the Plan

After the General Plan is adopted, it is implemented through a variety of ordinances, programs, and activities. These actions are described in the Implementation Plan and referenced by applicable policies for each element. The Implementation Plan should be viewed as a general workplan for implementing the goals of the general plan. It will be especially important to review local land use regulations and procedures to ensure that they are consistent with the General Plan. The zoning map should be consistent with the General Plan Land Use Plan, and the Zoning Code should be consistent with the land use classification system and density/intensity, design, and development policies.

The General Plan is intended to be a dynamic document and must be periodically updated to respond to changing community needs. An annual review of the Plan is required to ensure that it remains relevant. Moreover, the Plan may be amended up to four times a year. Requests for amendments may be submitted by individuals or initiated by the City itself. Most amendments propose a change in the land use designation for a particular property. Policy and text amendments also may occur. Any proposed amendment will be reviewed to ensure that the change is in the public interest and would not be detrimental to public health, safety, and welfare. Environmental review is required for all amendments to General Plan.

GENERAL PLAN VISION

Corona, the Gateway to the Inland Empire, is a vibrant and diverse community with a small-town charm. We cherish our rich cultural heritage and the services and amenities of our community. We value the surrounding natural resources and the scenic and recreational opportunities it provides. Our citizenry is active and engaged, dedicated to protecting our quality of life. Looking to the future, Corona must meet the challenges of economic competition, adequate housing, a healthy community, sustained environmental resources, and efficient and safe transportation within the community.

The Corona General Plan recognizes the complexities in balancing historical patterns of development in a region that continues to experience unparalleled rates of growth with the legal mandates to accommodate a fair share of that growth. It also recognizes that there are fundamental, underlying values about the nature of Corona as a place for living, working, and playing that are nonnegotiable and must be maintained. It also recognizes that change is inevitable and that it must be managed in order to sustain livability, economic vitality, social well-being, and environmental quality.

Guiding Principles

Based on the vision articulated above, guiding principles provide greater clarity regarding the values that underpin the General Plan. Nine guiding principles set the framework for the many general plan elements that follow.

1. Corona is a well-designed, balanced community.

Well-designed and accessible residential neighborhoods and commercial and industrial districts will provide opportunities for people to live, work, and play. Balanced neighborhoods will provide a diversity of housing choices that are integrated with supporting commercial services, schools, parks, greenbelts, and open space. Attractive, well-designed community facilities, including libraries and youth and senior centers, support civic and cultural activities.



2. Corona's small-town character and its neighborhoods will be maintained and enhanced, providing a diversity of housing, neighborhoods, and amenities.

Development will reflect the qualities and scale that distinguish the City as a special place to live. The planning of properties and the architectural design of buildings will contribute to the high quality of the City's built environment. Residential neighborhoods will be connected by sidewalks, bike paths, open space, parks, and greenbelts. Continued reinvestments with infrastructure, amenities, and services will be made in older neighborhoods to improve the quality and livability of those areas.



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3. Downtown will be restored as the symbolic, functional, and historic core of Corona.

Downtown Corona continues to be the focus for redevelopment to encourage the establishment of mixed land uses consisting of retail and entertainment land uses, with its historic housing and commercial buildings as cornerstones. Cumulatively, these features will create a vibrant downtown offering a quality pedestrian-oriented urban village. Traditional character, appearance, and functions of the Downtown's historic resources will be blended with new development as part of its revitalization.



4. Corona will be a city where people, goods, and services move safely and efficiently and connect to the larger region.

The City's transportation system will provide efficient access and mobility for all residents and visitors, be it by car, transit, bicycle, or feet. These modes will be integrated and scaled appropriately to support the land use pattern of residential neighborhoods, employment districts, and other locations. Corona's local streets will connect to an improved regional transportation system, which will relieve congestion on local streets and allow transportation users to reach a wide variety of community and regional destinations.



5. Improved employment opportunities will be provided for Corona's residents.

A diverse economic base with jobs for Corona residents will be promoted. Existing businesses will be encouraged to invest and expand in Corona. Clean, high-technology businesses and research-and-development companies will be recruited, providing jobs that match the skill of Corona's residents. These will be supported by adequate land and infrastructure. Through professional development programs, vocational training, and higher education, valued employees will be available to Corona businesses.



6. Corona is a safe community for the resident, business, and visitor population.

Corona is committed to providing effective and caring public safety services to the resident, business, and visitor population that effectively addresses quality of life, crime reduction, fire prevention and suppression, and safety from natural hazards. The police and fire departments through on-going strategic planning efforts will commit to provide effective responses to emergencies.



INTRODUCTION

7. Corona will respect and enhance its environmental resources.

Surrounded by hillsides and etched with canyons, Corona is defined by its beautiful natural setting. Corona offers stunning views from multiple vantage points. Connections will be created between the built and natural environment to increase awareness of and opportunities for enjoyment by Corona's residents. Conservation practices to lessen the burden on the environment will be integrated into daily life.



8. An active citizenry will be engaged to achieve a better Corona.

An efficient and responsive government will work with its citizens and regional agencies to meet collective needs and provide timely and understandable information. The City will achieve its vision through bold civic leadership and responsive, accountable government. It will promote communication, partnerships, public education, and access to information in all forms. It will keep pace with advances in technology and respond to the changing needs of its citizens and businesses. Corona will be a progressive city that will provide for the needs of and capitalize on the benefits of a diverse population.



9. Corona will be a vibrant community that supports healthy lifestyles, historical resources, arts, education, and culture for all residents.

History, arts, culture, recreation, and education are highly valued as assets that create a sense of community and confer many social, health, economic, leisure, and environmental benefits. These amenities should be accessible to all members of the community regardless of status or ability. They will offer places to recreate, be educated, be entertained, celebrate arts and culture, and contemplate nature—enabling the City to provide and sustain the quality of life desired in the community.



The outcomes expressed through the vision statement and guiding principles are the foundation for the General Plan update process and underpin the goals, policies, and implementing programs for the Corona General Plan.

INTRODUCTION

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Land Use

INTRODUCTION

Cities are the expression of the development of places for people to live, work, shop, eat, entertain, and socialize. Quality of life is affected by how these different land uses are balanced—how they are distributed, fit together, and cumulatively create an urban form that communicates a sense of place and well-being; how they respect and sustain natural resources; how they use economic resources to the benefit of the community; and how they recognize the culture and history of a city.

The land use element is a fundamental chapter of the general plan as it provides guidance for the type and pattern of development in the City of Corona and its sphere of influence. It defines how lands are to be used, the density and intensity of development, the physical form and character of development, and a strategy for where growth will occur and what lands and uses will be conserved and improved.

Corona recognizes the importance of promoting and sustaining quality development and achieving a balance of land uses as the foundation of the quality of life in the city. The following value statement expresses this commitment.

Corona is a city whose uses promote and sustain a high quality of life. It offers places to live, work, shop, recreate, invest, be educated, be entertained, celebrate culture and history, socialize with other residents, have personal privacy, pursue religious freedoms, and contemplate nature. It offers choices for a diverse population, enabling residents to fully meet their needs without traveling to other communities. Corona ensures sufficient economic uses to fund essential services and amenities essential for quality of life.

The city's residential neighborhoods, commercial and industrial districts, and civic places are differentiated in their functional role, physical form, and character. While these primarily serve the needs of Corona's residents, they also provide opportunities for business and employment for the greater region. Corona's built places respect its natural setting at the base of mountains and canyons and traversed by creeks. Throughout Corona, parklands, greenways, and open spaces are integrated with development to protect important resources and complement urban development.

Corona's plans for the buildout of the community will recognize the City's assets that distinguish it as a special place in the region, contribute to a quality life for its residents, and sustain its natural environmental resources.

Scope of The Element

This element is intended to guide the type, location, and quality of development in accordance with the land use plan and associated policies that add to the value and desirability of living and working in Corona. Specific guidance is provided for opportunity districts. Specifically, the land use element provides guidance for:

- » **Land Use Distribution.** The land use element begins with the land use plan, which details the location, density, and intensity of development allowed throughout the city. This is supplemented by specific plan land uses.
- » **Citywide Focus.** These goals and policies affect the entire community, including the pattern of land uses, such as residential, commercial, office, mixed use, industrial, and other land uses in Corona.
- » **Focus Areas.** These goals and policies address specific focus areas in the community, including the Downtown, North Main Street, Northwest Industrial District, and other areas in the community.
- » **Project Level Guidance.** Imbedded within the content, policies are provided to maintain the consistency and quality of new and rehabilitated development through project design, building design, transitions, and other project features.

Related Plans

The land use element is influenced and implemented by a variety of related plans, ordinances, and regulations that are consistent with and support the vision, goals, and policies of the general plan.

Related plans, ordinances, and tools include:

- » **Specific Plans.** Corona has 32 specific plans that provide detailed regulatory guidance for specific areas in the city. While many of these plans are technically built out, they still provide guidance for the maintenance of these areas.
- » **Corona Municipal Code.** The municipal code implements the general plan through a correlating set of zoning designations that determine the type of land use, intensity or density, standards, and appearance of proposed developments.
- » **Design Guidelines.** While the land use element contains general design principles, the City has adopted several design guidelines for residential, commercial, and industrial developments, and historic buildings that provide enhanced guidance.
- » **Airport Land Use Compatibility Plan.** Land uses and airport operations are subject to additional planning, development, and regulatory provisions of the Riverside Airport Land Use Commission.

The following sections provide context for each topic addressed in this element, followed by goals and policies to achieve the general plan vision.

TYPE, DISTRIBUTION, AND FORM OF LAND USES

Corona's diversity of uses includes housing, schools, parks, libraries, religious facilities, civic uses, and commercial and industrial uses. These provide shopping, employment opportunities, and open spaces for recreation. This mix evolved substantially during the last decade. In earlier years, Corona was primarily a "bedroom" community with few industrial and commercial uses, and residents had to travel to adjoining cities for these uses. Today, the City has achieved a greater balance of commercial, industrial, and residential uses that sustain revenue for essential City services to its residents.

Corona's urban form developed around its historic core, defined by a one-mile-diameter circular street, Grand Boulevard, and overlaid by a grid street system. The core and arterials form the spine along which land uses originally developed. Commercial uses developed along corridors emanating from the Circle. Industrial uses developed north of the Circle paralleling SR-91 and Temescal Creek, with mining in the foothills. Extending outward are residential neighborhoods containing housing, schools, parks, and local-serving commercial uses. Highway- and community-oriented commercial centers are at major interchanges of the SR-91 and I-15 freeways.

Today, Corona's urban form is polycentric, with district centers serving different purposes. The Northwest Industrial District is home to major industries, providing a wide range of jobs for Corona's residents. The Transit District provides a mix of employment, commercial, and residential uses in an intense mixed-use environment. The same exists at Dos Lagos. Smaller commercial districts are located throughout the city. A midrise professional district is south adjacent to the SR-91. Most of the southern half of Corona is residential, with commercial uses along arterial street corridors. These districts are connected by travel corridors that run the length of the city.

GOAL LU-1

A community that contains a diversity of land uses that support the needs of and provide a high quality of life for its residents, sustain and enhance the City's economy and fiscal balance, are supported by adequate community infrastructure and services, and are compatible with the environmental setting and resources.

Policies

- LU-1.1** Accommodate uses that support the diverse needs of Corona's residents, including opportunities for living, commerce, employment, recreation, education, culture, entertainment, civic engagement, and social and spiritual activity that are in balance with natural open spaces.
- LU-1.2** Emphasize the development of uses that sustain Corona as a cohesive, distinct, and self-sustaining community and minimize the need for residents to travel to surrounding communities for retail goods, services, and employment.

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- LU-1.3** Accommodate uses that maintain or enhance Corona’s fiscal viability and account for current and emerging market demands, while maintaining and improving the quality of life for current and future residents.
- LU-1.4** Accommodate the types, densities, and mix of land uses that can be adequately supported by transportation and utility infrastructure (water, sewer, etc.) and public services (schools, parks, libraries, etc.)
- LU-1.5** Accommodate land use development in balance with the preservation and conservation of open spaces for recreation, aesthetic relief, natural resource value, and public safety (such as floodways, seismic fault zones, and other).

GOAL LU-2

A cohesive and integrated city of distinct and vital commercial and business districts and livable residential neighborhoods, correlated with supporting transportation and utility infrastructure that sustain natural open spaces, hillsides, and canyons.

Policies

- LU-2.1** Design development to reflect Corona’s unique physical setting considering its natural topography, environmental resources, and natural hazards by including vegetation management zones and emergency access roads within the project boundary.
- LU-2.2** Require that land uses be located and designed to reflect and incorporate the property’s natural drainage courses, to the extent feasible in consideration of public safety and habitat preservation.
- LU-2.3** Concentrate land uses within prescribed areas to minimize impacts on natural environmental resources and maximize the efficiency of supporting infrastructure, transit use, and the vitality of Corona’s activity and business centers.
- LU-2.4** Maintain and reinforce the City’s urban form and pattern of viable commercial and business centers and residential neighborhoods; prevent incompatibilities in land uses that could detract from the appearance, quality, or functioning of each area.
- LU-2.5** Prioritize and reinforce the revitalization of Corona’s historic Downtown as a major activity center. Encourage mixed land-uses to maximize customer base and access to transportation and public services.
- LU-2.6** Maintain a land use pattern that accommodates a diversity of commercial districts that are differentiated by their function, customer base, and physical character and avoid unnecessary competition.
- LU-2.7** Promote the re-use of economically obsolete and inefficient commercial corridors by consolidating retail and supporting uses into distinct activity

- nodes and redeveloping intervening areas for mixed use projects that integrate commercial and residential uses or single residential projects.
- LU-2.8** Integrate a complementary mix of open spaces (including parks, trails, and landscaping) within the City's existing urban fabric to enhance character, soften hardscapes, beautify the community, and create a high quality of life.

GOAL LU-3

A development pattern that retains and complements the City's important residential neighborhoods, commercial and industrial districts, and open spaces.

Policies

- LU-3.1** Permit land uses and development consistent with the *Corona General Plan Land Use Designations*.
- LU-3.2** Require that development not exceed the maximum density of land use designations allowed by the general plan and implemented through zoning districts.
- LU-3.3** Allow flexibility in the defined land use types, densities, and intensities to account for changes in housing needs and characteristics, industrial and employment markets, and retail commercial enterprises that will occur during the implementation of this plan. Such deviations shall be considered only when found to be consistent with the plan's vision, goals, and overall policy intentions for community places, character, economy, environmental sustainability, and public safety.

GROWTH AND DEVELOPMENT

The City of Corona has been one of the fastest growing cities in the United States during the past several decades. Now, the City is at a major crossroads as most of its lands suitable for development have been exhausted. As of 2018, only a small percentage of the City's lands remain vacant and may be considered for development. The pace of future growth is likely to slow and occur on the limited vacant lands on the periphery of the City's existing urban development and the smaller remaining parcels within this pattern. Without annexation of surrounding properties in the City's Sphere of Influence (SOI), any additional growth would occur as re-use of existing underutilized parcels and obsolete developments. Looking forward, the City will focus on strategic growth, consistent with the current general plan, that yields communitywide benefits. The following goal and policies set that framework. Later sections in this chapter detail opportunity areas for development.

GOAL LU-4

Strategic growth that preserves viable residential neighborhoods and commercial and industrial districts, targets new development to parcels that are environmentally suitable and can be supported by infrastructure and services, and re-uses appropriate properties to enhance their economic vitality and community livability.

Policies

- LU-4.1** Accommodate future growth and development in accordance with Figure LU-1, the land use plan. This depicts lands on the City’s periphery and within the existing urbanized area for which development may be considered for re-use and intensified development.
- LU-4.2** Distribute and phase the timing of development to protect the viability, character, and quality of existing residential neighborhoods, commercial districts, and industrial/business areas.
- LU-4.3** Allow for the development of vacant lands on the periphery of existing development that complements the scale and pattern of existing uses; protects significant plant, animal, and other natural environmental resources by keeping vegetation management zones and emergency access roads within the project boundary; protects development and population from natural hazards; and where it is logical and feasible to extend infrastructure.
- LU-4.4** Proactively promote the adaptive re-use and infill of economically underutilized, obsolete, and dilapidated commercial and industrial sites within existing urbanized areas, in consideration of the uses, scale, and character of adjoining uses.
- LU-4.5** Manage the timing of development and allow development to occur only when public infrastructure and services needed to support that development are available, will be provided concurrently, or are committed to be provided within a reasonable time frame.

Table LU-1 Corona General Plan Land Use Designations

Land Use Designation	Description	Density/ Intensity
Agriculture	Accommodates agricultural activities, such as citrus crops, and allows for housing and ancillary facilities.	1 du/5 acres
Rural Residential I	Accommodates large lot residential development to maintain the area's low density, rural, and natural character.	Density: 0.2–0.5 du/adj. gross acre
Rural Residential II	Accommodates large lot residential development to reflect estate and/or rural qualities.	Density: 0.5–1 du/adj. gross acre
Estate Residential	Accommodates moderate to larger size lots for single-family detached housing units.	Density: 1–3 du/adj. gross acre
Low Density Residential	Accommodates detached single-family homes. For properties within Airport Compatibility Zone D, new development shall have a density of at least 5 du/ac	Density: 3–6 du/adj. gross acre
Low Medium Density Residential	Accommodates detached single-family houses or detached or attached condominium ownership.	Density: 6–8 du/adj. gross acre
Medium Density Residential	Accommodates townhomes, duplexes, and single-family detached units in condo developments, with smaller lots to facilitate clustering of units and expanded recreational amenities and preserve open spaces and topography.	Density: 6–15 du adjusted gross acre
High Density Residential	Accommodates multi-family residential (e.g., garden apartments and condos, including common open space, landscaping, and other site amenities.	Density: 15–36 du/adj. gross acre, up to 75 du/adj gross acre for senior units
Urban Density Residential	Accommodates high density residential development primarily through innovative infill design in the city's opportunity districts and sites.	Density: 36–60 du/adj. gross acre Density with an Affordable Housing Overlay Zone: 45–60 du/adj. gross acre
General Commercial ³	Accommodates a range of commercial uses that serve local neighborhoods, the community, and visitors. Typical uses are governed by implementing zones. Accommodates 100% residential use if affordable housing is provided pursuant to the requirements of the Affordable Housing Overlay (AHO) Zone.	Intensity: FAR of 0.5 Density with an Affordable Housing Overlay Zone: 36–60 du/adj. gross acre
Office Professional ³	Accommodates general business offices, banks, finance, insurance, and real estate offices, medical offices, professional offices, and compatible uses.	Intensity: FAR 2.0
General Industrial ³	Accommodates a wide range of manufacturing, construction, transportation, wholesale trade, warehousing, vehicle storage, and related service activities. Mineral resource activities are included in this category.	Intensity: FAR 0.5

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Table LU-1 Corona General Plan Land Use Designations

Land Use Designation	Description	Density/ Intensity
Light Industrial ³	Accommodates low intensity, nonpolluting manufacturing, R&D, e-commerce, wholesale, and distribution facilities. Also includes campus-style industrial and business parks. These are intended to provide a job base for residents in "clean" industries that do not generate nuisance or unsafe levels of noise, vibration, air emissions, or waste.	Intensity: FAR 0.5
Mixed Use I Commercial and Residential ^{1, 2}	Accommodates retail commercial and office uses or an integrated mix of commercial and residential uses along arterials or at primary community activity centers and transit stations. Commercial and office uses primarily serving neighborhood and community needs, is permitted. Accommodates 100% residential use if affordable housing is provided pursuant to the requirements of the Affordable Housing Overlay (AHO) Zone.	Intensity: FAR 2.0 Density for 100% residential use: 45-60 du/adj. gross acre
Downtown Commercial/ Mixed Use ²	Accommodates the development of properties exclusively for retail commercial uses or an integrated mix of commercial and residential uses. Commercial uses are permitted along the street frontages that cumulatively create a pedestrian-oriented and active street environment, including retail shops, services, offices, cultural facilities, entertainment, public and civic buildings, and similar and compatible uses.	Intensity: FAR 3.0
Mixed Use II—Industrial and Commercial ¹	Accommodates the development of light industrial uses or a mix of industrial and commercial uses. Generally, these should be recognized "clean" types of industries, typified by light manufacturing, research and development, and e-commerce. Accommodates 100% residential use if affordable housing is provided pursuant to the requirements of the Affordable Housing Overlay (AHO) Zone.	Intensity: FAR 2.0 Density for 100% residential use: 45-60 du/adj. gross acre
Open Space General	Accommodates lands permanently committed or protected for open space due to value as habitat, topography, scenic quality, public safety (e.g., flood control channels), or comparable purpose.	Not applicable
Parks and Open Space Recreational	Accommodates lands committed as open space for public or private recreational purposes, such parks and golf courses.	Not applicable
Public and Institutional	Accommodates public and institutional uses within areas specifically designated on the land use plan or within any other land use designation in accordance with policies under Goal LU-15. General categories include schools, civic uses, fire stations, utilities, and other institutional uses, except for public and private parks.	Based on implementing zone

Table LU-1 Corona General Plan Land Use Designations

Land Use Designation	Description	Density/ Intensity
Notes 1. Approval of a Specific Plan or adoption of citywide development standards and design guidelines is required for entitlement of a mixed-use project. 2. Residential uses may be integrated into the upper floors of structures developed for retail or office uses on the lower floors or horizontally on the same site. 3. Permissible intensity levels (maximum FARs) are lower within Airport Compatibility Zones C and D of the Corona Municipal Airport Influence Area, where limitations on the number of persons per acre apply. Refer to the Corona Municipal Airport Land Use Compatibility Plan for developments in this area.		

Figures LU-1 and LU-2 illustrate the land use plans for the City of Corona and the county land use plan for lands within the sphere of influence.

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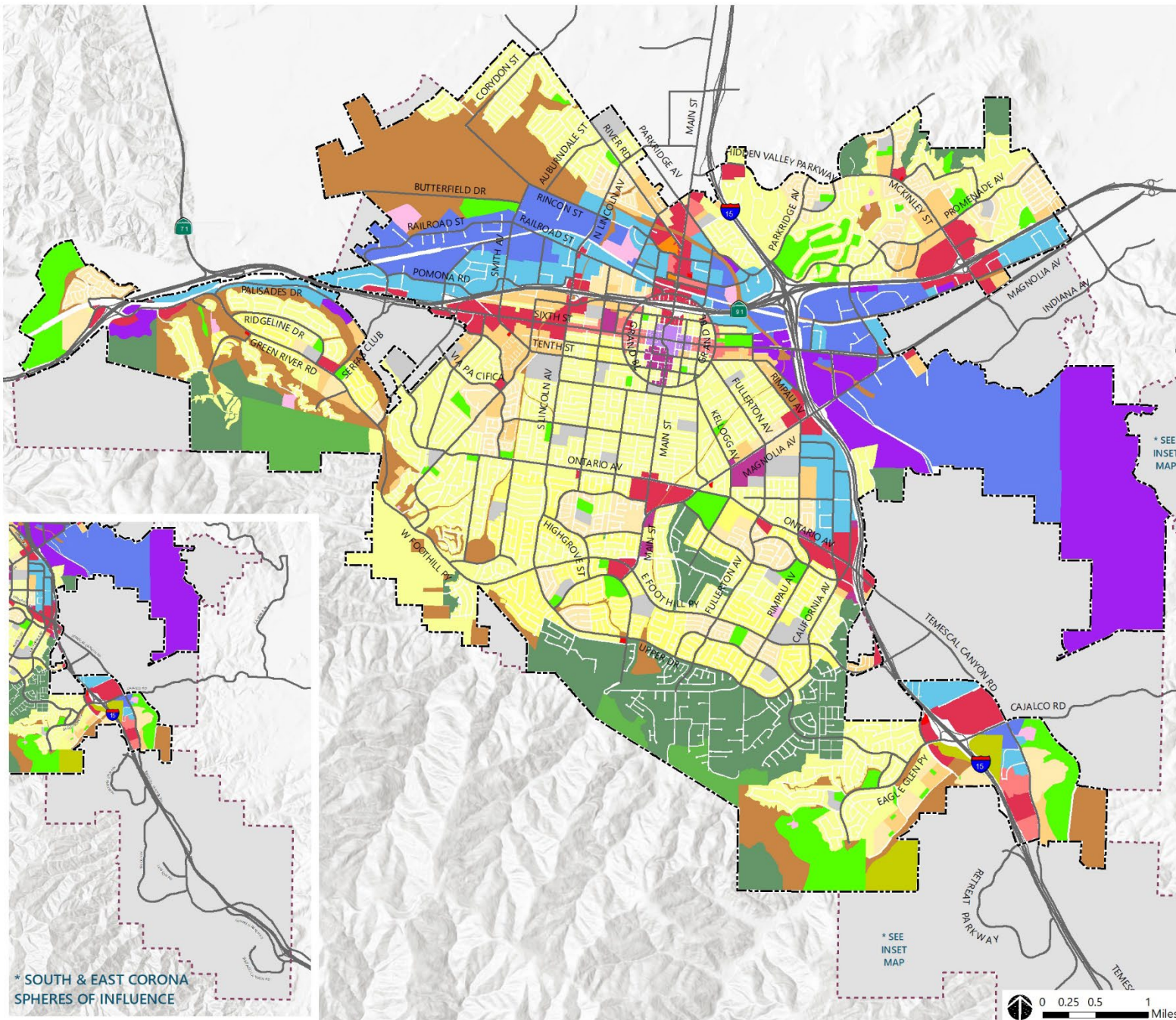
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**Figure LU-1
Land Use Plan
City of Corona**

Legend

- Agriculture
- Estate Residential
- Rural Residential
- Low Density Residential
- Low Medium Density Residential
- Medium Density Residential
- High Density Residential
- Urban Density Residential
- General Commercial
- Office Professional
- Mixed Use Downtown
- Mixed Use: Commercial/Residential
- Mixed Use: Industrial/Commercial
- Light Industrial
- General Industrial
- Open Space General
- Parks & Open Space Recreational
- Public and Institutional**
- School
- Fire Station
- Utility
- Sphere of Influence Areas
- City Boundary

Source:
City of Corona, 2018



LAND USE

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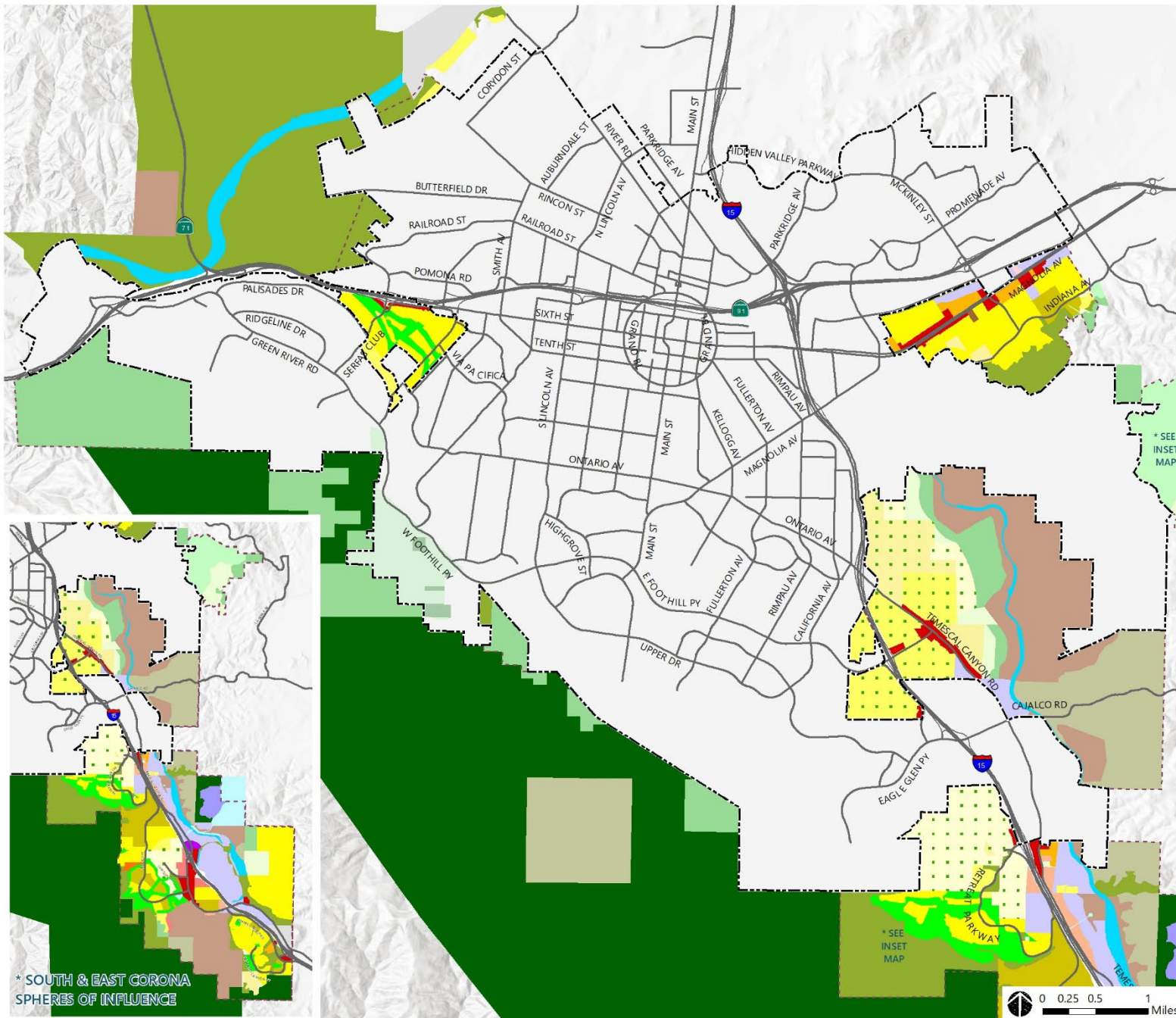
**Figure LU-2
Land Use Plan
Corona Sphere**

Legend

Rural Community

- Estate Density Residential
- Very Low Density Residential
- Low Density Residential
- Estate Density Residential
- Very Low Density Residential
- Low Density Residential
- Medium Density Residential
- Medium High Density Residential
- High Density Residential
- Very High Density Residential
- Highest Density Residential
- Commercial Retail
- Commercial Tourist
- Commercial Office
- Community Center
- Light Industrial
- Heavy Industrial
- Business Park
- Public Facilities
- Rural Residential
- Rural Mountainous
- Agriculture
- Conservation
- Conservation Habitat
- Open Space Recreation
- Open Space Rural
- Water
- Mineral Resources
- City
- City Boundary
- Sphere of Influence Areas

Source:
Riverside County, 2017



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Buildout of the General Plan Land Use Plan

Although the city is rapidly approaching buildout, Corona has vacant and underutilized land that can accommodate new housing, commercial, and industrial uses. The term “buildout” refers to the total amount of development allowed in Corona along with population, households, and jobs. The precise type of development allowed will vary based on a range of property characteristics, building requirements, and development standards, summarized briefly below.

The following provides guidance in interpreting density and intensity of development that applies to individual projects.

Interpreting Density and Intensity Standards

Density and Intensity

State law requires general plans to have standards for measuring the density and intensity of development. This is done to provide clarity in the amount of development allowed and to forecast the future buildout of the community. For the purposes of this general plan, building density and intensity are regulated and measured differently based on the type of development. The methods for regulating density and intensity are described below followed by prototypical illustratives.

Residential Development

Residential developments are regulated by an allowed density range (expressed as a minimum and maximum density). Residential densities are expressed in terms of the number of units allowed per adjusted gross acre, which excludes lands used for arterial road rights-of-way, schools, parks, and existing permanent land uses. Residential density is calculated by dividing the number of housing units on a site by the adjusted gross acreage of the site. The following diagram shows examples of different residential densities for one-acre properties.

Nonresidential Development

Commercial and industrial uses are regulated by a floor area ratio (FAR) standard. FAR is a measurement of the amount of floor space that can be developed on a particular parcel of land. Floor area excludes unfinished basements, carports, structured parking, mechanical rooms, and other non-habitable spaces within or adjacent to a building. The square footage could be provided in one or more buildings.

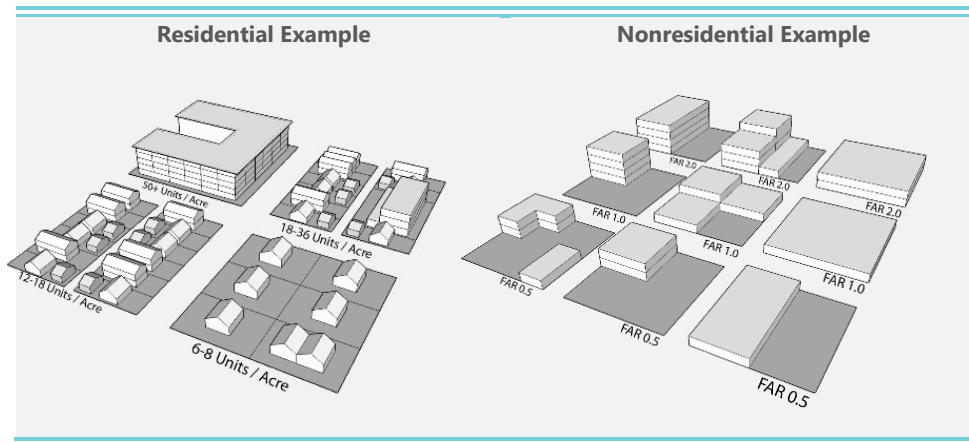
The FAR standard limits development allowed on a property. For example, a FAR standard of 12,500 square feet of building on a 25,000-square-foot site equates to a 0.5 FAR. Similarly, a maximum FAR standard of 0.8 would allow 20,000 square feet of usable floor area, and a FAR of 1.5 would allow 37,500 square feet of usable floor area. The diagram depicts building configurations of FARs of 0.5, 1.0, and 2.0. Floor area excludes unfinished basements, carports, structured parking, mechanical rooms, and other non-buildable spaces.

Mixed Use Development

Density and intensity of mixed-use developments that include both commercial and residential uses are regulated by the maximum residential density AND the maximum FAR for a land use designation. As an example, a one-acre site (43,560 sq. ft.) with a maximum FAR of 1.0 and an allowed density range of 17 to 35 units per acre could be developed with 43,560 square feet of total building space. The 43,560 square feet could be divided into a combination of commercial and residential space. Up to 35 units is allowed per adjusted gross acre.

The land use categories that follow indicate the density and FAR for with each land use category. Development that exceeds these levels may only be allowed under certain conditions in the Municipal Code. For example, the City is required by State law to offer a density bonus for senior or affordable housing. Other bonuses may be defined by the City as an incentive for meeting specific objectives.

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The buildout anticipated under the general plan and land use plan is a function of the acreage of available land and the amount of development allowed on a property. Density and intensity are two quantitative measures for determining how much development may occur on a property. It should be noted that not all parcels can accommodate the maximum density or intensity allowed under the general plan due to environmental constraints, development standards, and project design aspects.

Table LU-2, *Corona Buildout Summary*, shows the existing number of housing units, population, nonresidential square footage, and jobs in the city and SOI as of 2018 and a comparison with that proposed at buildout of the general plan. Over the planning horizon (2040), more than half of the housing, population, development, and employment growth will occur within the sphere of influence.

Table LU-2 Corona Buildout Summary

Scenario	Residential Uses		Nonresidential Uses	
	Housing	Population	Building Sq Ft.	No. of Jobs
Existing Conditions (2018)				
City of Corona	48,532	165,366	52,278,846	70,972
Sphere of Influence	10,896	37,264	3,436,459	4,346
<i>Total</i>	59,428	202,630	55,715,305	75,318
Proposed General Plan (2040)				
City of Corona	54,026	184,086	61,794,650	84,395
Sphere of Influence	16,913	57,842	20,397,007	22,079
<i>Total</i>	70,939	241,928	82,191,657	106,474
Difference (Existing and Buildout 2040)				
City of Corona	5,494	18,720	9,515,804	13,423
Sphere of Influence	6,017	20,578	16,960,548	17,733
<i>Total</i>	11,511	39,298	26,476,352	31,156

Source: Corona General Plan, Environmental Impact Report, 2019.

COMMUNITY QUALITY AND SENSE OF PLACE

Community quality and sense of place refer to the varied collection of qualities and characteristics—visual, cultural, social, and environmental—that provide meaning to a location and differentiate one location from another. In some cases, it is represented by tangible features of the environment—defined by thoughtful architecture, the quality and condition of buildings, and their relationship to other features of the built environment. In other cases, the presence of parks, recreation, trees, and other amenities provide sense of place. It is also tied to the preservation of important historic elements—streets, trees, buildings, and other cultural reminders.

Over Corona's history, the city has been defined by a variety of development typologies, patterns, and styles that are largely reflective of their era of construction. From the Downtown's historic character to post-World War II suburbs, from strip commercial corridors and older industrial uses to the master planned residential and newer commercial developments, each typology of development has left its mark. Some of the development patterns are highly desirable, others less so. These development patterns are characterized by the prevailing urban planning, transportation (namely the auto), and architectural practices of that particular era of construction.

Throughout these eras, specific features and places have developed that are known to typify community quality and sense of place. While not an exhaustive list, important principles to consider in creating community quality and sense of place include:

- » Physical form and character of development
- » Provision of green open spaces and landscaping
- » Thoughtful design and development of structures
- » Orientation and location of supporting land uses
- » Condition and maintenance of buildings

Principles of livability, such as walkability and opportunities for social interaction, are cross-cutting themes. These principles, individually and collectively, make Corona a desired place to live, work, and recreate.

While Corona is nearly built out and has an established pattern of development, it is recognized that the community will continue to evolve as development ages and requires reinvestment, as shifts in technology offer new opportunities for change, and as the goals of the community change over time. With community quality and sense of place as a guiding principle, these changes offer opportunities to improve the livability and desirability of Corona. The land use element sets forth policies that encourage the evolution of neighborhoods, commercial and office districts, and industrial uses to introduce and/or strengthen community quality and sense of place.

The following goal and policies address the preservation and enhancement of features that define community quality and sense of place with respect to land uses.

GOAL LU-5

Distinct and well-maintained neighborhoods and districts that contribute to the identity, character, and image of Corona as a livable, diverse, innovative, and environmentally sustainable community.

Policies

Community Form and Character

- LU-5.1** Promote development and revitalization of neighborhoods, commercial and industrial districts, and public places that are distinguished by their physical design, image, effectiveness in nurturing community socialization and economic activity, and perception as valued places.
- LU-5.2** Promote development patterns and structures that recognize and maintain the historic character of recognized heritage properties and those that have potential to become eligible for historical significance.
- LU-5.3** Distinguish the city's neighborhoods and districts in their character and physical appearance by considering their physical and visual separation, edge and entry treatment, architecture, landscape, streetscape, and comparable elements during their design and development.
- LU-5.4** Encourage preparation of Specific Plans for large vacant lands planned for residential, commercial, industrial, or mixed-use purposes, or for the re-use of existing multiple properties where the intent is to establish a cohesive district.

Green Open Spaces and Landscaping

- LU-5.5** Enhance Corona's system of parks, greenways, and open spaces by linking these and surrounding natural areas, including along the Temescal Creek, with pedestrian trails and greenways where feasible.
- LU-5.6** Require the submittal and approval of landscape plans for all development projects consistent with adopted ordinances and guidelines; encourage sustainable practices for landscape materials, design, irrigation, and maintenance.
- LU-5.7** Require property owners and tenants to maintain landscaping, remove weeds, and replace unhealthy or dead landscape; enforce landscape maintenance through proactive enforcement.
- LU-5.8** Encourage developers to incorporate mature, specimen trees and other significant landscaping that may exist on the site into the design of the project.

Design and Development

- LU-5.9** Require adherence to the design and development guidelines as subsequently stipulated by this plan's policies for each land use district, as well as implementing ordinances and specific plans.
- LU-5.10** Promote quality development through site design, architectural elements, and landscaping characteristics that make Corona a desirable place to live and work and respond to the local context.
- LU-5.11** Require projects to implement appropriate building orientation, setbacks, buffering, privacy, and vehicle access as well as mitigate potential impacts associated with noise and lighting in order to be compatible with adjacent land uses.
- LU-5.12** Require that development in neighborhoods, districts, and other community activity centers be designed to accommodate public gatherings and pedestrian activity.
- LU-5.13** Require that new master-planned residential subdivisions incorporate parks, greenways, and open spaces as character-defining amenities for their residents, emphasizing the retention of natural landforms and important plant communities.

Building Quality and Maintenance

- LU-5.14** Support the conservation, maintenance, and upgrading of housing, commercial buildings, and historic structures through education, technical and financial assistance, and partnerships.
- LU-5.15** Require that new and rehabilitated structures be designed, built, and maintained in a manner that promotes their physical longevity, and at the same time provide architectural details consistent with the City's design guidelines and other applicable codes and ordinances.
- LU-5.16** Maintain proactive code enforcement and nuisance abatement programs to ensure that properties in Corona's residential neighborhoods and business and service districts are properly maintained in order to preserve the quality and appearance of developed properties, making the city a desirable place to reside and/or conduct commerce .
- LU-5.17** Promote and support community efforts for the renovation of structures and facilities; work with local organizations to educate residential, commercial, industrial, and institutional property owners and tenants regarding property maintenance.

GOAL LU-6

A community that promotes sustainability in the planning, design, and construction of developments to create a more livable community and achieve broader economic and environmental objectives.

Policies

LU-6.1 Promote sustainable features in new construction and significant renovations, including the use of locally sourced, recycled, and sustainable-sourced building materials, energy- and water-efficient building design, integrated renewable energy and energy storage systems, and waste minimization during construction.

A variety of General Plan topic areas are related with sustainability because they protect the public and environmental health.

The Land Use Element contains sustainable policies that encourage infill development, increased densities and intensities in strategic locations, and environmentally friendly building design, materials, and construction practices,

The Infrastructure and Utilities Element contains sustainability-driven policies that encourage recycling, pedestrian connectivity, and public transportation, as well as energy, water, and wastewater efficiencies.

The Environmental Resources Element contains policies aiming to conserve or improve natural resources such as water supplies, biological communities, air quality, and minerals.

The Healthy Community Element contains policies that address environmental hazards including climate change, hazardous materials, wildfire, flooding, environmental justice, and others.

LU-6.2 Require that new residential, commercial, office, and industrial development be designed to minimize consumption of and sustain scarce environmental resources through:

- Site design—concentration and intermixing of development to minimize vehicular trips and promote walking and building orientation for solar access and heat gain and loss
- Landscaping—drought-tolerant species, use of recycled water for irrigation, and other purposes
- Capture of rainwater and re-use on site
- Building design and construction materials—energy-and water efficient fixtures, recycled building materials, insulation and wall thickness, permeable paving surfaces, and comparable techniques

RESIDENTIAL NEIGHBORHOODS

Corona is characterized by its diverse residential neighborhoods, which vary in scale, density of development, lot size, and type of housing. These range from the historic neighborhoods flanking the Downtown and Grand Boulevard circle that contain a mix of single-family and smaller-scale multi-family dwellings to the master planned residential neighborhoods that extend from the valley into the foothills and contain a greater homogeneity of housing types often oriented around schools and parks. Lots in southern Corona also offer ample open green space, including golf courses.

Older neighborhoods are characterized by diverse architectural design and quality. Some are distinctive in architectural design and representative of important styles evocative of Southern California's agricultural-based community development. Others reflect a "ranch style" character of rural communities. Others are simple, nondescript in their design, built on standard lots, oriented to the street with well-defined entries, and set back from the street by large landscaped front yards. As these neighborhoods have aged, they are increasingly in need of property enhancement.

Newer residential neighborhoods are characterized by a greater provision of green spaces. In turn, this has been accommodated by smaller lot sizes for single-family detached units and greater sense of building bulk and mass. Houses are closer to the street, and their frontages are often visually dominated by garages, with house entries reduced in size. The neighborhood street pattern has been internalized as well, with the use of cul-de-sacs and curvilinear alignments that are connected to the arterial network in limited locations and disconnected from adjoining residential areas.



Single-family residential development oriented around paths and open spaces.

The following goals and policies provide guidance that applies to all residential neighborhoods followed by specific guidance for existing and new residential neighborhoods and for lower density areas where future development is envisioned.

General Residential

GOAL LU-7

Residential neighborhoods that contain a diversity of housing and supporting uses to meet the needs of Corona’s residents and that are designed to enhance livability and a high quality of life.

Policies

Land Uses

- LU-7.1** Accommodate the development of a diversity of residential housing types that meet the needs of Corona’s population in accordance with the Land Use Plan’s designations, applicable density standards and design and development policies, and the adopted housing element.
- LU-7.2** Promote the development of innovative forms of housing that increase the diversity and affordability of units to meet the needs of the population, such as mixed-use that integrate housing with commercial and other uses, live/work structures, loft housing, and other similar housing types.
- LU-7.3** Allow for the development of accessory dwelling units and other similar uses in appropriate residential zones, provided that parking, design, building and safety, and other neighborhood regulations comply with State statutory requirements and local regulations.
- LU-7.4** Allow for the integration of land uses within residential neighborhoods that support and are complementary to their primary function as living environments, including but not limited to: schools, parks, trails, community centers, community meeting facilities, and other comparable uses that provide supporting services.
- LU-7.5** Allow for home occupations in Corona’s residential neighborhoods that do not diminish the quality and character of the neighborhood and update the city’s home occupation ordinance in accordance with state adopted legislation for certain home-based businesses.
- LU-7.6** Allow for the development of family day care facilities, appropriately sized childcare centers, and small residential care facilities (as defined by the State of California) subject to compliance with regulations in state law and the municipal code.

Design and Development

- LU-7.7** Require that single-family detached and attached housing be well designed in a manner that will enhance and maintain a high level of neighborhood quality in consideration of the following principles:
 - Avoidance of “box-like” structures through the articulation and modulation of building elevations and masses.

- Variation of rooflines and architectural design treatment of all elevations that are visible from public places.
- Use of entries and windows on street-facing elevations to visually “open” the house to the neighborhood.
- Minimize the use of paving for driveways and parking areas in front yard setbacks.

LU-7.8 Require that new multi-family residential projects be designed to convey a high level of visual and physical quality and distinctive neighborhood character in consideration of the following principles:

- Architectural treatment of building elevations and modulation of mass to convey the character of separate units, avoiding the sense of a singular building mass.
- Design of parking areas integral with the architecture of the residential portions of the structure, including its style, materials, colors, and forms.
- Incorporation of usable and functional private open space for each residential unit
- Incorporation of common open space that creates a pleasant living environment while providing attractive locations for recreation.

LU-7.9 Encourage the attractive treatment of front yards and other areas in residential neighborhoods that are visible from the street, including limits on the area that may be paved for parking or other uses.

LU-7.10 Require that fencing and walls in residential neighborhoods achieve high aesthetic and safety standards considering the following principles:

- Fencing and walls should not obstruct vehicle sight lines and create hazards for pedestrians and bicyclists.
- Fencing and walls should be compatible with or complement the architectural design of nearby structures.
- Fencing and walls shall be regularly maintained, repaired, and kept in excellent condition
- Fencing and walls should make a positive contribution to the character of the neighborhood.

Existing Neighborhoods

GOAL LU-8

Assure the integrity, quality, and livability of Corona’s existing residential neighborhoods, preserving those elements that give them character, cohesion, and quality of life.

Policies

Land Uses

- LU-8.1** Promote the conservation of existing residential neighborhoods, permitting the infill of housing that is compatible in density and scale with existing uses, except where densities may be increased as depicted on the land use plan or as permitted by state law.
- LU-8.2** Provide opportunities for the development of new housing adjacent to the Downtown and the Sixth Street corridor, which may include a variety of housing types, including mixed use projects, that integrate housing with commercial and office uses.
- LU-8.3** Provide opportunities for housing that are in pace with adopted state legislation and allow for a variety of housing types such as integrating residential with commercial and office developments, near activity centers and in transit-oriented areas near the Metrolink Station.
- LU-8.4** Provide opportunities for “live-work” development to accommodate artists, craft persons, and professionals working from home as a buffer between residential and nonresidential uses in Downtown, North Main Street, and adjoining commercial and industrial corridors and districts.
- LU-8.5** Promote development and enhancement of places that serve as the focal point of identity and activity in neighborhoods through the integration and, where feasible, consolidation of parks, schools, community facilities, religious facilities, and similar uses.
- LU-8.6** Encourage the rehabilitation and relocation of historic homes slated for demolition to other appropriate sites in the City; encourage the rehabilitation of homes that will soon become eligible for historic designation due to their age, integrity, and significance.

Design and Development

- LU-8.7** Require that new single-family homes constructed in existing neighborhoods be designed to complement existing structures in their property setbacks, scale, building materials, and color palette, and exhibit a high quality of architectural design.

- LU-8.8** Require multi-family units built within mixed density residential neighborhoods to be designed to convey a single-family character incorporating well-defined entrances, modulated building masses and facades, and extensive site landscape.
- LU-8.9** Discourage replacement of existing housing with substantially larger and massive structures where the existing home is in good physical condition and the new construction would deviate significantly in scale and character than their surroundings.
- LU-8.10** Require that building and site alterations and additions are compatible in scale and design with existing homes and neighborhood character, respect the privacy of nearby homes, and preserve solar access and views.
- LU-8.11** Discourage the gating of existing residential neighborhoods unless there are overriding public safety concerns that would require gating to be installed.
- LU-8.12** Require that nonresidential uses be located and designed to maintain the quality and character of the neighborhood and prevent traffic, noise, odor, lighting, and other adverse impacts on adjoining housing units.

Property and Building Maintenance

- LU-8.13** Promote the maintenance and upgrade of existing residential neighborhoods through proactive code enforcement and financial incentive and technical assistance programs, where appropriate and feasible.
- LU-8.14** Encourage and support homeowners' associations and local groups in the conduct of neighborhood "cleanup" days where assistance is provided for removal of debris, painting, and other property improvements.



Residential neighborhoods offer a range of quality housing types.

New Neighborhoods

GOAL LU-9

Development of new residential neighborhoods that complement existing neighborhoods, contain a mix of neighborhood-supportive land uses, exhibit high quality architectural design, and ensure a high level of livability for their residents.

Policies

Land Uses

LU-9.1 Accommodate the development of new residential neighborhoods in areas depicted by the land use plan and growth and development policy plan that contain a diversity of housing and supporting schools, parks, and other amenities.

Design and Development

LU-9.2 Promote the development of master planned communities that integrate a diversity of housing, parks, schools, trails, open spaces, and other elements into a distinct place. Require a development pattern that ties together parcels into a cohesive whole addressing the location and massing of buildings, architecture, landscape, pedestrian trails, key landmarks, and similar elements.

LU-9.3 Encourage the integration of a mix of housing types into new residential neighborhoods, which may include single-family homes, townhomes, row houses, live-work, and multi-family units to the extent the integration is appropriate and complements surrounding land uses.

LU-9.4 Design the distribution of residential land uses to avoid the overconcentration of multi-family units by limiting their number in any single location and providing for their dispersal throughout the neighborhoods.

LU-9.5 Establish and locate a focal point of identity and activity within walking distance of all housing in new residential neighborhoods that may consist of a school, community meeting facilities, parks, nonresidential areas with public facilities, and similar uses.

LU-9.6 Support the development of public uses that offer the opportunity for the sharing of facilities such as the integration of school play fields and athletic fields with public parks, public and school libraries, and multi-purpose facilities.

LU-9.7 Site and design new residential developments to enhance neighborhood quality by:

- Establishing a network of streets and pedestrian paths that promote neighborhood activity, internal access, and connectivity to surrounding areas.
- Enhancing the visual quality and character of street frontages through extensive landscape and reduction of the visual dominance of garages.
- Promoting architectural diversity for residential, commercial, and other supporting uses consistent with established design guidelines.
- Varying heights and rooflines of new development (residential, commercial, etc.) along the street frontages to allow for visual interest.

LU-9.8 Require that multi-family development abutting single-family housing units incorporate setbacks, step down in height and mass as it approaches lower density areas, and incorporate other design elements to ensure an appropriate transition between the uses.

LU-9.9 Require that residential neighborhoods be designed to ensure visual and physical compatibility among their various uses, as well as adjoining neighborhoods, commercial and industrial districts, and open spaces.

LU-9.10 Require that new residential development pay its fair share of the cost of capital improvements, public facilities, and services needed to serve that development. Ensure that funding mechanisms for landscape maintenance and improvement are required for each.



Corona offers a variety of new detached and attached housing types.

GOAL LU-10

Development of low-density residential neighborhoods in areas on the city’s southern periphery that preserve the rural and open space character of their setting.

Policies

Land Uses

LU-10.1 Accommodate the development of low-density single-family housing that reflects and maintains the rural character of Corona’s foothills and canyons, in accordance with the land use plan’s designations, density standards and design and development policies.

Design and Development

LU-10.2 Require that development projects be located and designed to maintain predominant topographic forms, contours, and elevations in the City’s foothills and canyons.

LU-10.3 Minimize the removal of native landscape and integrate with new residential development, to the extent feasible and practical for fire control; require adherence to building construction and site designs necessary to minimize risks from wildfire, such as implementation of fuel modification areas, concrete tile roofs and boxed eaves.

LU-10.4 Require that new development and major rehabilitations be located, designed, and built to maintain natural drainages, riparian vegetation, and the viability of habitats, except as necessary to protect from flooding or wildfire, or that impacted areas be properly mitigated.

LU-10.5 Establish community design standards that reflect the rural character such as the use of wood or stone fences, limited sidewalks, extensive street landscape, low levels of street lighting, and similar techniques.

LU-10.6 Establish a multi-use trail system that connects the rural and estate neighborhoods adjoining open spaces and parklands. These may be developed for pedestrians, bicycles, and/or for horseback riding where allowed by zoning.

LU-10.7 Within hillside areas, allow for the clustering of homes where it contributes to the preservation of open spaces and hillsides, conforms to the distinct environmental and topographical characteristics of the land, and achieves other community goals.

LU-10.8 Require geotechnical studies for development proposed in the hillsides, within close proximity to the Elsinore Fault Zone, and other areas known for potential seismic and geologic hazards to identify areas requiring appropriate safeguards.

COMMERCIAL AND OFFICE DISTRICTS

The City of Corona contains a diversity of commercial and office uses that support local resident needs, business and commerce, and surrounding communities. While the city has maintained a strong manufacturing and industrial base for many decades, efforts have directed at strengthening its commercial base to provide the types of goods and services desired by the community. Economic development efforts described later in this general plan have also targeted the growth of the city's office market to provide competitive locations for finance, real estate, technology, and other professional jobs.

Generally, the city's commercial and office districts can be classified into one of five categories, differentiated by location, form, or function in Corona:

- » Historic Downtown that serves as the symbolic and historic center of the city. It contains a mix of retail, personal service, and office uses located in one- and two-story buildings on generally smaller lots.
- » Community and neighborhood-serving multi-tenant centers containing grocery stores, local services (dry cleaners, small eating places, etc.), and supporting uses developed as nodes within residential areas (e.g., Ontario and Magnolia)
- » Community and region-serving corridors containing a mix of "large format" retailers, offices, and highway-oriented uses located in one- and three-story structures developed on large parcels
- » Larger format multi-tenant centers containing a mix of region- and some local-serving uses (grocery, drug stores, and restaurants) located at freeway interchanges (e.g., McKinley Street and Magnolia Avenue)
- » Professional office districts, which range in intensity from suburban one-two floor offices to higher-intensity mid-rise office complexes of up to six floors, which are typically located near the SR-91 or I-15.

Specific plans facilitate development of some of the city's commercial and office districts. The Downtown Specific Plan is intended to create a vibrant downtown experience, capitalizing on the area's historic character, local amenities, and opportunity for pedestrian activity. The North Main Street Specific Plan guides the transformation of the corridor into a vibrant transit-oriented district with mixed uses near and adjacent to the Metrolink station and commercial and service uses. Dos Lagos Specific Plan created a vibrant mixed-use district containing residential uses, multi-story office complexes, hotels and accommodations, and entertainment uses, all within an environment that encourages walking or a short drive.

The following goal and policies are directed at providing guidance for the development of the city's commercial and office districts. The goals and policies are intended to work in tandem with those in the economic development element.

GOAL LU-11

A diversity of viable commercial and professional office districts and corridors that contain uses supporting resident, business, and visitor needs and that contribute revenue to the City to fund essential services and maintain a high quality of life.

Policies

Land Uses

- LU-11.1** Encourage a comprehensive range of retail, service, and other commercial uses in the City that provide goods and services to meet the diverse needs of Corona’s residents and businesses, in accordance with the land use plan’s designations and applicable density standards and design and development policies.
- LU-11.2** Maintain a range of retail commercial and office uses and districts in the City that are differentiated by their functional role, customer base, and physical form and character. Such districts include:
- Mixed-use Downtown that serves as the center of Corona’s identity and activity; provides a wide range of retail, commercial, and specialty goods; and is designed and developed to emphasize pedestrian activity.
 - Community retail districts that contain larger-format uses, national retailers, restaurants, and overnight accommodations, that serve the region and the local community, generally located in proximity to freeway off-ramps.
 - Neighborhood shopping districts providing basic goods and services, such as grocery stores and personal services, within easy access and that are intended to serve the needs of residents living in nearby neighborhoods.
- LU-11.3** Promote reinvestment in declining shopping centers and districts, with an emphasis on new retail uses that serve adjacent neighborhoods and contribute to the overall vitality of the centers.
- LU-11.4** Maintain appropriate areas in the city for heavy commercial uses. While development standards in these areas should respect operational characteristics of these uses, they should promote aesthetic improvements and traffic safety and minimize impacts.
- LU-11.5** Regulate the extent, location, and design of drive-thru and “big box” commercial uses to ensure their compatibility with the functional role and character of adjoining land uses while addressing the operational needs of such commercial uses.
- LU-11.6** Require that transit-supporting facilities, such as bus turnouts, passenger drop-offs, and shelters, be incorporated in new commercial centers or

when subject to major renovation and improvement, where appropriate to support local, citywide, and regional transit systems. The location and type of facility should be coordinated with transit agencies.

- LU-11.7** Regulate the location and number of alcohol sales, adult business, game arcade, and other “community-sensitive” uses based on proximity to other such uses, residences, schools, parks, and religious facilities, consistent with State statutory requirements.



An example of multi-story office space using landscaping to frame dimension.

Design and Development

- LU-11.8** Require that new development within commercial and business districts be designed to convey a high quality of architectural and site quality in consideration of the following principles:
- Architectural treatment and modulation of all building elevations, including ancillary facilities such as storage.
 - Incorporate extensive windows to promote visual transparency of building elevations facing sidewalks and public spaces.
 - Modulation and articulation of building elevations to provide visual interest and character.
 - Clear identification of building entries through design elements and integration of signage with the architectural character of the building.
 - Screening and visual integration of rooftop mechanical equipment.
 - Extensive use of landscape that provides a three-dimensional character.

- Clearly delineated pedestrian connections between the business use and parking areas (e.g., paving treatment, landscape separation).

LU-11.9 Require that new development of multi-tenant commercial and office projects be designed to convey a unified and high-quality character in consideration of the following principles:

- Avoidance of sense of single building volume and mass through modulation, articulation, setbacks, and other techniques.
- Consistent architectural design vocabulary, building articulation, materials, and colors.
- Linkage of individual storefronts and structures through common pedestrian walkways, plazas, and other open spaces that provide amenities for customers.
- Variation of building heights and rooflines to avoid uninterrupted planes and promote visual interest.
- Architectural treatment of parking structures consistent and integrated with commercial and business buildings.
- Provision of pedestrian connections to off-site pedestrian areas, where appropriate.

LU-11.10 Require that large-footprint single commercial uses ("big box") be designed to exhibit a high level of architectural quality and avoid the sense of undifferentiated and continuous building elevations through the use of modulated building volumes, façade articulation, fenestration, well-defined entries, pedestrian plazas, and similar techniques.

LU-11.11 Promote the renovation of existing commercial and office centers in accordance with the design and development principles defined by Policies LU-11.11–LU-11.13, emphasizing the inclusion of plazas, sidewalks, streetscape, and other improvements to enhance their character as pedestrian-gathering places, when property owners invest in major redevelopment of their properties.

LU-11.12 Require that commercial projects abutting residential neighborhoods be designed and buildings located to prevent conflicts and ensure an appropriate interface with adjoining housing in consideration of the following principles:

- Reduction of building heights and modulation of mass and volume of the building in proximity to the adjacent housing.
- Inclusion of landscape and attractively designed walls as buffers to mitigate noise, provide privacy, and serve as a visual amenity between the commercial and residential uses.
- Design of building elevations facing residential properties to ensure privacy of adjoining housing.

- Control of the location of commercial truck access, loading, parking, and comparable functions in proximity to adjoining housing or other sensitive land uses.
- Design of on-site and building lighting to prevent spillover, glare, and adverse illumination of adjoining residential properties.

LU-11.13 Require that entertainment, drinking establishments, and similar uses incorporate physical and operational measures to prevent adverse impacts and ensure safety for adjoining residential properties.

LU-11.14 Require that a commercial site's vehicular access and parking be located and designed to prevent adverse impacts on adjoining residential uses.



Quality hotels and stores provide options for visitors to shop and enjoy Corona.

INDUSTRIAL DISTRICTS

Corona has historically maintained a significant industrial district consisting primarily of manufacturing, wholesale, warehousing, mineral extraction, and other industries. Over time, significant industrial clusters have developed in aeronautics, aftermarket automotive, food processing, and research and development for medical technology. The Northwest Industrial District is home to most of the City's industrial uses, although industrial uses also extend along the south side of SR-91 and I-15. Corona currently allows for several broader categories of industrial development.

Light Industrial Development

Light industrial development is generally characterized by operations involving light assembly and manufacturing, wholesaling, warehousing and distribution, agricultural and industrial processing within structures, and support commercial services. Light industrial operations may be conducted in a single building or within a complex of buildings that are collectively known as an industrial or office/industrial park. Light industrial uses are located predominantly in Northwest Corona along the State Route 91 and along the west side of the Interstate 15 in smaller business parks.

Heavy Industrial Development

Heavy Industrial development is characterized by a full range of manufacturing, agricultural, and industrial processing, general services, and distribution uses, including uses with outdoor equipment and product storage. Heavy industrial operations are generally land intensive, requiring the storage and conversion of raw materials and/or large equipment. These projects may be conducted in single or multiple buildings and are less likely within an industrial park where a cohesive design theme may be apparent. Warehousing and construction operations are in northwest Corona and along the east side of the Interstate 15 extending into Temescal Canyon.

Resource Extraction

Corona has two mineral extraction operations (Vulcan Materials and All American Asphalt) that are regionally significant sources of aggregate and industrial minerals. Both operations have been granted surface mine permits and have development agreements with the city to operate for a period of 100 years in exchange for the city receiving an extraction royalty payment from the aggregates produced at the sites. The 100-year permits were granted to Vulcan Materials in 2014 and to All American Asphalt in 2018. In the southern SOI, additional mining operations are located to the east of the Interstate 15 and in southern Temescal Valley.

While heavy industrial uses and warehousing still seek competitive locations near Los Angeles and Orange County to ship goods, other industrial land uses are emerging. The city is seeing more flex space opportunities that allow for a broader type of use within a traditional industrial building. As vacant land for industrial uses diminishes, the city will see increased interest in the recycling of older industrial uses. This gradual transition offers the opportunity to accommodate a greater diversity of jobs to lessen the need for residents to commute to other cities for their employment.

GOAL LU-12

Development and maintenance of industrial land uses that provide a wide range of employment opportunities for Corona's residents and that provide sufficient goods, services, and revenues to sustain the City's economy.

Policies

Land Uses

- LU-12.1** Accommodate existing and new manufacturing, research and development, professional office, and similar uses in accordance with the land use plan's designations and applicable density standards and design and development policies.
- LU-12.2** Allow for the development and integration of businesses and services that support and are ancillary to the primary industrial function and employee needs (e.g., production support, financial institutions, business services, restaurant).
- LU-12.3** Discourage the development of industrial uses that are land extensive, generate few job opportunities, and contribute little revenue for the City.
- LU-12.4** Encourage the reuse of underutilized, vacant, or obsolete industrial buildings with higher value uses that are consistent with the goals and policies of the General Plan.
- LU-12.5** Work proactively with property owners of declining industrial sites to facilitate upgrades and re-use for contemporary business uses. Such may include incentives for parcel consolidation to facilitate the development of cohesive and well-defined business parks.

Design and Development

- LU-12.6** In accordance with City industrial design guidelines, require that new and renovated industrial properties and structures be designed to achieve a high level of quality, distinctive architecture, and be compatible with adjoining uses in consideration of the following principles:
- Modulation of building volumes and masses and façade articulation to avoid blank or unarticulated façades.
 - Architectural treatment of all building elevations to minimize sense of monotonous and undifferentiated walls.
 - Inclusion of courtyards, plazas, and other uses that serve as amenities for employees.
 - Signage should be attractive; consistent; well designed and proportioned; and carefully located to enhance the character of the use of the district or site.
 - Extensive landscaping of open spaces.

LAND USE

- Service and utility areas, including loading docks, storage areas, mechanical systems, and trash bins, shall be screened from view and integrated into the design of a project and enclosed
- Enclosure of storage areas with decorative screening or walls.
- Location and design of driveways to minimize conflicts with adjoining uses and shield from public view to the extent practically feasible.
- Mitigation of noise, odor, lighting, vibration, and other impacts.

LU-12.7 Regulate the development of industrial uses (consistent with local regulation and state law) that use, store, produce, or transport toxic and hazardous materials; generate unacceptable levels of air or noise pollution; or result in other adverse impacts.

LU-12.8 Require that heavy industrial uses incorporate landscaped setbacks, screening walls, berms, downward focused lighting fixtures, and/or other appropriate elements that mitigate visual and operational impacts on adjoining land uses.

LU-12.9 Require that heavy truck and vehicle access for industrial land uses be effectively placed and managed to ensure that it is safe and efficient for the present use and that it minimizes noise, odor, vibration, traffic, queuing back onto streets or existing or adjacent properties, and other safety impacts on adjoining uses.



New industrial buildings feature a variety of materials, textures, and façade enhancements.

MIXED USE DISTRICTS

Mixed-use development has become a viable strategy to increase the supply of housing as developable lands become constrained and housing prices escalate. It is conceived as an urban planning solution to enhance community livability by locating residents in close proximity to commercial services, jobs, and transit. The General Plan allows for several forms of mixed-use developments along major corridors, the greater Downtown, and for specific employment-housing nodes, as described below.

The first form of mixed use accommodates properties exclusively for retail commercial or an integrated mix of commercial and residential uses with housing on the higher floors of buildings and commercial retail, service, or office uses on the first floor. Mixed-use development on North Main Street is an example. In the Downtown Core, options for mixed uses include integrated development with commercial or office uses on the primary frontage and residential to the rear as a transition to abutting neighborhoods.



Iconic mixed-use development along North Main Street in Corona.

A second prototype integrates industrial, office, and commercial uses on the same site or in proximity to one another. This recognizes the premise that viable industries and business districts benefit from accessibility to supporting activities. Corona Pointe on Magnolia Avenue demonstrates this intermixing of industrial and commercial uses. Typically, industrial uses allocate a certain percentage of space for ancillary office uses. However, if singular uses are desired in the City's mixed-use district, it must be industrial

The third prototype is not limited to a product itself or its adjacent uses. It involves the mixing of residential, commercial, office, and entertainment uses within a larger area. This type of mixed-use community can be found in the Dos Lagos community. This area offers a wide variety of supporting uses, some adjacent to one another, and others within walking distance.

The following goals and policies are intended to guide the design and production of quality mixed-use projects appropriate to their function and context.

GOAL LU-13

Vital and active mixed-use districts that provide a mix of housing in proximity to commercial uses, services, entertainment, and public transit that provide a mix of office, commercial, and/or industrial uses that support the local economy

Policies

Land Uses

- LU-13.1** Accommodate mixed-use projects that integrate housing with retail, office, and other uses within the same structure or on the same site, or the development of the property exclusively for commercial and office uses in accordance with the land use plan's designations and applicable density standards and design and development policies.
- LU-13.2** Limit retail commercial and professional office uses within a mixed-residential-commercial/office use development to those uses that are compatible with residential uses.
- LU-13.3** Require that adequate open space and, for larger projects, recreational facilities be incorporated into mixed-use development projects to meet the need of their residents and improve overall aesthetics.

Design and Development

- LU-13.4** Require mixed use projects be implemented through a specific plan to provide for cohesive and integrated development of commercial uses and housing or industrial/commercial/office uses in accordance with the principles herein and to ensure compatibility with adjoining uses.
- LU-13.5** Require that commercial uses be located along the street frontage where sites are developed for mixed-use projects, with housing on the upper levels or to the rear of the commercial uses.
- LU-13.6** Require that mixed-use projects be designed to convey a high level of architectural and landscape quality; ensure compatibility of commercial and residential uses in consideration of the following principles:
- Incorporate elements to avoid conflicts among functions, such as noise, lighting, and other factors.
 - Visual and physical integration of the commercial and residential uses.
 - Architectural treatment of building elevations and modulation of their massing.
 - Incorporation of separate and well-defined entries for commercial uses and residential units.
 - Design of parking areas and facilities to be architecturally consistent and integrated with commercial and residential uses.
 - Incorporation of extensive site landscape, where feasible.

GOAL LU-14

Economically vital districts that are characterized by and benefit from their integrated mix of industries, retail, and office uses.

Policies

- LU-14.1** Accommodate development of mixed-use projects that integrate industrial, commercial, and/or office uses on the same site or within a unified corridor, or the development of the property exclusively for light industrial (without commercial) in accordance with the Land Use Plan's designations, density standards, and design/development policies.
- LU-14.2** Limit the industrial uses to those that are compatible with commercial and office development, emphasizing nonpolluting light industries, such as research and development, e-commerce, high technology, and related uses.
- LU-14.3** Require that a Specific Plan be approved for mixed use projects that provides for cohesive and integrated development of industrial and commercial uses in accordance with the principles stipulated herein and to ensure compatibility with adjoining uses.
- LU-14.4** Require that mixed-use projects be designed to convey a high level of architectural and landscape quality and ensure compatibility among commercial and industrial uses in consideration of development and design policies stipulated independently for these uses



Iconic live-work development at Dos Lagos

PUBLIC AND INSTITUTIONAL USES

Corona contains public and institutional uses throughout the community. These include uses such as schools and educational facilities, parks, libraries, governmental offices, post offices, corporate yards, transportation facilities, fire and police facilities, utility facilities, and comparable uses. Major public uses, such as the city hall, police department, main library, community center, fire station headquarters, and the city's primary health facility, Corona Regional Medical Center, are concentrated in Corona's core. Other public and institutional uses, such as schools, are dispersed throughout the city to provide convenient access for residents and businesses.

In developing and maintaining public and institutional land uses and buildings, the City seeks to disperse facilities, where feasible, in different neighborhoods to facilitate and improve access of residents and business to a range of public and institutional uses. In other cases, facilities are centralized or located in a manner that is suited to the intended purpose of a facility. Additional elements of the general plan and department strategic plans provide additional policy guidance on the appropriate use, maintenance, and retrofit of public and institutional land uses.



As a full-service city, Corona provides a variety of public facilities.

GOAL LU-15

A mix of governmental service, institutional, educational, recreational, and utility facilities that support the needs of Corona's residents and businesses and improve the quality of life in the community.

Policies

Land Uses

- LU-15.1** Accommodate existing schools, parks, government, fire and police facilities, utility, and institutional uses suited to serving the local needs of Corona residents and business in accordance with the land use plan's designations and applicable design and development policies.
- LU-15.2** Allow for the development of new schools, parks, government, fire and police facilities, utility, and institutional uses in any location of the City, regardless of the land use plan's designation, provided the use is environmentally suitable and compatible with adjoining land uses, and adequate infrastructure can be provided.
- LU-15.3** Promote collaborative and creative solutions between the public and private sectors to develop additional schools, parks, and other public facilities in the City and sphere of influence.

Design and Development

- LU-15.4** Ensure that the City's public buildings, sites, and infrastructure are designed to be compatible in scale, mass, character, and architecture with the district and neighborhood in which they are located and pertinent design and development characteristics specified by this plan.
- LU-15.5** Encourage non-City public agencies to design their structures and improvements to achieve a high level of visual and architectural quality and complement adjoining uses.
- LU-15.6** Promote the consolidation of public uses in new residential communities—for example, the integration of parklands, schools, libraries, and community meeting facilities to enable them to serve as a centerpiece of community identity, as well as to maximize the efficient use of land.
- LU-15.7** Strive to incorporate best practices in sustainability (including water conservation, energy conservation, groundwater filtration, and other similar techniques) into the design and development of public and institutional buildings.

OPEN SPACES

Corona also encompasses lands retained as open space that define the character and image of the city as well as serving as an important amenity for residents. The General Plan open space designation is intended to accommodate lands permanently committed or protected for open space due to value as habitat, topography, and scenic quality. The open space designation is also intended to accommodate land dedicated for public safety purposes, such as flood control channels or comparable purpose. The open space designation is not intended for agricultural or mineral extraction uses.

Examples of open spaces vary throughout the community. Open spaces may encompass steeply sloped hillsides and canyons, the major floodways and improved flood control channels that drain from these, habitats that contain significant and endangered plant and animal species, earthquake faulting and seismic risk corridors along the foothills, utility easements, and National Forest lands. Additionally, many master planned subdivisions incorporate landscaped corridors and buffers, natural lands, and significant topography that are preserved as open space.



GOAL LU-16

Open spaces that provide Corona's residents with opportunities to enjoy the natural environment, provide visual "relief" from urban development, protect significant plant and animal habitats, and protect development from natural environmental hazards.

Policies

Land Uses

- LU-16.1** Accommodate open spaces that can be used for recreation and conserved to protect significant plant and animal habitats and population from the risks of flood, fire, and seismic hazards in accordance with the designations of the land use plan.
- LU-16.2** Require the dedication of additional open spaces in new residential subdivisions and other applicable development, where necessary, to preserve the natural topography, plant and animal habitats, and flooding and drainage corridors in accordance with subsequent policies of this plan.
- LU-16.3** Protect viewsheds by prohibiting the placement of electrical transmission lines, substations, and other types of overhead or at grade heavy infrastructure into public open space or other sensitive areas.

Design and Development

- LU-16.4** Design improvements constructed in public open spaces to reflect their natural environmental setting in form, materials, and colors and to ensure compatibility with adjoining residential, commercial, and industrial uses.
- LU-16.5** Require that improvements required to be placed in open space areas (e.g., reservoirs, lighting, and other infrastructure) be designed to minimize the impact on the landscape, avoid obstructing viewsheds, and be shielded to the extent feasible by landscaping, trees, and other natural forms.
- LU-16.6** As a requirement for new development, ensure the financing, planning, design, and construction of parkland as required by the Quimby Ordinance, community needs, and consistent with the parks, recreation, and education element.
- LU-16.7** Work with Corona Fire, CAL FIRE and Forest Service and with property owners in affected areas to reduce and minimize the hazards associated with wildfire in the hillsides and open spaces, consistent with the goals and policies of the safety element.

OPPORTUNITY DISTRICTS AND SITES

The 2004 General Plan identified opportunity districts and sites where growth was anticipated to occur. After nearly 15 years of growth, the pace of future development will slow and occur primarily on limited vacant lands on the periphery of the city. Existing specific plan areas that have been previously approved, but not developed, will proceed concurrent with market demand. Any additional growth would result from re-use and renovation of existing underutilized parcels and obsolete developments. This section provides guidance for remaining focus areas as may be supplemented by approved specific plans. Figure LU-3, *Opportunity Districts and Sites*, shows areas anticipated to develop that have distinct policies associated with them. Following the figure are goals and policies associated with each opportunity district.

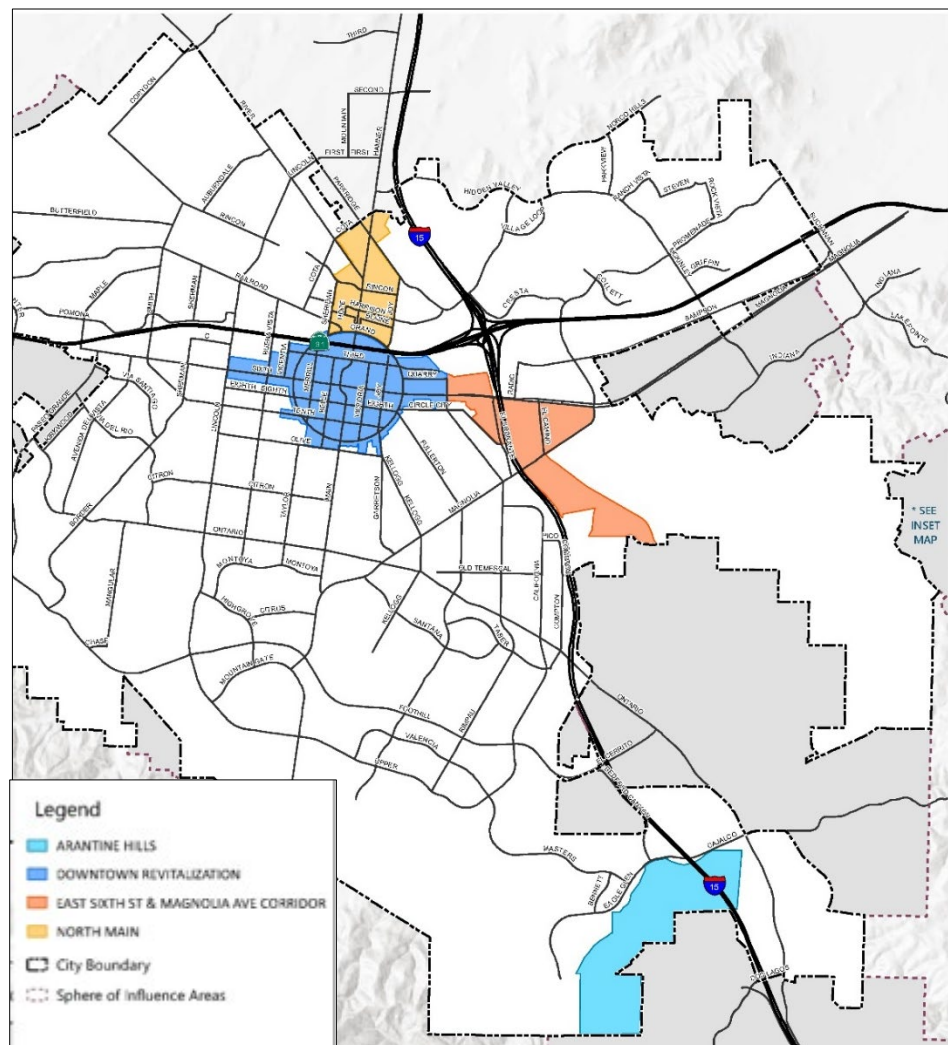


Figure LU-3 Opportunity Districts and Sites

Downtown Corona

Corona's historic Downtown hearkens to the City's original founding in 1886. More than a century later, Downtown is still distinctly identifiable by its grid street pattern, form of development, historic buildings, and landscape—all within traditional "Main Street" configuration. In 1998, the City adopted a Specific Plan covering the commercial corridor along Sixth Street and the area within the Grand Boulevard Circle. The specific plan seeks to strengthen the Downtown as the heart of the community, and an identifiable place to do business, shop, and recreate. Policies are aimed at:

- » Establishing a more "pedestrian friendly" environment by designing a circulation route that works "around" the heavy vehicular traffic on Main and Sixth Streets.
- » Stimulating economic development and reinvestment in the Downtown that also supports the historic scale and character of the original environment.
- » Providing an environment for history, arts, and culture to flourish and be a recognized and cherished feature of the Downtown.
- » Preserving and enhancing single-family neighborhoods, including the preservation and restoration of historic homes, while allowing new housing types.



From top left clockwise to the right: Medical plaza, City Park, and Corona City Hall

GOAL LU-17

A revitalized Downtown Corona that is the centerpiece of community identity, history and culture, and governance—known for its diverse and eclectic physical development and form, vibrant economy, historic character, and pedestrian activity.

Policies

Land Uses

- LU-17.1** Accommodate a mix of commercial, office, entertainment, civic, cultural, housing, and similar uses in accordance with the land use plan’s designations and applicable density standards and design and development policies, as may be precisely defined by specific plan.
- LU-17.2** Allow for the development of a mix of housing types as well as senior housing to enhance the customer base and promote walking to Downtown uses and activities.
- LU-17.3** Promote innovative redevelopment activities as feasible and supporting programs for business retention and proactive recruitment of new businesses to stimulate the revitalization of the Downtown.
- LU-17.4** Promote the development of community-oriented, cultural, and live/theatrical performance uses, building on the Civic Center’s current role as the centerpiece of arts and culture.
- LU-17.5** Accommodate public gatherings, festivals, and other special events in public places, such as parks and the community center
- LU-17.6** Promote and support the redevelopment of the Corona Mall and adjacent properties into a central attraction within the Downtown Core, with a mix of supporting land uses.

Design and Development

- LU-17.7** Ensure that new Downtown development is attractive and creates an image conducive to economic revitalization consistent with the adopted specific plan.
- LU-17.8** Maintain the generally small scale, “village-like” character of Downtown’s buildings, avoiding large “box-like” structures or developments and renovations of buildings that are inconsistent with the character of adjacent land uses.
- LU-17.9** Promote the consolidation of individual lots for the development of cohesive and well-designed commercial and mixed-use projects that maintain the area’s character of low-rise and pedestrian-oriented buildings with distinctive storefronts.

- LU-17.10** Locate and design commercial and civic structures and sites to achieve a pedestrian-oriented environment that serves as a centerpiece of community activity.
- LU-17.11** Require that commercial uses be designed to exhibit a high level of architectural and site quality in accordance with the principles defined by Policies LU-11.11 through LU-11.13.
- LU-17.12** Require that mixed-use projects that integrate commercial uses with housing be designed to exhibit a high level of quality in accordance with the principles defined by Policy LU-13.6.
- LU-17.13** Ensure that multi-family housing conveys high quality visual character, exemplified by modulated building masses, articulated facades, separate or well-defined entries for each unit, extensive landscape, and on-site amenities in accordance with principles defined by Policy LU-7.8.
- LU-17.14** Promote the development of more cohesive and uniform patterns of housing types and densities in the Downtown, avoiding the “hodge-podge” appearance that currently exists on some streets.
- LU-17.15** Enhance the historic character of the Downtown by requiring new construction to implement architectural features reminiscent of the era.
- LU-17.16** Identify and promote Downtown’s historic housing and support the rehabilitation and preservation of existing homes of historic significance.
- LU-17.17** Promote the heritage of historic structures and sites by encouraging the placement of markers and supporting financial incentives.

Circulation and Streetscape

- LU-17.18** Promote the development of centralized parking facilities that can be shared by multiple businesses to allow for a more pedestrian and social environment in Downtown.
- LU-17.19** Consider limiting the vehicle right-of-way along key corridors within the Downtown, substituting right-of-way formerly dedicated to vehicles to routes for pedestrians and bicyclists.
- LU-17.20** Retrofit and improve existing streetscapes with pedestrian improvements, sidewalks, specialty pavements, benches, and other features to encourage walkability.
- LU-17.21** Enhance the visual character, pedestrian activity, and distinct identity for Downtown streets with elements such as trees, plantings, benches, trash receptacles, sidewalk and crosswalk paving, signage, pedestrian-scaled lighting, entry identification, public art, and comparable improvements.
- LU-17.22** Incorporate extensive landscaping treatments to Downtown street corridors with elements such as tree planting with mature trees, planters,

LAND USE

landscaped gateways, and other similar techniques to beautify and create a downtown ambience.

Maintenance

- LU-17.23** Support the ongoing improvement of commercial and residential properties in the Downtown through programs of education, financial assistance, and partnerships with local businesses, organizations, and nonprofits.
- LU-17.24** Maintain proactive code enforcement and nuisance abatement programs to sustain the quality of development and character of the Downtown.
- LU-17.25** Repair, upgrade, and maintain the quality of public streets and sidewalks in the Downtown to encourage pedestrian activity, improve roadway safety, and beautify streets.

Programming

- LU-17.26** Promote and work with local business organizations to establish an annual calendar of events that attracts residents and visitors Downtown.
- LU-17.27** Work with law enforcement officials to maintain a visible presence to enhance and maintain the safety of Downtown for residents, visitors, and business.



North Main Street

Corona's North Main Street District extends northward of the historic downtown. In 2000, the City adopted the North Main Street Specific Plan covering the commercial corridor along North Main Street. The specific plan was historically part of a larger redevelopment area, established in 1996. Where the specific plan originally purported to establish an entertainment-oriented hub, market forces have led to a transit-focused area because of the proximity to the Metrolink Station. Subsequent amendments to the plan have resulted in the construction of urban density residential development and mixed-use development that is now consequently spurring a resurgence of supportive commercial uses.

Within that context, the specific plan provides guidance at:

- » Creating a revitalized North Main Street district that is attractive, economically vibrant, and dynamic.
- » Providing opportunities for transit-oriented residential and commercial development that increase transit ridership and decrease automobile trips.
- » Making circulation facilities that enhance the flow of vehicular traffic, ensure pedestrian safety and accessibility, and provide rail modes of travel.
- » Developing a vibrant North Main Street gateway to the city through economic development and encouraging mixed use housing opportunities within the area.
- » Accommodating office and light industrial uses that are compatible with the specific plan's commercial and residential uses.
- » Providing a pedestrian-supporting environment with enhanced sidewalks, street crossings, street trees, gateway monumentation, and directional signage.



The North Main Street Metrolink Station is a focal point in Corona.

GOAL LU-18

A thriving North Main Street corridor that is exemplified by a vibrant mix of housing, commercial uses, professional offices, transportation, and retail activity arranged and developed within an urban mixed-use environment.

Policies

Land Uses

- LU-18.1** Accommodate commercial retail, service commercial, business park, industrial, and mixed uses in accordance with the land use plan’s designations, applicable density standards and design and development policies, and adopted specific plan.
- LU-18.2** Prioritize the development of professional offices and supporting uses, including the possible intensification of these uses in areas appropriate for such uses.
- LU-18.3** Provide opportunities for intensified office, commercial, and mixed-use development that integrate housing with commercial and office uses in proximity to the Metrolink station.
- LU-18.4** Support redevelopment and other programs for business retention and proactive recruitment of businesses to stimulate revitalization of the North Main Street corridor.

Design and Development

- LU-18.5** Promote high quality architectural and landscape design of new construction and renovated buildings in accordance with Policies LU-11.11–LU-11.13 for commercial projects, LU-12.6–LU-12.9 for industrial projects, and LU-13.5–LU-13.6 for mixed-use projects.
- LU-18.6** Encourage the use of diverse and eclectic architectural design styles, varying building forms and geometries, combinations and juxtapositions of exterior materials and finishes, and the use of climatically sensitive building elements.
- LU-18.7** Incorporate streetscape improvements that establish a distinct identity and character for North Main Street (entries, signage, paving, lighting, landscape, public art, etc.).
- LU-18.8** Provide pedestrian and multi-modal transportation connections and improvements that link North Main Street uses to the Metrolink station.
- LU-18.9** Encourage the renovation or rehabilitation of existing buildings, developments, and shopping centers to generate economic activity, support adjacent residential neighborhoods, and improve the visual environment of the area.

East Sixth Street and Magnolia Avenue Corridors

Properties on Sixth Street east of Rimpau Avenue and flanking Magnolia Avenue east of I-15 contain a mix of business park and light-to-medium industrial uses, including manufacturing, distribution, and warehousing. Commercial uses have increased in the area following adoption of the Corona Magnolia Specific Plan in 2002. The specific plan replaced the once heavy industrial land uses on just over 100 acres to mixed land uses of office, retail, restaurants, business park and light industrial. Most of the specific plan area is redeveloped, but some parcels still contain older industrial uses.

Statewide, the character of industrial development has gradually transitioned from standalone heavy manufacturing functions and structures to cleaner industries (research and development, high technology, and bio-medical) that prefer campus-like development projects. These campus-like projects are designed to integrate a diversity of secondary services and functions to support their primary use. Secondary services and functions may include financial institutions, supply stores, accommodations and entertainment, restaurants, convenience stores and retail, and similar uses.

Significant components of this district include both industrial and supportive land uses. As is the case with industrial districts, the form and design of buildings should be suited and supportive of their function. In addition, significant improvements to the public realm have been incorporated to improve aesthetics along both of these corridors. Sixth Street now contains improved street medians with extensive landscape treatments that visually soften the concrete hardscapes, improve aesthetics, and contribute to a more cohesive environment for industry and commerce.

Sixth Street and Magnolia Avenue corridors have capitalized on these trends as supported by the land use element. However, other opportunities are present. Parcels along East Sixth Street and Magnolia Avenue corridor, but not within the specific plan area, could also transition as market conditions evolve. These remnant parcels may be suited for business parks or other similar or complementary land uses. Any such transition or improvements would be contingent on changes in the market.



GOAL LU-19

Enhancement of the eastern portion of Sixth Street and Magnolia Avenue into an integrated mix of vital commercial, office, and industrial nodes.

Policies

Land Uses

- LU-19.1** Consider expansion of land uses that contain modern industrial uses, that integrate a mix of clean industrial uses with supportive land uses adjacent to or within a campus environment.
- LU-19.2** Promote the development of sites for any of these uses individually or integrated as a cohesive mixed-use project that creates economic synergy and contributes job opportunities for residents.
- LU-19.3** Promote the consolidation of small, underutilized lots, or irregularly shaped parcels into larger parcels that are conducive to and supportive of viable and more cohesive development projects.

Design and Development

- LU-19.4** Require that a specific plan be prepared for mixed-use projects that provides for cohesive and integrated development of industrial and commercial in accordance with the principles stipulated herein and to ensure compatibility with adjoining uses.
- LU-19.5** Require that mixed-use projects be designed to convey a high level of architectural and landscape quality and ensure compatibility among commercial and industrial uses in consideration of the design and development policies set forth independently for these uses.
- LU-19.6** Maintain a comprehensive streetscape, lighting, landscaping, and signage improvement program that will improve aesthetics and property values along the Sixth Street corridor; promote increased landscaping fronting properties where deficient.

Maintenance

- LU-19.7** Encourage the renovation or rehabilitation of existing buildings and sites to improve the quality, appearance, and overall value of the East Sixth Street and Magnolia Avenue corridors.
- LU-19.8** Support improvement of industrial properties through education, financial assistance (e.g., CDBG grants and low-interest loans), and partnerships with local businesses, organizations, and nonprofits.
- LU-19.9** Maintain proactive code enforcement and nuisance abatement efforts to sustain quality of development, address nonconforming land uses, and improve the character of the area.

Eagle Valley

Eagle Valley is a mountainous area at Corona’s eastern edge and is predominantly vacant and presently used for grazing. Due to its topography and other constraints, the site is not served by roadways or utility infrastructure. The Metropolitan Water District has acquired the site and has tentative plans to construct a water treatment facility on a portion of the site. The Land Use Element re-considers the future of the property as an opportunity for the development of a master planned industrial and business park that integrates a diversity of uses into a cohesive and distinctly identifiable job center. Its natural setting can be uniquely used to shape the form and character of development, which differentiates it as a special place among business park environments. However, final disposition and use of this site is uncertain.

GOAL LU-20

An industrial and business park that integrates a diversity of uses into a cohesive and distinctly identifiable environment, is designed to “fit” with the site’s topography and natural resource and provides new job opportunities for Corona’s residents.

Policies

Land Uses

- LU-20.1 Allow for the development of high technology, biomedical, research and development, and comparable light industrial uses that provide job opportunities for Corona’s residents in accordance with the land use plan and applicable density, design, and development policies.
- LU-20.2 Develop uses concurrent with the establishment of a transportation corridor that provides access from Cajalco Road.

Design and Development

- LU-20.3 Require that a Specific Plan be prepared for mixed-use industrial and commercial projects that provides for cohesive and integrated development of commercial uses in accordance with the principles stipulated herein and to ensure compatibility with adjoining uses.
- LU-20.4 Require that mixed-use projects be designed to convey a high level of architectural and landscape quality and ensure compatibility among commercial and industrial uses in consideration of Development and Design policies stipulated independently for these uses.
- LU-20.5 Require that development be located and designed to preserve substantial open spaces onsite that account for its topography and serve as transitions to surrounding open spaces.
- LU-20.6 Locate and design development to complement and assure its compatibility with the potential Metropolitan Water District (MWD) water treatment facility, if developed.

Cajalco Road/Interstate 15

Properties located southwest of the Cajalco Road and I-15 interchange and within the boundaries of the Arantine Hills Specific Plan Area have long been planned for the development of a mixed-use community. Revised in 2018, the Arantine Hills Specific Plan envisions a well-design, high quality, and master planned community. Arantine Hills is envisioned where residents can live, shop, play, and relax within a setting of rich architecture, attractive landscaping, and numerous community amenities.

The Arantine Hills Specific Plan includes a number of objectives: a mix of residential and complementary commercial uses; open space preservation areas along Bedford Canyon Wash; a system of roads, trails, bikeways, and sidewalks that encourage active living; and high quality development and infrastructure that incorporate green and sustainable practices. The community of Arantine Hills is designed to fit in and complement surrounding land uses and development.

In addition to the specific plan, there are additional parcels located outside the specific plan area that present opportunities for development, particularly as a complement to the planned land uses and development within the approved specific plan.

GOAL LU-21

Development of a well-designed master-planned community through adoption and implementation of a specific plan with uses that would complement adjoining uses.

Policies

Land Uses

- LU-21.1** Allow for the conversion of the vacant site to a master-planned mixed-use community, in accordance with the land use plan’s designation and applicable design and development policies.
- LU-21.2** Allow for the development of urban uses on the property that complement adjoining residential neighborhoods, commercial districts, and open spaces, with the type and density of uses determined through the formulation and processing of a specific plan.
- LU-21.3** Allow for a high density overlay which allows for model homes of varying densities and types of up to 36 du/ac and an increase in dwelling units for age-qualified units as both specified in the adopted specific plan.

Design and Development

- LU-21.4** Require that any development on the site be designed to reflect its topographic setting and natural resources.
- LU-21.5** Require that development be located and designed to ensure adequate transitions with surrounding open spaces and natural areas.

SPHERE OF INFLUENCE

California Government Code requires the general plan to cover the entire area within a city's limits and any land outside its boundaries that bears relation to its planning area. The City's sphere of influence (SOI) covers an additional 35 square miles outside the incorporated boundaries. Riverside County Local Agency Formation Commission (LAFCO) is responsible for assigning lands under county jurisdiction to the SOI of cities that are likely to most efficiently serve them. For Corona, these areas are Coronita, Home Gardens, El Cerrito, Temescal Valley, and other smaller areas.

Corona's western SOI contains a diversity of lands that are developed, vacant, or permanently protected as open spaces. A small area at the SR-91 and Green River intersection is developed for residential and commercial uses. South of Prado Basin and the SR-91, Coronita is fully developed as a residential community oriented around a closed golf course, with commercial uses at Serfas Club Drive. A large hillside area at the westernmost edge along the SR-91 is undeveloped. Figure LU-4 shows the location of Corona and its sphere of influence boundaries.

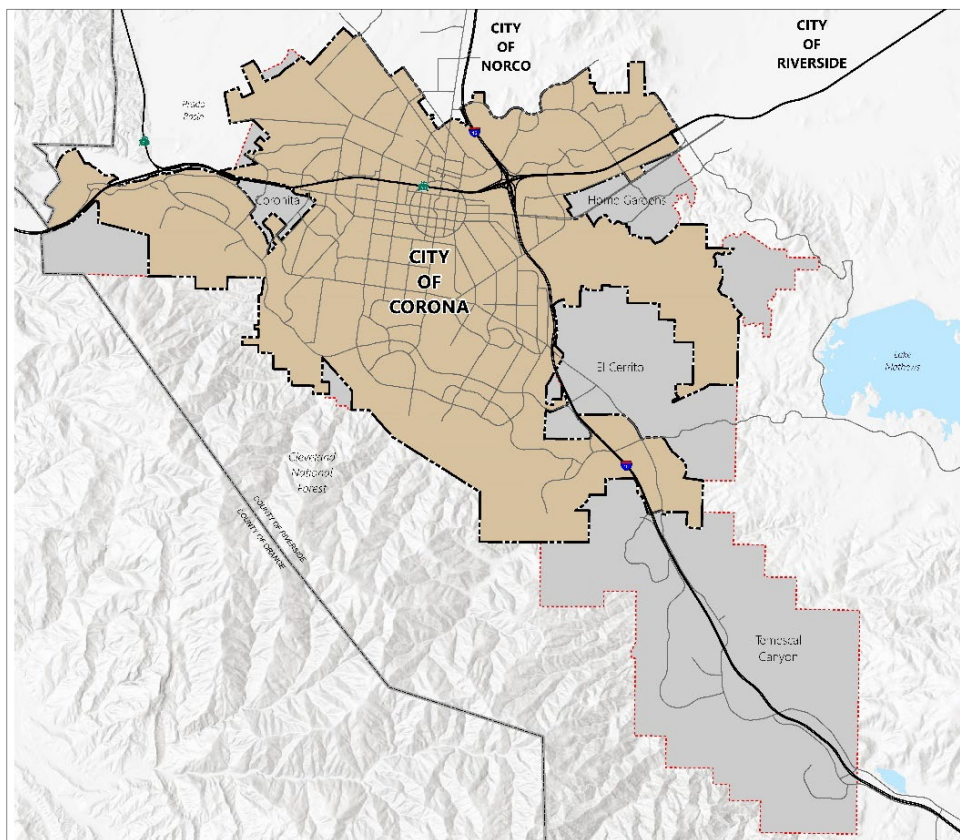


Figure LU-4 **City of Corona and SOI**

Corona’s eastern SOI encompasses the urbanized Home Gardens community, the mountainous and vacant East Eagle Valley area, and El Cerrito. Home Gardens is an almost fully developed area that contains some older housing, commercial, and industrial uses that are likely to be redeveloped during the next 20 years. A new town center is proposed for that area along Magnolia Avenue. El Cerrito is a low density, rural residential community with commercial uses located along its primary corridors (Temescal Canyon Road and El Cerrito Road) and aggregate mining in the foothills.

Temescal Valley includes a mix of older rural, residential, new residential subdivisions, recreational resort, highway- and local-oriented commercial centers. Aggregate mining is also a predominant land use. This area has been developed during recent years, with a number of master planned communities entitled and development constructed (Mountain Springs, Wildrose, Sycamore Creek, The Retreat, and Terramor). Several of these are developed as high-amenity, golf course–related communities. A number of additional residential developments are anticipated for surrounding foothill areas.

While the designation of SOI is an indication that such areas would logically be served by an adjoining city, the appropriateness of annexation must be considered in light of its fiscal impacts, willingness of property owners to be annexed, and local priorities.

GOAL LU-22

Recognize adjoining unincorporated County areas whose types, patterns, and intensities of uses complement existing development in Corona, reflect their natural and built environment, and contribute sufficient revenue to maintain the City’s fiscal balance and provision of services to the annexing area.

Policies

Annexation

- LU-22.1** Coordinate with the County of Riverside, landowners, and pertinent service agencies to ensure that development within the SOI complements, does not adversely compete with, or negatively impact the fiscal viability of Corona.
- LU-22.2** Ensure that annexations to the City of Corona are consistent with the goals and policies of the general plan and do not adversely impact the City’s fiscal viability, environmental resources, infrastructure and services, and quality of life.
- LU-22.3** Require that existing and proposed development within proposed annexation areas generate sufficient tax or other revenue base to compensate for their fair share of community services that are provided by the City of Corona.
- LU-22.4** Require that infrastructure and service improvements for proposed annexation areas do not create an undue burden on existing City of Corona infrastructure and services.

- LU-22.5** Encourage that, if an area annexes to the City of Corona, a community facilities district or similar financing district shall be established to fund the provision and maintenance of sewers, streets, and other public improvements and services.
- LU-22.6** Upon an annexation proposal, a change in general plan land use designations, which may include the Open Space designation if not set aside for flood control, habitat conservation, or master planned use, would be fully analyzed for appropriate alternate land use designations, which are required to mitigate all identified environmental and infrastructure impacts associated with the proposed land use change.
- LU-22.7** Promote the use of specific plans within hillside areas of the SOI to address unique topographic and natural resource constraints and allow flexibility to develop a plan to ensure visual, infrastructure, and land use compatibility with the surrounding area.

General Land Uses

- LU-22.8** Require that existing and future land uses in the proposed annexation area complement adjoining City uses and character.
- LU-22.9** Encourage the County of Riverside to promote development of the SOI in accordance with the SOI land use plan and applicable density standards and design and development policies for such designations that have been previously defined by this element. Should these lands be annexed to the City, they shall be subject to this plan's policies.
- LU-22.10** Collaborate with local, county, and regional governmental agencies to provide water, sewer, public safety, fire response, and other appropriate municipal services; coordinate emergency response services through mutual and automatic aid agreements.
- LU-22.11** Actively work with local, county, and regional governmental agencies to review proposed development proposals in the City and SOI that affect the land use patterns in areas surrounding or within the sphere areas.

Coronita and Foothills

- LU-22.12** Maintain the existing mix of developed residential, commercial, open space, and related uses in Coronita.
- LU-22.13** Promote and, should the area be annexed to the City, require the development of the Coronita foothills for low-density, rural housing that maintains the area's natural topography, drainage courses, and native landscapes. Housing should be clustered in lot patterns that complement development on adjoining lands in the City.
- LU-22.14** Require that all proposed development in the very high fire severity zones provide appropriate protection against wildfires in accordance with state

law, the California Building and Fire Codes, and regulations promulgated by the Board of Forestry and Fire Protection and CAL-FIRE.

Home Gardens

- LU-22.15** Promote the enhanced economic vitality of the Magnolia Avenue corridor in Home Gardens for a mix of general commercial and multi-family residential development consistent with the Temescal Canyon Area Plan.

Eagle Valley East

- LU-22.16** Promote, and should the area be annexed to the City require, the development of the Eagle Valley East area for housing that is designed in a manner that maintains the area's natural topography, drainage courses, and native landscapes. Development projects are required to meet all federal, state, and local regulations that are designed to protect against wildfire.

El Cerrito

- LU-22.17** Promote, and should the area be annexed to the City require, the development of the El Cerrito community for a variety of housing types, supporting local- and highway-serving commercial, and continued mining uses, as specified by the adopted specific plan and Temescal Canyon Area Plan to the extent applicable.

Temescal Valley

- LU-22.18** Promote, and should the area be annexed to the City require, the development of Temescal Valley for planned residential communities that integrate a variety of housing types, schools, parks, and other amenities; business and industrial parks supporting local- and highway-serving commercial; recreation resorts; and continued mining uses.
- LU-22.19** Require the preparation of specific plans for mixed-use development projects and encourage their preparation for other, larger-scale residential subdivisions and business parks; provide comment to the County on proposed specific plans.
- LU-22.20** Promote, and should the area be annexed to the City require, the development of residential communities designed to maintain the area's natural topography, drainage courses, and native landscapes. Housing should be clustered in patterns that complement development on adjoining properties. Development projects must meet all federal, state, and local regulations that protect against wildfire.

CORONA MUNICIPAL AIRPORT

Corona Municipal Airport occupies a 100-acre site and is bordered to the north by the Prado Dam, undeveloped Chino Hills to the west, industrial uses on the south, and residential uses directly to the east. The site is leased as part of a master recreational lease between the City and the US Army Corps of Engineers, who also owns the land. The airport serves general aviation purposes and is used primarily for recreational use. The airport houses up to 400 aircraft and helicopters. In addition to its general aviation purposes, the airport serves as a staging ground for coordinated responses to wildfires.

In 1978, the Corona Municipal Airport Master Plan was prepared to provide for the orderly growth and management of the municipal airport to safeguard the general welfare of the public and the inhabitants within the vicinity of the airport. The master plan has been updated several times, most recently in the 1990s. Originally, the municipal airport was proposed for expansion to encompass approximately 225 acres. However, it is in a federally protected wetlands with sensitive species, lies within the Prado Flood Control Basin, and is encompassed by the 100-year flood zone. Given these limiting site considerations, the airport is precluded from expansion.



Corona Municipal Airport

Land uses for the Corona Municipal Airport and its environs are regulated by the City and Riverside County Airport Land Use Commission and consistent with the Corona Municipal Airport Master Plan. Policies in the master plan are intended to protect flight paths and minimize impacts to residents and employees of the area. Within the airport influence area, the master plan identifies compatibility zones where properties are subject to regulations governing development intensity, density, structure heights, noise, and other standards. These land use restrictions are fully set forth in the adopted airport land use compatibility plan, as described later in the safety element.

GOAL LU-23

Maintain and improve the Corona Municipal Airport as a general aviation facility consistent with its approved master plan and all applicable county, state, and federal regulations and local ordinances.

Policies

- LU-23.1** Maintain, implement, and revise as appropriate an airport master plan that will guide the long-term orderly development, operation, and use of the Corona Municipal Airport.
- LU-23.2** Work cooperatively with the Riverside County Airport Land Use Commission in periodically refining, implementing, and protecting airport influence zones around the Corona Municipal Airport.
- LU-23.3** Work to limit the encroachment of uses that potentially pose a threat to continued airport operations, including intensification of residential, commercial, and industrial facilities within the airport safety zone and areas impacted by airport noise.
- LU-23.4** Review proposed projects within the airport influence area of the Corona Municipal Airport for consistency with applicable airport land use compatibility plan policies adopted by the Riverside County Airport Land Use Commission and City of Corona.
- LU-23.5** Limit building heights and land use intensities beneath airport approaches and departure paths to protect public safety, comply with the Corona Municipal Airport Land Use Compatibility Plan, and applicable state and federal regulations.
- LU-23.6** Allow emergency responders to use the Corona Municipal Airport to respond to local and regional emergencies and disasters (urban and wildland fire, hazardous material response, etc.).
- LU-23.7** Ensure, to the extent feasible, that environmental impacts such as noise, air quality, pollution, traffic congestion, and public safety hazards associated with continued operation of Corona Municipal Airport are mitigated to the extent practicable.
- LU-23.8** Prior to the adoption or amendment of the general plan or any specific plan, or the adoption or amendment of a zoning ordinance or building regulation within the airport influence area of any airport land use compatibility plan, refer such proposed actions to the ALUC for review and determination as provided by the airport land use law.

Housing

INTRODUCTION

Since incorporating more than 100 years ago, Corona has become one of the most desirable communities in the Inland Empire. In addition to many amenities offered, Corona is known for its quality housing, residential neighborhoods, and amenities that offer an exceptional quality of life. Indeed, the quality and relative affordability of housing are key reasons why many choose to live in Corona and work elsewhere. The Housing Element is Corona's plan for accommodating current and future housing needs of residents and providing quality neighborhoods for residents to invest in.

The housing element focuses on the actions that will be undertaken by the City to provide adequate housing for income categories of the population and those with special needs. Due to its short-term nature and state mandate for periodic updates, only its goals and policies have been incorporated into the comprehensive general plan. The complete housing element is a legal component of the general plan and may be obtained separately from the City.



Scope of Element

Perhaps more than other elements of the General Plan, a housing element is governed by detailed regulations in state law. This housing element covers the planning period of 2021-2029, and subsequent updates are required by state law. A housing element is required to address the production, maintenance, and improvement of housing for all income levels of residents. It contains the following:

- » **Technical Report.** The technical report provides the foundation for the goals, policies, and programs. It encompasses a housing needs assessment, constraints analysis, inventory of housing sites, and evaluation of programs. The technical report is included as part of a separate component to the housing element.
- » **Housing Plan.** The housing plan presents a summary of housing issues that are important to the City of Corona, followed by specific goals, policies, and implementation programs that address the development, improvement, and conservation of housing.
- » **Implementation Plan.** Unlike other elements of the General Plan, the housing implementation plan must also be adopted. Therefore, the specific programs designed to further housing goals and policies are part of the element itself. These programs are also included in the 2021-2029 housing element.

Related Plans

The Housing Element sets goals and policies that are intended to facilitate the construction, improvement, and maintenance of housing and neighborhoods that provide opportunities for residents of all incomes in Corona. The housing element is associated to related planning efforts:

- » **Regional Housing Needs Assessment (RHNA).** The RHNA is a state-mandated plan prepared by California Housing and Community Development (HCD) and distributed by the Southern California Association of Governments. The RHNA determines the housing needs for cities and influences land use policy.
- » **Consolidated Plan and Fair Housing Analysis.** The Housing Element is related to two federal documents that govern the prioritization and expenditure of funding for low- and moderate-income areas in Corona and fair housing issues. The Consolidated Plan and Analysis of Impediments address these needs.

Corona intends to implement goals and policies during the 2021-2029 housing element cycle that addresses the following five major issue areas:

- » Conserving and improving the existing stock of affordable housing
- » Providing adequate sites to achieve a variety and diversity of housing
- » Assisting in the development of affordable housing
- » Removing governmental constraints as necessary
- » Promoting equal housing opportunity

HOUSING PRODUCTION

State law requires that the goals and policies of the housing element shall encourage and facilitate the production of a range in types of housing affordable to households of varied income levels. The City supports this goal by identifying adequate housing sites (infill sites, vacant sites, and larger sites within Specific Plans) that are appropriately zoned for a variety of housing types (e.g., single-family, multiple family, etc.) while implementing programs that address the City's housing needs. At the same time, housing needs continually change over time due to broader demographic factors.

The sites identified for new housing have been found to be adequate to accommodate the City's regional housing needs allocation (e.g., for very low, low, moderate, and above moderate income households) as determined by the state Housing and Community Development Department for the 2021-2029 planning period. The following goal and policies set forth the City's commitment to facilitate and encourage the production of housing commensurate with community needs.

GOAL H-1

Promote and maintain a balance of housing types and corresponding affordability levels to provide for the community's demands for housing within all economic segments of the City.

Policies

- H-1.1** Continue to support public and private sector nonprofit and for-profit organizations in their efforts to construct, acquire, and improve housing to provide access to affordable housing to lower and moderate-income households.
- H-1.2** Promote specific plans and zoning map amendments that provide a variety of housing types and densities based on the suitability of the land, including the availability of infrastructure, the provision of adequate City services and recognition of environmental constraints.
- H-1.3** Provide sites for residential development so that scarcity of land does not unduly increase the cost or decrease the availability of housing for all segments of the community.
- H-1.4** Support the development of sustainable projects that reduce demand for water and energy resources, reduce commute times and operational costs, and provide for transit-oriented development.
- H-1.5** Create or expand zoning designations and commensurate development standards to encourage flexibility in permitted land use types that respond to changing market forces and provide opportunities for higher density

residential development, mixed-use residential/commercial development, and transit oriented residential development in appropriate areas of the City.

SPECIAL NEEDS HOUSING

Corona, like many cities in California, have residents with special housing needs. These include seniors, large families with five or more members, people with disabilities, single parent households, homeless people, and others in need of housing. The City proactively addresses each of these groups by providing a range of special needs and affordable housing suited to the lifestyles and needs of each special need group.



GOAL H-2

Promote and preserve suitable and affordable housing for persons with special needs, including large families, single parent households, the disabled, and seniors and shelter for the homeless.

Policies

- H-2.1** Encourage the development of rental units with three or more bedrooms to provide affordable housing for large families.
- H-2.2** Work with nonprofit agencies and private sector developers to encourage development of senior housing.
- H-2.3** Encourage the production of assisted living facilities (single story houses and apartments) to facilitate access for the disabled and the elderly.

- H-2.4** Provide emergency shelter with transitional support for city residents, including disadvantaged groups.
- H-2.5** Encourage the upgrade and conversion of older motels to single-room-occupancy housing.

NEIGHBORHOOD QUALITY

The City of Corona's quality of life is contingent on neighborhood quality and the safety, public amenities, and quality of development found in each neighborhood. Many residential neighborhoods are in excellent condition as evidenced by well-maintained housing, streets with sidewalks and trees, adequate physical infrastructure, and public services. In other cases, some neighborhoods show signs of deterioration and could benefit from improvement. Still other neighborhoods require significant reinvestment in housing, infrastructure, parks and open space, and public services.

Given the diversity of residential neighborhoods, the City of Corona supports a multifaceted approach to improving and preserving the quality and livability of residential neighborhoods. The particular strategies employed to achieve this goal depend on the location of the neighborhood, age and tenure of housing, type of housing, and other neighborhood characteristics. These strategies include, but are not limited to, the following: historic preservation, neighborhood traffic management, infrastructure maintenance, safety, code compliance, and housing rehabilitation. The following goal and policies set forth Corona's commitment to neighborhood quality.

GOAL H-3

Maintain high quality residential development standards to ensure the establishment of livable neighborhoods with lasting safety and aesthetic value, and to promote the maintenance and preservation of historic neighborhoods.

Policies

- H-3.1** Recognize the City's inventory of existing historic structures and seek programs to enhance and preserve those neighborhoods.
- H-3.2** Encourage the revitalization of the existing dwelling units in the Circle area through rehabilitation programs.
- H-3.3** Provide public services and improvements that enhance and create neighborhood stability.
- H-3.4** Continue to establish and enforce property maintenance regulations that promote the sound maintenance of property and enhance the livability and appearance of residential areas.
- H-3.5** Maintain design review for new residential developments to ensure the construction of livable and aesthetically pleasing neighborhoods.

- H-3.6** Prioritize water and sewer services and upgrades in areas of the city that have been identified as urban infill sites for the planning of affordable housing.

FAIR HOUSING

Equal access to housing for all is fundamental to each person in meeting essential needs and pursuing personal, educational, employment, or other goals. As defined in state and federal law, fair housing is a condition in which individuals of similar income levels in the same housing market have like ranges of choice available to them regardless of protected status. Recognizing this fundamental right, the federal and State of California governments have both established fair housing as a right protected by law. The following goal and policies set forth the City's commitment to fair housing.

GOAL H-4

Ensure that housing opportunities are available to all persons without regard to the classes protected by federal and State laws.

Policies

- H-4.1** Coordinate housing actions with social service agencies and support efforts of organizations dedicated to working toward elimination of discrimination in housing.
- H-4.2** Promote and provide for nondiscrimination in all City programs.



Handrails and railings improve the safety of entrances to residential units

Community Design

INTRODUCTION

Corona's leaders appreciate the importance of promoting and creating a cohesive community and unique civic identity. Corona supports communities and districts within the city and seeks to establish and retain their unique sense of place. This objective is accomplished by establishing a policy framework for design and setting guidelines the City will use to review development applications, as well as standards the City will set for the public realm. These policy directives are intended to ensure that continued investments in the city will enhance vitality, context, form, and function.

This chapter of the general plan provides guidance for the design character of Corona's public streetscapes, entries, and activity nodes. The Community Design Element expands on and complements the project design and development guidelines defined for the city's residential neighborhoods, commercial/office, industrial, and mixed-use districts in the land use element, and supplemental citywide design guidelines.

In consideration of these objectives, the following statement expresses the City's commitment to creating and sustaining a well-designed community.

Corona is an attractive and well-designed city whose aesthetic strengths contribute to a high-quality livability. Design quality is achieved through the city's streetscapes, entry treatments, architecture, signage, physical form and architecture of private buildings and public places, and respect for the natural environmental assets in the city. Street trees and landscape along its primary transportation corridors unify its neighborhoods and districts. Entries are clearly delineated by landscape, signage, lighting, and public art to ensure the sense of arrival into and identity for Corona. The public realm, particularly within defined districts, is improved with sidewalks, pedestrian-scale lighting, and other amenities to promote active pedestrian use. Physical development is located and designed to maintain the city's hillsides and canyons, creeks, and other natural open spaces as a visual backdrop and amenity for its residents and visitors.

The community design element includes a series of goals, policies, and programs to: (1) address community-wide investment in the city's public realm; (2) ensure appropriate design continuity and compatibility between existing and future development and (3) protect visual resources in the community. New development and redevelopment in the public realm guided by this element will exhibit quality design that is context sensitive and contributes positively to the character and value of the city.

Scope of Element

The community design element is intended to promote quality design for every aspect of Corona—its buildings, structures, paths, corridors, districts, nodes, landmarks, natural features, and landscaping. It ensures each development in the private or public realm enhances the sense of place for the city, district, and the site itself. The element expresses the City's objectives for quality design. While this element does not dictate project-specific design guidelines, it does provide policies to ensure quality design and developments are incorporated in the public realm.

California state law does not mandate the preparation of a community design element. In 2004, the City included a community design element to provide a framework for making physical improvements to the public and private realms that would enhance quality of life. This community design element addresses the following topics:

- » **Public realm improvements**, including streetscapes, landscaping, entries, and other features that provide visual cues throughout the community
- » **Private realm**, supporting improvements to building architecture, site planning, private landscaping, and business signage located here and in other chapters
- » **Visual resources**, including the preservation of important landscapes, viewsheds, landmarks, and other natural/built features of the environment.

Related Plans

The community design element is related to other elements of the general plan, particularly the land use element, which governs the development of the city's built environment. As the general plan is a policy document, the community design element is implemented through more detailed residential and nonresidential design guidelines and specifications—architectural standards, landscape palettes, and streetscape improvement plans that provide guidance for the preferred design of buildings, landscaping, streetscapes, and public spaces.

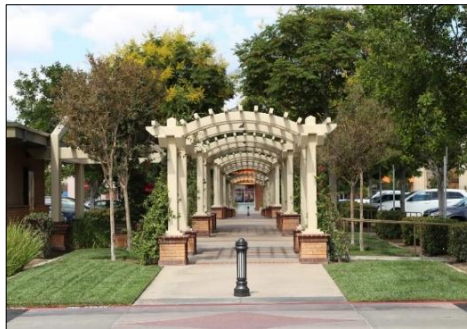
Related plans include:

- » **Corona Municipal Code.** The municipal code implements the general plan through a correlating set of zoning designations that determine the type of land use, intensity or density, standards, and appearance of proposed developments.
- » **Design Guidelines.** While this element contains general design principles, the City has also adopted design guidelines for residential, commercial, and industrial developments, and historic structures that provide more specific guidance.
- » **Landscape Design Guidelines.** The City also implements a variety of landscape design guidelines for its public streets and different types of development. Landscape maintenance districts are used to dictate and fund improvements.
- » **Specific Plans.** Corona has 32 specific plans that provide detailed regulatory guidance for certain areas in the city. While many of these plans are technically built out, they still provide design guidance for structures within their areas.

DESIGN CONTEXT

Corona residents and business place a high value on the city's "sense of place"—one that people identify with and seek to preserve. Generally, a "sense of place" can be thought of as a collection of qualities and characteristics—visual, cultural, social, and environmental—that people understand as providing meaning to a location. "Sense of place" is not only what makes one city, town, or neighborhood different from another, but sense of place is also what makes physical surroundings or the environment worth caring about. Community design efforts are thus directed at creating a strong sense of place that residents, workforce, and visitors can identify with.

Most communities derive sense of place from the main physical and natural elements of the environment, although social and cultural elements play a significant role as well. In Corona, these main physical elements include major paths and corridors; districts and neighborhoods, landmarks (including historical structures); activity nodes; and community and district edges. Natural elements include the mountains and canyons which frame the views of the community and transition into open space areas. Each of these features and their contribution to sense of place Corona follow.



Thoughtful arrangement of buildings, public monuments, and landscaping create welcoming place for gatherings and a place of beauty in Corona.

Paths and Corridors

Corridors form boundaries between various land uses, but also provide connections between neighborhoods and community activity centers. Corridors in Corona include transportation corridors, commercial corridors, and open space corridors. Transportation corridors include multimodal roadways that connect residents and employees to destinations, such as shopping, jobs, recreation, and schools. Commercial corridors are significant roadways lined with businesses. Examples of commercial corridors include North Main and Sixth Street. Design treatments (trees, public signage, and wayfinding, etc.) are useful tools for improving the image of corridors. Open space corridors are natural areas that provide visual and physical linkages and habitat along creeks and designated open spaces and parks in Corona. Examples include Temescal Wash, Santa Ana River, canyon floors, and washes.

Districts and Neighborhoods

Districts and neighborhoods are areas of Corona that have an identifiable and distinct character due to their building architecture, neighborhood design, streetscape, predominant land use, or even their history. A district is a smaller area (e.g., such as Dos Lagos) within a city, with characteristics that make it unique from other areas of a city. This distinction is particularly applicable in Corona, where 32 specific plans have defined neighborhoods and commercial areas. The Historic Downtown is the most common district known in the city. Other areas with specific identities are more commonly known as neighborhoods or as a community identified by a specific plan. Commonly known neighborhoods or communities include Sierra del Oro, North Main Street, Eagle Glen and Dos Lagos. Another well identified district in the city is the Crossings at Corona which is a major retail, restaurant, and entertainment center.

Landmarks

A “landmark” is a physical or natural element that provides a point of reference or serves as a community identity marker. Visual resources are an important component of the quality of life in Corona. As residents or visitors travel throughout the community, their primary sensory interaction is visual in nature, with a wide variety of shapes, colors, and textures primarily derived from the topography, structures, roadways, and vegetation in the city. Corona is situated on a river plain and is surrounded by the Santa Ana Mountains, Chino Hills, and Gavilan Hills, which dominate most viewsheds. This combination and intersection of mountains, valleys, and plains create a visually dynamic landscape. Major and ephemeral creeks (e.g., Temescal Creek and Santa Ana River) and drainage channel traverse the landscape. While this chapter focuses on preserving viewsheds, later chapters focus on other landmarks and historic resources.

Activity Nodes

An “activity node” is an important point where people gather and/or where paths converge, thus providing higher-than-typical levels of pedestrian or other activity. Activity nodes may include larger shopping centers, such as the Crossings at Corona or McKinley Center, which draw residents and visitors from outside the community. The Historic Downtown and parts of North Main Street also are local activity nodes, particularly shopping areas and mixed-use residential and commercial development.

Neighborhood centers or smaller commercial projects can also serve as activity nodes, where people from neighborhoods or other locales come to shop, recreate, or socialize. These smaller activity nodes are located in a variety of neighborhoods in Corona. Maintaining the vibrancy and attractiveness of these local and regional activity nodes is essential for conveying a sense of place and identification for the community. The following provides an example of a major activity center in Corona.



Dos Lagos is a key activity center in south Corona

Community Edges

Community edges are natural or physical elements that serve as visual or physical boundaries, barriers, or transitions between districts, neighborhoods, or other community features and that define the boundaries of a place. Elements such as freeways, flood channels, natural features, and landforms may be considered edges. Corona's physical boundaries are the Cleveland National Forest, Gavilan Hills, Chino Hills, and Santa Ana River, which provide visual relief and serve as boundaries for urban development. Within the city, the most dominant edges are the SR-91 and I-15, which bisect the city east-to-west and north-to-south. Major arterials also serve to define and differentiate areas of the city. These include Main Street, Sixth Street, Ontario Avenue, Temescal Canyon Road, Magnolia Avenue, Green River Road, and other major roadways.

The goals and policies in this element target the improvement and maintenance of the key features of the city that convey a sense of place in Corona. These include street landscaping, city entries and monumentation, community signage and wayfinding, and district nodes and corridors. Programs are provided in the implementation plan to prioritize and phase in such improvements.

STREET LANDSCAPING

A lasting impression of Corona is the lushness and diversity of its landscape. From freeway entries to neighborhood cul-de-sacs, industrial parks to historic districts, planted parkways to old palm-lined drives, remnant palm and citrus groves to neighborhood entries, the city is distinctly characterized by the intensity and scale of its greenery. This is most evident when viewing the city from a distance, when trees collectively create an urban forest in contrast to the adjacent natural areas. Community landscape may be best appreciated from Green River Road, Ridgeline Drive, Foothill Parkway, Upper Drive, Promenade Avenue, McKinley Street, and Hidden Valley Parkway.

Certain streets in the city have received special landscape treatment due to their importance and proximity to destinations deemed important to the city's image. Grand Boulevard and Ontario Avenue has old palm trees and street trees, as do parts of North Main Street. Remnants of the historic citrus industry era are seen throughout Corona. Double rows of palm trees, once lining driveways, dot the skyline and are reminders of the city's agricultural history. Additionally, some new developments have incorporated new palm-lined streets as part of their design themes, such as in Eagle Glen.

Over its history, Corona's design considerations for landscaping have gradually evolved to reflect the following considerations:

- » Strategic placements of mature tree specimens, color accents, and distinctive plant and tree forms to enhance views along streetscapes and project entryways.
- » Lush landscaping along designated greenways or adjacent to residential developments to improve the ambience of neighborhoods.
- » Landscaping principles that are water efficient and allow for the improvement of groundwater quality through percolation of water.
- » Landscape maintenance and protection through the turf and alternative materials, such as rocks and drought-tolerant, low-maintenance plants.
- » Historic landscaping and tree, such as tall palms that line streets and distinguish the Historic Downtown Core and other locations.
- » Fire-resistive landscaping and defensible space, particularly applicable to residential areas in high fire hazard areas.

In the newly developed areas built after 1980, the city has landscaping and lighting districts to fund the installation and maintenance of trees and landscaping. As a result, the city's master planned residential communities and business parks have common street landscapes that improve the aesthetics of those areas. However, some older areas of the city have an inconsistent presentation in streetscapes. Significant opportunities exist to improve landscaping and trees when streets or properties are redeveloped. In other areas, gradual transitions of streetscapes are desired.

In improving street landscaping, careful attention is warranted. With the need to conserve water and control maintenance costs, the city must increasingly use sustainable landscaping that balances goals for water conservation, maintenance costs, and aesthetics. Sustainable landscaping for the local climate should require less resource inputs, such as water, pesticides, and labor for maintenance. Sustainable landscaping begins with an appropriate design that includes functional, cost-efficient, visually pleasing, environmentally friendly, and maintainable areas.



Public landscaping improves aesthetics and adds character to streets.

The City's landscaping guidelines cover many design features, planting requirements, drainage, and irrigation. When reviewing plans, the City considers the combination of water-conserving trees, shrubs, vines, groundcover, and accent lighting. Additionally, projects are encouraged to use low-impact development methods, including porous paving, stormwater cisterns, and bioswales. Hardscape site amenities may include boulders, recycling fountains, walls, art/sculptures, fences, and benches.



Private landscaping adds to a sense of place and neighborhood character.

GOAL CD-1

Public street landscapes that unify the City of Corona and contribute to the unique identity of its neighborhoods, districts, and public places.

Policies

- CD-1.1** Require the planting and maintenance of street trees as part of development applications with consideration for the following principles:
- Physical constraints of the public street right-of-way, maintenance needs, and safety.
 - Importance of shade, beauty, and variety of species that encourage pedestrian activity.
 - Reflects the context of the surrounding residential, commercial, office, or industrial land uses.
- CD-1.2** Maintain a street tree maintenance and enhancement program that visually distinguishes neighborhoods, districts, and corridors. Areas requiring specific treatment include, but are not limited to, Downtown along Grand Boulevard, Sixth Street, North Main Street Corridor, and other key districts.
- CD-1.3** Maintain a street landscape master plan that identifies species to be used along public streets throughout the City. A palette of trees and landscaping should be designed to allow for:
- Differentiation within key districts in the City, including Downtown, Sixth Street, North Main, and other locations.
 - Differentiation at the street's key nodal intersections, entryways, and public places.
 - Sustainable landscaping practices including but not limited to drought-resistant species.
- CD-1.4** Protect landscaping and mature trees that are symbolic of the City's agricultural heritage, history, or identity for a district, neighborhood, or street corridor.
- CD-1.5** Require developers of residential subdivisions to submit a landscape plan that defines a program of trees and plantings that uniquely identify streets, principal entries and intersections, and activity centers such as parks and community facilities.
- CD-1.6** Seek to expand the citywide and district-specific district financing mechanisms to fully fund the cost of adding to, maintaining, and improving the City's public landscaping and street trees.

CITY ENTRIES AND MONUMENTATION

The sense of arrival into Corona from adjoining communities is defined principally by the visual transition from rural open spaces to urban and suburban development patterns and from mountainous topography into an open valley. While land uses and quality of development establish a community's character, city entries and monumentation signal the entry into a community. As such, signage and streetscape improvements on Main Street, north of SR-91 have been implemented to "announce" the entry into the North Main Street district. At other off-ramps, signage and landscape identify adjoining commercial centers.

The community design element proposes the use of a diversity of strategies to clearly distinguish the city's primary entries from the regional transportation corridors, including signage, landscaping, lighting, and similar elements.

GOAL CD-2

Entries that are well defined by signage, landscaping, lighting, and other visual landmarks that provide a clear sense of arrival into and identity for the City of Corona.

Policies

- CD-2.1** Implement improvements at key entries into Corona from the SR-91 and I-15 corridors that provide a distinct sense of arrival and identity. These may include well-designed signage, landscape, lighting, public art, monuments, fountains, structures, and other elements that serve as visual landmarks. Common elements (graphics, signage, etc.) should be used to visually distinguish the location as a primary City entry.
- Potential locations include the SR-91 interchanges at McKinley Street, Main Street, Grand Boulevard, Lincoln Avenue, Sixth Street, Serfas Club Drive-Auto Center Drive, and Green River Road, and the I-15 interchanges at Magnolia Avenue, Ontario Avenue, and Cajalco Road.
- CD-2.2** Coordinate the design of entry improvements with adjoining commercial and industrial property owners, where appropriate. Encourage the owners to incorporate landscape, signage, and architectural design elements in their projects that contribute to and complement the sense of entry from the freeways.
- CD-2.3** Continue to promote the establishment of entry monumentation to identify and convey a distinct sense of arrival to designated communities, districts, and neighborhoods in Corona.

COMMUNITY SIGNAGE AND WAYFINDING

A diversity of street signs and graphics are used throughout the city’s public places. The most unique signage, today, is the system of signs that provide directions to developing residential subdivisions and that identify the redeveloping North Main Street entertainment/office district. Otherwise, street identification, traffic control, parking, and other wayfinding signs use simple graphics and greatly vary in their fonts, colors, and design. Typical of many communities, multiple signs that differ in their size and graphic design are affixed to utility poles and streetlight standards.

Public signage is designed in a coordinated manner. Street lighting is scaled to the pedestrian while providing adequate illumination for automobiles on the street. Architectural and landscape design elements and markers are used to reflect Corona’s history. Corona’s identity and visual quality would benefit from the establishment of a comprehensive public signage program that establishes a logo and graphic style for consistent use throughout the city, consolidates multiple signs where feasible, and defines a plan for their distribution to facilitate wayfinding and the identification of key districts and places by residents and visitors to the city.

GOAL CD-3

Well designed, high quality, and distinctive public and private signage that identifies key City districts, public facilities, buildings, and facilitates wayfinding.

Policies

- CD-3.1** Continue to promote the city’s comprehensive public signage program for public wayfinding and places that identifies:
- City entries
 - Street names
 - Public facilities such as the city hall and library
 - Parks, trails, and other recreational amenities
 - Key districts such as the Downtown and North Main Street
 - Historic districts, buildings, sites, and landscapes
 - Public transit stations and stops
 - Directional (wayfinding) information
 - Traffic control and parking (as regulated by state codes)
- CD-3.2** Establish design specifications for each type of public sign with consideration for the following components:
- Size, color, fonts, and shape
 - Logo (City seal or other simplified graphic design that can be used for other public purposes)

- Placement (height above ground, position on utility pole, wall, or another fixture, and so on)
- Illumination (if appropriate)
- Text and data to be communicated
- Consolidation of information onto a single sign, as permitted by state codes

CD-3.3 Work with private developers and property owners to develop on-site project signage for identification, traffic direction and wayfinding, and parking that complements the City's design program, where appropriate.

CD-3.4 Require that signage on private buildings be designed to exhibit a high quality of interest and visual appeal; be integrated into and reflect the building's architectural design character; and be sized to not overwhelm its scale and mass.

CD-3.5 Collaborate with the Corona Historical Society or other nonprofit organizations to maintain and expand the Historic Markers program that identifies historical properties and/or historic landscapes in the City.



Corona uses a variety of signage and wayfinding signs tailored to different projects.

TRAILS AND GREENWAYS

The City of Corona’s community design character is influenced by its rich resource of parklands; surrounding open spaces of the Cleveland National Forest and Prado Basin; and Temescal Creek and Wash, which traverse the city. Less prominent washes also traverse the more urbanized parts of the community. The parklands and open spaces are separated and offer opportunities for the establishment of interconnecting greenways and trails that would considerably enhance the city’s urban character.

Additionally, some of Corona’s recent master planned residential communities have incorporated extensive open spaces that contribute high aesthetic value and character. Sierra del Oro and Eagle Glen retain natural slopes and canyons, and the latter is built around golf courses. Arantine Hills provides a multi-use trail along the Bedford Wash. Because most of the lands available for future development extend into the city’s foothills, there are opportunities to continue to incorporate topography and natural areas into the development pattern as a community amenity.

The Environmental Resources chapter provides additional policy guidance on trails and open spaces. Later sections of this chapter address Corona’s scenic resources, many of which are associated with or contain landscaped greenways and trails.

GOAL CD-4

A network of trails and greenways that interconnect Corona’s parklands, open spaces, and drainages that provide hiking and bicycle opportunities and access into surrounding open spaces and natural areas.

Policies

- CD-4.1** Develop a plan and implement improvements that visually and physically interconnect the City’s parklands and link these and residential neighborhoods with the Cleveland National Forest, and other open spaces. This may be accomplished by the installation of a continuous corridor of trees, plantings, informational signage, trails, and/or other defining elements along streets that connect the parks and open spaces or new corridors, where feasible.
- CD-4.2** New development adjoining open spaces, washes or have the ability to provide pedestrian connections to off-site trails or pathways should be designed to ensure landscape transitions and compatibility with these resources. Such improvements should be designed to provide adequate flood protection for adjoining properties.

DISTRICTS, NODES, AND CORRIDORS

Corona's historical development pattern over the past several decades has resulted in the identification of various districts, nodes, and key corridors, each of which is known as district places, centers of activity, or critical transportation corridors. Improving the image and desirability of Corona relies, in part, on continued investments in making these features viable, attractive, and desirable places to live and conduct commerce. Districts, nodes, and corridors where continued investment is warranted include:

- » **Downtown Corona.** This district's form is distinctly identified by its street pattern, form of development, historic buildings, unique circular and distinct grid street pattern, and "Main Street" configuration. It is the intent of the general plan to reinvent the Downtown through focused land use, rehabilitation, and street improvements to strengthen its focus as a center of community and identity.
- » **North Main Street.** This district has transformed into a vibrant mixed-use community of residential, retail, office, and industrial uses with varying building sizes. New signage and streetscape have also been implemented to establish an identity for the district as a stimulus for its revitalization.
- » **Key Corridors.** North Main Street, Sixth Street, Ontario Avenue, and other corridors link the City's major activity nodes together. Continued attention should be directed at improving and beautifying these key corridors not only as major thoroughfares, but also as places of activity themselves.
- » **Activity Nodes.** Freeway and neighborhood-oriented commercial centers typically have primary structures set back from streets by landscaped parking lots. Newer commercial centers or business parks exhibit higher quality architectural character. Larger nodes offer opportunities for enhancement and creation of distinct activity nodes for residents, businesses, and other associated uses.



Office complexes are key activity centers in Corona.

GOAL CD-5

A city of well-designed residential neighborhoods, commercial districts and corridors, industrial districts, and civic places that are uniquely identifiable in their building form, public places, and landscapes, contributing to a high quality of life for residents and positive image for visitors to the City.

Policies

Downtown Corona

- CD-5.1** Implement the streetscape improvements described in the Downtown Revitalization Specific Plan that are intended to uniquely identify Downtown Corona and enhance the pedestrian experience.
- CD-5.2** Maintain and expand a program of Historic Markers that identify important historical buildings, properties, and landscape in the Downtown.
- CD-5.3** Require renovations of buildings and new construction exhibit a high level of architectural character and foster pedestrian activity by adhering to design guidelines of the Downtown Revitalization Specific Plan.

Corridor Enhancement

- CD-5.4** Maintain and expand, where appropriate, streetscape improvements that uniquely identify and contribute to the character of the North Main Street, complementing the trees, landscape, signage, lighting, and other elements that have been implemented.
- CD-5.5** Require that the renovation of existing buildings and new construction along North Main Street Corridor exhibit a high level of architectural character by adherence to the design guidelines of the N. Main Street Specific Plan.
- CD-5.6** Implement streetscape improvements for Sixth Street that enhance its identity and character. This should differentiate the street into its functional sub-areas. Improvements that should be considered include:
- Common street trees with accent trees at key nodes and intersections. Areas developed with housing and mixed-uses should have shade trees for pedestrians.
 - Signage, landscape, lighting, or other elements at the entry portals from the freeways.
 - Uniform and well-designed signage to identify key activity locations, wayfinding, traffic control, and parking. A logo should be incorporated to uniquely identify corridors and districts.
 - Uniform and well-designed street furniture, clustered at transit stops and activity centers.

- CD-5.7** Identify other key corridors (Magnolia Avenue, Ontario Avenue, etc.) that connect major activity centers and consider the inclusion of public landscaping, specialty pavement, signage, lighting, and other corridor enhancement projects that signal arrival into major districts.

Freeway-Oriented and Community-Oriented Commercial Centers

- CD-5.8** Require commercial and office centers to enhance their aesthetic quality, image, and “fit” with adjoining land uses. Elements may encompass site and entry identification by signage, landscape, or lighting; extensive on-site landscape; public art; improvements of abutting public streetscapes; and other amenities.
- CD-5.9** Require that the renovation of existing buildings and new construction within freeway-oriented and community-oriented commercial centers exhibit a high and distinctive level of architectural character and site design character by adherence to policies in the land use and community design elements and established design guidelines.

Industrial and Business Parks

- CD-5.10** Require industrial projects to enhance their aesthetic quality, image, and “fit” with adjoining land uses. Elements may encompass site and entry identification by signage, landscape, or lighting; extensive on-site landscape; public art; improvements of abutting public streetscapes; and other amenities.
- CD-5.11** Require that the renovation of existing buildings and new construction within industrial and business parks exhibit a high level of architectural and site design character by adherence to policies in the land use and community design elements, and established design guidelines.



VISUAL RESOURCES

Corona is situated on a river plain and is bounded on three sides by the Santa Ana Mountains, Gavilan Hills, and the Chino Hills, which dominate most viewsheds from within the city. Additionally, the Temescal Wash bisects the city. This combination and intersection of mountains, valleys, and plains create a visually dynamic landscape of varying shapes, colors, and textures. These visual features of Corona are an essential part of Corona's community design features that contribute to quality of life.

Scenic Mountain Views

Scenic mountain views surround all sides of Corona. To the west and south are the Chino Hills and the Santa Ana Mountains. The Cleveland National Forest, composed of evergreen native chaparral, is considered a scenic resource for the community. The surrounding mountains are the dominant natural feature in most views, providing a dramatic visual contrast to the flat topography within the city. The play of light and shadow changes throughout the day, and this effect is enhanced by the highly textured slopes, which are generally covered by low scrub but are dramatically punctuated by large bedrock outcrops and small stands of oak trees or solitary trees.

Surrounding mountains also frame views of the city from its freeway entries. The effect is particularly striking on the eastbound approach into the city—the SR-91 runs through the Santa Ana Canyon, and its viewshed near the western portion of the city is bounded by the Chino Hills on the north and the foothills of the Santa Ana Mountains on the south, with the narrow gap between these hills framing the first visual impression of the city. The Chino Hills then turn abruptly northward, the Santa Ana Mountain foothills trend southeast, and the gap between the two frames a wide vista that includes Prado Basin, with the San Bernardino foothills as a backdrop.

City Views

Roads that traverse Corona provide scenic views of the city, its hillsides, and environs. SR-91 meanders through the Santa Ana Canyon and provides view of the Cleveland National Forest and Chino Hill. I-15 extends south through Temescal Canyon between the Cleveland National Forest and Gavilan Plateau, providing panoramic views of the valley floor and surrounding hills. Cajalco Road, which extends eastward from Temescal Canyon to Mead Valley over the Gavilan Plateau, is also eligible for designation as a county scenic corridor. The views of the valley floor and backdrop of mountains from this corridor are breathtaking and worth preserving.

In addition to and much like the grandeur of the Santa Ana Canyon entrance to Corona, another significant view of Corona is provided from I-15 as it descends from the Norco Hills north of the city and provides a grand entrance into Corona. The breadth of the city is visible to motorists, and this view is particularly beautiful at night with the city lights as a backdrop and on clear days when views are unimpeded. Significant views of the city can be found from many ridges and peaks surrounding the city as well as within the canyons of the surrounding mountain ranges. Wide-open vistas associated with these natural features dominate the visual image of the city.

Prominent Scenic Vistas

Corona benefits from a wide variety of scenic vistas associated with natural features that dominate the visual image of the city. Internally, the visual elements of major arterials, such as Grand Boulevard, provide unique vistas that characterize individual neighborhoods. Significant vistas include:

- » Prado Basin views from Sierra del Oro—the basin and canyon areas on the west.
- » Views south to the Santa Ana Mountains from the I-15/SR-91 freeway interchange.
- » Southern view of the foothills from major streets south of Ontario Avenue.
- » Views of San Gabriel Mountains from higher elevations south of Ontario Avenue.

Eagle Glen provides one of the best views in the city. Eagle Glen Parkway runs along the top of the east slope of Eagle Glen. Another scenic road is Palisades Drive/Green River Road, which passes through a narrow canyon slot. Views from South Corona, including Ontario Avenue and Foothill Parkway that traverse the higher slope areas, provide views looking north. This includes the Prado Basin on the west and the hills and valleys leading toward the San Bernardino Mountains in the north and east.

Residents who live on the urban/chaparral interface often have direct canyon and mountain views from their residences. Residents who live north of the airport and to the east of Prado Basin in northwest Corona have views into the basin and further south to the mountains behind the city. The Prado Basin is also dramatic and densely covered by trees adapted to its moist environment. Its green mass is best seen from Sierra del Oro, from SR-71 near its intersection with SR-91, and from the industrial and residential areas flanking the basin in the northwest quadrant of the city.



View of Corona from a ridgeline trail.

Scenic Corridor

The Scenic Corridor Plan represents a composite of vistas, activity centers, corridors and pathways, edge areas, and entry and approach areas. It provides for the establishment, development, and protection of the city's highways and corridors for scenic purposes. These include enjoyment of highway users, visual relief from development, connection between activity centers, city identification, and accents to entries and special areas of the city.

The following describes the different corridor classifications for visual resources.

- » Scenic corridors—visible land area outside and alongside the highway right-of-way, generally described as the view from the road.
- » Rural designated scenic highway—a route that traverses a defined corridor within which natural scenic resources and aesthetic values are protected and enhanced.
- » Urban designated scenic highway—a route that traverses a defined visual corridor that offers an unhindered view of attractive urban scenes.



Foothill Parkway is a scenic corridor that offers views of the Cleveland National Forest and other foothill areas along the periphery of Corona.

Figure CD-1 on the following page illustrates important scenic corridors that contribute to the sense of place and beauty of Corona.

* SOUTH & EAST CORONA SPHERES OF INFLUENCE

* SEE INSET MAP

0 0.25 0.5 1 Miles

-  City Designated
-  County Eligible
-  State Eligible
-  City Boundary
-  Sphere of Influence Areas

Source:
City of Corona General Plan, 2003; Caltrans, 2016
Riverside County General Plan, 2015;
PlaceWorks, 2019

COMMUNITY DESIGN

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GOAL CD-6

Develop and implement land use controls that preserve significant visual resources from potential loss or disruption.

Policies

- CD-6.1** Ensure unobstructed view corridors or viewsheds of the San Bernardino, Santa Ana, and San Gabriel Mountains, the Chino and La Sierra Hills, and other significant natural features from public spaces such as parks, termination of streets and community trails, community centers, and school properties, where feasible, as part of the design of development projects.
- CD-6.2** Require that project applicants identify and map all slopes greater than 15 percent on parcels within the City's hillside areas, referred to as the "Hillside Management District," in increments of 5 percent. Lands within this District shall be subject to administrative review to ensure that development is located and designed to reflect its distinct environmental and topographic characteristics consistent with the policies of this plan, under the provisions of a Hillside Development Ordinance.
- CD-6.3** Require that development in hillside areas with greater than 25 percent slope be clustered on the most gently sloping portions of the site, to the extent feasible, according to the following density limitations of the underlying land use plan designations.

Maximum Percentage of Site to be Graded	Maximum Percent of Allowable Density
40-44.9%	100%
45-49.9%	90%
50-54.9%	80%
55-59.9%	70%
60-64.9%	60%
65-69.9%	50%
70-74.9%	40%
75-79.9%	30%
80-84.9%	20%
85+%	10%

- CD-6.4** Require that projects be designed and sited to maintain the natural topographic, physiographic, and aesthetic viewshed characteristics of those features, utilizing the following conditions:
- Minimize the area and height of cuts and fills to the extent technically achievable, ensuring that slope tops and bottoms are rounded and

facilitate a smooth and seamless transition where natural and built slopes intersect.

- Configure development sites to mimic predevelopment natural topography by clustering sites and individual units and avoiding extensive fragmentation of steep slopes, “stair stepping” and varying terraces of structures, and/or other design practices.
- Minimize the size of flat development pads in site grading to that necessary to accommodate the building footprint, a reasonable amount of useable outdoor space, and structural and site stability.
- Encourage building architectural design styles, forms and shapes, materials, and building siting to complement rather than visually dominate their landscape setting.
- Minimize the height of retaining walls, and design with smooth flowing forms that follow topography and with material colors and textures that blend in with the surrounding landscape.
- Plant hillside and canyon slopes with natural species of drought-tolerant plants to soften the visual impact of land grading, retaining walls, structures, and roads and maintain (to the extent feasible) natural vegetation.
- Restore disrupted vegetation, wildlife habitat, natural water courses, drainage swales, and other important viewshed features. Vegetation should be arranged in informal masses to create a textured slope characteristic of natural chaparral mountain slope terrain. (Imp 2)

GOAL CD-7

Maintain, establish, develop, and protect the City’s highways and corridors for scenic purposes.

Policies

- CD-7.1** Review, update, and expand the City’s Scenic Highway Plan to keep visual resources associated with the City’s highways and roadways current; consider designation roads along the City’s hillsides bordering the City as potential candidates for scenic roads or highways.
- CD-7.2** Regulate new development, substantial rehabilitation, or renovation projects through provisions that require an analysis of impacts of development on the quality of the City’s designated highways and corridors.
- CD-7.3** Prohibit installation or expansion of poles, billboards, and other above-ground appurtenances from detracting from the views along the City’s scenic highways and corridors; phase out uses that impair scenic views.

Historic Resources

INTRODUCTION

The City of Corona is noted for its rich historic and cultural heritage as evidenced by its many historic structures, prehistoric sites, and natural features. The City's cultural resources as well as the features of its natural environment give the City its unique identity, charm, and orientation. Significant efforts have been undertaken and resources expended to preserve these important features. When well preserved and maintained, these cultural and historic features provide the community with a sense of permanence, which fosters civic pride and stewardship.

The planning, conservation, and management of cultural and historic structures and landscapes is not a state-mandated requirement of a general plan. However, because of the importance of Corona's heritage, the general plan includes a historic resources element anchored by the following statement:

Corona is rich in historic and cultural resources. Sustaining the community's heritage is a matter of civic pride among residents and businesses—it fosters a sense of place and identity, sustains a high quality of life, and strengthens economic growth through tourism. Corona will continue to identify, maintain, rehabilitate, protect, and display its heritage and its cultural resources as it continues to grow and mature as the anchor of western Riverside County.



The City of Corona's historic civic center is a source of local pride.

Scope of Element

The historic resources element is not a state-mandated element of the general plan. However, it is important because it provides guidelines to preserve resources that represent the history and culture of Corona. Specifically, the element is intended to provide guidance in developing and implementing programs, in concert with community partners, that ensure the identification, designation, and protection of cultural and historical resources for future Corona generations.

The City's historic resources element is organized into the following sections:

- » **Historic Context.** This section provides a brief overview of the City's historic context, historic resources, and the various programs implemented by the City and nonprofit organizations to support their preservation and restoration.
- » **Historic and Cultural Resources.** This section provides an overview of the historical and cultural resources in the City and sphere of influence, followed by goals and policies to identify and preserve them.
- » **Paleontological Resources.** This section provides an overview of paleontological resources and sensitivity of lands for such resources, followed by goals and policies to identify and preserve resources.

Related Plans and Studies

The historic resources element of the general plan is the City's plan for preserving and maintaining its cultural, historic, and paleontological resources consistent with state and federal law and community values. This plan is implemented by a variety of related plans, ordinances, and tools that are consistent with and support the vision, goals, and policies of the general plan. Related plans and tools include:

- » **Corona Historic Register and Landmark Heritage Inventory.** These documents are the official list of heritage properties identified by the planning commission. There is also the official list of landmarks, historic properties, and all contributing resources within historic districts that have been adopted by city council.
- » **Corona Municipal Code.** The Corona Municipal Code, Historic Resources Chapter, provides guidance and regulations to promote the recognition, preservation, and continued viability of historic resources in Corona in the interest of prosperity, social and cultural enrichment, and the general welfare of the people of Corona.
- » **General Plan and EIR Technical Studies.** The most authoritative study of cultural and paleontological resources can be found in technical studies, City of Corona General Plan Technical Background Report, and the Cultural Resources Technical Report and Paleontological Resources Report, prepared in 2018.

The following sets the context for understanding, appreciating, and protecting the City's historic, cultural, and paleontological resources in the community.

BRIEF HISTORY OF CORONA

Corona's modern history dates back well before its incorporation in 1896, and it has been the subject of many historic publications. An abbreviated history of the major eras in the community is provided below.

Early Settlements

The General Plan area is located within an ethnographic transition zone between three Native American groups: the Juaneño, the Gabrielino, and the Cahuilla. In the early 1700s, prior to the arrival of the Spanish, it is said that these indigenous people occupied the Corona area. These Native Americans used the hot waters in Temescal Canyon for bathing and religious ceremonies. Current residents and visitors still enjoy the rejuvenating mud baths and hot springs at the Glen Ivy Hot Springs resort. Luiseño religious ceremonies were strictly followed, and remnants of their artistic pictographs and petroglyphs can still be found in undeveloped areas.

During the early 1800s, lands within Corona were part of several Mexican land grants: Rancho La Sierra, Rancho Jurupa, Rancho El Rincon, and Rancho El Sobrante de San Jacinto. With the Treaty of Guadalupe Hidalgo (1848), Mexico ceded the Corona area to the United States with the rest of California. The Yorba, Serrano, Sepulveda, Cot, and Botiller families ranched sheep and cattle on the ranchos. In 1849, the California gold rush brought prospectors and settlers. The Butterfield Overland Mail Trail, a stagecoach service which delivered mail and passengers from St. Louis to San Francisco from 1858 to 1861, traversed the Temescal Valley, bringing an influx of people to Corona.

South Riverside

Corona is closely linked to the advent of the railroad and the phenomenal southern California real estate boom of the 1880s. In 1886, developer Robert Taylor persuaded his partners, Adolph Rimpau, George L. Joy, A. S. Garretson, and Samuel Merrill, to form the South Riverside Land and Water Company. Together they purchased 12,000 acres of prime agricultural land in Corona. Taylor and his partners knew that the Santa Fe Railroad would complete its new line, and it would run just north of the new town site. The rail line was important to Corona's emerging agriculture and industrial enterprises and its eventual township. The town's founders initially named their development "South Riverside" after the successful citrus community of Riverside.

On July 13, 1896, residents voted to incorporate and rename the community Corona, which is Spanish for "crown," in honor of the City's circular Grand Boulevard. On September 9, 1913, Corona residents celebrated with an international automobile race on Grand Boulevard. More than 100,000 people came to the town of 4,000 to watch the race. Races were held again in 1914 and 1916 but were discontinued after tragic deaths in 1916. The original Main Street and Sixth Street intersected at the center of the circle. The creation of a larger road network made Sixth Street part of the main road from Orange County to Riverside and the Coachella Valley. Main Street became the alignment for the original SR-71. Corona was located at these crossroads.



HISTORIC RESOURCES

Lemon Capital

Agriculture has always played a significant role in Corona's history. As early as 1914, the land produced alfalfa, grain, sugar beets, tomatoes, beans, walnuts, and dairy land. However, the climate, soil, and railroad made Corona an ideal place to grow citrus. Most new settlers to the Corona area planted citrus trees in hopes of profits. New groves sprang up, and by 1912, 5,000 acres of lemon and orange groves were established. The abundant production of lemons and lemon products earned Corona the nickname "Lemon Capital of the World." By 1915 Corona businessmen formed the first Exchange By-Products Company in the nation. Sunkist eventually bought this co-operative in 1954, marketing lemon products for worldwide disbursement.



In 1961 citrus was still the backbone of Corona's economy, employing thousands. However, the citrus boom was not to last. Corona's agricultural industry faced a bleak future as rising production costs made the economics of farming fair or poor. The land required for agricultural production proved more valuable for other business ventures. The first plans were drawn to replace the groves with a master-planned development with approximately 12,500 dwelling units. As residential, commercial, and industrial developments began to replace the citrus groves throughout southern California, Sunkist permanently closed the plant in 1982 due to insufficient local supply.



Sunkist Growers Historic Location, now Lucas Oil (courtesy CHPS)

Tin, Tile, and Mining Operations

Mining has been a part of Corona's history since 1859 when Daniel Sexton and W.W. Jenkins discovered the Temescal Tin Mines sometimes referred to as Cajalco Tin Mines. Historically, the mining industry was secondary to the citrus industry. However, as citrus production declined, the mines remained and became a stronger focal point in Corona. This area was known for the only productive tin mine in the nation, and it produced tin until 1893. Other successful mining ventures included the Minnesota Mining and Manufacturing Company (previously Blue Diamond Mine), Pacific Clay Company, Redlands Clay Tile, Maruhachi Ceramics, Monier Roof Tile, and US Tile.



Blue Diamond Mine, Courtesy Corona Library

While these historic mining industries no longer remain, Corona's mining industries shifted to more economically valuable mineral resources used as building and construction materials. Corona gradually became known as the epicenter of the Temescal Valley Production Area, a vast area recognized for its regionally significant resources essential to construction industries in the Inland Empire. The City's mineral resources include clay (to make brick, pipe, tiles, etc.), limestone (to make Portland cement), sand and gravel (collectively "aggregates" for road base and concrete), specialty sands (for glass making and foundry molds), and commodities. Therefore, local mining industries have continued to play a key role in the local economy.

Postwar Suburbanization

Like many communities in southern California, the City enjoyed a construction boom after World War II and a significant demand for new housing. State Route 91 was constructed through Corona in 1962. Downtown Corona was subject to various urban renewal actions in the late 1960s and 1970s, with many of the original buildings demolished and a new commercial mall developed near Main Street and Sixth Street. Fortunately, a considerable number of the original residences and churches, and some

HISTORIC RESOURCES

institutional buildings, remain intact and add to the varied architectural history of Corona. Renewal efforts continue today in the Downtown.

With continued growth in the Inland Empire as a whole and Corona's strategic location to labor markets, the City became known as a prime area for new housing. In 1986, the City adopted a general plan amendment for the then-agricultural south Corona area that identified residential and other neighborhood-serving land uses, and master planned infrastructure. This change promoted the development of large undeveloped areas in southern Corona, more than doubling the size and population of the community. By 1990, completion of the I-15 provided major access to Corona. Meanwhile, new commercial developments built on Lincoln Avenue, McKinley Avenue, in Sierra del Oro, and the auto mall became a key to the City's fiscal strategy.

By 1996 Corona's population had topped 100,000, and the City ranked among the fastest growing cities in California. The City celebrated its centennial of incorporation in 1996 with events, parades, picnics, banquets, and ceremonial dedications.

Gateway to the Inland Empire

Corona has evolved from a few pioneers with a vision and a circular road in the desert foothills, to a citrus-based agricultural empire, to one of the primary commercial and industrial hubs of Riverside County. For nearly 120 years, Corona has reinvented itself and prospered, becoming the 31st most populated city in California. It provides a wide range of housing opportunities in quality neighborhoods. Employment options abound in industrial, manufacturing, retail, professional, and natural resource industries. Spanned by three major freeways and major roadways, residents and employers benefit from convenient access to the broader southern California region. The city has become known as the gateway to the greater Inland Empire.



Historic Preservation Program

Because of the many historic resources in the city, the City of Corona has undertaken an increasingly broader range of programs and actions to support historic preservation. A sample of significant programs includes the following.

Corona Historic Resources Ordinance

The Corona Historic Resources Ordinance—Chapter 17.63 of the Corona Municipal Code—was established to promote the recognition, preservation, and continued viability of historic resources in Corona in the interest of prosperity, social and cultural enrichment, and the general welfare. It provided for the establishment of the Corona Register of Historical Resources and Heritage Inventory, which contains 482 sites. It also authorized the property preservation/tax reduction program, historic markers program, and historic design guidelines, which set the standards by which buildings are evaluated for the Corona Register of Historic Resources and Heritage Inventory.

California Historic Building Code

The City has adopted the California Historical Building Code (Health and Safety Code §§ 18950–18961) as part of its municipal code, which continues to be updated triennially as part of the State’s mandatory update to the California Building Code. The CHBC is intended to assist in preserving California’s architectural heritage by recognizing the unique construction issues inherent in maintaining historic buildings and adapting them for reuse while preserving their unique historic qualities. The CHBC provides alternate building regulations for permitting repairs, alterations, and additions needed for the preservation, rehabilitation, relocation, related construction, change of use, or continued use of a qualified historical building or structure.

Corona Register of Historic Resources

As a Certified Local Government (CLG) in the Federal Historic Preservation Program, the City of Corona pledged its commitment to historic preservation. The Corona Register of Historic Resources was originally established in 2001 with 9 landmarks, 9 districts, and 9 markers that identified sites of important historical/cultural interest. Since its establishment, the Register has increased to more than 50 properties that have been listed as local historic landmarks.

Property Preservation Program (Mills Act)

The City’s Historic Property Preservation (Mills Act) program offers tax relief for properties on the Corona Register. In turn, those properties are maintained or restored in accordance with City design and historic building standards. Participation in the program by the owner is voluntary, and the minimum term of the preservation agreement is ten years with automatic annual extensions. The purpose of this program is to use the cost savings from the property tax and invest it in the ongoing preservation and maintenance of the historic resource.

HISTORICAL AND CULTURAL RESOURCES

Historical and cultural resources are evidence of past human activity that is important for scientific, historic, or religious reasons to communities, descendants, and people. They may include objects, buildings, structures, sites, areas, places, records, or manuscripts associated with history. Some examples of cultural resources are pioneer homes, buildings, or old wagon roads; structures with unique architecture or designed by a notable architect; pioneering settlements; historic or prehistoric artifacts or objects; rock inscriptions; human burial sites; industrial sites, etc.

Resources may also include places that have historic or traditional associations or that are important for their natural resources, like places where Native Americans have gathered plants for the purpose of making baskets or medicines, places where religious or ceremonial activities have occurred, or places where a significant historic event has occurred. Some of these places may not have physical evidence of their use but may only be recognized through oral history or archival documentation. Other such places may include artifacts and/or ruins above or below ground.

Corona's rich history is evidenced in a wide variety of historic and cultural resources, summarized below:

- » **Archeological resources.** Archaeological resources generally refer to any material remains of human life or activities that are at least 50 years of age and that can provide scientific or humanistic understanding of past human behavior, cultural adaptation, and related topics.
- » **Architectural character of urban and agricultural structures.** This refers to historic structures and other physical elements that evoke Corona's history. These include historic streetlights, old sidewalks, stone curbs and walls, and palm trees. Accessory structures include barns, outbuildings, or rock irrigation channels.
- » **Landmarks of national and statewide significance.** Landmarks are physical elements (e.g., buildings, structures, sites, or place) of Corona's history that provide the city with its unique civic identity and character. Landmarks that rise to state and national historic significance are eligible for additional designation.
- » **Historic districts.** A geographic area designated as containing multiple historic resources (e.g., consisting of buildings, properties, structures, or sites) that collectively have a special character or value—historical, cultural, architectural, archaeological, community, or aesthetic.
- » **Historical markers.** Historic markers generally refer to plates of metal, ceramic, stone, wood, or other material, typically attached to a wall, stone, or other vertical surface, and bearing text or an image to commemorate people, an event, a former use of the place, or some other thing.

The following are examples of the types of Corona's cultural and historic resources.

Archeological and Paleontological Resources

Archeological resources refer to any material remains of human life or activities that are at least 50 years of age and that can provide scientific or humanistic understanding of past human behavior, cultural adaptation, and related topics. These resources refer to artifacts left from the Native American habitation in Corona and include straw baskets, clay pots, tools, and stone grinding sticks. Prehistoric or paleontological resources, such as fossilized plants and animals, have also been discovered in some of the deeper canyons and drainages in the South Corona area.

In general, it has proven very difficult or impossible to establish definitively the precise location of Native American villages occupied in the Ethnohistoric period. Native American place names referred to at the time of Spanish contact did not necessarily represent a continually occupied settlement in a discrete location. Instead, in at least some cases, the communities were represented by several smaller camps scattered throughout an approximate geography, shaped by natural features and subject to change over generations. Many villages had long since been abandoned by the time ethnographers, anthropologists, and historians attempted to document them. Even with archaeological evidence, it can be difficult to conclusively establish whether any given assemblage represents the remains of the former village site.

Although the precise location of any given village is subject to speculation, the banks of the major stream courses were home to many Native American settlements and place names. Similarly, foraging and seasonal camps surrounding springs would have almost certainly been regular occurrences and correlate more regularly with archaeological assemblages. Other clues about the approximate locations of the communities have been taken from where associations were described between the village areas with specific ranchos or land grants, as well as prominent natural features within those approximate boundaries.

The closest ethnographically documented village to the Corona's general plan area is known as Paxangna (alternative spellings and names include Paxauxa and Paxavxanga). As cited in the cultural resources report for the general plan, Kroeber (1925) refers to the village being located along Temescal Creek; O'Neil and Evans (1980) suggest the village was further south. Harrington's informant Jesus Jauro described the area around Corona as having been known as Shiishonga, which McCawley notes is similar to Shiisho'vet. In any case, it is likely that the region that includes Corona was once inhabited by Native Americans although the precise location is unclear.

The City of Corona and its sphere of influence (SOI) area are sensitive for existing archaeological resources. Cultural records search show 70 recorded resources within the City of Corona, of which 30 are prehistoric archaeological sites, 38 are historic archaeological sites, and 2 are multicomponent resources. Six archaeological resources are located on the border between the City and its SOI. Within the SOI, approximately 86 archaeological resources have been previously identified and recorded. Of these resources, 74 are prehistoric archaeological resources, 10 are historic archaeological resources, and 2 are multicomponent resources.

HISTORIC RESOURCES

Architectural Character/Historic Resources

Architectural/historic resources typically refer to resources that date back a century or more. Many original residences, churches, and some institutional buildings remain in existence today. Corona has a documented variety of historic residential architectural style that harken back to its earliest days as an incorporated city. Most of the historic homes in Corona are of the Craftsman bungalow, California bungalow, or Vernacular wood frame styles. Other styles include the Spanish Revival and Spanish Colonial, Queen Anne, Gothic Revival, Colonial Revival, and Victorian Cottage.

In addition, other physical elements evoke Corona's history and can be considered historic resources. Examples include the pocket parks on Grand Boulevard, stone curbs and walls, the mature trees of Grand Boulevard and other downtown streets, or the tall palm trees along Chase Drive. Accessory structures associated with Corona's agricultural origins—such as barns, outbuildings, or rock-lined irrigation channels—may be considered historic resources if representative of the industry's local history. Parks, monuments, signs, or public art may also qualify as historic if significant to the cultural, social, educational, architectural, economic, or political history of the city.



Clockwise from top left: Victorian Carpenters Gothic Style, 1892; Queen Anne Victorian House, 1899; William Henry Jameson House, 1905; Vernacular Wood Frame House, 1907.

Landmarks of State and National Significance

The Corona Register of Historic Resources and the Corona Heritage Inventory comprise 482 buildings, structures, and sites of local significance, civic identity, and character. Sites listed/eligible for the California or National Register of Historic Places are below.

- » **Andrew Carnegie Library**, 8th and Main Streets. This Neoclassical building, designed by Franklin Pierce Burnham and built in 1906, was the City's public library until 1971. The building was added to the National Register on June 29, 1977.
- » **Woman's Improvement Club**, 1101 S. Main Street. This one-story, multi-gabled, Craftsman-style bungalow clubhouse was built in 1913. In 1899, this civic club was formed as the Town Improvement Association. The building was added to the National Register on November 3, 1988.
- » **Corona Theater**, corner of Ramona Avenue and East Sixth Street. Shown below, the Spanish Revival-style Corona Theater was designed by Carl Boller and dedicated in 1929. It is the only pre-Depression Era theater remaining in Corona.
- » **Corona Heritage Park**, 510 W. Foothill Parkway. This 5-acre complex was the headquarters for the Corona Foothill Lemon Company, the largest citrus ranch in California in the early 1900s.
- » **Corona High School**, 815 West Sixth Street. This Spanish Revival-style building was originally built as Corona's second high school in 1923 and became the Civic Center in 1961. The building was added to the National Register on August 3, 2005.
- » **Jefferson Elementary**, 10th and Vicentia Streets. This site joined the California and National Register of Historic Places in December 2017. It includes the 1927 Spanish Colonial Revival-style original school and 1931-addition south wing. The building was added to the National Register on September 28, 2017.
- » **Grand Boulevard Historic District**. This circular roadway—one mile in diameter and three miles in circumference—was used for internationally acclaimed road races in 1912. The boulevard was added to the National Register on July 14, 2011.



HISTORIC RESOURCES

Corona's sphere of influence contains two State Historical Points of Interest: Bandini-Cota Adobe Site and the Temescal Tin Mines. The five properties listed on the NRHP are also automatically eligible for listing to the CRHR. In addition, there are eight other properties that are eligible for the CRHR. These are:

- » Barber Home (1893) – Eastlake
- » 1101 Ramona Ave (1915)–Vernacular Wood Frame with Classical Revival Element
- » Terpening House (1899) – Queen Anne Victorian
- » Corona First Methodist Church (1914) – Tudor Revival
- » 401 East 8th Street (1908) – Vernacular Wood Frame
- » Camp Haan Barracks (1942) – Vernacular Wood Frame
- » 517 E 8th Street (1896)
- » El Gordo Caballo Ranch (1939)



Clockwise from top left: First Congregation Church, 1910 (Corona's First Church est. 1887); 1284 Kelley Street, unique Colonial Revival home, 1928.

Historic Districts

A historic district is a geographically defined area possessing a concentration of contributing historic resources that relate to each other and are unified by physical development or historical context. As required by the municipal code, the city council has made the findings to establish 10 historic districts in Corona:

- » **Heritage Park District**, built 1913. The park is built at the site of the Foothill Ranch, Corona's last citrus packinghouse complex. The site includes the company store, packinghouse, original residence of ranch founder H. E. Hampton, outbuildings, century-old trees, exotic specimens, and a functioning lemon grove.
- » **Lemonia Grove District**, built 1895. This district is located on 3½ acres of land at 2750 Rimpau Avenue. Oscar Thieme, a German businessman, established the estate in 1895. He planted the area around his home with a wide variety of lush specimen trees, ornamental shrubs, flowering vines, and multitudes of flowers.
- » **Kammeyer Ranch District**, built 1892 and 1895. Kammeyer Ranch District is located on five acres of land at 2837 South Kellogg Avenue and is a typical complex reminiscent of Corona agricultural history. Citrus ranchers and the Gilbert family's groves surrounded their home.
- » **Sunnyslope Cemetery District**, built 1892. The cemetery is at 1125 South Rimpau. A small section was reserved for paupers. Many of the city's founding families are buried here. The grounds, graves, headstones, and memorials are reminders of the people who founded, shaped, guided, and shared the city's history.
- » **City Park District**, built 1913. City Park, the first park built in the City, is a 20-acre site at 930 East Sixth Street. Local architect Leo Kroonen Sr. designed a "City Plunge" swimming pool complex that was built in 1925 and later demolished. A Founders Plaque was erected on the site in 1936. It was listed as California Historic Landmark No. 738, Corona Founders Monument.
- » **Grand Boulevard Streetscape District** (2001). The unique circular roadway was a prominent feature used as a racecourse for internationally acclaimed road races in 1913, 1914, and 1916. It gave rise to the long-standing moniker "The Circle City," which makes Corona distinctive from any other city. The city's only "boulevard," it contains wide parkways, large mature trees, and historic streetlamps fronting the stately homes of the city founders and early city leaders.
- » The final four historic districts consist of individual roadway segments in Corona that are historically significant to the City and were lined with landmark palm trees. These roadway segments are:
 - Chase Drive Palm Trees District (built pre-1930)
 - Rimpau Avenue Palm Trees District (built pre-1930)
 - South Main Street Palm Trees District (built pre-1930)
 - Palisades Drive Roadway District (build date unknown)

GOAL HR-1

A comprehensive historic resource management program that identifies, designates, and protects resources that are significant to the historic development, identity, and character of Corona.

Policies

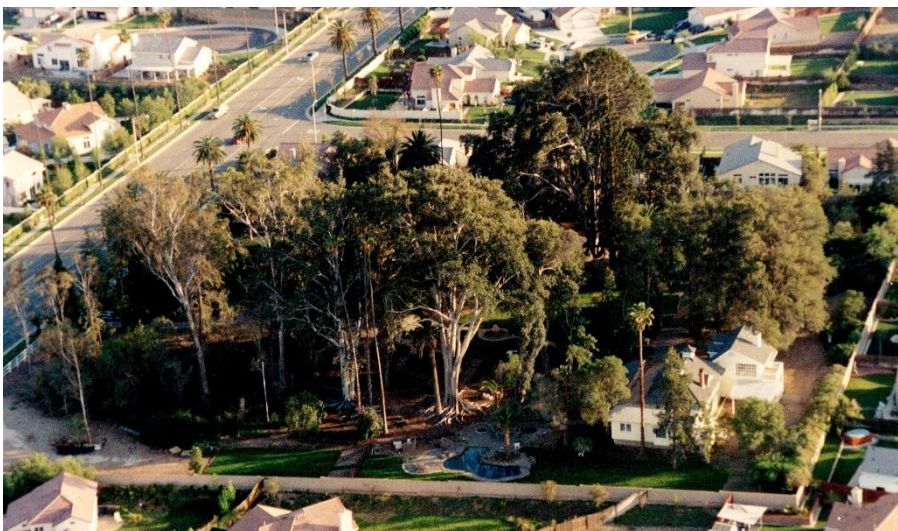
- HR-1.1** Continue to implement and expand upon, as feasible, the following historic resources management strategies:
- A local Corona Historic Register that includes significant "Landmark" properties, "Historic Districts," and "Historical Markers" as prescribed in the Corona Municipal Code.
 - A Corona Heritage Inventory that includes surveyed properties meeting all the criteria as prescribed in the Corona Municipal Code to be considered a local historic resource.
 - Procedures and criteria for determining the eligibility for listing properties on the Corona Historic Register and the Corona Heritage Inventory.
 - Standards and regulations governing the identification, protection, restoration, maintenance, alteration, relocation, or removal of historic resources.
- HR-1.2** Expand existing surveys of historic resources to include areas of potential historic importance not previously surveyed, and develop an ongoing program for updating the surveys on a regular basis.
- HR-1.3** Continue to implement criteria and guidelines for the inclusion of historic resources and historic structures for the Historic Register and Heritage Inventory, including but not limited to: sites, parks, landscape elements, streets, streetlights, signs, monuments, murals, and public art.
- HR-1.4** Continue to implement and expand upon preservation incentive programs that encourage property owners to preserve, restore, and maintain historic properties, and secure public and private funding sources to assist in said preservation.
- HR-1.5** Support the preservation of historic resources controlled by other governmental agencies, including those related to federal, state, county, school district, and other agencies. This includes resources under the jurisdiction of the Army Corps of Engineers at Prado Basin.
- HR-1.6** Seek and support City-sponsored, nonprofit, and privately sponsored public events and festivals, as feasible, that recognize and promote the cultural and historic heritage of Corona.

GOAL HR-2

Promote the retention, restoration, adaptive reuse, and maintenance of historic structures and properties in a manner that will conserve the integrity of the resource in the best possible condition.

Policies

- HR-2.1** Assist and encourage property owners and tenants to maintain the character and integrity of the historic resource, and to restore and reuse historic properties in a manner compatible with their original architectural style.
- HR-2.2** Continue to implement design guidelines for restoring historic and architecturally significant structures, including but not limited to, the Secretary of the Interior's Guidelines for Preserving, Rehabilitating, Restoring, and Reconstructing Historic Buildings.
- HR-2.3** Develop an inventory of information and resources regarding the proper rehabilitation techniques to assist owners and developers of historic buildings.
- HR-2.4** Administer the State Historic Building Code to facilitate the restoration and rehabilitation of historic structures in a manner that is more appropriated to older structures than the standard building codes.
- HR-2.5** Require all modifications to historic properties to be consistent with the Secretary of the Interior's "Standards for the Treatment of Historic Properties with Guidelines for Preserving, Rehabilitating, Restoring, and Reconstructing Historic Buildings" or "Standards for Rehabilitation and Guidelines for Rehabilitating Historic Buildings."



Lemon Grove, Corona Historic District

PALEONTOLOGICAL RESOURCES

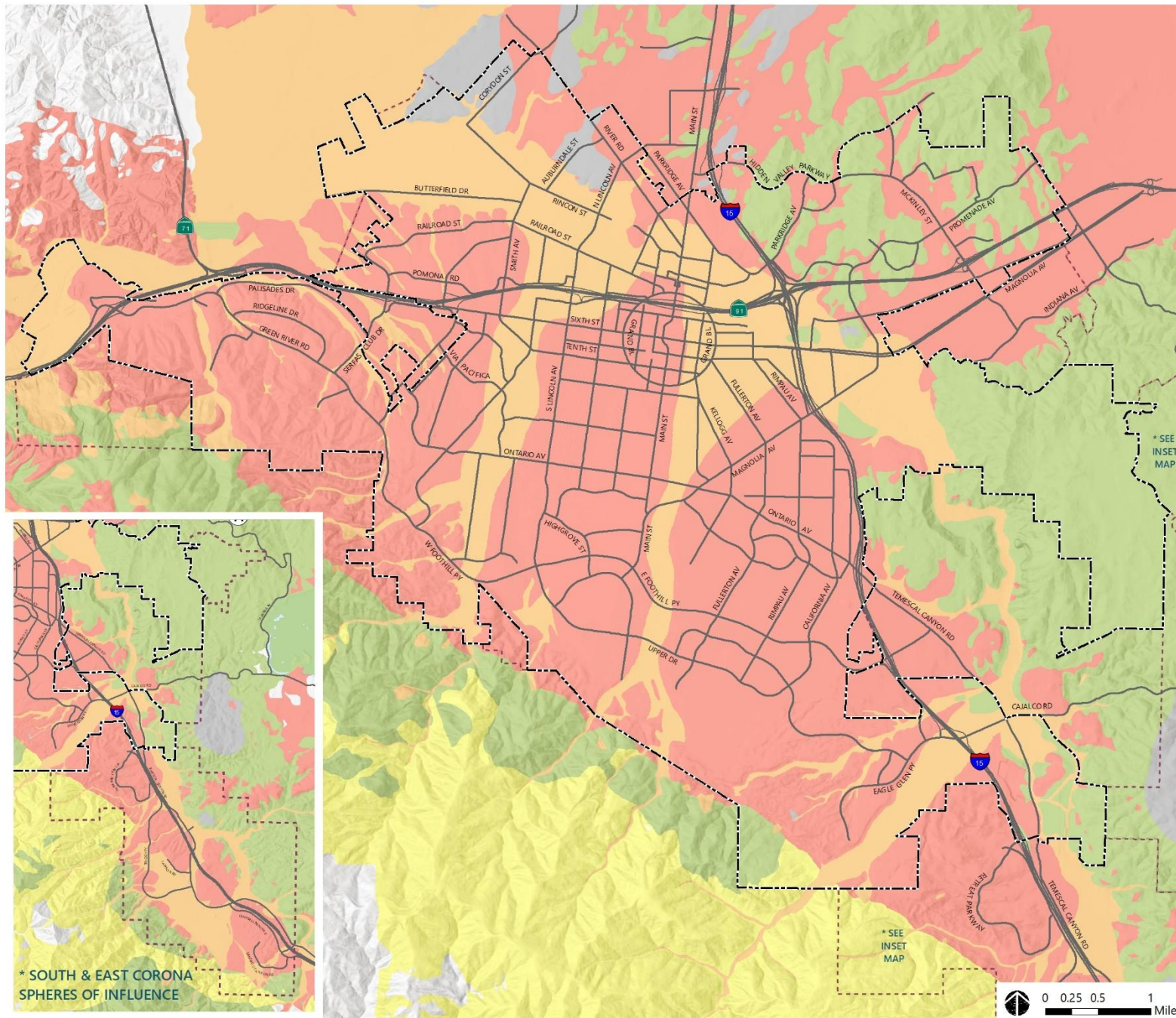
While other areas of Riverside County are better known for paleontological resources, the Corona area is nonetheless known to contain fossil localities within the city limits as well as geological formations that are known to contain fossils in other locations within the vicinity of the city. Marine-related habitats have also been recorded in Corona, in particular near the I-15/SR-91 interchange. Data provided by the Los Angeles County Museum indicates there are multiple known fossil localities within Corona city limits, and other fossil localities from similar formations in the vicinity.

In planning for future development or for major redevelopment or infrastructure projects in Corona where excavations are likely, it is useful to assign a paleontological sensitivity rating to locations. Paleontological sensitivity refers to the potential for a geologic unit to produce scientifically significant fossils. Site rating is determined by the type of rock, history of the geologic unit in producing significant fossils, and fossil localities recorded from that unit.

The following classifications of geologic formations are used to indicate the potential for the presence of fossils and assign appropriate mitigations.

- » **No Sensitivity.** This refers to igneous and metamorphic rocks, which generally have no paleontological sensitivity because the ways these rocks form are not conducive to the preservation of fossils.
- » **Low Sensitivity.** Some rock units are of an age to preserve fossil resources, but specimens are poorly represented in the literature and in museums, and the presence of fossils is the exception and not the rule.
- » **Low-to-High Sensitivity.** Some sedimentary deposits are too young to preserve fossils at the surface or shallow subsurface but may preserve fossils at greater depth or overlie older units that have high paleontological sensitivity.
- » **High Sensitivity.** These areas refer to geologic formations that are known to preserve abundant or scientifically significant fossils, therefore giving them high sensitivity to paleontological resources.
- » **Undetermined Sensitivity.** This designation refers to areas where paleontological sensitivities cannot be determined because there is little to no record in the scientific literature.

Most of central Corona is underlain by an area designated as having high sensitivity or a low-to-high sensitivity (depending on the depth of the soil) for paleontological resources. Rock units surrounding the city in the adjacent foothills are classified as having low or no sensitivity for paleontological resources. Locations for these different areas of paleontological sensitivities are illustrated in Figure HR-1 on the following page and in the paleontological resources report for the General Plan EIR.



**Figure HR-1
Sensitive Paleonto-
logical Resources**

Legend

- Unknown Sensitivity
- No Sensitivity
- Low Sensitivity
- Low-to-high Sensitivity, increasing with depth
- High Sensitivity
- City Boundary
- Sphere of Influence Areas

Source:
SCWA 2017

HISTORIC RESOURCES

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GOAL HR-3

Recognize the importance of archeological and paleontological resources and ensure the identification and protection of those resources within the City of Corona.

Policies

- HR-3.1** Require appropriate treatment/preservation of archaeological collections in a culturally appropriate manner, in accordance with state and federal standards, and in consultation with interested Native American tribes that have traditional cultural affiliation with the project area and/or the resources affected by the project.
- HR-3.2** Require that development proposals incorporate specific measures to identify, protect, and preserve cultural resources in the planning, environmental review, and development process.
- HR-3.3** Archaeological resources found prior to or during construction shall be evaluated by a qualified archaeologist and appropriate mitigation measures applied, pursuant to § 21083.2 of CEQA, before the resumption of development activities. Any measures applied shall include the preparation of a report meeting professional standards, which shall be submitted to the appropriate CHRIS information center.
- HR-3.4** Any project that involves earth-disturbing activities in an area determined to be archaeologically or culturally sensitive shall require evaluation of the site by a qualified archaeologist. The applicant shall implement the recommendations of the archaeologist, subject to the approval of the City Planning Department.
- HR-3.5** Any project that involves earth-disturbing activities in an area determined to be archaeologically or culturally sensitive shall require consultation by the applicant with interested federally recognized American Indian Tribe(s) that have a traditional cultural affiliation with the project area and/or the resources affected by the project, for the purposes of determining resources impacts and appropriate mitigation to address such impacts. Applicant shall also arrange for monitoring of earth-disturbing activities by interested federally recognized American Indian Tribe(s) that have a traditional cultural affiliation with the project area and/or the resources affected by the project, if requested.
- HR-3.6** Any project that involves earth-disturbing activities in soil or rock units known or reasonably suspected to be fossil-bearing shall require monitoring by a qualified paleontologist retained by the project applicant for the duration of excavation or trenching.
- HR-3.7** Paleontological resources found prior to or during construction shall be evaluated by a qualified paleontologist, and appropriate mitigation measures applied, pursuant to § 21083.2 of CEQA, before the resumption

HISTORIC RESOURCES

of development activities. Any measures applied shall include the preparation of a report meeting professional standards, which shall be submitted to the Riverside County Museum of Natural History.

- HR-3.8** In the event of the discovery of a burial, human bone, or suspected human bone, all excavation or grading in the vicinity of the find shall halt immediately and the area shall be protected and the project applicant immediately shall notify the Riverside County Coroner and comply with provisions of the Health and Safety Code § 7050.5, including PRC § 5097.98, if applicable. If the find is determined to be Native American human remains, the applicant shall consult with the Most Likely Descendent to determine appropriate treatment for such remains.

GOAL HR-4

Recognize, identify, and protect natural resources for their historic and cultural value, and include these features in the historic resource management program.

Policies

- HR-4.1** Develop an inventory and map concentrations of Heritage Street Trees, which are representative of the City's character and history, for consideration and official inclusion on the Corona Historic Register or the Heritage Inventory.
- HR-4.2** Designate "Landmark Trees" in accordance with existing City policy and ordinance to preserve and protect individual specimen trees, which display particular historic value to the community.
- HR-4.3** List applicable parks within Grand Boulevard, as resources on the Corona Historic Register, to preserve their historic identity and become eligible for funding for future restoration and maintenance.



Corona Founders Landmark

GOAL HR-5

Foster increased community awareness and appreciation for Corona's unique heritage and the many cultural and historical resources found in the City.

Policies

- HR-5.1** Encourage, participate in, and promote activities and events designed to educate the community about Corona's unique heritage and the recognition of its many cultural and historic resources.
- HR-5.2** Promote the archival collection and documentation of Corona's history at the Heritage Room of the Corona Public Library, and establish this facility as the official local repository for historic and cultural resource records.
- HR-5.3** Develop educational and interpretive brochures for distribution to the public and property owners about the City's historic resources, preservation programs, financial incentives for designated properties, and restoration requirements and guidelines.
- HR-5.4** Foster neighborhood conservation and beautification programs and consider preservation awards or recognition certificates for historic properties displaying exceptional care, maintenance, or restoration.
- HR-5.5** Inform property owners of the benefits of being a listed historic property and provide information on conservation methods and professional resources.

GOAL HR-6

Build and strengthen preservation partnerships between the City and property owners, businesses, community organizations, educational institutions, and State and federal agencies.

Policies

- HR-6.1** Coordinate with the Chamber of Commerce, Corona Historic Preservation Society, State Office of Historic Preservation, and other organizations or agencies regarding potential programs that promote tourism, filming, and economic development in association with historic resources.
- HR-6.2** Encourage the involvement of the Corona-Norco Unified School District in preservation activities, local history programs, and the potential listing of identified historic school sites on the Corona Historic Register.
- HR-6.3** Work cooperatively with the Corona Heritage Foundation in the establishment and improvement of Heritage Park as a historic citrus ranch complex in South Corona.

HISTORIC RESOURCES

- HR-6.4** Consider application to the State of California Historic Preservation Office for acceptance as a Certified Local Government, and for having a Certified Local Ordinance for historic resource management.
- HR-6.5** Continue to consider and assist in the nomination of Corona's historic resources to the National Register of Historic Places, the California Historic Landmarks program, and the California Points of Historical Interest program.
- HR-6.6** Work cooperatively with the Corona Historic Preservation Society, and other nonprofit and community organizations, in the placement of appropriate Historical Markers, monuments, or plaques to memorialize historic sites in Corona.
- HR-6.7** Work cooperatively with the Corona Historic Preservation Society and other nonprofit organizations and individuals applying for available local, State, and federal funding for the rehabilitation and restoration of historic properties and resources.



Economic Development

INTRODUCTION

Economic development is essential to a successful municipal corporation. Industries, commerce, and associated employment are essential in bringing jobs for residents, providing goods and services that support the population and allow businesses to thrive, and for providing tax revenues to support public services, infrastructure, and facilities. Corona's local economy has competitive strengths and economic opportunities and the General Plan seeks to establish and maintain a balanced diversity across the many economic sectors operating in the community.

The City's position at the intersection of SR-91 and I-15 and its housing stock have made Corona a desirable location to live, work, and conduct commerce. Both factors have resulted in significant growth in the City's population and employment base. Looking forward, the City's approach to economic development is as follows:

Corona envisions a continued expansion of its industrial, commercial, and retail base to include an emerging office market and burgeoning health care sector, complementing the City's strong economic base. A strong foundation of local commerce builds a stronger local economy, benefitting the entire city. The City seeks to attract, retain, and expand businesses for the purpose of encouraging profitable enterprises, creating sustainable local jobs, and generating revenue to support municipal functions. These objectives are to be achieved in a manner consistent with protecting the character of the community and quality of life.



Scope of Element

The Economic Development Element is not a state-mandated part of the general plan. However, the City authorized preparation in recognition of the importance of the economy to the overall viability of Corona. The Element provides a framework to ensure that the City is able to maintain its strong economic base and take advantage of future economic opportunities. A strong economy not only provides local workers with adequate income to afford a high quality of life, but it also provides local government with adequate public revenues to maintain a high quality of public services.

In order to maintain the City's vision of a fiscally healthy and balanced economy, broad goals and policies are defined to guide future economic development efforts. The Economic Development goals and policies are long-term to provide an organizational framework and process that can guide ongoing development efforts. Recognizing that economic development is not a static process, the goals and policies provide direction to guide development activities while at the same time maintaining flexibility to respond to changing economic trends and local market conditions.

Related Plans and Studies

The economic development element of the general plan is the City's plan for promoting and developing a local economy that can provide sufficient jobs and local incomes, provide a supportive environment for businesses to prosper, and provide tax revenues to fund services. This plan is implemented by plans, ordinances, and tools that are consistent with and support the vision, goals, and policies of the general plan.

Related plans and tools include:

- » **Strategic Plan.** Corona's Strategic Plan is a collaborative community-driven effort engaging a broad cross section of stakeholders to help the City prioritize its efforts, allocating both fiscal and human resources to achieve a shared vision and goals. It includes specific goals and programs addressing economic development.
- » **Economic Development Plan.** This effort represents Corona's plan to create a balance between quality of life, employment creation and taxable sales generation so that the City of Corona continues to be a desirable location to live and establish business. The plan is periodically updated as needed.
- » **Corona 2020.** Enacted by the Corona Chamber in partnership with the City of Corona, this effort focuses on three key areas of development: employment, health care, and infrastructure. It is intended to help attract career building jobs, improve health care, and continue to improve public spaces and infrastructure.

The following discussion focuses on key issues in Corona, followed by responsive goals and policies intended to build Corona's economy, promote and leverage its workforce, revitalize areas of the community, ensure fiscal viability and financing opportunities, and build an economic development program capable of achieving these objectives.

ECONOMIC BASE

The City's key location in the Inland Empire and Riverside County allows it to position itself as a regional location for retail, commercial and industrial activity. The City's location and accessibility present opportunities for encouraging the development of industries in emerging markets and new technologies, as well as in the professional office market. Research and Development firms present opportunities for development in high-technology sectors such as electronics and medical manufacturing, which also are associated with a high-skilled labor force. Job diversification and a skilled labor force are two elements that are essential to maintaining a strong economic base.

Corona's manufacturing base is strong with nearly 400 manufacturers within the city. The main clusters are: Aerospace, After-Market Auto, Food Processing, Beauty/Nutrition, and Medical Technology. Educating manufacturers on the importance of "Made in California" products to the global economy is a major goal for Corona. The City's ideal location to major freeways, distribution hubs and to the ports of Los Angeles make Corona an ideal location for manufacturing facilities to thrive. The City's goal is to encourage the growth of manufacturers mainly through global exporting, thereby increasing the manufacturers' client base and increasing their bottom line.

At the same time, Corona is seeking to significantly expand its professional sectors of businesses by leveraging its locational assets, economic base, and workforce skills. As a gateway to Orange County, Corona continues to see a growing demand for research and development, health care and allied services, engineering sciences, and other professional services. Corona also has an increasingly skilled resident workforce living in the community. These factors will present opportunities for Corona to attract new corporate headquarters that will relocate into or expand within the community.



Corona is the corporate headquarters for Monster Beverages

GOAL ED-1

Promote a strong and diversified economic base by attracting quality businesses and encouraging existing businesses to expand their sales, facilities, and employment.

Policies

- ED-1.1** Encourage a variety of industries to locate in Corona, including commercial/professional office uses, specialized medical services, manufacturing, and “clean,” high technology industries that provide high-skill/high-wage job opportunities.
- ED-1.2** Encourage the expansion of existing businesses in Corona if possible and extend efforts at business retention.
- ED-1.3** Utilize Specific Plans to define flexible growth areas that allow for the transition of heavy industrial to research and development to mixed-use and office uses, while allowing some viable heavy industrial areas to remain industrial.
- ED-1.4** Encourage the growth of manufacturing companies and allied supporting businesses in Corona by providing education and resources to support their efforts to export products globally.
- ED-1.5** Facilitate the retention and expansion of existing jobs-generating industries within existing and planned industrial areas to allow such industries to remain in Corona.
- ED-1.6** Periodically monitor the market for retail commercial and office development, assessing the adequacy of existing sites to accommodate and capability of existing buildings to be adaptively re-used for community-desired commercial uses and adjust applicable codes and ordinances, as necessary.
- ED-1.7** Recruit the development of new industries and businesses that build upon Corona’s existing diversifying industrial base, transportation infrastructure, increasing demand for professional and medical services, and its proximity to key regional business centers.
- ED-1.8** Discourage the development of industrial uses that are land extensive, generate few job opportunities, contribute little revenue for the City, and foreclose the opportunity to maximize economic opportunities remaining on limited vacant and underutilized land.

LABOR FORCE

Skilled labor is the number one attraction when firms consider relocation. For Corona to succeed in attracting firms that provide high value jobs, it must continue to collaborate with educational institutions and industry to produce a workforce capable of securing those jobs. In addition, an aging population living longer than any preceding generation presents new workforce and societal changes. Jobs based on knowledge, or skill sets of specific knowledge, will be the key to economic opportunity.

The City is well positioned as a gateway to Orange County along State SR-91, allowing those who work in Orange County to live in Corona's more affordable housing. However, quality of life issues become paramount as commuting and traffic increases. There is a need for local economic growth that will provide a better match between the City's labor force (Corona residents) and the City's available employment, and to satisfy a significant portion of the employment and income needs of the City's labor force.

Through expanded partnerships with local schools and institutions of higher learning, Corona will leverage its ability to meet the challenges of developing a highly skilled workforce ready for the industries it is targeting. It can also offer opportunities for re-training through local and state funded programs and the local workforce investment board to ensure that those who are under-employed can advance their skillsets to compete for the jobs of today and the future.

GOAL ED-2

Promote a growing and skilled labor force

Policies

- ED-2.1** Promote development of a highly skilled labor force within high-wage emerging industries such as research and development, high technology manufacturing and office-oriented occupations.
- ED-2.2** Promote professional development programs and vocational training to enhance the quality of the area's labor force, and assist them in obtaining new employment opportunities.
- ED-2.3** Encourage growth of the specialty medical services industry which would allow for new employment opportunities and encourage the placement of skilled students within Corona. Increased medical specialties would also eliminate some traffic exiting daily to other counties for these services.
- ED-2.4** Continue to build a sustainable Labor Force by building Partnerships with local education partners like the Corona-Norco Unified School District, Norco College, and Riverside Community College.
- ED-2.5** Target the recruitment of businesses that provide high-paying jobs commensurate with the skills of Corona's residents.

REVITALIZATION OF TARGET AREAS

While the City of Corona has grown rapidly over the 1990s in terms of employment, retail sales and average household income, there are areas of the City that need economic attention and revitalization. Due to the older nature of the Downtown and North Main areas, revitalization is important both to create a sense of place in Corona and to promote economic development and expansion. Mixed-use residential and commercial land uses can contribute to this success.

An important component to creating a vibrant town center is a district that is active and lively into the evening hours. Cafes, bookstores, and restaurants with evening hours draw a variety of people and offer a welcome setting. The increased focus on office development, including professional and medical, will provide opportunities for revitalization of the downtown core. Creating a pedestrian- oriented environment, community facilities, and mixed-use projects with residential, retail, and office are key to a successful downtown core. The North Main area should also provide a focal point for office and residential uses in addition to retail and entertainment.

In addition to the Downtown and North Main areas, other targeted growth areas in the City have opportunities for focused commercial, industrial, and residential development that can contribute to a balanced City economy. These include underutilized and transitioning areas such as the southeast corner of the SR-91 and I-15 interchanges, along the Sixth Street corridor, and the center of the City's current industrial district north of the SR-91. These areas are targeted for office, industrial, residential or a mix of uses that require a different economic focus than the Downtown or North Main area.

GOAL ED-3

Promote the revitalization of targeted growth areas including the Downtown, North Main Street, southeast corner of the SR-91 and I-15 interchanges, the Sixth Street corridor, the North-West Quadrant, and the City's Sphere areas.

Policies

- ED-3.1** Analyze economic development opportunities in targeted growth areas that could meet the City's economic needs, while following guidelines that ensure compatibility with the City's economic strategy.
- ED-3.2** Undertake targeted economic studies to examine highest and best use of the designated land uses for these areas.
- ED-3.3** Encourage diversity of housing opportunities of varying densities to reinforce the character of each growth area.
- ED-3.4** Promote the consolidation of auto sales, service, and related uses on Sixth Street between Lincoln Avenue and the SR-91 freeway.

FISCAL VIABILITY

Corona's quality of life is contingent on its ability to provide essential public services such as fire, law enforcement, parks and recreation, public works, and schools. In order to provide a high level of services to the community and finance capital projects, however, the community must be fiscally viable—generating tax revenues that are able to support services. While property taxes were once the primary source of revenue for funding municipal activities, sales tax is now more important. This is contingent upon a diversified local business base and increasing property values for residential land uses.

GOAL ED-4

Ensure fiscal viability for the City by pursuing a diversified local business base that provides growing sales and property tax revenues to pay for municipal operations.

Policies

- ED-4.1** Expand retail and visitor-serving opportunities by encouraging an appropriate mix of revenue- generating land uses to maintain a competitive edge and a strong sales tax base.
- ED-4.2** Include experiential retail and adaptive re-use commercial development when appropriate.
- ED-4.3** Review master planned and mixed-use development projects and land annexations for their fiscal impacts on the City of Corona and ensure that they are fiscally neutral or beneficial.
- ED-4.4** Promote and recruit new businesses that (a) fill gaps in the range of goods and services currently available and are needed by the City's residents and (b) act as catalysts for attracting other retailers to the City.
- ED-4.5** Promote reinvestment in declining shopping centers and districts, with an emphasis on new retail uses that serve adjacent neighborhoods and contribute to the overall vitality of the centers.

FINANCING OPPORTUNITIES

Once primarily dependent on property tax revenues to fund infrastructure and other public facilities, as well as programs, local governments have sought alternative methods to obtain funds to finance such projects. Today, Corona, like other local governments, must rely upon a mixture of various funding sources to finance capital facilities. These include a variety of techniques including redevelopment tools, development impact fees, and assessment and special tax districts.

GOAL ED-5

Pursue a range of financing opportunities to fund infrastructure and public facilities.

Policies

- ED-5.1** Continue capital improvements planning and prioritization of infrastructure investments to assure that funding resources are allocated to the City's most critical economic needs.
- ED-5.2** Use tax increment financing (TIF's) and enhanced infrastructure financing districts (EIFD's), when appropriate and available, as financing tools in the revitalization of downtown and other areas of the City.
- ED-5.3** Pursue a variety of funding approaches, including impact fees, assessments, transportation funds, and other programs to revitalize and upgrade infrastructure.
- ED-5.4** Continue to look at public private partnerships for Infrastructure Improvements.

ECONOMIC DEVELOPMENT PROGRAM

In 2011, the State of California eliminated community redevelopment agencies. Corona, like many cities in the state, funded its economic development efforts primarily through its redevelopment agency. Since then, the City of Corona has continued to invest in economic development with the intent of expanding local job opportunities, promoting income growth, improving the quality of life, and expanding municipal revenues. Implementation of the General Plan and achieving the community's vision for the City will require continued investment in economic development.

GOAL ED-6

Continue investing in the City's economic development.

Policies

- ED-6.1** Develop collaborative relationships between private and public entities to achieve and maintain a comprehensive and coordinated economic development process.
- ED-6.2** Across city departments and agencies, promote a culture that recognizes that economic development is everyone's job.
- ED-6.3** Continue to implement and periodically update the City's Strategic Plan.
- ED-6.4** Maintain sufficient staff to maintain contact with existing businesses, market the City to potential new businesses, and implement programs and services to maintain and expand existing businesses and assist entrepreneurs to establish new businesses.

Parks, Recreation, Cultural Arts, & Education

INTRODUCTION

Thoughtfully planned parks, recreation, cultural arts, and education can have a profound influence on quality of life. These resources, individually and collectively, convey multiple benefits; they provide an environment in which leisure is valued, where healthful activities take place, and where creative expression and learning are lifelong pursuits. Moreover, these resources also provide an opportunity for residents to come together in different ways and for different purposes, whether sharing an experience at an outdoor concert, hiking in the hillsides, or simply enjoying time with their children.

Yet despite their benefits, these programs and services are often among the first to be curtailed during uncertain economic conditions. At the same time, evidence repeatedly demonstrates that the most desirable cities in California are known for their robust parks, recreation, cultural arts, and educational systems. This is because these amenities support and enhance property values. Companies seek to relocate to communities that offer these amenities, which are attractive to a qualified workforce. And these resources are also known to benefit the physical environment.

In consideration of these communitywide benefits, the following Value Statement expresses the City's commitment to strive toward creating and sustaining a well-integrated system of parks, recreational, creative, and educational opportunities.

Corona values its parks, recreational facilities, trails, cultural arts, and educational resources for the many social, health, economic, leisure, and environmental benefits they offer. To that end, the City seeks to maintain a system of parks and open space for all residents to enjoy. Diverse recreation programs offer opportunities for activity, creativity, and socialization. Educational and arts resources offer an environment where learning and creative expression are valued, lifelong pursuits. Programs are accessible via public transit and pedestrian and bicycle routes. These resources offer places to recreate, be educated, be entertained, celebrate arts and culture, and contemplate nature—enabling the City to sustain desired quality of life.

This element focuses on enhancing Corona's park, recreation, cultural arts, and educational facilities and programs and identifying opportunities present in the community and those that can be pursued to adapt to changing needs.

Scope of Element

Although State law does not mandate the preparation of this general plan element, the City elected to include a Parks, Schools, and Libraries Element in the 2004 General Plan Update to ensure the provision of sufficient parks, schools, and library facilities appropriate to the planned-for residential and service population of the City. The inclusion of this element also enables a municipality to mandate a requirement for providing parkland resources as a condition of development approval, as set out in the Quimby Act. In 2018, the element was updated to include recreational facilities and programs, and cultural arts.

This element addresses the following topics:

- » **Parks, recreation, and trails facilities**, including the range and type of active and passive park facilities, recreational facilities, and multi-use trails in Corona.
- » **Cultural arts facilities and programs**, including the mix of programs for children, families, adults, and older adults in the community.
- » **Lifelong learning and enrichment**, including the City's library and public schools in the community.

This element provides direction for developing and maintaining a comprehensive system of quality facilities, programs, and services. General plan goals, policies, and implementing actions are focused on preserving and enriching resources.

Related Plans

This element is influenced and implemented by a variety of related plans, ordinances, and regulations that are consistent with and support the vision, goals, and policies of the general plan. Related plans, ordinances, and programs include:

- » **Strategic Plans.** Corona adopts and maintains a variety of strategic plans to improve local parks, recreation, trails, and library services. These plans include the Corona Public Library Three-Year Strategic Plan and Corona City Park Reutilization Plan, and Trails Master Inventory, among others.
- » **Municipal Code.** The Corona Municipal Code specifies how new development will provide public open space or impact fees as a condition of development approval. Specific plans provide procedures and requirements for development within a particular boundary, including parks, recreational amenities, and public facilities.
- » **Capital Improvement Plan.** The City's capital improvement plan schedules funding for constructing improvements at local public facilities, including parks and libraries. Public school districts, charter schools, and private schools, however, adopt their own plans for facility maintenance and improvement.

The following sections provide context for each topic addressed in this element, followed by goals and policies to achieve the general plan vision.

PARKS AND OPEN SPACES

The Corona Library and Recreation Services Department provides residents of all ages and abilities with an abundance of recreational and educational services. Corona's existing facilities include community centers, libraries, and a variety of parks, open spaces, and public schools. The activities that take place at these facilities contribute to the social fabric and sense of community enjoyed in Corona.

City Parks

The City of Corona has 35 public parks covering about 352 acres. The public park system includes mini, neighborhood, community and major/regional parks that are differentiated by scale, population served, and amenities. Recreational facilities include the 27-acre El Cerrito Sports Park, which serves City residents under a joint use agreement with the county. Additional park facilities serve the unincorporated sphere of influence. In addition to developed parkland, the Sage Open Space area and Fresno Canyon offer 67 acres of open space for walking, hiking, and bicycling. Additional recreational facilities are available as part of homeowner associations.

Local public schools in Corona also offer additional active recreational facilities for public use during afterschool hours. The City of Corona and the Corona Norco Unified School District maintain formal public use agreements for several school facilities. Joint-use agreements allow for shared public use of school grounds and facilities after school hours and on weekends, which benefits the community by expanding the availability of recreational spaces for residents. In other cases, the City's parks and recreational facilities are also available for shared use by community groups. These allow groups meeting space for a variety of passive and active uses.



Border Neighborhood Park

PARKS, RECREATION, CULTURAL ARTS, AND EDUCATION

Regional, State, and Local Open Space

In addition to recreational opportunities within the City, Corona residents have access to park resources in three counties—the adjacent Cleveland National Forest, which forms the southwest boundary of the City; Prado Basin, to the northwest of the City; and Chino Hills State Park to the northwest of the City. Corona is home to Fresno Canyon and Sage Open Space, providing additional opportunities in the community. These natural areas provide extensive passive and active recreational opportunities for Corona residents, including hiking, bicycling, equestrian use, and camping.



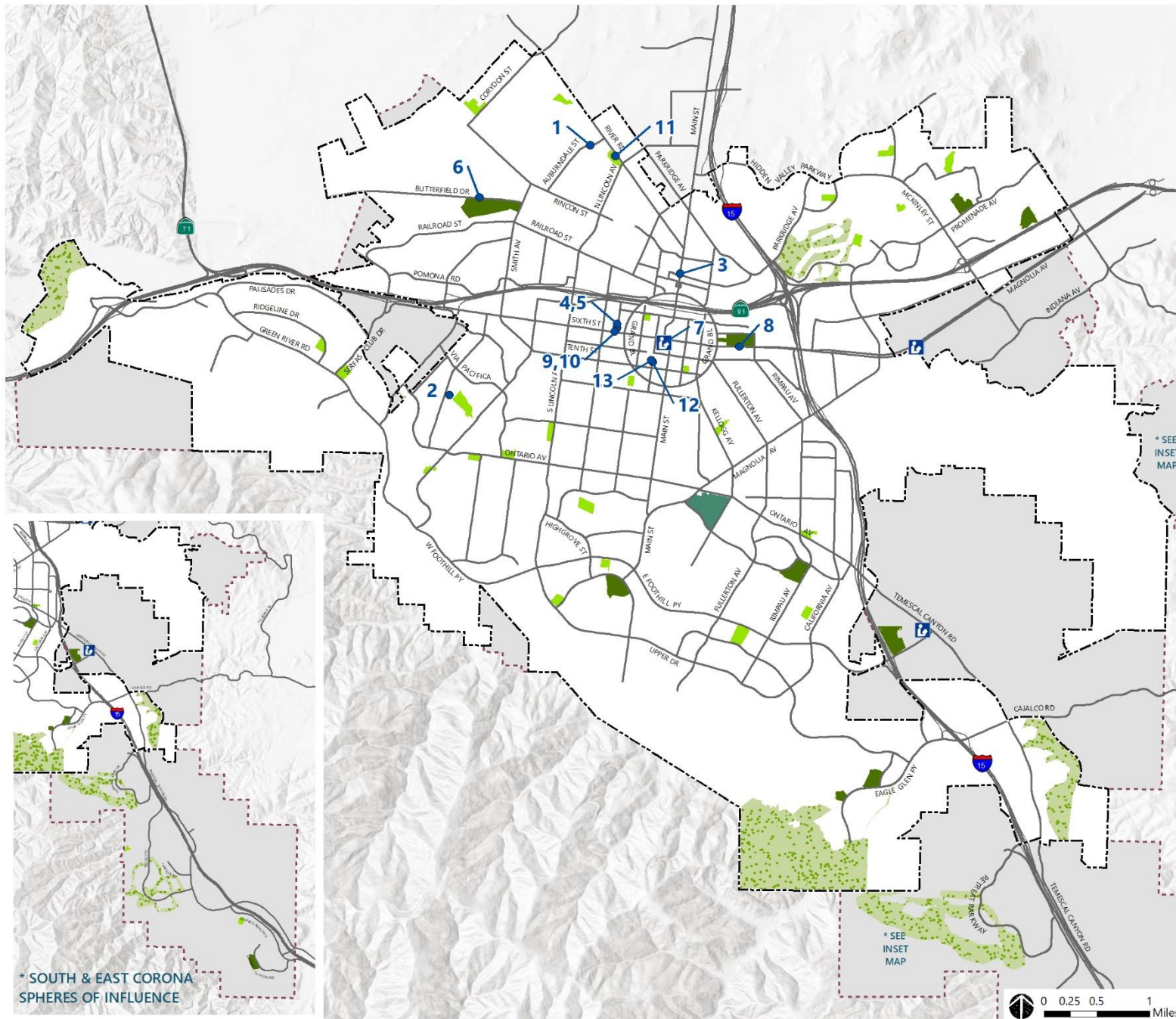
From top clockwise: Rick Vista Park, Fresno Canyon, and Sage Open Space

Figure PR-1, City Parks Resources, illustrates the location of parks, recreational facilities, and preserved open spaces in Corona.

Figure PR-1 Recreation and Park Facilities

Legend

- Mini Park
 - Neighborhood Park
 - Community Park
 - Major Park
 - Golf Courses
 - City Boundary
 - Sphere of Influence Areas
 - Library
 - Recreational Facilities
- 1 - Auburndale Recreation Center
 - 2 - Brentwood Park Center
 - 3 - Circle City Center
 - 4 - Vicentia Activity Center
 - 5 - Civic Center Gym
 - 6 - Corona Municipal Airport
 - 7 - Corona Public Library
 - 8 - Fiesta Bandshell
 - 9 - Historic Civic Center Community Room
 - 10 - Historic Civic Center Theater
 - 11 - River Road Community Center
 - 12 - Senior Center
 - 13 - Victoria Park Community Center



Source:
City of Corona, 2019

PARKS, RECREATION, CULTURAL ARTS, AND EDUCATION

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Recreational Facilities and Programs

The City owns and operates three community centers, multipurpose recreation centers, a senior center, tennis courts, two skate parks, a gymnasium, and an auditorium in the Civic Center (which provides space for active arts, music, and drama organizations). Private golf courses also offer recreational opportunities. The City also has historic structures (e.g., Heritage Park) that serve recreational purposes. Corona Heritage Foundation continues to work on restoring the complex as a historic park and museum. Historic districts throughout Corona offer passive recreational use for sightseeing.

Recreational venues should be available for all residents regardless of age and ability. Therefore, Corona offers expanding recreational services tailored to meet the diverse and changing needs of Corona residents. The City also strives to offer inclusive playgrounds and recreational services so children of all abilities can play together and that are developmentally appropriate for children with and without disabilities.

The Library and Recreation Services Department is charged with providing a wide range of community services, including after-school programs, summer programs, childcare, adaptive classes, community classes for all ages, and senior enrichment. This also includes community events and parades, such as the annual July 4th celebration. These programs and special events bring residents, businesses, and the broader community together in engaging ways. City recreational services and programs include:

- | | |
|-----------------------|--------------------------|
| » Early Childhood | » Kids Club |
| » Youth/Teens | » Youth and Adult Sports |
| » Young Adults | » Special Events |
| » Middle Age Adults | » Arts, Music, and Drama |
| » Seniors | » Exercise and Fitness |
| » Adaptive Recreation | |



Citrus Community Park offers a popular splash pad for youth.

GOAL PR-1

A well-designed system of parks and associated facilities that are sufficient in acreage, type, and distribution, that are designed to provide a quality recreational experience, and that meet the diverse needs of Corona residents.

Policies

- PR-1.1** Seek all creative means to facilitate the provision of at least three acres for every 1,000 residents of useable, attractive, well-maintained, and amenity-appropriate parkland.
- PR-1.2** Provide a variety of park types (e.g., neighborhood, community, major, and special user) with an appropriate mix of amenities that are designed for accessibility and use to meet the diverse needs of residents.
- PR-1.3** Encourage distribution of parks, open space, and recreational amenities throughout the City, to the extent feasible, to maximize convenient access for residents, primarily, and secondarily to the business community.
- PR-1.4** Strengthen partnerships and collaborations with the Corona-Norco and Alvord school districts and other community organizations to increase the shared use of facilities for the effective delivery of services and programs.
- PR-1.5** Operate and maintain park and recreational facilities to facilitate a high-quality experience; regularly modernize parks and associated facilities where needed, incorporating best practices in sustainable designs.
- PR-1.6** Enhance the safety of parks and associated facilities through crime design, age-appropriate playgrounds, crime prevention technology, patrols, and community volunteer efforts.
- PR-1.7** Seek feasible alternatives to raise sufficient funds to finance regular maintenance repairs and modernization of existing public parks as well as the development of new parks.
- PR-1.8** Enhance options to access parks, community centers, and other recreational facilities through transit, bikeways, and walking paths that are useable for people of all ages and abilities.
- PR-1.9** Increase stewardship and volunteerism opportunities for Corona youth, adults, schools, and community organizations to participate in parks and recreation events, projects, and programs.
- PR-1.10** Provide opportunities for creative expression (e.g., public art, signage, pavement design, etc.) to improve the beauty of parks and to celebrate local history, culture, and values.

GOAL PR-2

An engaging mix of passive and active recreational, educational, and cultural programs that are responsive to the diverse needs and interests of Corona's residents and visitors of all ages and abilities.

Policies

- PR-2.1** Provide recreational and educational services, programs, and activities that are responsive to the interests of the community; adjust services to reflect trends and needs.
- PR-2.2** Provide state-of-the-art community recreational and other facilities that support existing programs, accommodate emerging needs, and are accessible to all members of the community.
- PR-2.3** Provide and improve childcare and after-school programs for children and youth; coordinate with school districts and other organizations to maximize participation and funding opportunities.
- PR-2.4** Provide and support senior programs and seek opportunities to expand, where feasible, programs promoting health, lifelong learning, recreation, arts, and culture for Corona's older adults.
- PR-2.5** Incorporate a range of program innovations, when financially feasible, to increase the type and range of programs that are adaptive and inclusive of people with disabilities.
- PR-2.6** Collaborate with community organizations to plan and host a variety of special events and programs, such as music festivals, seasonal celebrations, and cultural activities.
- PR-2.7** Ensure recreational service fees, to the extent feasible and appropriate, and balance the need to recover costs while offering opportunities for residents to participate regardless of income.
- PR-2.8** Partner with the community, nonprofits, schools, and other organizations to provide a wide range of recreation, educational, and wellness programs that foster a healthy lifestyle in Corona.
- PR-2.9** Explore affordable strategies for expanding access to City programs and active recreational programs such as shared use of libraries, public and private schools, community centers, and senior centers.

EDUCATIONAL RESOURCES

Education and lifelong learning are essential to academic, professional, and personal growth and success. The City of Corona supports early childhood education, youth education, and adult education through City programs, the Corona Public Library, and collaboration with local schools. Corona-Norco Unified School District is the primary provider of public educational services in the City of Corona.

Public Library Resources

The Corona Public Library is a 62,000-square-foot facility at 605 S. Main Street. The library offers a variety of services including children, family, and adult literacy, homework assistance and study rooms, story times for a variety of ages and in multiple languages, afterschool activities, online high school, and adaptive programs. The library collection includes books, DVDs, CDs, audiobooks, book club kits, a library of things, children's health and wellness kits, e-books, magazines, and newspapers. Additionally, the library has numerous computers with internet access and educational software for patrons, and a homework center for students. Teens on Main is a space specifically designed for 6th-12th graders to read, study, and socialize. The Veterans Resource Center connects veterans with employment, access to health and other benefits, housing, and a variety of veteran's services. The Corona Public Library Gallery hosts monthly shows featuring the works of local and regional artists of all ages and abilities. Maker Exchange is CPL's makerspace, a collaborative workspace using high tech to no tech tools for making, learning, exploring, and sharing ideas. The W. D. Addison Heritage Room covers all periods of local history and includes photographs, rare books, newspapers, manuscripts, oral histories, artifacts, and other items for public review. The City offers a wide range of programs and services for all ages and abilities.



Children captivated by story time. Courtesy: City of Corona

Local School Resources

The City of Corona is part of the Corona-Norco Unified School District, which serves more than 33,000 students in Corona alone. The District provides traditional K-12 educational facilities and programs, alternative education, and adult education programs. The District presently has 22 elementary schools, 5 intermediate junior high schools, and 4 secondary (high) schools. Corona residents also benefit from more than a dozen parochial schools and other private and charter schools that draw students from the community as well as surrounding cities.

The Corona-Norco Unified School District operates an adult school with a mission to provide adult learners with educational opportunities and services, promote transitional readiness, and prepare each to become a productive member of the community. The Short-Term Career Technical Education program offers 21st-century industry standard pathways that offer students immediate entry into promising careers or give them the confidence to transition to postsecondary education or training through industry pathways. Additional occupational focused programs are available.

Corona residents also have access to a wide variety of accredited postsecondary educational institutions in nearby communities. Corona residents have access to two community colleges in the cities of Norco and Riverside (Norco College and Riverside City College). The City of Riverside is also home to a University of California campus and several other four-year colleges (e.g., CalBaptist, La Sierra, and others). Satellite campuses for Point Loma Nazarene University and La Sierra University are in Corona. The City of Corona is also home to several trade schools in allied medical services.

GOAL PR-3

Safe and successful school programs and facilities that provide a range of enriching educational resources in the community and are adaptable to emerging educational and technological trends.

Policies

- PR-3.1** Provide access to information, technology, leisure services, and a range of innovative educational resources through the Corona Public Library system.
- PR-3.2** Continue to promote the Corona Public Library as a community centerpiece; maintain and expand collections and programs that celebrate local history and culture.
- PR-3.3** Support ongoing and long-term partnerships that help all community members reach an appropriate level of literacy, math, writing, critical thinking, and computer training.
- PR-3.4** Include and solicit input and participation of the community in assessments of the Corona Public Library collection and programs to increase library patronage and effectiveness.

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- PR-3.5** Facilitate collaboration among community groups, educational institutions, and the Corona Public Library to enhance sharing of information and resources in support of library services.
- PR-3.6** Support the Corona Public Library, where economically feasible, in its efforts to modernize and provide adequate and equitably distributed library services, facilities, and programs that meet the needs of all residents.
- PR-3.7** Maintain active engagement with public and private schools, neighboring communities and cities, and other agencies to fully understand the area's evolving educational resources, issues, and opportunities.
- PR-3.8** Partner with Corona-Norco Unified School District to further establish school facilities as community focal points where open spaces, multipurpose facilities, libraries, and other facilities are available for City programs/public use at specific times.
- PR-3.9** Work with schools to establish safe sidewalks and bicycle paths that link public kindergarten through 12th-grade school sites with neighborhoods; work with schools to encourage use of nonmotorized transportation.
- PR-3.10** Consult with Corona-Norco Unified School District and other local educational organizations to explore opportunities to obtain grants and other funds together.



Corona's Library and Recreation On the Go serves the entire Corona community

ARTS AND CULTURE

The City of Corona is home to a long-standing and diverse arts community. Celebrating local history, arts, and culture is a matter of pride and key to preserving a high quality of life. These valued characteristics translate to a strong sense of place, enhance the community's attractiveness and uniqueness, and foster lifelong learning.

Community Resources

Corona offers a range of enriching art, theatre, and music programs through the City's Recreation Services division, nonprofits, schools, and private enterprises. Many local organizations collaborate through the Arts Alive Cultural Arts Council of Corona. The Council's purpose is to increase awareness and appreciation of arts and cultural activities in the area. Corona's commitment to the arts is nationally recognized. In 2018, the John F. Kennedy Center for the Performing Arts selected Corona to be the first site for a new national arts initiative called Arts Across America. Nationally renowned musicians visited Corona to kick off this national initiative.

Additional organizations are active in promoting the arts. Since 1963, the Corona Art Association has encouraged and developed the appreciation, study, and practice of visual arts through art shows and classes. The Arts Colony has a gallery and artist-in-residence studios, and offers classes for drawing, painting, glassblowing, woodworking, and art history. The Circle City Chorale promotes music appreciation and arts education. Corona Symphony Orchestra is a nonprofit musical performance organization that supports the Corona Symphony Conservatory. Christian Arts & Theatre offers an after-school theater/arts education program for youth and hosts children and adult theater performances year-round. Off Broadway Corona Theater is a non-profit theater company that offers quality musical theater productions and voice and acting classes.



Christian Arts Theatre production, Corona California

GOAL PR-4

Support a thriving arts community where participation in and attendance at artistic and educational programs is valued.

Policies

- PR-4.1** Promote the community’s arts and cultural resources and encourage participation and volunteerism.
- PR-4.2** Explore funding opportunities and strategies to improve and expand arts and cultural programs, facilities, and special events.
- PR-4.3** Continue to provide City venues for hosting indoor and outdoor performances, exhibitions, and other creative activities.
- PR-4.4** Encourage joint-use agreements between the City, schools, and arts organizations to increase venues for performances, exhibitions, etc.
- PR-4.5** Foster cooperative relationships with public and private entities to facilitate performances or the temporary or permanent display of visual art.
- PR-4.6** Periodically review the City’s arts and recreation resources to identify potential deficiencies and ensure sustained accessibility.

GOAL PR-5

Celebrate local culture and identity through the arts.

Policies

- PR-5.1** Encourage the integration of public art into existing City facilities and require it in new ones.
- PR-5.2** Develop a program or policy for selecting public art locations and evaluating designs.
- PR-5.3** Seek donations, grants, or other funding for the acquisition, creation, maintenance, and conservation of visual art at City facilities.
- PR-5.4** Involve neighborhood leaders, businesses, and organizations in supporting public art that will help define and beautify their areas.
- PR-5.5** Continue to develop and support arts programs and events that increase awareness of local history, culture, and the arts.

MULTI-USE TRAILS

The area's hillsides, riverbeds, washes, canyons, and other open spaces have intrinsic environmental value as well as recreational benefits. These environmental resources are amenities for the community at large, but especially for hikers, cyclists, equestrians, and other outdoor enthusiasts. Much of the City of Corona features undulating topography and is adjacent to expansive protected wildlands.

- **Cleveland National Forest.** The 460,000-acre forest extends along the border of Riverside and Orange Counties in the Santa Ana Mountains. The area adjacent to Corona is known for a variety of hiking trails with diverse terrain and incredible vistas. Several popular hiking trails through the forest originate in the City. The land is managed by the U.S. Forest Service, an agency of the federal government.
- **Lake Mathews Estelle Mountain Reserve.** Lake Mathews, located east of Corona, is surrounded by approximately 13,000 acres of conserved lands, including hiking trails and habitat for threatened and endangered species. It is jointly managed by the Metropolitan Water District, California Department of Fish and Wildlife, U.S. Fish and Wildlife Service, and the Riverside County Habitat Conservation Agency.
- **Chino Hills State Park.** Located northwest of Corona, the park includes over 14,000 acres of open space and approximately 90 miles trails in the foothills of the Santa Ana Mountains. It is managed by the California Department of Parks and Recreation. In addition to hiking trails, visitors can enjoy the Native Plant Trail, Interpretive Trail, Discovery Center, picnic areas, and campsites.

Corona Trails Master Inventory

In 2018, the City launched the Corona Trails Master Inventory in response to community interest in trails and to implement direction from the General Plan to establish and maintain a comprehensive system of walking and biking paths and trails. An extensive public outreach effort ensued to obtain information on trail use, lesser known trail locations, and the community's vision for trails. The inventory includes trails that are being used or have been used in the past by the public to access destinations within the City and to adjacent open spaces. It proposes four classifications of trails:

- **Urban trails**--multi-purpose, hard surface, pedestrian and cycling routes that physically connect residential areas, parks, schools, commercial nodes, and employment centers.
- **Historic Trails**--scenic walkways that traverse older developed residential neighborhoods and downtown areas to promote public and visitor appreciation of local, regional, or national heritage.
- **Rural Trails**--multi-purpose pedestrian/cycling and equestrian routes. Trail surfaces are typically unpaved. These trails link various areas of a community and sometimes provide connections with nearby communities.
- **Bicycle Trails**—routes located adjacent to, or on the outer edge of roadways. They are often integrated with Urban and Rural Trails. They can also serve as important cycling commuter routes to areas of employment, shopping, schools, and parks.

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Tin Mine Canyon Trail in the Cleveland National Forest is an example of a rural trail.

Maintaining and increasing trail resources in the future in and around Corona will be a multijurisdictional effort, requiring coordination with agencies such as the County of Riverside, County of Orange, California State Parks, U.S. Army Corps of Engineers, U.S. Fish and Wildlife Service, and U.S. Forest Service among others. There are several trail plans and projects that include land within or adjacent to Corona and its SOI.

- **Southern Emigrant Trail and Butterfield Overland Trail Project.** This project encompasses a historic trail. In 2013, several agencies collaborated to plan to bring this historic route back to life. Most of the proposed trail is generally consistent with its historical alignment. The trail includes 66.8 miles crossing Corona, Murrieta, Lake Elsinore, and Temecula, and unincorporated areas of Riverside County.
- **Riverside County Comprehensive Trails Plan.** This plan was approved in 2018 to guide management and development of new trails in the County, including those that link to Corona and its SOI. Specifically, the plan calls for a regional trail in the Temescal Canyon, south of Corona. It also includes the Santa Ana River Trail to the north and the Southern Emigrant Trail/Butterfield Overland Trail to the south.
- **Santa Ana River Trail (SART) Master Plan.** The SART is a multi-use trail that will span 100 miles in the counties of San Bernardino, Riverside, and Orange. The portion in Riverside County crosses Corona, Riverside, Norco, Eastvale and Jurupa Valley. These cities coordinate trails planning with the Riverside County Regional Park and Open Space District, Riverside County Transportation Commission.
- **Prado Regional Park Master Plan.** The Prado Regional Park Master Plan is an ongoing planning effort to develop a vision for the park for the next 20 years. The planning process includes the development of a preferred alternative that enhances recreation, special events, trails, and other opportunities.

GOAL PR-6

A comprehensive and quality system of off-road hiking, biking, and equestrian trails that are, to the extent feasible, accessible to people of all ages, and connect residents to natural resources surrounding Corona.

Policies

- PR-6.1** Strive to identify and connect multipurpose trails to schools, local and regional parks, residential neighborhoods, open space areas, downtown, bikeways, and other community destinations in Corona.
- PR-6.2** Require new developments to provide access opportunities to trails that exist in their area or to proposed trails linking parks, recreational areas, neighborhoods, and other areas of high public concentration with a trail design suitable to the area or contribute improvements, dedications, or fees to extend trails.
- PR-6.3** Encourage creation of a multipurpose trail system for hiking, biking, and equestrian use in areas commonly used for these purposes, such as along washes, creeks, drainages, hillsides, parks, and other public use areas. Trails created within the MSHCP conservation areas that are not identified as a covered activity in the Western Riverside County MSHCP are to avoid and minimize impacts on biological resources by following the Guidelines for the Siting and Design of Trails and Facilities [MSHCP Section 7.4.2].
- PR-6.4** Cooperate with Riverside County in establishing and completing portions of the county's backbone trail system that crosses Corona.
- PR-6.5** Ensure trails that navigate through residential neighborhoods are not obtrusive, invade the privacy of residents, or jeopardize the safety of neighborhoods.
- PR-6.6** Locate, design, and regulate the use of multipurpose trails so that they reflect the character and environment where they are located and do not negatively impact natural habitat, wildlife, landforms, or cultural resources or MSHCP Conservation areas.
- PR-6.7** Initiate and maintain dialogue with federal, state, and local governments to coordinate access and maintenance of trails that cross jurisdictional boundaries.
- PR-6.8** Promote the safe use of trails and require infrastructure and other public rights-of-way to be designed and developed to accommodate trails in a manner that is safe and compatible with the intended primary use of the rights-of-way or easement, where feasible.
- PR-6.9** Seek available funding for the maintenance and/or establishment of multi-use trails that accommodate bicycle and pedestrian users.

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- PR-6.10** Consider numerous outlets to make the city's Trails Master Inventory or Trails Master Plan and bicycle plan easily accessible to the public to increase public awareness.
- PR-6.11** Promote the use of trails and bicycle routes through use of wayfinding signs or placards.
- PR-6.12** Raise public awareness of the health benefits of walking and bicycling, the safe use of the streets and sidewalks, and the availability of trails, bicycle routes, and greenways.
- PR-6.13** Encourage the establishment of various trail classifications in the City that are suited to the environmental context on which they are located and the intended purpose and use of the trail.
- PR-6.14** Consider establishment of trail heads and/or staging areas with parking for newly created trails, to the extent feasible; and if the opportunity arises, incorporate trail heads and/or staging areas into existing trail areas.



Hiking trails within and adjacent to Corona allow residents to enjoy the scenic hillsides.

Circulation

INTRODUCTION

The City of Corona's commerce, development, and attractiveness as a community in southern California has always depended on its circulation system. The City's original circular design and motto as the "Circle City" originally served to attract its original residents more than 100 years ago. Since then, Corona has evolved into one of the more prosperous cities in the Inland Empire, with a thriving commercial and industrial sector, quality residential neighborhoods, and a high quality of life. Moreover, due to the City's strategic location at the corner of three counties, Corona has become a critical gateway to the counties of Orange, Riverside, and San Bernardino.

This circulation element is the City's blueprint for moving people, goods, and resources throughout Corona in a manner that is supportive of the land use element. Yet it is important to note that the goal of circulation element involves more than just moving vehicles. This element embraces opportunities to create a multimodal, safe, and efficient circulation system that will address local traffic congestion, encourage increased transit use, respond to local business needs, and encourage pedestrians and bicyclists to use the network of streets for travel and recreational purposes.

The City of Corona's approach to providing and improving local circulation options and transportation services is guided by the following statement.

Corona envisions a balanced multimodal transportation system that supports a broad range of safe and convenient choices for transportation and the movement of goods. Our transportation system connects major activity centers with regional labor markets, educational institutions, and goods markets. Context-sensitive design solutions improve the livability and safety of City streets for bicyclists and pedestrians and allow for convenient and pleasant travel through neighborhoods. Transit opportunities allow residents and the workforce to easily move within Corona and connect to neighboring cities and the greater metropolitan region. Goods movements routes allow for the efficient movement of goods to regional markets, ensuring greater prosperity for local commerce.

Looking forward, the City of Corona continues to seek opportunities to improve its circulation system. Foremost among the many opportunities are to reduce the impact of regional traffic on the community, improve and maintain public safety for all roadway users, and beautify roadways and routes wherever feasible.

Scope of the Element

The circulation element outlines the long-term plan for roadways, including numbers of lanes, right-of-way, and general operating conditions. It also provides guidance relating to the transit system, goods movement system, and nonmotorized travel, including bicycle and pedestrian travel. Regional circulation is also of critical interest in Corona because of the city's access from SR-91 and I-15 and regional trips that cut through Corona and use local roads to bypass the congestion on the freeway. California law mandates preparation of a circulation element to provide a framework for physical improvements that enhance mobility. The element guides:

- » **Local thoroughfares and routes**, including the location and extent of planned circulation facilities and services, and identifies standards for those facilities.
- » **Transportation Management**, including strategies to reduce and optimize roadways efficiency through demand management and system management.
- » **Bicycling and Pedestrian Facilities**, including facilities such as bike routes, sidewalks, and other facilities that encourage and enhance bicycling and walking.
- » **Transit Routes**, including transit by local buses, regional transit, and rail to improve the ability of residents and the workforce to travel.
- » **Goods Movement Routes**, including the designation of roadways and rail suitable to support industry and commerce in Corona.

Related Plans

The Circulation Element is influenced and implemented by a variety of related regional and local plans, ordinances, and regulations that are consistent with and support the circulation vision, goals, and policies of the general plan. These documents correlate with various physical improvements to the City's street network. Related plans, ordinances, and programs include:

- » **Strategic Plans.** Corona adopts and/or participates in a variety of master plans that govern the provision of transit, bicycle service, and other circulation-related services. These include the Short-Range Transit Plan, regional (county) transit plans, Bicycle Master Plan, and other similar plans.
- » **City Standard Plans and Codes.** City Engineering standard plans specify design standards for roads. The Municipal Code establishes the city's ability to collect development impact fees and the fair share construction costs for circulation improvements and other similar requirements as result of new development.
- » **Capital Improvement Plans.** The City's capital improvement plans specify the types of improvements required to achieve circulation and their related goals, and the capital improvement plan provides a schedule of activities needed to fund, construct, and rehabilitate such improvements.

The following sections provide context for each topic addressed in this element, followed by goals and policies to achieve the general plan vision.

LOCAL THOROUGHFARES AND ROUTES

Corona's streets have traditionally served residents and business efficiently. Recent growth in population and land uses—both within the City and in other nearby cities in the Riverside County region has put increasing pressure on the city's arterial streets. Moreover, congestion on SR-91, I-15, and interchanges to both freeways has resulted in a significant amount of regional "by-pass" traffic using City streets to avoid freeway congestion. Though completion of the Foothill Parkway Westerly Extension and SR-91 Corridor Improvement projects have helped address regional traffic, these improvements have not resolved all the issues.

It is critical for the circulation system to support the land use element of the general plan but not promote increases in regional "through" traffic. Longer-term projects such as completing the SR-91 / SR-71 Interchange Improvements, I-15 South to SR-91 West Toll Connector, and I-15 Toll Lane Extension are important regional projects to the City. Also, the need for improving the street system besides widening and intersection improvements must be balanced against other goals in the City, such as livability. This includes traffic signal system improvements to maximize the efficiency of arterials.

In designing and improving roadways, the City has taken great care to implement state legislation requiring complete streets. Complete streets are designed to accommodate a range of users, such as bicyclists and pedestrians, and not just automobiles and trucks. However, a complete streets philosophy involves more than simply the implementation of the state-mandated requirement for complete streets. Rather, it fundamentally seeks to ensure that the public space serves all users of the system (elderly, children, bicycles, pedestrians, etc.), not just vehicles within the urban context of Corona.

Corona's roadways are grouped into functional classifications based on two general criteria; first, the extent to which the road prioritizes the through movement of traffic; and second, the level of access to adjacent properties. Aside from these generalized characteristics, roadways vary in terms of right-of-way, width, number of lanes, intersection and traffic signal spacing, speed, and other characteristics (such as the presence of sidewalks, bikeways, landscaping, and improvements outside the right-of-way). Functional class is identified in the General Plan and Street Design Standards.

Table CE-1 includes a description of the roadway classifications in Corona and the opportunities for bicycle and pedestrian uses. These vehicular and nonvehicular uses are described later in this element. Figure CE-1 illustrates the City of Corona roadway functional classification system. The goal and policies that follow set forth guidance on how the City will design and operate its network of complete streets.

Table CE-1 Corona Functional Roadway Classification

Classification	General Purpose
Major Arterial	Major arterials have the highest traffic-carrying capacity, with the highest speeds and limited interference with traffic flow from driveways or abutting properties. Major arterials may be 4 or 6 lanes depending on traffic volumes, and may have center medians. Parking may or may not be allowed. Major arterials are 82 to 106 feet wide curb-to-curb within a 106- to 130-foot right-of-way. Key major arterials include portions or all of Main Street, Magnolia Avenue, Ontario Avenue, Cajalco Road, River Road, McKinley Avenue, Grand Boulevard, and Green River Road.
Secondary Arterial	Secondary arterials connect traffic from collector streets to streets of higher classification with limited access to abutting properties. Secondary arterials carry some through traffic and may or may not provide on-street parking or Class 2 bike lanes. Secondary arterials are typically 4 lanes, 64 feet wide curb-to-curb, and within an 88-foot right-of-way. Secondary arterials include Foothill Parkway, Lincoln Avenue, and Hidden Valley Parkway.
Collector	Collectors are intermediate routes in a road network. Collector streets may handle some localized "through" traffic from one local street to another; but their purpose is to connect local streets to the arterial network. Collectors typically are 44 feet wide curb-to-curb (2 lanes) within a 68-foot right-of-way and are often equipped with sidewalks and bicycle routes.
Mixed Use Boulevard	Mixed use boulevards are streets that serve land use patterns in the City's mixed-use land use districts. A prime example is Sixth Street, which runs through the Circle and is designed to support a mixed-use district and encourage pedestrian activity by having wide sidewalks and on-street parking where people will park and walk to multiple businesses
Special Residential	Special residential arterials are a type of street intended to accommodate land use patterns in the City's Circle and surrounding environment. These streets will include improvements sensitive to adjacent residential uses. These may include parking cutouts, raised medians, roundabouts, bike lanes, special treatments at pedestrian crossings, peak period parking, etc.
Local Street	Local streets principally provide vehicular, pedestrian, and bicycle access to property that is directly abutting the public right-of-way. Movement of through traffic on local streets is discouraged. Local streets are 40 feet wide curb-to-curb within a 64-foot right-of-way and have 2 lanes (1 in each direction). Sidewalks are included.
Private Street	Streets not maintained by the City; they principally provide access to and within developments. Most of these streets are within multifamily residential developments; however, a few private streets are in single-family residential neighborhoods. Residents and/or homeowner associations manage and maintain these streets.
Rural Streets	Rural roads carry vehicles in very low volumes and can only be used in appropriate locations. The rural road carries less than 100 vehicles daily and has a 28-foot-wide travel width and 50-foot right-of-way. The high-traffic-volume rural road may carry up to 200 vehicles per day, and generally has a 36-foot travel width within a 50-foot right-of-way.

Sources: Corona Street Design Standards, 2016.

GOAL CE-1

A roadway network of complete streets that provide accessibility for all users of all ages and abilities while maintaining context sensitivity to the land uses identified in the Land Use Element.

Policies

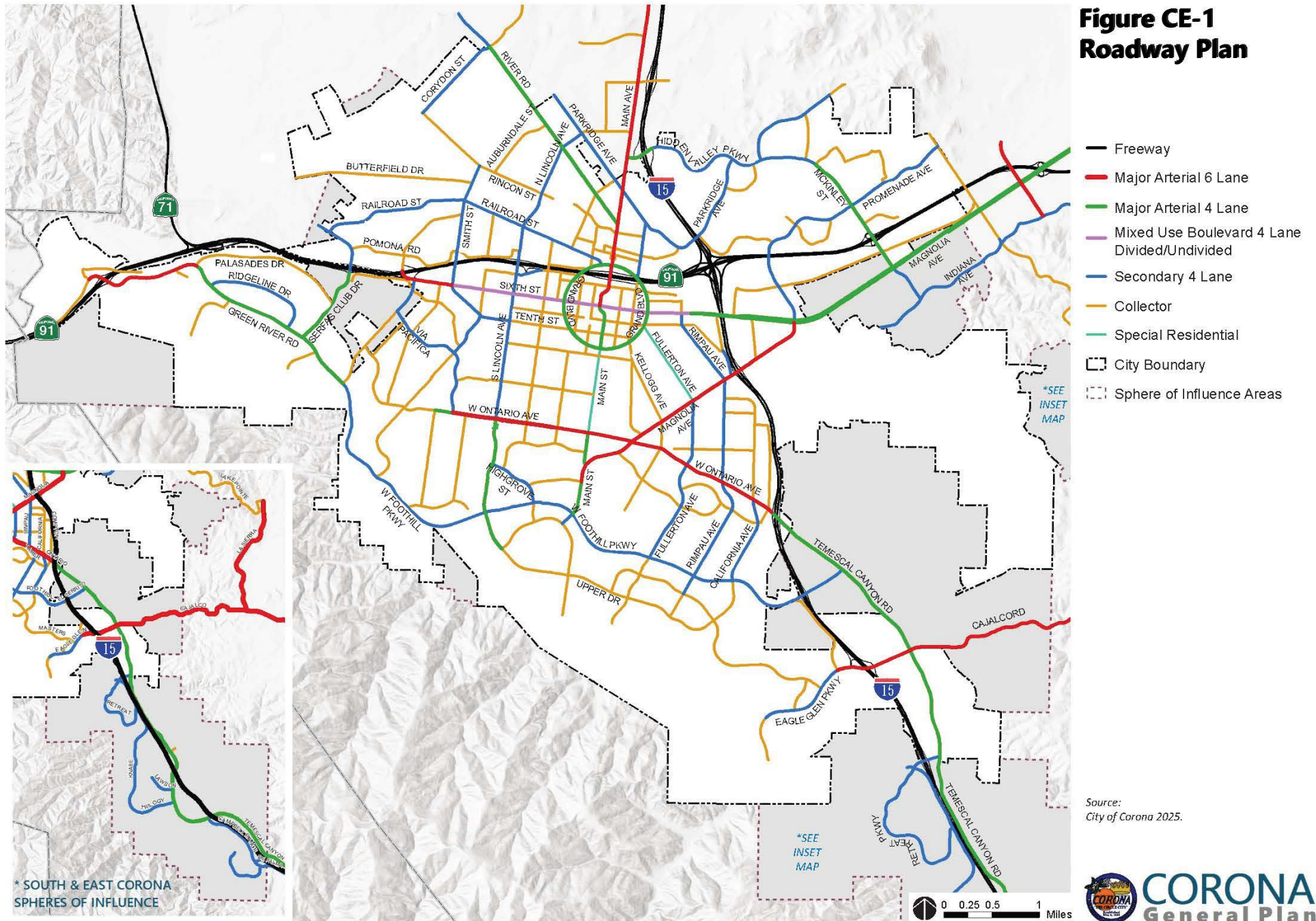
- CE-1.1** Implement complete streets by limiting capacity to only serve expected demand on City streets (e.g., do not overbuild roadways) while discouraging regional cut-through and maximizing accessibility for users to adjacent land uses in a safe and efficient way.
- CE-1.2** Support roadway maintenance programs that inspect, repair, and rehabilitate pavement surfaces in order to preserve the high quality of City streets and thoroughfares.
- CE-1.3** Provide for safe roadway conditions by adhering to nationally recognized improvement standards and uniform construction and maintenance practices.
- CE-1.4** Design and employ traffic control measures to ensure City streets and roads function with safety and efficiency.
- CE-1.5** Maintain Level of Service D or better on arterial streets in the City. Develop and maintain a list of locations where LOS E or LOS F are considered acceptable and would be exempt from this level of service policy. Considerations for LOS exemption include lack of available right-of-way, environmental constraints, or other modes of travel (such as bicycle or pedestrians). Key locations identified for LOS exemption are:
- Green River Road at SR-91
 - Lincoln Avenue at SR-91
 - Main Street at SR-91
 - Sixth Street, between East Grand Boulevard and West Grand Boulevard
 - McKinley Avenue at SR-91
 - Hidden Valley Parkway at I-15
 - Magnolia Avenue at I-15
 - Ontario Avenue at I-15
 - El Cerrito Road at I-15
 - Cajalco Road at I-15
 - Weirick Road at I-15
 - Other locations as approved by the City
- CE-1.6** Coordinate street system improvements and signalization with regional transportation efforts, including the Regional Transportation Plan, the

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State Transportation Improvement Program, the Riverside County General Plan, the Community and Environmental Transportation Acceptability Process, the Congestion Management Program, and other relevant regional and subregional efforts and programs.

- CE-1.7** Limit driveway and local street access on arterial streets to maintain a desired quality of traffic flow. Wherever possible, consolidate driveways and implement access controls during redevelopment of adjacent parcels.
- CE-1.8** Restrict on-street parking on arterial streets, and in cases where on-street parking may be necessary, implement design features that separate parking spaces from street lanes.
- CE-1.9** Design and operate secondary, local, and collector streets to discourage their use as through traffic routes. Utilize residential neighborhood traffic control techniques to reduce cut-through traffic impacts.
- CE-1.10** Require a traffic analysis to be prepared in accordance with the City's adopted Traffic Impact Study Guidelines and require projects to mitigate impacts on the City's circulation system that exceed the City's adopted service thresholds for near term and future conditions.
- CE-1.11** Provide all residential, commercial, and industrial areas with efficient and safe access for emergency vehicles, including undeveloped areas or those on the hillsides in high or very high fire hazard severity zones.
- CE-1.12** Consider the effects on transportation systems of public utility improvements, including extensions of underground pipelines and overhead transmission lines and associated utility rights-of-way.
- CE-1.13** Ensure that, to the extent possible, all pipelines and electrical transmission lines are placed underground.
- CE-1.14** Design Sixth Street from Smith Avenue to El Sobrante Road as a Mixed Use Boulevard, including measures that support mixed-use development. Allow for the design of Sixth Street from East Grand Boulevard to West Grand Boulevard to be a Downtown District by reducing this segment to two travel lanes and providing a complete street concept to support Downtown uses.
- CE-1.15** Recognize the unique character of Special Residential Streets, including Main Street south of Grand Boulevard and Fullerton Avenue between Magnolia Avenue and Grand Boulevard. Implement improvements sensitive to adjacent residential uses. These may include parking cutouts, raised medians, roundabouts, bike lanes, special treatments at pedestrian way crossings, peak-period parking restrictions, and so forth.
- CE-1.16** Plan for emerging autonomous vehicles and transportation network companies (TNCs) by designing and/or managing curb space to allow for safe pick-up and drop-off.

**Figure CE-1
Roadway Plan**



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INTERCITY AND REGIONAL TRANSPORTATION

Corona is greatly influenced by the regional transportation system and by the travel demand that is generated by adjacent and nearby communities. Additionally, the residents and visitors to the City rely upon an efficient intercity and regional transportation system. Congestion on the SR-91 and I-15 freeways causes significant traffic impacts in the City, because motorists desiring to avoid freeway traffic use City streets. This impacts residents and businesses by increasing local congestion, affecting safety, making access to adjacent land uses and driveways difficult, and causing delays for residents and visitors accessing the freeway system.

Several key initiatives are proposed to improve regional traffic flow. These include the State Transportation Improvement Program (STIP), Measure "A" Freeway and Highway improvements, the Riverside County Community and Environmental Transportation Acceptability Process plan, and the Transportation Uniform Mitigation Fee. The regional improvements will help to alleviate local congestion. There are several potential corridors under consideration for new regional east-west routes. These must be reviewed carefully in conjunction with local transportation planning.

GOAL CE-2

A network of regional roadway facilities to ensure the safe and efficient movement of people and goods from within the City to areas outside its boundaries and that reduce regional cut-through traffic in the City.

Policies

- CE-2.1** Support RCTC and Caltrans efforts to improve management of the SR-91, I-15, and SR-71. Promote improvements that reduce regional cut-through traffic on City streets and work with RCTC and Caltrans to ensure that accessibility to these facilities is provided to Corona residents.
- CE-2.2** Support regional transportation infrastructure that would provide alternative connections and access to neighboring counties and reduce the volume of cut-through traffic on City streets.
- CE-2.3** Coordinate impacts of new roadway connections with adjacent cities and Riverside County to ensure consistency in design and operations of the new facilities and connections.
- CE-2.4** Implement the Circulation Element map concurrent with new development and through redevelopment.
- CE-2.5** Pursue available federal and state funding sources for mitigation of transportation impacts, construction of new facilities, and maintenance of existing facilities.

TRANSPORTATION MANAGEMENT

Major physical improvements such as widening to add lanes to the regional freeway system and to the City's arterial system are often costly, require right-of-way, and may disrupt the quality of life for adjacent residents and businesses. Throughout southern California, it is increasingly recognized that it may not be feasible to simply "build our way out" of traffic congestion and impacts. A multimodal approach to solving transportation solutions is required. A key element of the approach is to reduce the number of vehicles using the freeway and roadway systems and to reduce vehicle miles traveled. This may be accomplished by eliminating some trips via transit or carpooling, consolidating other trips, and making the trip length shorter.

Many trips can be modified using various transportation demand management (TDM) techniques. TDM techniques include incentives to use transit; incentives to form carpools rather than to drive alone; and making home, work, and shopping closer together to shorten travel distances. In addition, there are less costly transportation system management (TSM) improvements that can be made to the roadway system to more efficiently use the capacity that is available. Such improvements include better traffic signal operations to reduce delay by motorists at traffic signals. These TSM techniques help utilize the existing circulation system in the most efficient manner possible and cost far less than major physical infrastructure improvement projects.

GOAL CE-3

Maximize the efficiency of the circulation system through the use of transportation system management strategies. Reduce total vehicular miles traveled in Corona through the development and improvement of alternative transportation modes, the reduction in the number of trips generated, and the reduction in trip distances.

Policies

- CE-3.1** Implement and maintain traffic signal coordination and advanced traffic management strategies throughout the City to the maximum extent practicable and integrate signal systems with adjacent jurisdictions and Caltrans.
- CE-3.2** Implement, maintain, and enforce the traffic demand and system management recommendations in the South Coast Air Quality Management District's Air Quality Management Plan and in the Riverside County Congestion Management Program.
- CE-3.3** Encourage employers to reduce vehicular trips by offering to employees commute trip reduction programs, such as transit fare subsidies, alternative work schedules and telecommuting, employer-sponsored van pools or shuttles, ride share programs, and bike share.

PUBLIC TRANSPORTATION

Corona maintains a well-balanced transit system, providing intercity buses, local buses, demand-responsive service, and commuter rail (Figure CE-2). Corona's bus service, the Corona Cruiser, provides transit to local activity centers—major retail areas, hospitals, medical facilities, public service agencies, library, civic center, and commercial/retail areas—in the City and unincorporated areas. For regional travel, the Riverside Transit Agency buses connect to the Metrolink stations and other regional destinations.



Corona Cruiser connects City residents to a wide variety of destinations, such as employment centers, medical offices, shopping, parks and City facilities, and other frequented locations.

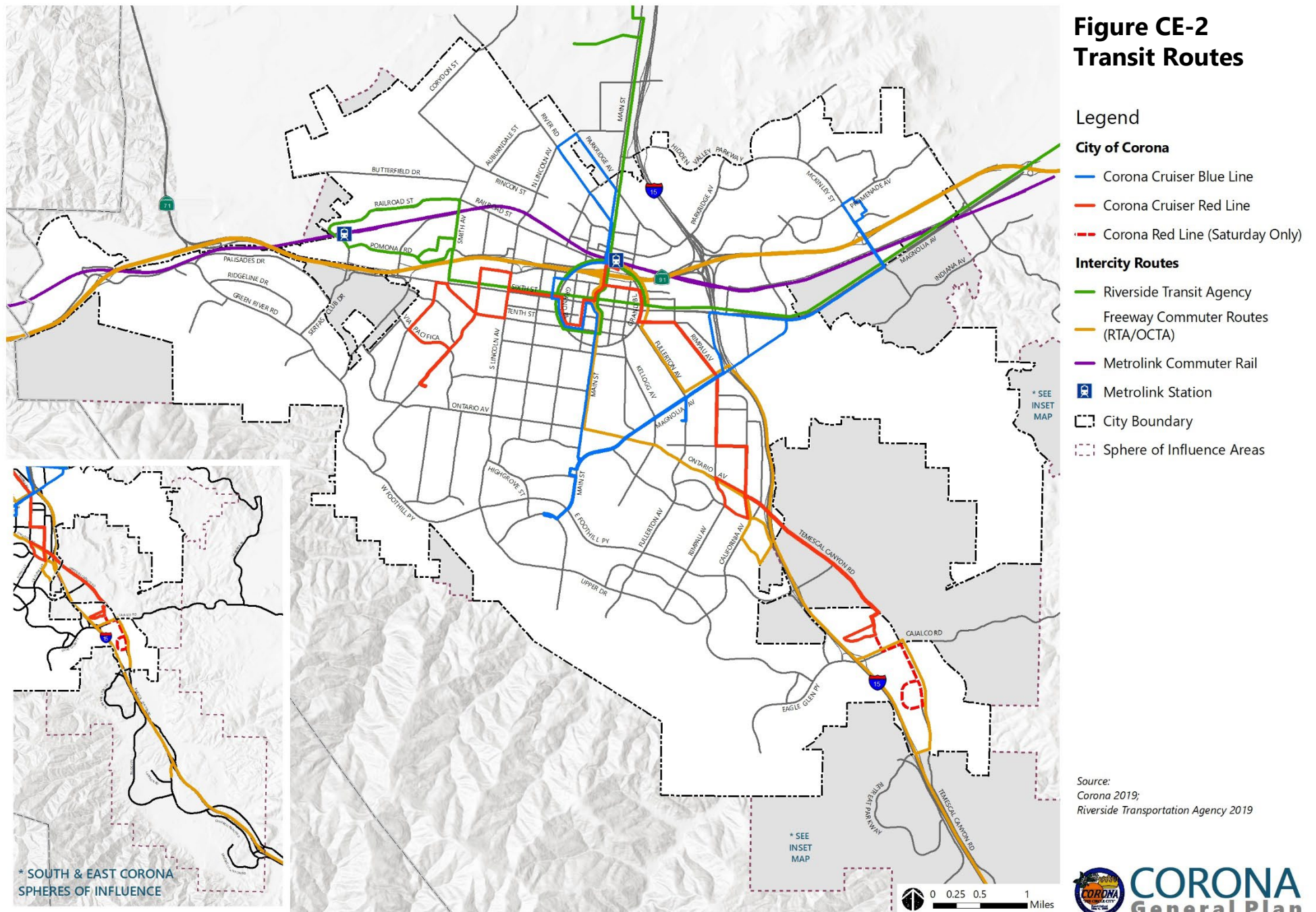
Regional transit is provided by Metrolink, which provides passenger rail service from outlying communities to employment centers in Burbank, Irvine, and Los Angeles. The Metrolink 91 Line provides access between Riverside and Los Angeles, and the Inland Empire/Orange County Line provides access between Irvine and Riverside. Metrolink is used in Corona by approximately 7,500 daily weekday riders. Riverside Transit Agency's commuter express bus routes connect to cities surrounding Corona during peak morning and evening hours.

Paratransit service is an alternative and complementary mode of flexible passenger transportation that does not follow fixed routes or schedules. This type of service is especially targeted to individuals who are unable to operate vehicles. Vans, mini-buses, and taxis are typically used to provide paratransit service. The Dial-A-Ride program, which has been operated by the City of Corona since 1977, is an on-demand, shared-ride transit system. This service provides enhanced and tailored options for seniors and persons with disabilities to remain active and able to access community services.

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**Figure CE-2
Transit Routes**



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GOAL CE-4

A public transportation system that provides mobility for residents and encourages use of public transportation as an alternative to automobile travel.

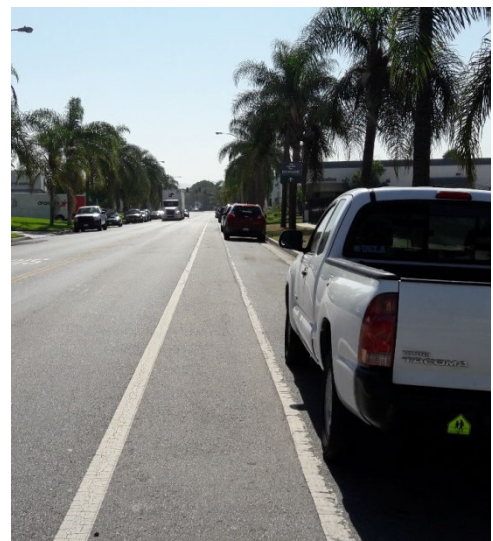
Policies

- CE-4.1** Maintain local fixed-route and demand-responsive transit service to ensure mobility within Corona and to ensure that users have adequate access to public facilities, services, and employment options.
- CE-4.2** Work with the Riverside Transit Agency to identify needs for additional bus services and enhancements to existing services.
- CE-4.3** Encourage the development of additional regional public transportation services and facilities, including park-and-ride near the SR-91 and I-15 freeways and mobility hubs at key transit stations.
- CE-4.4** Ensure public transit opportunities (e.g., fixed-route buses, paratransit) for elderly and disabled persons and accessibility of such services by elderly and disabled persons.
- CE-4.5** Encourage employers to reduce single-occupant vehicular trips by providing employee incentives (e.g., reduced rate transit passes).
- CE-4.6** Require new development to provide transit facilities, such as bus shelters and turnouts, where deemed necessary, to encourage the use of transit and other alternative forms of transportation.
- CE-4.7** Preserve options for expanding future transit use when designing improvements for roadways or redeveloping major developments and including areas for transit facilities.
- CE-4.8** Encourage access to and the expansion of regional rail transportation facilities and services at the Metrolink stations to increase ridership.
- CE-4.9** Encourage the development of bus rapid transit systems along major transportation corridors where feasible.
- CE-4.10** Improve first/last mile connections to improve transit use and accessibility. Explore use of transportation network companies, micro-transit, and other emerging technologies to strengthen the transit system.

BICYCLE AND PEDESTRIAN FACILITIES

Nonmotorized transportation is an important part of the local circulation network. Pedestrian activity and bicycles can enhance the urban environment, reduce motor vehicle emissions, promote a healthy lifestyle, and reduce automobile trips. In the Sixth Street mixed-use corridor, there will be an increased emphasis on nonmotorized transportation. In other parts of the City, walking and biking will continue to be important for short distance trips, recreation, and school trips. The City has a well-developed network of 70 miles of completed bikeways in the community.

Corona's bicycle facilities include Class I Bike Paths (completely separated from auto traffic), Class II Bike Lanes (striped bike lanes on roads), and Class III Bike Routes (designated bike routes noted by painted legends). Pedestrian facilities include sidewalks and pedestrian and multipurpose trails. Class IV Bikeways are an additional option for designating a right-of-way exclusively for bicycle travel within a roadway, protected from vehicular traffic with devices. Bicycle boulevards are low-volume and low-speed streets parallel to a major commercial corridor.



Class I and Class II Bikeways in Corona

To meet the demand for bikeway facilities from the community and to improve safety for users of all ages and abilities, the City implements its Bicycle Master Plan. Future updates can include additional bicycle facilities, such as cycle tracks (Class IV) and bicycle boulevards, particularly in the Grand Boulevard. The Bicycle Master Plan update should also reconsider the use of bike lanes on major arterials or truck routes. Additional modes of pedestrian travel should also be considered.

Figure CE-3 illustrates the City's bikeway plan.

Sphere of Influence Areas



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GOAL CE-5

Develop and maintain convenient bikeway and pedestrian systems to satisfy both recreational desires and transportation needs using a complete streets approach to accommodate users of all modes, abilities, and needs.

Policies

- CE-5.1** Provide for safety of bicyclists, equestrians, and pedestrians by adhering to national standards and uniform practices; adhere to accessibility requirements for people with disabilities.
- CE-5.2** Maintain existing pedestrian facilities and encourage new development to provide walkways between and through developments.
- CE-5.3** Provide for safe accessibility to and use of pedestrian facilities by people with disabilities to implement accessibility requirements under the American with Disabilities Act.
- CE-5.4** Develop bicycle routes in accordance with the City's adopted Bicycle Master Plan and implement other elements of that plan.
- CE-5.5** Develop and maintain a bikeway system that provides connections to routes of neighboring jurisdictions and regional bikeways.
- CE-5.6** Encourage new and existing development to provide accessible and secure areas for bicycle storage. Provide bicycle racks or storage facilities at public facilities and require bicycle parking, storage, and other support facilities as part of new office and retail developments.
- CE-5.7** Use easements and/or rights-of-way along flood control channels, public utilities, railroads, and streets wherever possible for bikeways and equestrian and hiking trails.
- CE-5.8** Improve bicycling and pedestrian safety by minimizing conflict points (e.g., bicycle and vehicle crossings) with motorized traffic, separating bike routes and truck routes where possible, or adding and improving existing facilities with buffers/barriers to separate bikes from vehicle lanes.
- CE-5.9** Coordinate with the Riverside County General Plan and the Santa Ana River Trails Plan to create an uninterrupted Class I bicycle route through Corona that connects to the Santa Ana River Trail in surrounding cities.
- CE-5.10** Encourage and support safe bicycle riding on City streets. Provide bicycle safety and education programs through public outreach. Support future bikeway designs that minimize bicycle conflicts with vehicles, separate bikeways from vehicles where possible, and lower bicycle level of stress.

GOODS MOVEMENT

Efficient and safe movement of goods is vital for both residents and business. The City of Corona has long had a well-established manufacturing and industrial sector that relies on the import of raw materials into the City and transport of finished goods to other cities. Corona is also home to a significant number of warehousing operations, which also rely on safe and economical transport. Similarly, Corona's population requires a broad range of goods, which are shipped in by rail or by truck.

Trucking dominates the goods movement in Corona. Industrial uses and interstate shipping require truck access and mobility for the delivery of parts and raw materials, movement of inventories, and shipping of finished goods to the marketplace. Commercial and residential uses require delivery of goods and services for daily operations. Regional truck movements occur on the freeways, and local truck deliveries to and from land uses in Corona occur on the arterial and local roadway systems. SR-91 and I-15 interstate freeways are critical pieces of the goods movement infrastructure.

While freight movement through Corona will continue to be primarily via trucks using the City's arterials and freeways, a substantial and increasing portion will use railways. Corona is bisected by the Burlington Northern Santa Fe (BNSF) Transcon line, which extends from the Port of Los Angeles eastward into the Inland Empire. With the expansion of economic activity in Los Angeles, the City can expect rapidly increasing volumes of rail transport through the community. Therefore, the City is working extensively to install grade-separated rail crossings where feasible.



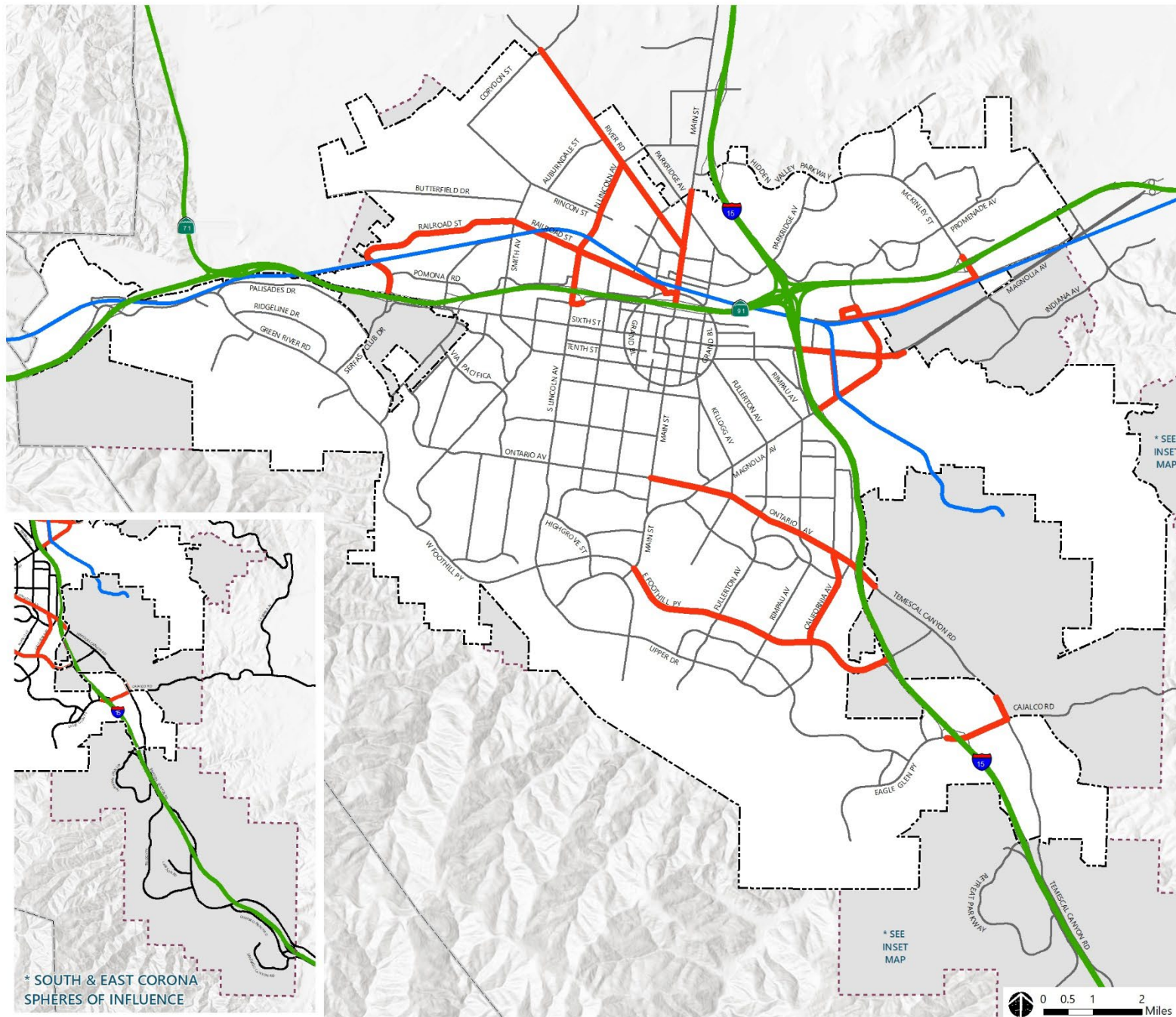
Corona Metrolink Transit Center

The City will continue to enhance its goods movement network of roads and railways for the benefit of the community. Figure CE-4 illustrates goods movement in the city.

**Figure CE-4
Goods Movement
Routes**

Legend

- Local Truck Routes
- Freeway Truck Routes
- BNSF Railroad
- City Boundary
- Sphere of Influence Areas



Source:
City of Corona, 2019

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GOAL CE-6

Facilitate goods movement to support local commerce, while protecting residents and visitors from the negative effects of noise, vibration, and air pollution typically associated with truck operations and rail service.

Policies

- CE-6.1** Provide primary truck routes on selected arterial streets that will serve the business community while minimizing the impacts of through truck traffic into residential areas.
- CE-6.2** Provide appropriately designed and maintained roadways in accordance with local, state, and federal standards for truck routes so that they can safely accommodate truck travel.
- CE-6.3** Develop appropriate treatments along local truck routes to minimize noise and vibration impacts on sensitive land uses that are adjacent to or impacted by the truck route.
- CE-6.4** Ensure that new development provides adequate on-site truck loading facilities and enforce prohibition of queuing of trucks on public streets or in other areas not intended for such uses.
- CE-6.5** Monitor traffic and safety crossing conditions at grade railroad crossings; support at-grade and grade-separated improvements, when warranted, to improve local commerce, flow of traffic, or safety.
- CE-6.6** Strive to minimize through truck traffic in residential neighborhoods and other areas not intended for such travel, and enforce City codes that restrict or prohibit trucks on certain streets.
- CE-6.7** Work closely with other agencies on implementing improvements along the BNSF Transcon route to facilitate rail movements, minimize roadway congestion, and reduce impacts on City roadways.

PARKING

Adequate and convenient parking is important in both residential neighborhoods and in commercial and industrial areas. In residential areas, adequate off-street parking will minimize on-street parking impacts and spillover of parking to areas that impact adjacent land uses. In commercial areas, parking must have sufficient spaces and convenience so that businesses can succeed. Conversely, the overbuilding of parking in a commercial area can be detrimental because it uses up too much land, makes development inefficient, and is not attractive. In mixed-use areas, such as the Sixth Street Corridor, reductions in parking supply may be appropriate since mixed use encourages the “park once” concept, where a visitor parks one time and visits multiple land uses in a single trip. City codes ensure the provision of adequate parking while certain specific plans allow mixed-use parking solutions.

GOAL CE-7

Provide an adequate supply of convenient parking for all developments in the City in a manner that is consistent with the goals of managing transportation demand.

Policies

- CE-7.1** Require new developments to provide adequate off-street parking in compliance with Corona Municipal Code Chapter 17-76.
- CE-7.2** Allow for the provision of adequate parking that is required to meet the needs of residential uses, commerce, and other land uses and is sensitive to the context and broader transportation goals of the City.
- CE-7.3** Encourage employers to include strategic parking provisions in new developments, where feasible, to encourage the use of transit and other modes of travel rather than single-occupancy autos.
- CE-7.4** Accommodate joint use of parking facilities as part of an area plan or site plan, based on the peak parking demands of permitted uses in the planning area.
- CE-7.5** Encourage the use of shared parking arrangements in areas with parking shortfalls, downtown and in appropriate mixed-use projects, and along the Sixth Street Mixed Use Boulevard corridor.

Infrastructure and Utilities

INTRODUCTION

Infrastructure, public facilities, and services consist of the places, equipment, and programs that support the basic needs of a community. For residents and businesses, these services are often the most tangible indicators of the quality of life offered by Corona and the products of local taxes. At the same time, the continued provision of infrastructure, public facilities, and services is challenging. Due to the rapidly changing economic climate, evolving state regulations, and tax system, local governments face challenges in maintaining the level of services desired.

Corona is responsible for providing quality services and systems to meet current and future needs of the community. These include water, sewer, storm drainage, solid waste, energy, and telecommunications. The City's approach to providing these services is guided by the following statement:

Corona provides a wide range of infrastructure and utility services to meet the existing and future needs of the community. This includes water, sewer, drainage, solid waste, energy, and telecommunications. Providing these services requires the ability to adjust service delivery models to accommodate changing needs, technologies, and legislative context. The City is committed to providing quality infrastructure services and facilities that are safe, adequate, cost-effective, and available in existing and newly developing areas.



INFRASTRUCTURE AND UTILITIES

Scope of the Element

Businesses and residents in Corona are supported by a variety of public facilities and services. To sustain existing households and businesses and to accommodate future population and employment growth, local infrastructure will need to be improved, expanded, and maintained. Obtaining adequate funding for infrastructure and public facilities is a key challenge and priority for the City of Corona.

The inclusion of the Infrastructure and Utilities Element was an element elected by the city to include in the 2004 General Plan update to provide a framework for making physical improvements to utility and infrastructure facilities that enhance quality of life. The element guides:

- » **Water Systems**, including the distribution, treatment, storage, and delivery of potable water to meet local needs and comply with state and federal law.
- » **Sewer Systems**, including the collection and treatment of wastewater in Corona that complies with state and federal law.
- » **Storm Drainage**, including the provision of infrastructure needed to protect people and property from flooding as well as protect the environment.
- » **Energy, solid waste, and telecommunications**, including partnering with agencies to ensure adequate energy, solid waste, and telecommunications are available.

Related Plans

The infrastructure and utilities element is influenced and implemented by a variety of related plans, ordinances, and regulations that are consistent with and support the vision, goals, and policies of the general plan.

Related plans, ordinances, and programs include:

- » **Master Plans.** Corona adopts and maintains a variety of master or management plans that govern the provision of services, consistent with local policy, state, and federal laws. These include master plans for water, sewer, storm drainage, recycled water, groundwater, water treatment/blending, and many other topics.
- » **Municipal Code.** The Corona Municipal Code implements the general plan. It specifies how existing and new development will further water, sewer, storm drainage, solid waste, energy, and other goals through adherence to City, state, and federal regulations.
- » **Capital Improvement Plans.** While the City's various master plans specify the types of improvements required to achieve specific utility goals, the capital improvement plan provides a schedule of activities needed to fund, construct, and rehabilitate such improvements.

The following sections provide context for each topic addressed in this element, followed by goals and policies to achieve the general plan vision.

WATER SYSTEM

The Corona Department of Water and Power is responsible for supplying clean water to the City and surrounding areas, a total of approximately 75 square miles. This area includes approximately 39 square miles within the City's municipal area and 35 square miles in the City's sphere of influence (SOI) in Riverside County. The City Department of Water and Power provides potable water service to the city's residential and service population and portions of its sphere of influence.

Corona receives water from both local groundwater basins and imported water sources. The City's three groundwater basins provide approximately 40 percent of its water supply, though this may vary depending on climate conditions. Twenty-two (22) wells are designed with a capacity to provide up to 39,200 acre-feet per year (afy) of water. The remaining 60 percent of the City's water supply is imported from the Western Municipal Water District through the Lower Feeder project or the Mills Pipeline Connection (treated State Water Project). The City's water system contains six primary pressure zones ranging from a minimum elevation of 430 to an elevation of 1,510 feet.

The City's public water system has 26 domestic booster stations that deliver groundwater to the City supply system. All raw water is treated at the Lester Treatment Plant or Sierra del Oro Treatment Plant prior to entering the City's public water system. The City also operates eight blending stations that blend water from the City's groundwater basins and imported water to meet regulatory standards of the US Environmental Protection Agency and California Department of Health Services. Blended water is stored in 17 reservoirs with a capacity estimated at 43.3 million gallons.

Within the West sphere of influence (Coronita and Foothills), the City provides domestic water services to residential and nonresidential customers. In the East sphere of influence, the City of Corona provides water to the Home Gardens County Water District who then provides water to customers in the Home Gardens area; the WMWD serves the East Eagle Valley area; and both the WMWD and City of Corona serve the El Cerrito area. Within the South sphere of influence, the Temescal Canyon area is served by the City of Corona, the WMWD, and Temescal Valley Water District.

The City of Corona prepares and updates a variety of planning and infrastructure studies and plans to ensure the long-term sustainability of its water supply. The Water Master Plan addresses the infrastructure necessary to acquire, treat, and transport water to the community. The Urban Water Management Plan addresses the provision, use, and conservation of water resources in the community. The City has also adopted and periodically updates Groundwater Management Plans and Reclaimed Water Master Plans to ensure the sustainable management of the City's water resources. These plans individually and cumulatively, will ensure that a sufficient amount and quality of water is available for present and future uses in Corona.

The following goal and policies are designed to guide the securing of water supply, responsible use, and provision of infrastructure to meet the current and projected water demands of Corona in an equitable, efficient, and sustainable manner.

GOAL IU-1

Secure water supply, water treatment, distribution, pumping, and storage systems that meet the current and projected future daily and peak water demands of Corona in an equitable, efficient, and sustainable manner.

Policies

- IU-1.1** Review, evaluate, and update the City’s Urban Water Management Plan and related capital improvement programs on a regular basis in order to maintain plans for expansion and improvement of distribution and storage facilities.
- IU-1.2** Evaluate the adequacy of water infrastructure in areas where intensification of land use is anticipated; coordinate capital improvements planning for all municipal water service infrastructure with the direction, extent, and timing of growth.
- IU-1.3** Construct, upgrade, maintain, and expand water supply, distribution, pumping, storage, and treatment facilities in the Urban Water Management Plan and/or as required to meet state and federal standards.
- IU-1.4** Designate, preserve, and acquire land, if necessary, for siting future water supply, storage, and distribution facilities in conformity with the goals and policies of the Land Use Element.
- IU-1.5** As a condition of permit approval, require adequate water supply, distribution, pumping, storage, and treatment facilities to be operational prior to the issuance of building permits.
- IU-1.6** Achieve and maintain compliance with all federal, state, and local regulatory standards for drinking water to protect the health, safety, and welfare of Corona.
- IU-1.7** Require all new development to be served from an approved domestic water supply to protect the health and safety of the public and groundwater supplies.
- IU-1.8** Through engineering design, construction practices, and enforcement of water regulatory standards, ensure that existing and new land uses and development do not degrade the City’s surface waters and groundwater supplies.
- IU-1.9** Require the costs of improvements to the water supply transmission, distribution, pumping, storage, and treatment facilities necessitated by new development be equitably borne by beneficiaries, either through the payment of fees, or construction of the improvements.

Resource Conservation

California experiences periodic cycles of drought interspersed with years of ample rainfall. The most recent cycle of drought was one of the most severe in state history, revealing the vulnerability of most communities to the effects of drought. In response to unprecedented shortfalls in rainfall in 2014, the governor declared a State Emergency, and the State Legislature passed laws mandating water conservation and requirements for sustainable groundwater management to conserve water resources. This has been a reminder of the need for local integrated water resource management.

To meet this goal, the City has embraced a comprehensive and integrated approach to managing its water system. This includes reduced water consumption through the implementation of conservation policies and programs. Water conservation represents a cost-effective and environmentally sound way to reduce current and future water demand and energy usage. Homeowners and business owners can take many actions to reduce water use, such as using water-conserving fixtures and appliances, fixing leaks, planting drought-tolerant landscaping, and avoiding unnecessary water use.

In accordance with the Water Conservation Act of 2009, the City set a target for a 20 percent reduction in per capita water use by 2020. The City achieved this goal in 2015. The City also adopted water contingency shortage plans that mandate different levels of response to drought. Community outreach and education are part of this effort in addition to practical reduction measures. Current City programs include:

- » Residential water conservation programs and rebates
- » Business water conservation techniques
- » Tiered rates based on water consumption
- » Landscaping conversion incentives



Corona has planted drought-tolerant species to reduce water consumption while also providing aesthetic benefits.

GOAL IU-2

Minimize water consumption and urban runoff generation through site design, the use of water conservation systems, and other techniques.

Policies

- IU-2.1** Continue to implement the City's water conservation and reuse efforts; review these programs regularly, and modify them as appropriate and feasible.
- IU-2.2** Establish guidelines and standards for water conservation and actively promote use of water-conserving devices and practices in new construction, major alterations and additions to existing buildings, and retrofitting of irrigation systems where feasible.
- IU-2.3** Require incorporation of best available technologies for water conservation, internally and externally, in new construction and associated site design.
- IU-2.4** Expand the recycled water program to provide water for landscaped medians and other appropriate open spaces along SR-91 and I-15, in coordination with Caltrans when feasible.
- IU-2.5** Require that sewer flows be minimized in existing and future developments through water conservation and recycling efforts.
- IU-2.6** Encourage the use of recycled water by industrial, commercial, and institutional users through the use of incentives such as differential pricing; require recycled water use for landscaped irrigation, grading, and other noncontact uses in new projects, where feasible.
- IU-2.7** Require the use of recycled water for landscaped irrigation, grading, and other noncontact uses in new developments, parks, golf courses, sports fields, and comparable uses, where feasible.
- IU-2.8** Continue to provide and support public educational efforts to residents, business, and students regarding the importance of water conservation and recycled water use.
- IU-2.9** Require that grading plans be designed and implemented to reduce stormwater runoff by capturing rainwater onsite and storing on a temporary, short-term basis to facilitate groundwater recharge rather than relying solely on community drainage facilities.
- IU-2.10** Require the use of rainwater capture and storage facilities, techniques, and improvements in residential and nonresidential developments to further objectives for water conservation.

SEWER/RECLAIMED WATER

The Corona Department of Water and Power is responsible for supplying the majority of sewer collection and treatment services within the City. The Department services a population of approximately 168,000 people over 38.5 square miles. The Temescal Valley Water District (TVWD) provides sewer services to the Temescal Canyon area in the City's southern SOI. The Home Gardens Sanitary District (HGSD) serves the unincorporated areas of Home Gardens. El Cerrito currently relies on septic systems; however, there are plans to extend the City's sewer service to that area.

The City's sewer system consists of 13 sewer lift stations, associated force mains, and gravity sewer pipes. The Home Gardens Sanitary District has 16 miles of sewer lines. Corona's three water reclamation facilities (WRFs) treat up to 15.5 million gallons per day (mgd). Western Riverside County Regional Wastewater Authority operates a WRF for Home Gardens, and Temescal Valley Water District maintains a WRF for its area. Corona also has capacity for 2.62 mgd in the WRCRWA plant. In accordance with City standards, sewer is treated to tertiary levels so that it can be used for irrigation purposes or safely be discharged to the Santa Ana and Temescal rivers.

The reclaimed water system receives an average of 11.4 mgd per day and the system consists of three reclaimed water storage tanks, five reclaimed booster stations, and 44 miles of reclaimed water lines. This reclaimed water system produces water that is used for landscape irrigation, golf courses, and parks. The City's reclaimed water master plan estimates existing recycled water demand at 2.0 mgd, which is primarily used for irrigation across the City's service area.



Corona Water Reclamation Plant #1

GOAL IU-3

A secure sewer collection and treatment system that meets current and projected future daily and peak load demands in Corona and protects public health and the environment in an efficient, equitable, and sustainable manner.

Policies

- IU-3.1** Review, evaluate, and update the City’s Sewer Master Plan and related capital improvement programs on a regular basis to plan for expansion and improvement of conveyance, storage, and treatment facilities.
- IU-3.2** Evaluate sewer infrastructure in areas where intensification of land use is anticipated to occur; coordinate capital improvements planning for service infrastructure with the direction, extent, and timing of growth.
- IU-3.3** Build, upgrade, maintain, and expand existing sewer collection and treatment facilities where existing systems are deficient in accordance with the Sewer Master Plan and state and federal standards.
- IU-3.4** Require that new development be connected to the municipal sewer system and ensure that adequate capacity is available for the treatment of generated sewer flows and safe disposal of sludge.
- IU-3.5** As a condition of approval, require that all new development submit a sewer analysis to the satisfaction of the City of Corona prior to the issuance of building permits.
- IU-3.6** Restrict and prioritize sewer connections, if necessary, to comply with available treatment capacity.
- IU-3.7** Ensure that sewer connection fees and charges are reviewed annually and are sufficient to fully fund and support the construction, improvement, and rehabilitation of sewer facilities.
- IU-3.8** Require that new development be connected to the City’s sewer system.
- IU-3.9** Continue to require all applicable industries/businesses to obtain sewer discharge permits from the City and to comply with the City’s Waste Discharge Pretreatment and Source Control Program.
- IU-3.10** Continue to implement, as appropriate, the requirements of the NPDES and SCAQMD regulations, including requiring the use of Best Management Practices by businesses in the City.

STORM DRAINAGE

Like much of southern California, an extensive network of facilities was developed over time to deal with flooding. In western Riverside County, the City of Corona and Riverside County have constructed a vast storm drainage system to protect from floodwaters and protect groundwater resources from urban runoff. The City's current storm drainage system releases water into flood control channels, washes, Santa Ana River, and Prado Basin. Components of the City's stormwater infrastructure include:

- » **Temescal Canyon Wash.** Temescal Canyon Wash is the major watercourse. It is concrete lined in some areas, and an unimproved natural channel in other areas. Tributaries to Temescal Canyon Wash include Wasson Canyon Wash, Arroyo Del Toro, Stovepipe Canyon Wash, Rice Canyon Wash, and Lee Lake.
- » **Oak Street Channel.** This channel traverses from the Oak Street Debris Basin northerly across SR-91 and terminates at Temescal Wash. The channel consists of a concrete-lined rectangular channel with culvert crossings at the major streets.
- » **Main Street Channel.** This channel traverses through the southeasterly corner of the City and consists of a concrete-lined rectangular channel at the upstream end of the channel. It joins the Temescal Wash at Sixth Street.
- » **Arlington Channel.** This channel consists of concrete-lined section that flows westerly through Home Gardens and joins Temescal Wash north of SR-91.
- » **South Norco Storm Drain.** This drain runs from southwest of Norco through Parkridge Avenue at the City limit and terminates at Temescal Wash.
- » **North Norco Storm Drain.** This drain enters the City limits at River Road and terminates at Temescal Wash.

Urban development not only affects flooding, but affects Corona's water quality because of surface and storm runoff. Household hazardous materials such as motor oil, pesticides, solvents, paint, and similar materials are sometimes poured down the drain or into the street gutters. Water quality is also affected by the amount of permeable surface. As development occurs, impermeable surface area increases and groundwater recharge decreases. In addition, urbanization introduces potential contaminants that can be carried into the water supply. Control of urban runoff is an important preventive measure to avoid contamination of both surface and groundwater supplies.

The NPDES permit program is designed to monitor, reduce, and control the amount and type of pollutants that enter the storm drainage system. As required by state law, Corona implements a Drainage Area Management Plan and Local Implementation Plans (LIP) to manage urban runoff. Under the LIP, the City requires that development projects incorporate best management practices to reduce runoff from a site. The goal in project planning and design is to preserve a site's predevelopment hydrology. Projects must comply with low-impact development (LID) requirements, which require systems that first infiltrate, then harvest and reuse, then biofilter stormwater runoff.

GOAL IU-4

Adequate planning, construction, maintenance, and funding for storm drainage and storage control facilities to support permitted land uses and protect the health and safety of the public and environment.

Policies

- IU-4.1** Review, evaluate, and regularly update the City’s Storm Drainage Master Plan and related capital improvement programs as a basis for the orderly planning, expansion, and improvement of facilities; implement improvements identified in the Drainage Master Plan.
- IU-4.2** Maintain and upgrade public storm drains and storage control facilities and construct or expand storm drain and flood control facilities to protect people and property from flooding and stormwater runoff. Implement improvements identified in the City’s Drainage Master Plan.
- IU-4.3** Designate, preserve, and acquire land, as necessary, for storm drainage and storage control facilities. As necessary, require the reservation of rights-of-way and easements for designated water-related infrastructure facilities as a condition of project approval.
- IU-4.4** Evaluate the adequacy of stormwater conveyance and storage control facilities in areas where intensification of land use is anticipated to occur; coordinate capital improvements planning for infrastructure with the direction, extent, and timing of growth.
- IU-4.5** Review development proposals for projects within the City’s Sphere of Influence and encourage Riverside County to not approve any project that cannot be accommodated with an adequate drainage system.
- IU-4.6** Annually review the development charge, acquisition of service charge, and monthly service charges in order to ensure that adequate fees and charges are collected to fund the operation, maintenance, and repair of existing facilities and construction of new facilities.
- IU-4.7** Require adherence to City regulatory stormwater quality measures and, if needed, take necessary enforcement action(s) to eliminate illicit connections and discharges to/from the stormwater system.

GOAL IU-5

Ensure that urban runoff from existing and new development does not degrade the quality of the City's surface waters, groundwater system, and other sensitive environmental areas.

Policies

- IU-5.1** Ensure that existing and new development does not directly degrade or indirectly contribute to the degradation of surface waters or the groundwater system.
- IU-5.2** Reduce pollutant loading through passive treatment systems such as vegetated filter strips, grass swales, and infiltration/ sedimentation areas in suitable open space areas, overland flow channels, and landscaping adjacent to parking lots and streets.
- IU-5.3** In new developments, minimize the amount of impervious area that is directly connected to piped or channelized drainage systems.
- IU-5.4** Evaluate any existing environmental degradation or potential degradation from current or planned storm drain and storage control facilities in wetlands or other sensitive environments.
- IU-5.5** Require that development projects consider the appropriateness of the channelization of stormwater runoff to facilitate its possible capture and reuse for on-site irrigation and other purposes.
- IU-5.6** Implement environmentally and economically efficient stormwater treatment systems, whenever practical (such as artificial marshland sewer treatment).
- IU-5.7** Require developers to obtain a NPDES permit prior to moving construction equipment onto a development site. The NPDES permit shall be retained at the construction site throughout the construction period, and a copy shall be filed with the City Engineer.
- IU-5.8** During construction projects, ensure compliance with all terms and conditions outlined in the NPDES permit, including the implementation of the latest best management practices and determination of need for any additional water quality management plans to reduce pollutants and urban runoff flows to the maximum extent practicable.
- IU-5.9** Require that new developments employ the most efficient drainage technology to control drainage and minimize damage to environmentally sensitive areas.
- IU-5.10** Require that individual project owners and operators handle, store, apply, and dispose of all pest control, herbicide, insecticide, and other similar substances according to all federal, state, and local regulations.

SOLID WASTE MANAGEMENT

The State of California has a long history of waste management, and communities have been required to follow increasingly strict regulations. The reasons include the shortage of landfill space, the cost of natural resources to manufacture goods, and the cost of disposing of and treating certain wastes. In 1989, the State Legislature passed Assembly Bill 939, the original landmark bill that required recycling, source reduction, and waste diversion. Since then, the state has required jurisdictions to increase diversion of solid waste from the landfills from 25 to 75 percent.

Cities statewide, including the City of Corona, have adopted comprehensive integrated waste management programs to meet state mandates. Assembly Bill 341 came into effect in 2012, requiring mandatory commercial and public agency waste recycling and establishing a statewide 75 percent waste diversion goal by 2020. In 2016 businesses and multifamily buildings with five or more units were impacted by Assembly Bill 1826, which requires the mandatory recycling of organic waste.

Corona's waste management efforts include waste prevention (or "source reduction"), recycling and composting, and combustion or disposal of waste into landfills. Corona's waste management efforts center around the following programs: mandatory recycling for residential, commercial and multifamily uses; household hazardous waste and electronic waste program; organics, mulch, compost, and tree recycling; bulky item pickup; waste oil/filter program; and construction and demolition recycling.

WMI transports all solid waste from the City and the sphere of influence areas to the El Sobrante landfill, located east of the City in the unincorporated county. Opened in 1986, the El Sobrante Landfill is a Class III landfill that accepts municipal solid waste.



Corona waste haulers provide curbside service to residential, commercial, and industrial uses.

GOAL IU-6

Maintain solid waste collection, recycling, and disposal services, programs, and regulations in accordance with California mandates.

Policies

- IU-6.1** Provide an adequate and orderly system for collection and recycling or disposal of solid waste for new and existing development in the City and sphere of influence.
- IU-6.2** Monitor the adequacy of solid waste collection and recycling, including organic and electronic waste, for commercial, industrial, and residential developments for compliance with state law.
- IU-6.3** Coordinate with Riverside County to ensure the City's continued use of the El Sobrante Landfill and adherence to county, state, and federal environmental regulations and local priorities.
- IU-6.4** Encourage and support local, regional, and statewide efforts to reduce the solid waste stream; implement a waste reduction and recycling program within all City offices and facilities.
- IU-6.5** Continue to operate and expand source reduction, reuse, recycling, and composting efforts to continue to reduce waste generation citywide and achieve state-mandated waste diversion goals.
- IU-6.6** Continue and enhance public educational programs promoting reuse, recycling, composting, and the safe disposal of waste.
- IU-6.7** Continue to work with providers and businesses to educate the community and to provide household hazardous material, used oil, and electronic waste collection for the community.

ENERGY

Corona recognizes the importance of providing a sufficient supply of energy in an environmentally responsible manner. Clean energy includes energy efficiency and clean energy supply (e.g., highly efficient combined heat and power and renewable energy sources). Solar photovoltaic panels on residential and commercial building rooftops (in combination with storage systems) is an effective way to save energy. By identifying, designing, and implementing clean energy and technology solutions, Corona receives environmental and economic benefits, including reduced greenhouse gas emissions.

The state of California is committed to reducing greenhouse gas emissions, including emissions from the provision of electricity. Signed into law in 2017, Senate Bill 100 establishes new standards for increasing the amount of renewable energy purchased

INFRASTRUCTURE AND UTILITIES

over time and reducing dependence on fossil fuels. Additionally, the City offers expedited permits for small-scale solar photovoltaic projects. Corona's portfolio of purchased energy resources is on track to meet state targets of 50 percent renewable sources by December 31, 2026, and 60 percent by December 31, 2030.

On April 4, 2001, the Corona's City Council passed Resolution No. 2001-25, which established a municipally owned electric utility. In August 2001, this electric utility, which is part of the Corona Department of Power and Water, entered into an agreement with Southern California Edison (SCE) to provide retail services as an electric services provider. Corona DWP buys and sells power on behalf of the City's municipal electric accounts and properties within specific service areas.

SCE provides electrical service to most of Corona and its SOI with power plants in California and other western states. As of 2017, ten substations serve Corona and the SOI, of which SCE owns and operated eight. An additional substation is proposed in Corona and, if approved by the California Public Utility Commission, is expected to be operational by 2021. Most major electricity transmission lines are maintained by SCE.



Corona's resources include wholesale solar and a solar facility at Water Reclamation Plant 1.

Southern California Gas Company (SCG) provides natural gas service in Corona. SCG offers a variety of rebate programs to encourage energy-efficient home improvements and the purchase of energy-saving appliances. SCG also administers a no-cost, energy-saving installation program regulated by the California Public Utilities Commission. SCG maintains transmission and distribution lines throughout the City.

GOAL IU-7

Reliable and safe natural gas, electrical, and renewable energy supplies and facilities to support existing and future uses within Corona.

Policies

- IU-7.1** Require that new development is approved contingent upon its ability to be served with adequate natural gas, energy facilities, and other critical infrastructure.
- IU-7.2** Coordinate with energy providers and the City Department of Power and Water to ensure that adequate services and facilities will meet SB 100 guidelines and the demand of existing and future developments, and be compatible with adjacent uses in Corona.
- IU-7.3** Encourage energy providers and regulators to evaluate and maintain the safety and efficiency of utility facilities such as gas pipelines, electric lines, and transformers.
- IU-7.4** Consider adopting a Community Choice Aggregation Ordinance or work with utility providers to offer renewable energy purchasing at a reduced cost to consumers.
- IU-7.5** Continue to require and regulate the undergrounding of electrical poles and wires in accordance with the Corona Municipal Code.
- IU-7.6** Continue to expand the supply of rooftop solar energy systems at public facilities and improve energy efficiency in City operations and capital improvements.
- IU-7.7** Encourage the reduction of energy consumption through passive solar building orientation as well as the installation of rooftop solar energy systems and energy-efficient technologies.
- IU-7.8** Continue to inform the community of rebates and other supportive programs for energy-efficient building improvements, appliances, and alternative energy systems.

TELECOMMUNICATIONS

The acceleration of digital technologies has been one of the greatest advances to business in the last several decades. Corona is striving to remain at the forefront of this wave of technology by providing advanced communication infrastructure at City Hall and throughout the community. Telecommunications is part of this critical information infrastructure.

INFRASTRUCTURE AND UTILITIES

Telecommunications in Corona are offered by multiple service providers and through different types of infrastructure systems. Access to reliable telecommunications infrastructure such as wireless, satellite, and broadband technologies can improve connectivity and quality of life in Corona. High quality online connectivity is also an important component of economic development—supporting new and existing businesses and allowing residents to work, learn, shop, and recreate online. State-of-the-art telecommunications systems benefit our workforce and residents of all ages.

Telecommunications companies are generally licensed and monitored by the State of California Public Utilities Commission. The City is responsible for oversight and approval authority for the siting and operation of transmission antennas and other facilities within the City, but does not exercise control over the provision of telecommunications services. The City continues to support the provision of telecommunications services that improve quality of life and meet local standards.

GOAL IU-8

Allow for the provision of an adequate, safe, and orderly supply of telecommunication infrastructure to support existing and future land uses within the City.

Policies

- IU-8.1** Encourage service providers to ensure access to state-of-the-art telecommunications systems and services throughout Corona and its SOI.
- IU-8.2** Provide for continued development and expansion of telecommunications systems for residential and nonresidential use.
- IU-8.3** Encourage the collocation of telecommunications facilities to reduce the amount of land dedicated to this use without compromising service.
- IU-8.4** Promote the extension of the regional fiber optic network into the City.

Infrastructure and Utilities

INTRODUCTION

Infrastructure, public facilities, and services consist of the places, equipment, and programs that support the basic needs of a community. For residents and businesses, these services are often the most tangible indicators of the quality of life offered by Corona and the products of local taxes. At the same time, the continued provision of infrastructure, public facilities, and services is challenging. Due to the rapidly changing economic climate, evolving state regulations, and tax system, local governments face challenges in maintaining the level of services desired.

Corona is responsible for providing quality services and systems to meet current and future needs of the community. These include water, sewer, storm drainage, solid waste, energy, and telecommunications. The City's approach to providing these services is guided by the following statement:

Corona provides a wide range of infrastructure and utility services to meet the existing and future needs of the community. This includes water, sewer, drainage, solid waste, energy, and telecommunications. Providing these services requires the ability to adjust service delivery models to accommodate changing needs, technologies, and legislative context. The City is committed to providing quality infrastructure services and facilities that are safe, adequate, cost-effective, and available in existing and newly developing areas.



INFRASTRUCTURE AND UTILITIES

Scope of the Element

Businesses and residents in Corona are supported by a variety of public facilities and services. To sustain existing households and businesses and to accommodate future population and employment growth, local infrastructure will need to be improved, expanded, and maintained. Obtaining adequate funding for infrastructure and public facilities is a key challenge and priority for the City of Corona.

The inclusion of the Infrastructure and Utilities Element was an element elected by the city to include in the 2004 General Plan update to provide a framework for making physical improvements to utility and infrastructure facilities that enhance quality of life. The element guides:

- » **Water Systems**, including the distribution, treatment, storage, and delivery of potable water to meet local needs and comply with state and federal law.
- » **Sewer Systems**, including the collection and treatment of wastewater in Corona that complies with state and federal law.
- » **Storm Drainage**, including the provision of infrastructure needed to protect people and property from flooding as well as protect the environment.
- » **Energy, solid waste, and telecommunications**, including partnering with agencies to ensure adequate energy, solid waste, and telecommunications are available.

Related Plans

The infrastructure and utilities element is influenced and implemented by a variety of related plans, ordinances, and regulations that are consistent with and support the vision, goals, and policies of the general plan.

Related plans, ordinances, and programs include:

- » **Master Plans.** Corona adopts and maintains a variety of master or management plans that govern the provision of services, consistent with local policy, state, and federal laws. These include master plans for water, sewer, storm drainage, recycled water, groundwater, water treatment/blending, and many other topics.
- » **Municipal Code.** The Corona Municipal Code implements the general plan. It specifies how existing and new development will further water, sewer, storm drainage, solid waste, energy, and other goals through adherence to City, state, and federal regulations.
- » **Capital Improvement Plans.** While the City's various master plans specify the types of improvements required to achieve specific utility goals, the capital improvement plan provides a schedule of activities needed to fund, construct, and rehabilitate such improvements.

The following sections provide context for each topic addressed in this element, followed by goals and policies to achieve the general plan vision.

WATER SYSTEM

The Corona Department of Water and Power is responsible for supplying clean water to the City and surrounding areas, a total of approximately 75 square miles. This area includes approximately 39 square miles within the City's municipal area and 35 square miles in the City's sphere of influence (SOI) in Riverside County. The City Department of Water and Power provides potable water service to the city's residential and service population and portions of its sphere of influence.

Corona receives water from both local groundwater basins and imported water sources. The City's three groundwater basins provide approximately 40 percent of its water supply, though this may vary depending on climate conditions. Twenty-two (22) wells are designed with a capacity to provide up to 39,200 acre-feet per year (afy) of water. The remaining 60 percent of the City's water supply is imported from the Western Municipal Water District through the Lower Feeder project or the Mills Pipeline Connection (treated State Water Project). The City's water system contains six primary pressure zones ranging from a minimum elevation of 430 to an elevation of 1,510 feet.

The City's public water system has 26 domestic booster stations that deliver groundwater to the City supply system. All raw water is treated at the Lester Treatment Plant or Sierra del Oro Treatment Plant prior to entering the City's public water system. The City also operates eight blending stations that blend water from the City's groundwater basins and imported water to meet regulatory standards of the US Environmental Protection Agency and California Department of Health Services. Blended water is stored in 17 reservoirs with a capacity estimated at 43.3 million gallons.

Within the West sphere of influence (Coronita and Foothills), the City provides domestic water services to residential and nonresidential customers. In the East sphere of influence, the City of Corona provides water to the Home Gardens County Water District who then provides water to customers in the Home Gardens area; the WMWD serves the East Eagle Valley area; and both the WMWD and City of Corona serve the El Cerrito area. Within the South sphere of influence, the Temescal Canyon area is served by the City of Corona, the WMWD, and Temescal Valley Water District.

The City of Corona prepares and updates a variety of planning and infrastructure studies and plans to ensure the long-term sustainability of its water supply. The Water Master Plan addresses the infrastructure necessary to acquire, treat, and transport water to the community. The Urban Water Management Plan addresses the provision, use, and conservation of water resources in the community. The City has also adopted and periodically updates Groundwater Management Plans and Reclaimed Water Master Plans to ensure the sustainable management of the City's water resources. These plans individually and cumulatively, will ensure that a sufficient amount and quality of water is available for present and future uses in Corona.

The following goal and policies are designed to guide the securing of water supply, responsible use, and provision of infrastructure to meet the current and projected water demands of Corona in an equitable, efficient, and sustainable manner.

GOAL IU-1

Secure water supply, water treatment, distribution, pumping, and storage systems that meet the current and projected future daily and peak water demands of Corona in an equitable, efficient, and sustainable manner.

Policies

- IU-1.1** Review, evaluate, and update the City’s Urban Water Management Plan and related capital improvement programs on a regular basis in order to maintain plans for expansion and improvement of distribution and storage facilities.
- IU-1.2** Evaluate the adequacy of water infrastructure in areas where intensification of land use is anticipated; coordinate capital improvements planning for all municipal water service infrastructure with the direction, extent, and timing of growth.
- IU-1.3** Construct, upgrade, maintain, and expand water supply, distribution, pumping, storage, and treatment facilities in the Urban Water Management Plan and/or as required to meet state and federal standards.
- IU-1.4** Designate, preserve, and acquire land, if necessary, for siting future water supply, storage, and distribution facilities in conformity with the goals and policies of the Land Use Element.
- IU-1.5** As a condition of permit approval, require adequate water supply, distribution, pumping, storage, and treatment facilities to be operational prior to the issuance of building permits.
- IU-1.6** Achieve and maintain compliance with all federal, state, and local regulatory standards for drinking water to protect the health, safety, and welfare of Corona.
- IU-1.7** Require all new development to be served from an approved domestic water supply to protect the health and safety of the public and groundwater supplies.
- IU-1.8** Through engineering design, construction practices, and enforcement of water regulatory standards, ensure that existing and new land uses and development do not degrade the City’s surface waters and groundwater supplies.
- IU-1.9** Require the costs of improvements to the water supply transmission, distribution, pumping, storage, and treatment facilities necessitated by new development be equitably borne by beneficiaries, either through the payment of fees, or construction of the improvements.

Resource Conservation

California experiences periodic cycles of drought interspersed with years of ample rainfall. The most recent cycle of drought was one of the most severe in state history, revealing the vulnerability of most communities to the effects of drought. In response to unprecedented shortfalls in rainfall in 2014, the governor declared a State Emergency, and the State Legislature passed laws mandating water conservation and requirements for sustainable groundwater management to conserve water resources. This has been a reminder of the need for local integrated water resource management.

To meet this goal, the City has embraced a comprehensive and integrated approach to managing its water system. This includes reduced water consumption through the implementation of conservation policies and programs. Water conservation represents a cost-effective and environmentally sound way to reduce current and future water demand and energy usage. Homeowners and business owners can take many actions to reduce water use, such as using water-conserving fixtures and appliances, fixing leaks, planting drought-tolerant landscaping, and avoiding unnecessary water use.

In accordance with the Water Conservation Act of 2009, the City set a target for a 20 percent reduction in per capita water use by 2020. The City achieved this goal in 2015. The City also adopted water contingency shortage plans that mandate different levels of response to drought. Community outreach and education are part of this effort in addition to practical reduction measures. Current City programs include:

- » Residential water conservation programs and rebates
- » Business water conservation techniques
- » Tiered rates based on water consumption
- » Landscaping conversion incentives



Corona has planted drought-tolerant species to reduce water consumption while also providing aesthetic benefits.

GOAL IU-2

Minimize water consumption and urban runoff generation through site design, the use of water conservation systems, and other techniques.

Policies

- IU-2.1** Continue to implement the City's water conservation and reuse efforts; review these programs regularly, and modify them as appropriate and feasible.
- IU-2.2** Establish guidelines and standards for water conservation and actively promote use of water-conserving devices and practices in new construction, major alterations and additions to existing buildings, and retrofitting of irrigation systems where feasible.
- IU-2.3** Require incorporation of best available technologies for water conservation, internally and externally, in new construction and associated site design.
- IU-2.4** Expand the recycled water program to provide water for landscaped medians and other appropriate open spaces along SR-91 and I-15, in coordination with Caltrans when feasible.
- IU-2.5** Require that sewer flows be minimized in existing and future developments through water conservation and recycling efforts.
- IU-2.6** Encourage the use of recycled water by industrial, commercial, and institutional users through the use of incentives such as differential pricing; require recycled water use for landscaped irrigation, grading, and other noncontact uses in new projects, where feasible.
- IU-2.7** Require the use of recycled water for landscaped irrigation, grading, and other noncontact uses in new developments, parks, golf courses, sports fields, and comparable uses, where feasible.
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Corona Water Reclamation Plant #1

GOAL IU-3

A secure sewer collection and treatment system that meets current and projected future daily and peak load demands in Corona and protects public health and the environment in an efficient, equitable, and sustainable manner.

Policies

- IU-3.1** Review, evaluate, and update the City’s Sewer Master Plan and related capital improvement programs on a regular basis to plan for expansion and improvement of conveyance, storage, and treatment facilities.
- IU-3.2** Evaluate sewer infrastructure in areas where intensification of land use is anticipated to occur; coordinate capital improvements planning for service infrastructure with the direction, extent, and timing of growth.
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- IU-3.10** Continue to implement, as appropriate, the requirements of the NPDES and SCAQMD regulations, including requiring the use of Best Management Practices by businesses in the City.

STORM DRAINAGE

Like much of southern California, an extensive network of facilities was developed over time to deal with flooding. In western Riverside County, the City of Corona and Riverside County have constructed a vast storm drainage system to protect from floodwaters and protect groundwater resources from urban runoff. The City's current storm drainage system releases water into flood control channels, washes, Santa Ana River, and Prado Basin. Components of the City's stormwater infrastructure include:

- » **Temescal Canyon Wash.** Temescal Canyon Wash is the major watercourse. It is concrete lined in some areas, and an unimproved natural channel in other areas. Tributaries to Temescal Canyon Wash include Wasson Canyon Wash, Arroyo Del Toro, Stovepipe Canyon Wash, Rice Canyon Wash, and Lee Lake.
- » **Oak Street Channel.** This channel traverses from the Oak Street Debris Basin northerly across SR-91 and terminates at Temescal Wash. The channel consists of a concrete-lined rectangular channel with culvert crossings at the major streets.
- » **Main Street Channel.** This channel traverses through the southeasterly corner of the City and consists of a concrete-lined rectangular channel at the upstream end of the channel. It joins the Temescal Wash at Sixth Street.
- » **Arlington Channel.** This channel consists of concrete-lined section that flows westerly through Home Gardens and joins Temescal Wash north of SR-91.
- » **South Norco Storm Drain.** This drain runs from southwest of Norco through Parkridge Avenue at the City limit and terminates at Temescal Wash.
- » **North Norco Storm Drain.** This drain enters the City limits at River Road and terminates at Temescal Wash.

Urban development not only affects flooding, but affects Corona's water quality because of surface and storm runoff. Household hazardous materials such as motor oil, pesticides, solvents, paint, and similar materials are sometimes poured down the drain or into the street gutters. Water quality is also affected by the amount of permeable surface. As development occurs, impermeable surface area increases and groundwater recharge decreases. In addition, urbanization introduces potential contaminants that can be carried into the water supply. Control of urban runoff is an important preventive measure to avoid contamination of both surface and groundwater supplies.

The NPDES permit program is designed to monitor, reduce, and control the amount and type of pollutants that enter the storm drainage system. As required by state law, Corona implements a Drainage Area Management Plan and Local Implementation Plans (LIP) to manage urban runoff. Under the LIP, the City requires that development projects incorporate best management practices to reduce runoff from a site. The goal in project planning and design is to preserve a site's predevelopment hydrology. Projects must comply with low-impact development (LID) requirements, which require systems that first infiltrate, then harvest and reuse, then biofilter stormwater runoff.

GOAL IU-4

Adequate planning, construction, maintenance, and funding for storm drainage and storage control facilities to support permitted land uses and protect the health and safety of the public and environment.

Policies

- IU-4.1** Review, evaluate, and regularly update the City’s Storm Drainage Master Plan and related capital improvement programs as a basis for the orderly planning, expansion, and improvement of facilities; implement improvements identified in the Drainage Master Plan.
- IU-4.2** Maintain and upgrade public storm drains and storage control facilities and construct or expand storm drain and flood control facilities to protect people and property from flooding and stormwater runoff. Implement improvements identified in the City’s Drainage Master Plan.
- IU-4.3** Designate, preserve, and acquire land, as necessary, for storm drainage and storage control facilities. As necessary, require the reservation of rights-of-way and easements for designated water-related infrastructure facilities as a condition of project approval.
- IU-4.4** Evaluate the adequacy of stormwater conveyance and storage control facilities in areas where intensification of land use is anticipated to occur; coordinate capital improvements planning for infrastructure with the direction, extent, and timing of growth.
- IU-4.5** Review development proposals for projects within the City’s Sphere of Influence and encourage Riverside County to not approve any project that cannot be accommodated with an adequate drainage system.
- IU-4.6** Annually review the development charge, acquisition of service charge, and monthly service charges in order to ensure that adequate fees and charges are collected to fund the operation, maintenance, and repair of existing facilities and construction of new facilities.
- IU-4.7** Require adherence to City regulatory stormwater quality measures and, if needed, take necessary enforcement action(s) to eliminate illicit connections and discharges to/from the stormwater system.

GOAL IU-5

Ensure that urban runoff from existing and new development does not degrade the quality of the City's surface waters, groundwater system, and other sensitive environmental areas.

Policies

- IU-5.1** Ensure that existing and new development does not directly degrade or indirectly contribute to the degradation of surface waters or the groundwater system.
- IU-5.2** Reduce pollutant loading through passive treatment systems such as vegetated filter strips, grass swales, and infiltration/ sedimentation areas in suitable open space areas, overland flow channels, and landscaping adjacent to parking lots and streets.
- IU-5.3** In new developments, minimize the amount of impervious area that is directly connected to piped or channelized drainage systems.
- IU-5.4** Evaluate any existing environmental degradation or potential degradation from current or planned storm drain and storage control facilities in wetlands or other sensitive environments.
- IU-5.5** Require that development projects consider the appropriateness of the channelization of stormwater runoff to facilitate its possible capture and reuse for on-site irrigation and other purposes.
- IU-5.6** Implement environmentally and economically efficient stormwater treatment systems, whenever practical (such as artificial marshland sewer treatment).
- IU-5.7** Require developers to obtain a NPDES permit prior to moving construction equipment onto a development site. The NPDES permit shall be retained at the construction site throughout the construction period, and a copy shall be filed with the City Engineer.
- IU-5.8** During construction projects, ensure compliance with all terms and conditions outlined in the NPDES permit, including the implementation of the latest best management practices and determination of need for any additional water quality management plans to reduce pollutants and urban runoff flows to the maximum extent practicable.
- IU-5.9** Require that new developments employ the most efficient drainage technology to control drainage and minimize damage to environmentally sensitive areas.
- IU-5.10** Require that individual project owners and operators handle, store, apply, and dispose of all pest control, herbicide, insecticide, and other similar substances according to all federal, state, and local regulations.

SOLID WASTE MANAGEMENT

The State of California has a long history of waste management, and communities have been required to follow increasingly strict regulations. The reasons include the shortage of landfill space, the cost of natural resources to manufacture goods, and the cost of disposing of and treating certain wastes. In 1989, the State Legislature passed Assembly Bill 939, the original landmark bill that required recycling, source reduction, and waste diversion. Since then, the state has required jurisdictions to increase diversion of solid waste from the landfills from 25 to 75 percent.

Cities statewide, including the City of Corona, have adopted comprehensive integrated waste management programs to meet state mandates. Assembly Bill 341 came into effect in 2012, requiring mandatory commercial and public agency waste recycling and establishing a statewide 75 percent waste diversion goal by 2020. In 2016 businesses and multifamily buildings with five or more units were impacted by Assembly Bill 1826, which requires the mandatory recycling of organic waste.

Corona's waste management efforts include waste prevention (or "source reduction"), recycling and composting, and combustion or disposal of waste into landfills. Corona's waste management efforts center around the following programs: mandatory recycling for residential, commercial and multifamily uses; household hazardous waste and electronic waste program; organics, mulch, compost, and tree recycling; bulky item pickup; waste oil/filter program; and construction and demolition recycling.

WMI transports all solid waste from the City and the sphere of influence areas to the El Sobrante landfill, located east of the City in the unincorporated county. Opened in 1986, the El Sobrante Landfill is a Class III landfill that accepts municipal solid waste.



Corona waste haulers provide curbside service to residential, commercial, and industrial uses.

GOAL IU-6

Maintain solid waste collection, recycling, and disposal services, programs, and regulations in accordance with California mandates.

Policies

- IU-6.1** Provide an adequate and orderly system for collection and recycling or disposal of solid waste for new and existing development in the City and sphere of influence.
- IU-6.2** Monitor the adequacy of solid waste collection and recycling, including organic and electronic waste, for commercial, industrial, and residential developments for compliance with state law.
- IU-6.3** Coordinate with Riverside County to ensure the City's continued use of the El Sobrante Landfill and adherence to county, state, and federal environmental regulations and local priorities.
- IU-6.4** Encourage and support local, regional, and statewide efforts to reduce the solid waste stream; implement a waste reduction and recycling program within all City offices and facilities.
- IU-6.5** Continue to operate and expand source reduction, reuse, recycling, and composting efforts to continue to reduce waste generation citywide and achieve state-mandated waste diversion goals.
- IU-6.6** Continue and enhance public educational programs promoting reuse, recycling, composting, and the safe disposal of waste.
- IU-6.7** Continue to work with providers and businesses to educate the community and to provide household hazardous material, used oil, and electronic waste collection for the community.

ENERGY

Corona recognizes the importance of providing a sufficient supply of energy in an environmentally responsible manner. Clean energy includes energy efficiency and clean energy supply (e.g., highly efficient combined heat and power and renewable energy sources). Solar photovoltaic panels on residential and commercial building rooftops (in combination with storage systems) is an effective way to save energy. By identifying, designing, and implementing clean energy and technology solutions, Corona receives environmental and economic benefits, including reduced greenhouse gas emissions.

The state of California is committed to reducing greenhouse gas emissions, including emissions from the provision of electricity. Signed into law in 2017, Senate Bill 100 establishes new standards for increasing the amount of renewable energy purchased

INFRASTRUCTURE AND UTILITIES

over time and reducing dependence on fossil fuels. Additionally, the City offers expedited permits for small-scale solar photovoltaic projects. Corona's portfolio of purchased energy resources is on track to meet state targets of 50 percent renewable sources by December 31, 2026, and 60 percent by December 31, 2030.

On April 4, 2001, the Corona's City Council passed Resolution No. 2001-25, which established a municipally owned electric utility. In August 2001, this electric utility, which is part of the Corona Department of Power and Water, entered into an agreement with Southern California Edison (SCE) to provide retail services as an electric services provider. Corona DWP buys and sells power on behalf of the City's municipal electric accounts and properties within specific service areas.

SCE provides electrical service to most of Corona and its SOI with power plants in California and other western states. As of 2017, ten substations serve Corona and the SOI, of which SCE owns and operated eight. An additional substation is proposed in Corona and, if approved by the California Public Utility Commission, is expected to be operational by 2021. Most major electricity transmission lines are maintained by SCE.



Corona's resources include wholesale solar and a solar facility at Water Reclamation Plant 1.

Southern California Gas Company (SCG) provides natural gas service in Corona. SCG offers a variety of rebate programs to encourage energy-efficient home improvements and the purchase of energy-saving appliances. SCG also administers a no-cost, energy-saving installation program regulated by the California Public Utilities Commission. SCG maintains transmission and distribution lines throughout the City.

GOAL IU-7

Reliable and safe natural gas, electrical, and renewable energy supplies and facilities to support existing and future uses within Corona.

Policies

- IU-7.1** Require that new development is approved contingent upon its ability to be served with adequate natural gas, energy facilities, and other critical infrastructure.
- IU-7.2** Coordinate with energy providers and the City Department of Power and Water to ensure that adequate services and facilities will meet SB 100 guidelines and the demand of existing and future developments, and be compatible with adjacent uses in Corona.
- IU-7.3** Encourage energy providers and regulators to evaluate and maintain the safety and efficiency of utility facilities such as gas pipelines, electric lines, and transformers.
- IU-7.4** Consider adopting a Community Choice Aggregation Ordinance or work with utility providers to offer renewable energy purchasing at a reduced cost to consumers.
- IU-7.5** Continue to require and regulate the undergrounding of electrical poles and wires in accordance with the Corona Municipal Code.
- IU-7.6** Continue to expand the supply of rooftop solar energy systems at public facilities and improve energy efficiency in City operations and capital improvements.
- IU-7.7** Encourage the reduction of energy consumption through passive solar building orientation as well as the installation of rooftop solar energy systems and energy-efficient technologies.
- IU-7.8** Continue to inform the community of rebates and other supportive programs for energy-efficient building improvements, appliances, and alternative energy systems.

TELECOMMUNICATIONS

The acceleration of digital technologies has been one of the greatest advances to business in the last several decades. Corona is striving to remain at the forefront of this wave of technology by providing advanced communication infrastructure at City Hall and throughout the community. Telecommunications is part of this critical information infrastructure.

INFRASTRUCTURE AND UTILITIES

Telecommunications in Corona are offered by multiple service providers and through different types of infrastructure systems. Access to reliable telecommunications infrastructure such as wireless, satellite, and broadband technologies can improve connectivity and quality of life in Corona. High quality online connectivity is also an important component of economic development—supporting new and existing businesses and allowing residents to work, learn, shop, and recreate online. State-of-the-art telecommunications systems benefit our workforce and residents of all ages.

Telecommunications companies are generally licensed and monitored by the State of California Public Utilities Commission. The City is responsible for oversight and approval authority for the siting and operation of transmission antennas and other facilities within the City, but does not exercise control over the provision of telecommunications services. The City continues to support the provision of telecommunications services that improve quality of life and meet local standards.

GOAL IU-8

Allow for the provision of an adequate, safe, and orderly supply of telecommunication infrastructure to support existing and future land uses within the City.

Policies

- IU-8.1** Encourage service providers to ensure access to state-of-the-art telecommunications systems and services throughout Corona and its SOI.
- IU-8.2** Provide for continued development and expansion of telecommunications systems for residential and nonresidential use.
- IU-8.3** Encourage the collocation of telecommunications facilities to reduce the amount of land dedicated to this use without compromising service.
- IU-8.4** Promote the extension of the regional fiber optic network into the City.

Public Safety

INTRODUCTION

Protecting public health and safety is a fundamental mission of the City of Corona. While most people are familiar with the police and fire personnel who respond to emergencies, Corona engages in many less visible functions to protect people from natural and human-caused disasters. Building codes, ordinances, transportation route planning, and hazardous materials management efforts are all critical programs that protect property, life, and safety. Indeed, the City's long-term vision cannot be fully achieved unless the public's health and safety can be assured.

Like most California cities, Corona has an array of natural and human-caused hazards. With the many waterways traversing the City, the risk of flooding is a concern. While the hillsides that surround the City offer scenic views, they are also subject to wildfires during summer weather or mudslides during storm events. Corona is also susceptible to earthquakes due to the fault zones crossing the city as well as geologic hazards associated with its topography and soil conditions. Activities associated with commerce and the City's transportation network all present safety hazards as well.

Consistent with its vision, the City of Corona's efforts to protect the health and safety of the public and business community is guided by the following statement:

Corona is committed to protecting residents, businesses, and visitors from natural and human-induced hazards. The City is also committed to rebuilding from emergencies or disasters in a manner that efficiently and safely returns quality of life to Corona. Residents and visitors will feel safe in their homes, neighborhoods, and public places. Community and regional resources—public, private, and nonprofit—will work together to ensure the safety of all residents and to minimize the disruption caused by emergencies and disasters. By implementing appropriate protocols and programs, the City will become safer, more resilient, and prosperous in return.

For Corona to continue as a desirable place to live and work, the City must continue to comprehensively address the public health and safety needs of its residents, businesses, institutions, and visitors. To achieve the vision of the general plan, this public safety element therefore sets forth proactive and coordinated programs to protect against foreseeable natural and human-caused hazards. As the policies and actions are progressively implemented, the City will be increasingly less impacted by hazards, and in the process, become more self-reliant, sustainable, and prosperous.

Scope of Element

California State law, specifically the Government Code § 65302(1), requires that each city prepare and adopt a safety element for the protection of the community from any unreasonable risks associated with a wide variety of natural and manmade hazards. This legislation encompasses a wide range of safety hazards commonly found in communities, including climate change hazards. This element addresses:

- » **Natural Hazards.** Natural hazards include a range of seismic and geologic hazards, flooding hazards, wildland and urban fire hazards, and severe weather, most of which are caused by inclement weather or natural events.
- » **Human-Caused Hazards.** These include air pollution, hazardous materials, and aviation hazards that are caused by human activities. Other transportation- and public safety hazards are addressed in other elements of the general plan.
- » **Emergency Response and Preparedness.** This refers to the range of procedures, methods, protocols, and staff the City of Corona uses to respond and prepare for emergencies and disasters, respond to them, and recover from them.

This public safety element is intended to: 1) recognize the local hazards associated with Corona's environment, and 2) identify methods to manage these risks and protect people, property, infrastructure, and structures from harm.

Related Plans

Corona's public safety element is implemented by various strategic plans that protect the community from individual hazards. Some of these plans are provided by the City; others are provided by other organizations.

- » **Police Department Strategic Plan.** The Corona Police Department prepares an annual police strategic plan that contains an assessment of safety in Corona, staffing and resource allocation, and sets short and long-range goals for the future. The plan is also used evaluate outcomes and progress to meet department goals.
- » **Fire Department Strategic Plan.** The Corona Fire Department prepares an annual fire department strategic plan that sets short and long-range goals for its operations, training, and other safety outcomes. These outcomes are based on best practice, periodic organizational reviews, and city needs.
- » **Emergency Operations Plan.** Corona's EOP is intended to address the City's planned response to extraordinary emergency situations associated with natural disasters, technological incidents, and national security emergencies. The plan addresses potential large-scale disasters requiring unusual emergency response.
- » **Hazard Mitigation Plan (LHMP).** The LHMP for the City of Corona planning area was developed in accordance with the Disaster Mitigation Act of 2000 (DMA 2000) and followed Federal Emergency Management Agency (FEMA) 2011 Local Hazard Mitigation Plan guidance. The LHMP incorporates a process where hazards are identified and profiled, the people and facilities at risk are analyzed, and mitigation actions are developed to reduce or eliminate risk. The implementation of these mitigation actions, which include both short-term and long-term strategies, involve

planning, policy changes, programs, mitigation projects, and other activities. The City of Corona LHMP can be found here: [2023 Local Hazard Mitigation Plan](#)

The next sections provide context for each safety hazard presented, followed by goals and policies to achieve the general plan vision.

SEISMIC AND GEOLOGIC HAZARDS

Corona's location and underlying geology make it susceptible to seismic and geologic hazards. Corona is situated between two active fault zones—the Whittier-Elsinore Fault Zone and the San Jacinto Fault Zone. Other potentially active faults nearby include the San Jose, Cucamonga, Sierra Madre, Newport-Inglewood, and San Andreas. While the City has not experienced a major earthquake, it is prudent to plan for such to minimize potential damage to the community, injury, and loss of life. The primary seismic and geologic hazards in Corona are summarized below.

Seismic Hazards

Seismic activity has been known to cause ground displacement along a fault or within the general vicinity of a fault zone. Surface rupturing could damage or destroy infrastructure, pipelines, roads, and bridges. Much of the western portion of the city extending southeast through the SOI is within a fault zone. Two active surface faults—the Chino Fault and Glen Ivy segment of the Elsinore Fault—could produce earthquakes of 7M, causing surface ground ruptures. Areas with known surface rupture hazards are identified as Alquist Priolo Special Study Zones. Primary ground rupture can also be expected to spread out into secondary areas.

Ground shaking refers to the motion of the Earth's surface from an earthquake. Ground shaking is responsible for the majority of damage from earthquakes and can damage or destroy buildings, structures, pipelines, and infrastructure. The intensity of shaking depends on the type of fault, distance to the epicenter, magnitude of the earthquake, and subsurface geology. The Elsinore Fault is the dominant active fault and is capable of producing a 6.8 to 7.0 M earthquake. The greatest severity of ground shaking would occur in central Corona, Temescal Valley, and northern Corona.

Liquefaction happens when strong ground shaking causes soils that are saturated with groundwater to lose strength and behave more like a liquid than a solid. Where liquefaction occurs, the ground may give way, causing damage or destroying structures, foundations, and infrastructure. Susceptibility to liquefaction depends on the strength and duration of ground shaking, soil characteristics, and depth to the groundwater. Loose, granular materials at depths of less than 50 feet, with silt or clay contents below 30 percent, and saturated by groundwater are most susceptible. Areas at moderate-to-high risk run the entire length of Corona in areas north of SR-91.

Landslides can also be caused by seismic activity. Landslides are the downward movements of soil, debris, and rock in steep topography. Landslides can occur due to intense rainfall or following strong seismic shaking. Landslides are distinguished from debris flows because in a landslide, the majority of material moved is bedrock material; a minor debris flow is the surface slippage of soil. Landslides are most common in steep

topography, such as steep canyon walls or hillsides. In the city, landslides have been occurred along the northeastern front of the Santa Ana Mountains, the Gavilan Hills, Eagle Valley, Sierra Del Oro area, northern Corona, and other areas.

Geologic Hazards

Expansive and collapsible soils are two widely distributed and costly geologic hazards. Expansive soils shrink as they dry and swell as they are wetted. Homes, foundations, infrastructure, and other structures built on these soils may experience shifting, cracking, and breaking damage as soils shrink or expand. In Corona, there is some potential for expansive soils as the city has clay mineral resources, alluvial soils, and weathered granitic and fine-grained sedimentary rocks. To protect against these hazards, soil engineering reports are required by the City, and developers are required to protect against such hazards, if present, prior to development.

Land subsidence (sinking) is generally related to substantial overdraft of groundwater or petroleum reserves from underground reservoirs. According to the Department of Water Resources, there are no known or reported locations of subsidence in Corona. The probability of subsidence is generally low in most of the developed portions of Corona north of Cajalco Road. A small part in the westernmost portion of Corona along SR-91 has a high potential for subsidence. While the City's northern section has a medium to high potential for subsidence, it is unlikely given the lack of active wells. As such, subsidence is considered to be a minor hazard in the City.

Seismic settlement is the lowering of the ground surface as a result of strong earthquake shaking and liquefaction. Seismic settlement and/or collapse is a potential hazard in areas where there are loose underlying alluvial soils and shallow groundwater. Settlement can cause damage to structures or improvements that were built on low-strength materials, such as artificial fills, if they are not adequately compacted. While Corona has areas susceptible to settlement, the building code requires site development practices (e.g., site-specific grading and compaction) to ensure foundational materials are strong and will protect structures.

Soil Hazards

Corrosive soils contain chemical constituents that may cause damage to construction materials such as concrete and ferrous metals. One such constituent is water-soluble sulfate, which, if in high enough concentrations, can react with and damage concrete. Electrical resistivity, chloride content, and pH level are all indicators of a soil's tendency to corrode ferrous metals. High chloride concentrations from saline minerals can corrode metals. Low pH and/or low resistivity soils could corrode buried or partially buried metal structures. Soils throughout the majority of Corona have been found to be highly corrosive to metals and moderately corrosive to concrete.

Figures PS-1 through PS-4 show the location of faults crossing Corona and the areas at greatest risk for liquefaction, landslide, and soil hazards in Corona.

**Figure PS-1
Fault Hazards**

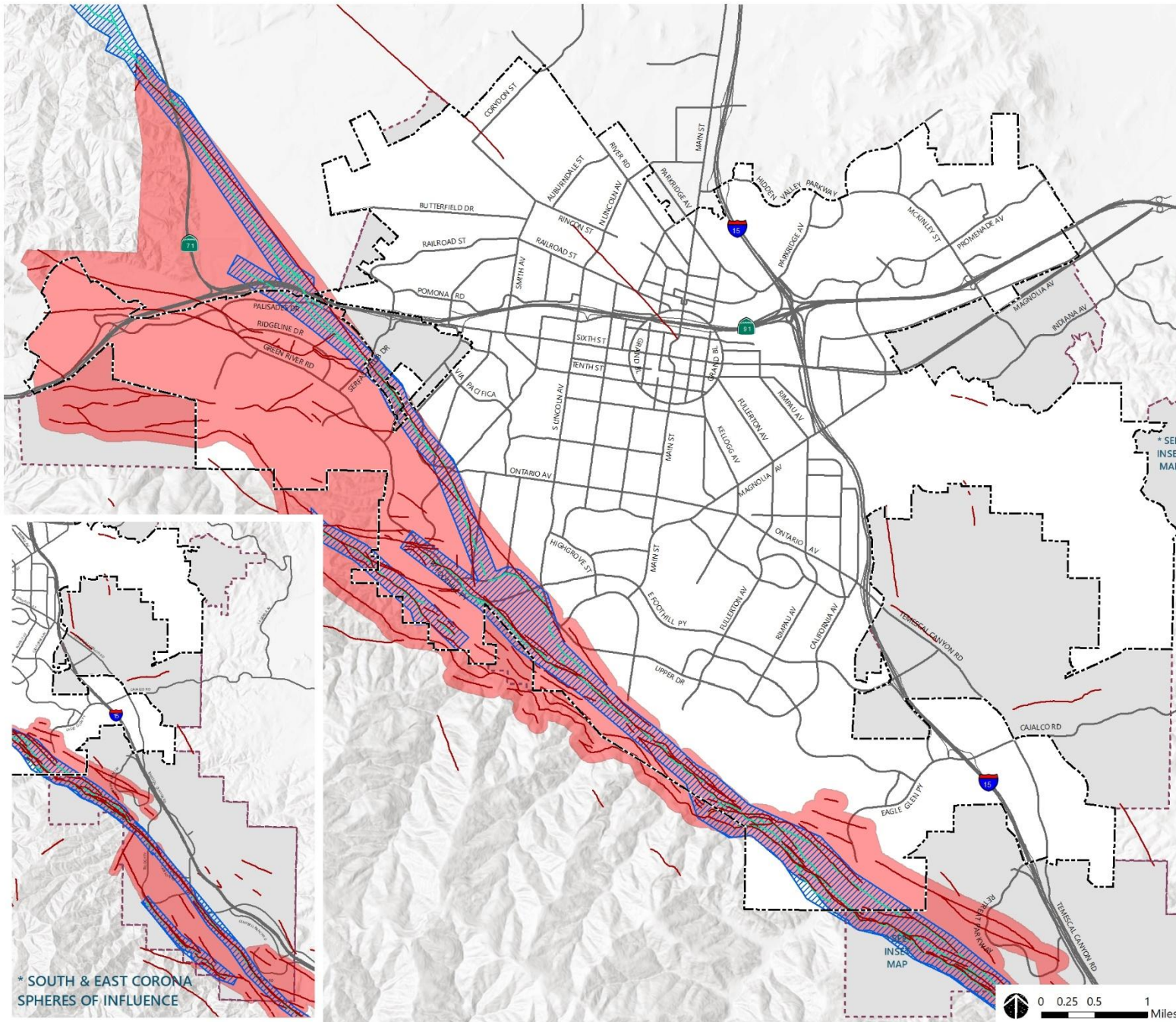
Legend

Faults

- Identified by State (Alquist-Priolo)
- Identified by Riverside County

Elsinore Fault Zone

- Identified by State (Alquist-Priolo)
- Identified by Riverside County
- City Boundary
- Sphere of Influence Areas

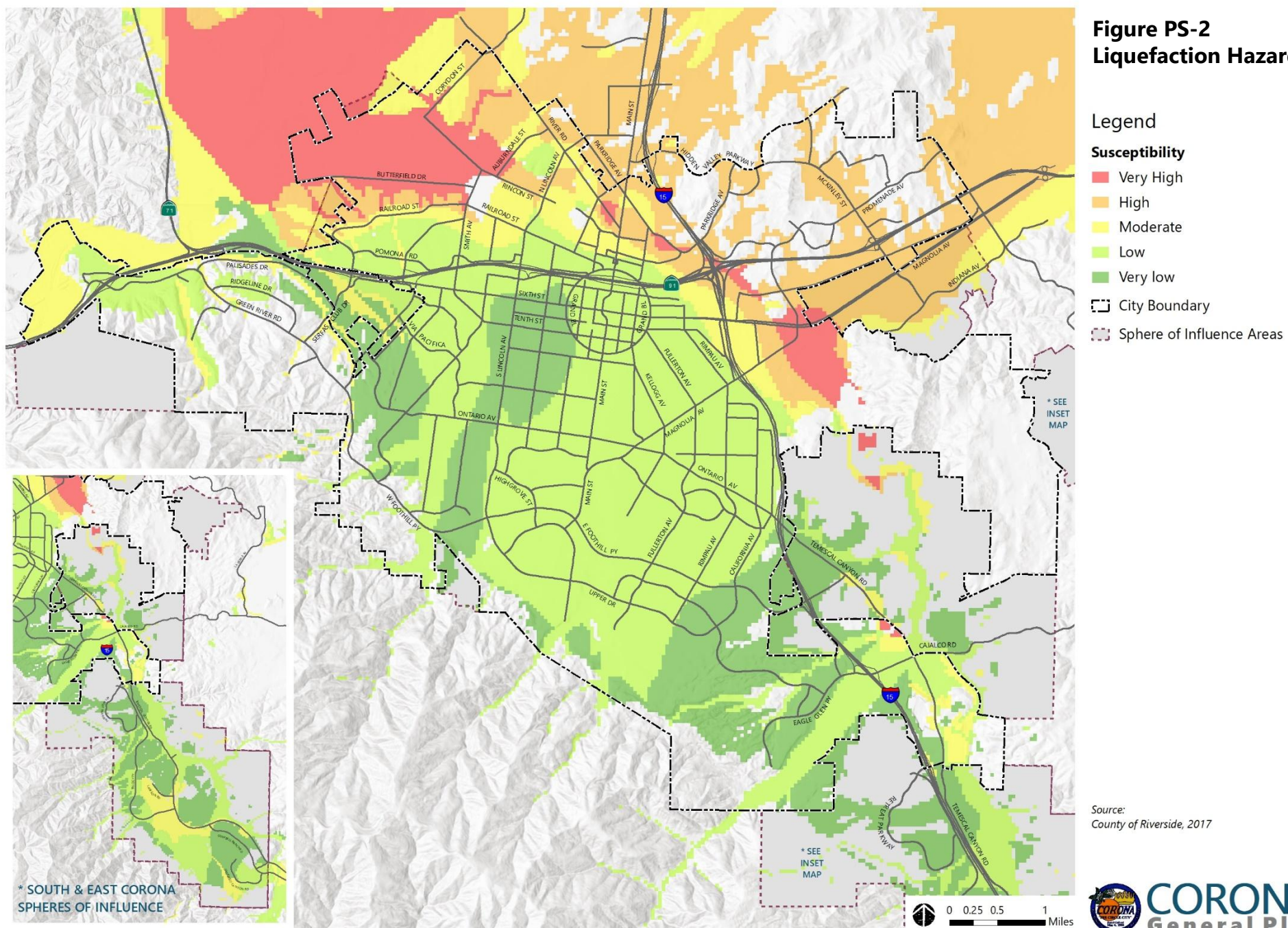


Source:
County of Riverside, 2013

PUBLIC SAFETY

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**Figure PS-2
Liquefaction Hazards**



Source:
County of Riverside, 2017

PUBLIC SAFETY

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**Figure PS-3
Landslide Hazards**

Legend

- City Boundary
- Sphere of Influence Areas

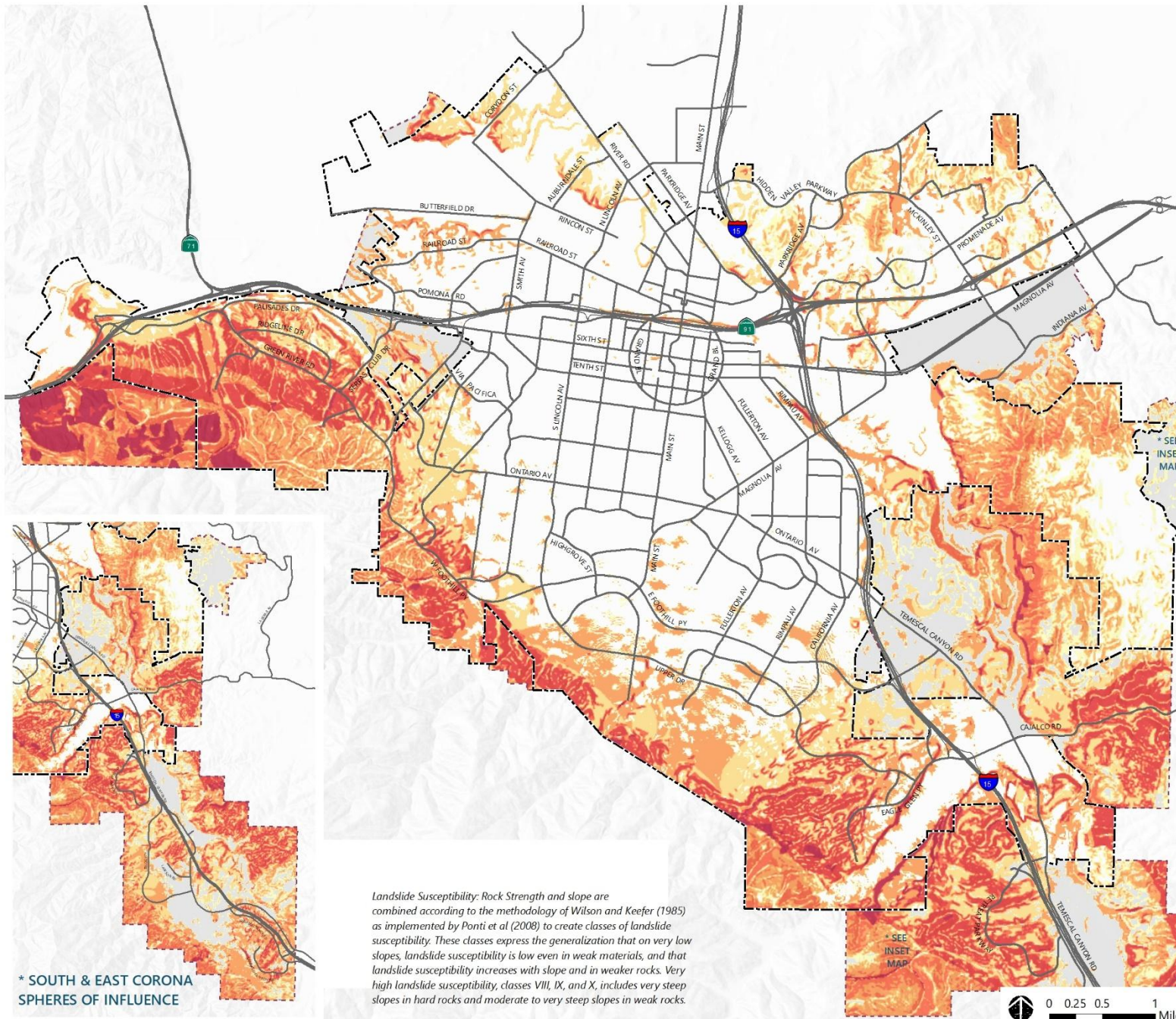
ROCK STRENGTH

1 2 3

SLOPE CLASS	1	2	3
	0	0	0
	0	V	VII
	0	V	VII
	III	VIII	IX
	VI	IX	X
	VII	IX	X
	VIII	IX	X
	VIII	IX	X

**LANDSLIDE
SUSCEPTIBILITY
CLASSES**

(0 III V VI VII VIII IX X)
increasing susceptibility



* SOUTH & EAST CORONA
SPHERES OF INFLUENCE

Landslide Susceptibility: Rock Strength and slope are combined according to the methodology of Wilson and Keefer (1985) as implemented by Ponti et al (2008) to create classes of landslide susceptibility. These classes express the generalization that on very low slopes, landslide susceptibility is low even in weak materials, and that landslide susceptibility increases with slope and in weaker rocks. Very high landslide susceptibility, classes VIII, IX, and X, includes very steep slopes in hard rocks and moderate to very steep slopes in weak rocks.

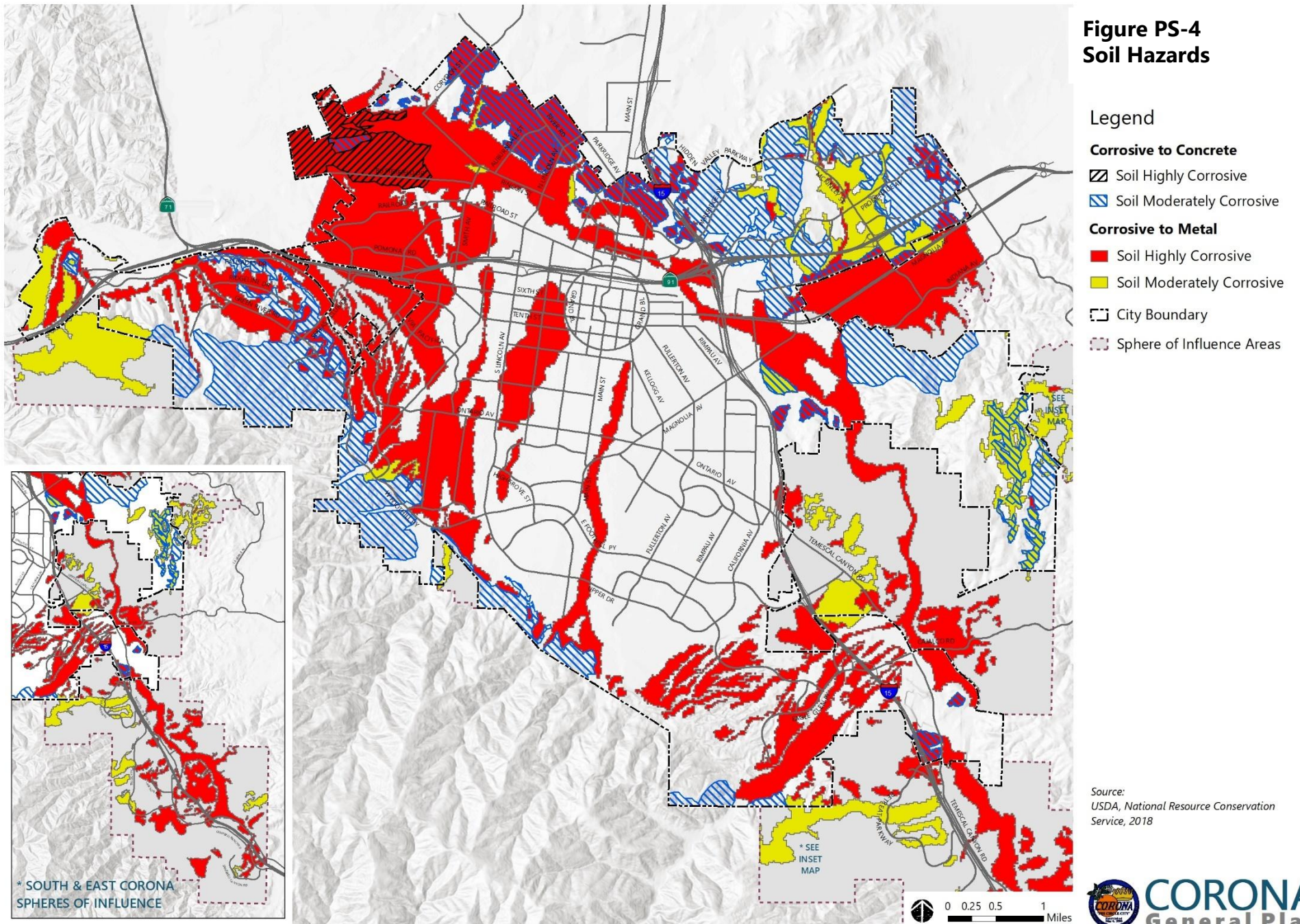
Source:
Deep-Seated Landslide Susceptibility (CGS Map Sheet 58) C.J. Wills, F.G. Perez, C. I. Gutierrez-
California Geological Survey, 2011

For more information please see:
<http://www.conservation.ca.gov/cgs/information/publications/ms/documents/ms58.pdf>

PUBLIC SAFETY

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**Figure PS-4
Soil Hazards**



Source:
USDA, National Resource Conservation
Service, 2018

PUBLIC SAFETY

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GOAL PS-1

Adequate protection of the health, safety, and welfare of the public, property and economic investments, and community social and service functions from seismic and geologic events.

Policies

- PS-1.1** Maintain accurate records, information, and mapping of seismic and geologic activity and hazards in Corona and the region from the California Geologic Survey; update records with information from local geotechnical studies.
- PS-1.2** In areas subject to seismic and geologic hazards, require development proposals to include a geotechnical hazard analysis and specific mitigations to reduce risks to acceptable levels as a condition of approval.
- PS-1.3** Enforce development requirements, such as seismic study analyses, project siting, setbacks, and project design features for proposed developments near the Elsinore Fault Zone and other active faults in accordance with the Alquist-Priolo Act.
- PS-1.4** Require adherence to the latest California Building Codes and associated regulations in the City's Municipal Code; update local codes and development requirements periodically for the latest best practices.
- PS-1.5** Locate new or existing buildings in the Elsinore earthquake fault zone or in other areas at risk from liquefaction, landslides, or other seismic and geologic hazards in the community and take corrective actions to minimize the risk of loss.
- PS-1.6** Identify vulnerable structures and encourage the retrofit or upgrade of vulnerable buildings (e.g., mobile homes) to minimize the damage to structures and reduce the risk of injury or death from seismic or geologic events.
- PS-1.7** Require geotechnical analysis for projects proposed in areas subject to corrosive soils. Where found, require appropriate cathodic protections and other best practices to minimize damage to buildings, structures, and infrastructure.
- PS-1.8** Limit grading for developments to the minimum needed to preserve natural topography, preserve vegetation, and maintain soil and slope stability. Require appropriate grading plans and slope stability to minimize soil instability.

FLOODING AND INUNDATION

Corona's landscape ranges from the alluvial fan at the Prado Dam Basin to abruptly rising terrain of the Santa Ana Mountains on the city's southwest. The general drainage pattern runs in a northwesterly direction toward the Santa Ana River. Substantial flows reach the mouths of the canyons and then spread out on the alluvial fan formed by several watercourses draining from the mountains. Seasonal rains can be intense, particularly in the foothills, making Corona susceptible to flooding.

Riverine Flood Hazards

Corona is bounded by the Santa Ana Mountains, Chino Hills, and lower-lying hills and the Gavilan Plateau to the east. Other major waterways generally flow southward through the city or downward from slopes, joining with Temescal Wash. The most recent flooding occurred in 1993, 1997, 2005, and 2010 along the Santa Ana River, Prado Dam area, and Corona Municipal Airport. While the City has been spared significant damages, Corona's location in a valley makes it susceptible.



Corona Municipal Airport flooding in 2010, retrieved from <http://160knots.com/>.

Corona's flood-prone areas are given two designations. Special Flood Hazard Areas (SFHAs), or the 100-year zone, have a 1 percent chance of flooding in any given year. Northwestern Corona, from Prado Dam to the Airport and westward through Santa Ana Canyon is covered by a SFHAs. Mabey Canyon Wash and Temescal Creek are also SFHAs. A large portion of central Corona is within a "moderate" or 500-year flood zone, with a 0.2 percent chance of flooding in any year. This includes areas around Temescal Wash, Mabey Canyon Wash, Main Street Wash, and the Arlington Channel.

Mudflow/Debris Flow

A mud/debris flow refers to a moving mass of loose mud, sand, soil, rock, and water that travels down a slope under the influence of gravity. A mud/debris flow can also flow down a stream, ravine, canyon, arroyo, or gulch. These flows develop when water rapidly accumulates in the ground during heavy rainfall or rapid snowmelt, changing loose earth into a flowing river of mud. Mud/debris flows can travel miles from the source, growing as they pick up trees, boulders, cars, and other materials. Generally, areas most susceptible to mud/debris flow include steep slopes, landforms subject to erosion, river channels, and hillsides that have been burned by wildfire.

Mud/debris flows are most susceptible in areas that front the steeper slopes on the west side of the city fronting the Santa Ana Mountains and Cleveland National Forest. Following the Santa Ana Canyon fires of 2017 and the Holy Fires of 2018, the city experienced mud/debris flows near homes at the base of the Cleveland National Forest, causing voluntary evacuations. Although damages to homes, personal property, and infrastructure were limited, they underscore a potential safety hazard. To reduce the potential damages from mud/debris flows, residents are forewarned regarding potential hazards that can result from rainfall on previously burned areas.



Mud flows from burned hillsides can carry mud and debris into neighborhoods.

Dam Inundation

Inundation hazards typically result from a partial or complete failure of a dam. Causes include flooding, earthquake, blockage, landslide, lack of maintenance, improper operation, poor construction, vandalism, and terrorism. While the probability of a dam failure is remote, it can cause significant damage, particularly within areas located directly below or downstream (an area called the dam inundation zone) from a dam. With respect to dam hazard rating, a dam is considered a “high” hazard potential if it stores more than 1,000 acre-feet of water, is higher than 150 feet, and could cause property damage and/or evacuation. Dams which are rated as an extremely high hazard could likely result in loss of human life in the event of a complete dam failure.

Table PS-1, *Reservoir Inundation Hazards*, lists each dam with a high hazard rating that would cause significant damage in Corona.

Table PS-1 Reservoir Inundation Hazards

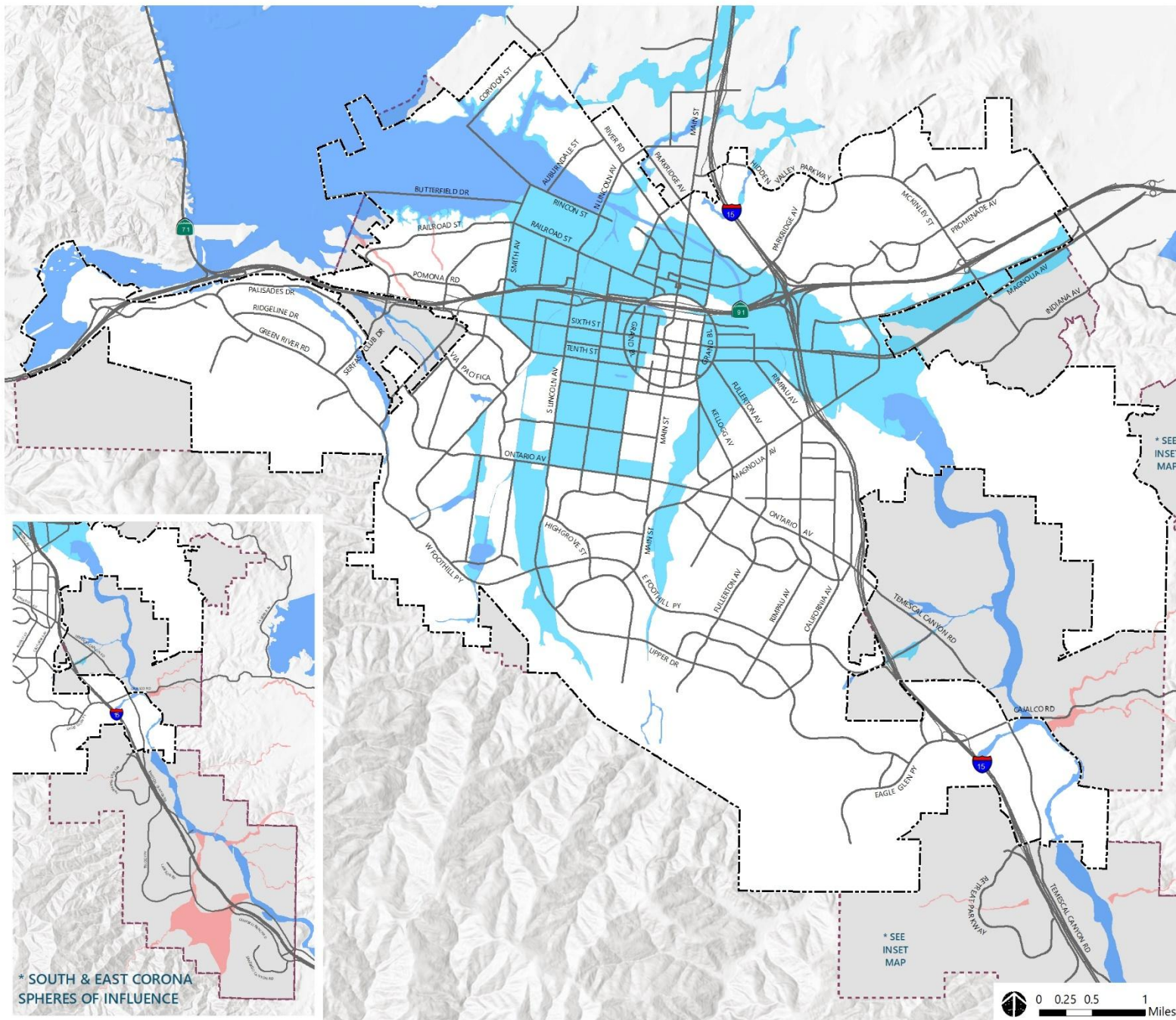
National ID	Dam/Reservoir	Year Built	Storage Capacity (Acre-Feet)	Hazard Rating
CA01103	Mabey Canyon	1974	68 AF	High
CA10022	Prado Dam	1941	295,581 AF	High
CA00797	Harrison Street	1954	208 AF	High
CA00212	Lake Matthews	1938	182,000 AF	Ext. High
CA00305	Mockingbird Canyon	1914	1,250 AF	High
CA01179	Oak Street	1979	138 AF	High

Source: State of California, Department of Water Resources, 2017.

The primary inundation hazard to Corona is Lake Matthews, located seven miles southeast of Corona in the Gavilan Hills. Two dams contain Lake Matthews. Failure of either dam would cause flooding along the Temescal Wash in the eastern and northeastern parts of the city. Should either of the two dams fail, flood waters would reach Corona’s city limits in 40 minutes and the Prado Basin in 65 minutes.



Figures PS-5 through PS-7 show the areas in Corona that are most susceptible to riverine flood hazards, dam/reservoir inundation, and debris/mud flows.



**Figure PS-5
Flood Hazards**

Legend

- 100-Year Flood Zone
- 500-Year Flood Zone
- DWR Awareness Floodplain
- City Boundary
- Sphere of Influence Areas

Notes:

100-year flood zone: Includes areas subject to a 100-year flood as defined by FEMA. This area is also referred to as a special flood hazard area.

500-year flood zone: Includes areas between the limits of the 100-year floodplain and subject to a 500-year flood as defined by FEMA. This area is also referred to as a moderate flood hazard area.

DWR Awareness flood zone: Includes areas defined by the California DWR with a potential for a 100-year flood that may warrant further study to assess the risk of flooding.

This map does not have the official status

Source:
Department of Water Resources (DWR, 2016)
Federal Emergency Management Agency
(FEMA, 2016)

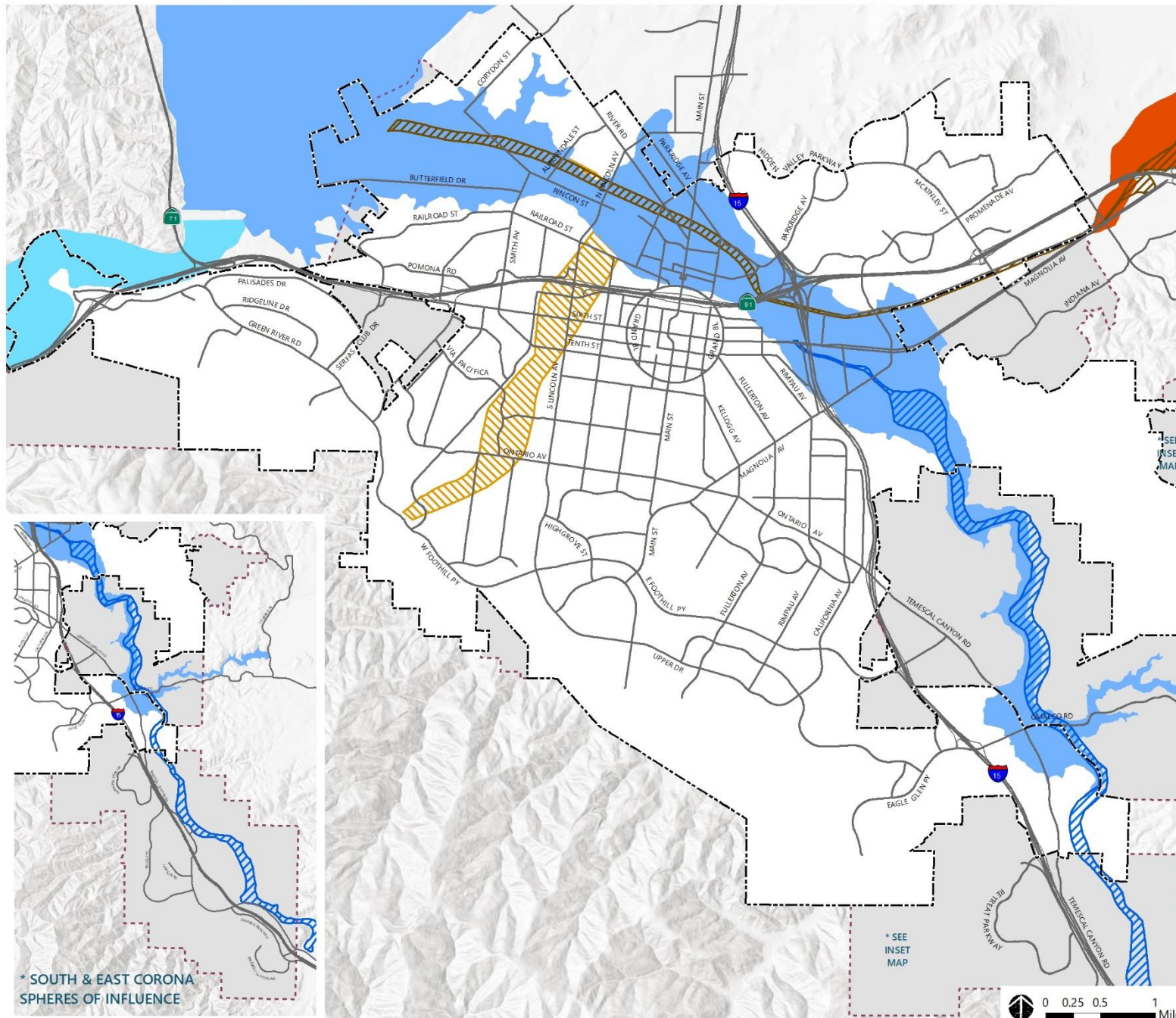
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**Figure PS-6
Dam Inundation
Hazards**

Legend

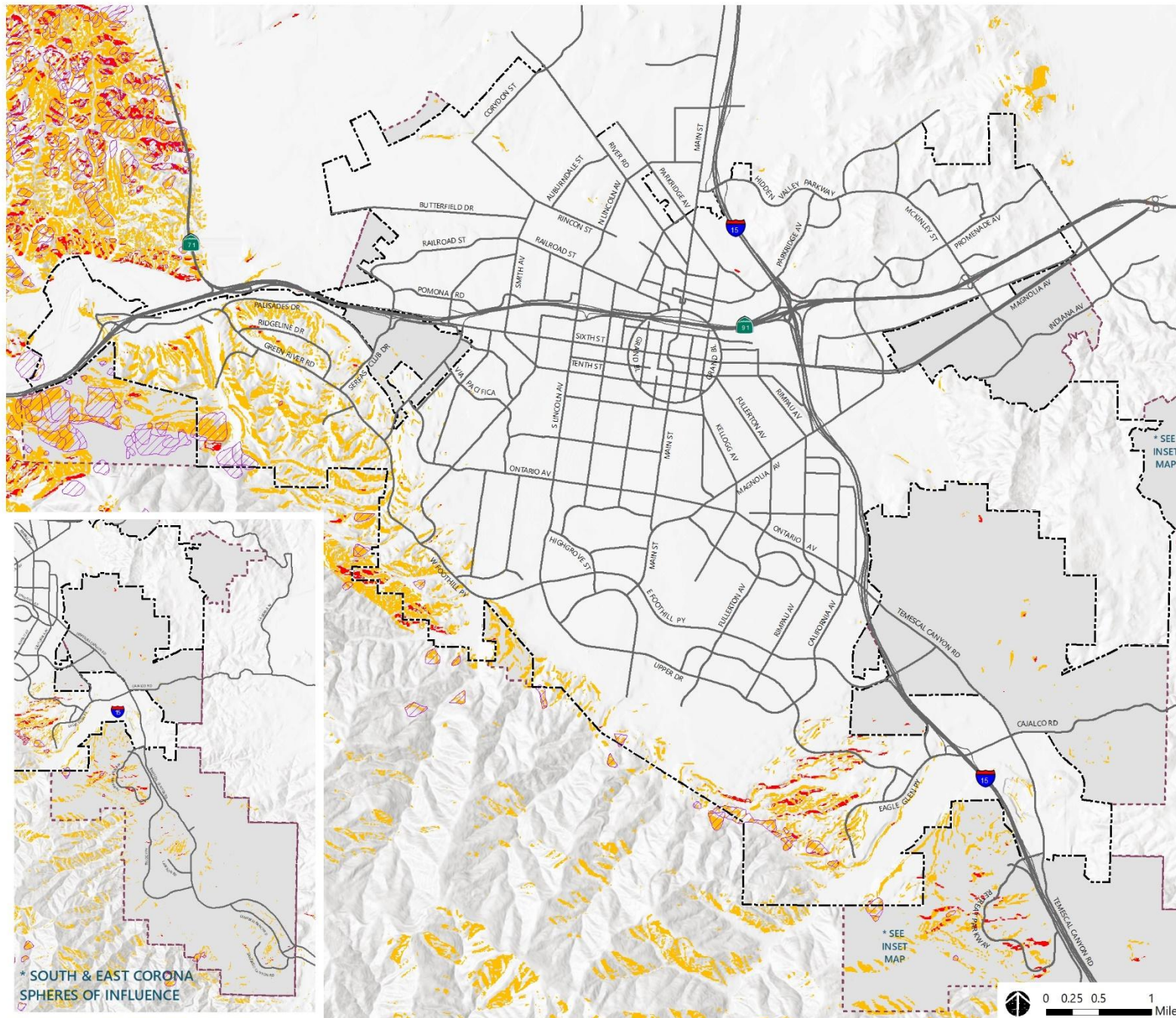
-  Harrison St.
-  Lee Lake
-  Lake Mathews
-  Mabey Canyon
-  Mockingbird Canyon
-  Prado
-  City Boundary
-  Sphere of Influence Areas



Source:
Department of Water Resources, 2015

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**Figure PS-7
Debris Flow Hazards**

Legend

- Landslide Deposits
- Soil Slip Susceptibility**
 - Moderate Susceptibility
 - High Susceptibility
- City Boundary
- Sphere of Influence Areas

Source:
Morton, 2004. Preliminary Digital Geologic Map
of the Santa Ana 30' X 60' Quadrangle, Southern
California, Version 2.0; Morton, et al., 2003.
Preliminary Soil-Slip Susceptibility Maps, South-
western California

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GOAL PS-2

Adequate protection of the health, safety, and welfare of the public, property and economic losses, and community social and service functions from flooding and dam inundation events.

Policies

- PS-2.1** Maintain and continuously update the City's floodplain safety hazards maps and dam inundation maps in concert with FEMA map amendments, improvements to local drainage facilities, and updated flood studies from individual projects or the State of California.
- PS-2.2** Evaluate, on a project-by-project basis, whether new development should be located in a flood hazard zone and identify and require construction methods or other appropriate methods to minimize the risks of damage for projects located in flood zones.
- PS-2.3** Require adherence to the California Building Code, Municipal Codes, FEMA flood control guidelines, and Corona Floodplain Management Ordinance for the purposes of avoiding or minimizing the risk of damages to structures, injury, or loss of life.
- PS-2.4** Locate, when feasible, new essential public facilities outside of flood zones; for those that must remain or are built in flood hazard zones, harden structures to maintain the structural and operational integrity of such public facilities in case of flooding.
- PS-2.5** Identify vulnerable structures, infrastructure, and utilities in areas of special flood hazards and encourage the retrofit or upgrade of such structures and infrastructure to minimize damages and reduce the risk of injury or death from flooding.
- PS-2.6** Prohibit the alteration of natural floodplains or improved drainage areas or the allowance of encroachments by structures without determination by the Floodplain Administrator that such actions will not be detrimental to public health and safety.
- PS-2.7** Establish and maintain cooperative working relationships among public agencies with responsibility for flood protection, including Riverside County Flood Control District, County Public Works, neighboring jurisdictions, and other entities.

HAZARDOUS MATERIALS

Hazardous materials are toxic, ignitable, corrosive, or reactive substances that can harm people, animals, and the environment. The improper generation, use, and disposal of hazardous materials and wastes can contaminate soil and groundwater resources and compromise the health and quality of life of residents. Accidents that involve the release of hazardous materials can also cause explosions or spills that endanger lives, property, and the environment.

Types of Hazardous Materials

Hazardous materials include, but are not limited to, hazardous substances, hazardous wastes, and any material that a business or implementing agency has a reasonable basis for believing would be injurious to public health and safety or harmful to the environment if released into the workplace or the environment.

Toxic Air Pollutants

Facilities in certain industry sectors that manufacture, process, or otherwise use toxic chemicals in amounts above established levels must report how each chemical is managed through recycling, energy recovery, treatment, and permitted releases into the air or water or placed in some type of land disposal. Similar to communities across southern California, the City of Corona has numerous facilities that are required to report the level and disposition of toxic air pollutants they release.

Hazardous Waste Generators

Like many urban cities, Corona has hundreds of licensed commercial and industrial businesses and uses that generate some form of hazardous materials or waste. The EPA regulates generators of hazardous waste based on the amount of waste generated: 1) large quantity generator (more than 1,000 kilograms of hazardous waste per month or more than one kilogram/ month of acutely hazardous waste) or 2) small quantity generator (between 100 and 1,000 kilograms of hazardous waste per month).

Solid and Liquid Waste

Solid and liquid waste facilities include a wide variety of facilities—such as landfills, transfer stations, material recovery facilities, composting sites, transformation facilities, closed disposal sites, and used oil collection sites. Although Corona does not have a hazardous waste disposal site, there are several other types of solid waste facilities, including open and closed landfills, active transfer/processing sites, used oil collection sites, and waste tire collection sites that are located either in or near the City.

Medical Waste

Medical facilities generate a variety of hazardous waste. Large hospitals are the primary sources of medical wastes, but there are numerous other sources. Corona has several hospitals, clinics, professional offices, dentists, blood and plasma centers, and other facilities that produce medical waste. Hazardous materials stemming from these facilities include contaminated medical equipment or supplies, infectious biological matter, prescription medicines, and radioactive materials.

Contaminated Sites

Although the generation, use, transport, and disposal of hazardous materials is carefully regulated today, past activities have led to the contamination of several sites. With the City's proximity to the Santa Ana River, reliance on groundwater supplies, and location of industrial activities in a populated urban community, improper use and disposal of hazardous materials could pose health threats. Corona is currently home to large contaminated sites due to legacy industrial uses. Even historical agricultural activities have caused some groundwater contamination. For these sites, the City works with the California Department Toxic Substances Control, California Environmental Protection Agency, and federal agencies to develop and implement remedies. Sustained efforts have resulted in the cleanup of contaminated sites.

Natural Gas Transmission Pipelines

Rupture of gas lines due to a natural disaster or accidental breach could have very serious consequences in highly populated areas. Southern California Gas Company (SoCalGas) operates two high-pressure transmission lines for natural gas in Corona. The east-west transmission line begins west of SR-71 and extends eastward on the north side of SR-91 to the intersection of Promenade and McKinley, where it divides into two segments that extend to SR-91. The north-south line runs south along River Road to Main Street, jogs around the east side of the Circle, and continues south along Fullerton to Ontario Avenue, where it joins with Temescal Canyon Road.

Pipeline safety is critical, particularly within areas that are subject to earthquakes, flooding, and other hazards that can affect high-pressure transmission pipelines. In accordance with Public Utilities Code §§ 961 to 963, SoCalGas implements an integrated pipeline safety program that includes design, maintenance, and operation. SoCalGas safety plan addresses: (1) safety systems, (2) emergency response, (3) state and federal regulations, (4) continuing operations, and (5) emerging issues. Requirements for safety measures are heightened in highly populated areas such as Corona. These plans are shared annually with city fire department staff.

Hazardous Material Transport

Releases of explosive, highly flammable, or toxic materials can cause fatalities and injuries, necessitate evacuations, destroy property, or result in serious environmental effects if toxic materials seep into surface or groundwater supplies. In Corona, hazardous materials and wastes are transported on the SR-91 and I-15. The City has no direct authority to regulate the transport of hazardous materials on federal and state highways or rail lines. For transporting explosives, inhalation hazards or other potentially dangerous materials, and controlled quantities of radioactive materials, state and federal governmental agencies require transporters to include safeguards to reduce the risks of hazardous materials release.

The following goal and supporting policies are designed to establish strategies to minimize exposure to hazardous materials through the documentation, monitoring, cleanup, storage, transport, and disposal of hazardous materials.

GOAL PS-3

Ensure that the health, safety, and general welfare of residents and visitors of the City of Corona, including the overall health of the natural environment, is provided through good land use planning and strict adherence and enforcement of the City of Corona Hazardous Material Area Plan, Local Hazard Mitigation Plan, California Fire Code, Certified Unified Program Agency, and other pertinent sources and documents.

Policies

- PS-3.1** Enforce federal and state regulations and local ordinances in accordance with Certified Unified Program Agency requirements that require all users, producers and transporters of hazardous materials and waste to clearly identify materials that they store, use or transport, and make available emergency response plans, emergency release reports, hazardous material inventory reports, and toxic chemical release reports to reduce the risk from natural or other hazards and effectively protect the community.
- PS-3.2** Require projects to comply with applicable land use regulation, building and fire codes, and local ordinances; determine the need for buffer zones/setbacks, building modifications, site design, operational changes, or other measures to minimize risk from hazardous materials.
- PS-3.3** Review and update the City of Corona’s Hazardous Material Area Plan every three years as required by the Health and Safety Code Chapter 6.95 and implement policies contained therein. Ensure newly developed and annexed areas of the City are included in the Plan and that the area plan policies are coordinated with those of adjacent municipalities.
- PS-3.4** Utilize local enforcement powers for land use regulation, code enforcement, and nuisance abatement to address the use and/or discharge of hazardous material to the air, ground, wastewater collection and storm drain systems, groundwater, or surface water bodies.
- PS-3.5** Actively work with federal, state, county, and responsible entities to ensure proper cleanup activities are undertaken in as a timely manner as possible and are effectively managed to clean up contaminated sites so as to protect the public’s health and safety.
- PS-3.6** Continue to promote the safe disposal of hazardous and toxic substances that are used in private households through the support of the hazardous materials collection efforts and address the long-term need for a local facility working with the County.
- PS-3.7** Coordinate hazardous material planning and appropriate response efforts with other City departments, as well as local, county, and state agencies to maintain readiness to mitigate local impacts resulting from hazardous material-induced emergencies.

- PS-3.8** Require property owners of contaminated sites to develop and implement, at their own expense, a site remediation plan to the satisfaction of the Riverside County and the California Department of Toxic Substances Control.
- PS-3.9** Minimize the potential risk of contamination to surface water and groundwater resources and implement restoration efforts to resources adversely impacted by past urban and rural land use activities.

AIRPORT HAZARDS

Corona Municipal Airport is a general aviation airport in northwest Corona. The airport serves primarily recreational uses for aircraft, but also serves as a staging ground for disaster response for fires and other emergencies. As required by the California Aeronautics Act, the Riverside County Airport Land Use Commission (ALUC) has established an Airport Land Use Compatibility Plan (ALUCP) for the Airport with policies to address the influence areas of airports, aircraft noise standards and criteria, accident potential zones, and building heights near airports. Internally, airport operations are governed by an airport master plan that includes a comprehensive land use plan for the operation of an airport and the area surrounding the airport. The airport accommodates 50,000 operations annually and is not anticipated to substantially increase due to environmental constraints in the surrounding environs.

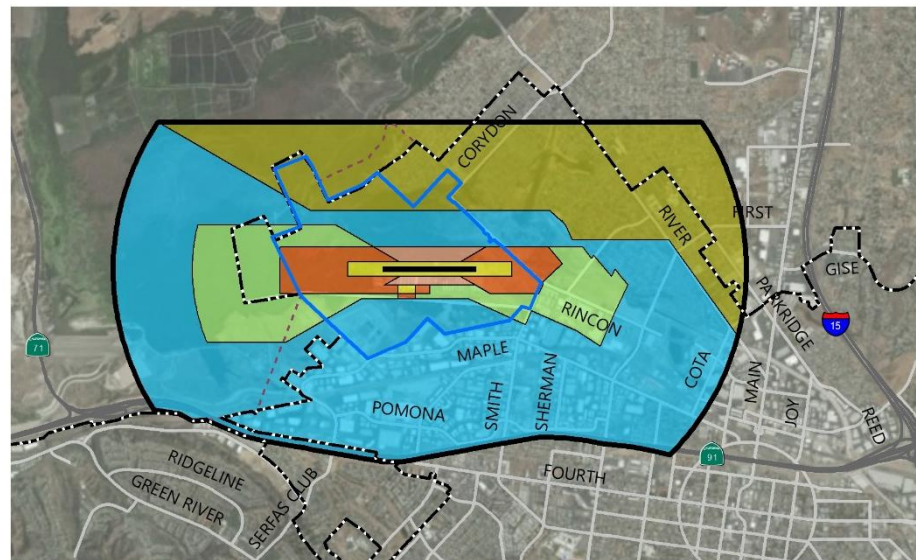


Corona Municipal Airport

Airport Hazard Zones

Riverside County ALUC has prepared a hazard map for Corona Municipal Airport that delineates safety zones based on the California Airport Land Use Planning Handbook. Taken together, these zones comprise the Airport Influence Area (AIA) defined by ALUC for the Corona Municipal Airport. These safety zones are defined and illustrated below.

- » **Zone A**, Runway Protection Zone. An area ("clear zone") off the end of a runway to enhance the protection of people and property on the ground.
- » **Zone B1**, Inner Approach/Departure Zone. Where aircraft are typically 200 to 400 feet above runway elevation for straight-in arrivals or straight-out departures.
- » **Zone B2**, Adjacent to Runway. This area fills out gaps in Zone B1 and enhances protection for approach/departures that veer off the runway.
- » **Zone C**, Extended Approach/Departure Zone. This refers to an area where planes are flying around 800 feet to 1,000 feet from the ground.
- » **Zone D**, Primary Traffic Patterns and Runway Buffer Zone. This refers generally to an area that includes most of regular air traffic patterns and pattern entry routes.
- » **Zone E**, Other Environs. This refers to the influence area beyond the compatibility zones. Overflight annoyance is the primary impact. The risk of accident is very low.



Compatibility Zones

- | | |
|---|---|
| A - Runway Protection Zone | D - Primary Traffic Patterns and Runway Buffer Area |
| B1 - Inner Approach/Departure Zone | E - Other Airport Environs |
| B2 - Adjacent to Runway | Airport Property |
| C - Extended Approach/Departure Zone | |

Figure PS-8 Airport Land Use Compatibility Zones

GOAL PS-4

Implement land use restrictions and review procedures that encourage adequate protection of the community, its residents, and business from airport land use and flight-related hazards.

Policies

- PS-4.1** Protect flight paths from encroachment due to proposed development projects or redevelopment in Corona by using the Riverside County ALUCP and Corona Airport Master Plan to evaluate the consistency of proposed land uses and development projects.
- PS-4.2** Regulate building heights, land use intensities, and occupancies beneath airport approaches and departure paths consistent with the Riverside County ALUCP, the Corona Municipal Airport Master Plan, and all other applicable State and Federal regulations.
- PS-4.3** Ensure that review by the Riverside County Airport Land Use Commission for projects within the airport influence area occurs within the early stages of the development review process by the City and prior to project approval by the City.
- PS-4.4** Periodically review the Corona Municipal Airport Master Plan to update operational and safety procedures, reflect State and Federal mandates, improve the use of airport property, and recommend land use capability standards for land surrounding the airport.
- PS-4.5** Submit proposed projects to the ALUC for review if new development (including buildings, antennas, other structures) has a height exceeding:
- 35 feet in Compatibility Zone B1, B2, or a Height Review Overlay Zone
 - 70 feet within Compatibility Zone C
 - 150 feet within Compatibility Zone D or E
 - 200 feet or taller regardless of their location
- PS-4.6** Periodically monitor the potential for wildlife hazards to the flights and operations of the Corona Municipal Airport emanating from the Prado Basin, retention basins, golf courses, Santa Ana River, or other areas. Comply with federal wildfire strike hazards regulations if hazard exists.
- PS-4.7** Periodically consult with the Riverside County Airport Land Use Commission in matters affecting the operation of the Corona Municipal Airport and in regard to proposed development within the Influence Area that affect the safety and operations of the airport.

POLICE SERVICES

Corona Police Department (Corona PD) is a full-service organization providing 24-7 services. The mission of the Police Department is to achieve excellence in policing, security and safety through strong community partnerships, and investment in our people. Corona PD provides a diversified array of services for residents and business.



Corona Police Department Headquarters

Key functions of Corona PD include:

- » **Field Services.** Includes the City's patrol services, aviation unit, special response team, K9, explorers, HOPE program (Homeless Outreach and Psychological Evaluation), and mounted enforcement unit, among other programs.
- » **School Services.** Due to the large student population at high schools, there is a continued need for prevention and intervention by school officials, the community, and police. The City jointly funds school resource officers at high school.
- » **Traffic Control.** The traffic bureau facilitates the safe and orderly movement of traffic through patrol, law enforcement, education, and investigations. Additional services, such as child-seat installation, are also provided.
- » **Investigation Services.** This division investigates crimes against persons, property crimes, vice-narcotics, computer crimes, gang control, traffic accidents, and a variety of other incidents requiring investigation and follow-up.
- » **Aviation Services (contract)** Corona PD contracts with Riverside PD to provide helicopter patrols (Air One patrols) to Corona based on the type and priority, such as in-progress crimes, vehicle pursuits, area checks, and missing persons.

Crime prevention is an important part of the department's mission. Corona PD values its community partnerships as they help to protect lives, property, and the quality of life within neighborhoods and business districts. To that end, Corona PD participates in community outreach events that support a positive public presence. These include:

- » **Business Security Survey.** *This survey is intended to evaluate current security measures. A Corona Police Officer or Crime Prevention Assistant will use the survey results to recommend actions to help prevent/deter future crime.*
- » **Child Identification.** *The Corona Police Department uses a digital fingerprint machine equipped with a camera to provide parents with a printout that includes the child's name, date of birth, photo, allergies, and fingerprints.*
- » **Community Outreach.** *Outreach events typically include a police presence, car/motorcycle display, fingerprint machine, career opportunities, and crime prevention materials.*
- » **Police Explorer Post.** *Police Explorers receive training and exposure in career opportunities, life skills, citizenship, character education, and leadership experience.*
- » **Neighborhood Watch.** *Corona PD works with neighborhoods and residents to set up and implement neighborhood watch programs to learn how to report activities in order to keep neighborhoods safe.*
- » **Personal Safety.** *Crime prevention materials are made available to help residents reduce their chance of being victimized. Topics include vehicle and home security, robbery, burglary, domestic violence, gang avoidance, and senior safety.*



Enjoying National Night Out with Corona PD

Corona PD Goals

The City of Corona's Police Strategic Plan guides its internal operations. The current 2017–2019 edition is the fifth update to the original 2012 strategic plan. The Police Department Strategic Plan contains the following 11 goals:

- » *Goal 1: Prevent and Suppress Crime*
- » *Goal 2: Maintain Adequate Staffing Ratios*
- » *Goal 3: Maintain an Emergency Response Time within Five-Minutes*
- » *Goal 4: Robust Radio Interoperability*
- » *Goal 5: Maintain and Enhance Partnerships with the Community*
- » *Goal 6: Implement Department Wide "Succession and Success" Plan and Mentor*
- » *Goal 7: Enhance In-House Technology and Equipment*
- » *Goal 8: Enhance and Expand City-Wide Camera Systems*
- » *Goal 9: Animal Services & Enforcement*
- » *Goal 10: Fiscal Efficiency*
- » *Goal 11: Ongoing Department Review of Practices, Procedures, and Policies*

Law Enforcement Response Zones

Law enforcement is divided between the City of Corona, Riverside County Sheriff, and the California Highway Patrol. The City of Corona operates four response zones to cover the incorporated area. Riverside County Sheriff provides patrol services in El Cerrito, Coronita, Home Gardens, and Temescal Valley. In addition to the Sheriff, the California Highway Patrol (CHP) is responsible for traffic enforcement in unincorporated areas. Mutual aid agreements are in place for jurisdictions to assist one another as requested. Figure PS-9 shows police and sheriff response zones in Corona and its SOI.

**Figure PS-9
Police and Sheriff
Response Zones**

Legend

 Main Police Station

 Sub-Station

Corona Police Patrol Zones

 Zone 1

 Zone 2

 Zone 3

 Zone 4

County Sheriff Patrol Zones

 Jarupa Valley Station

 Lake Elsinore Station

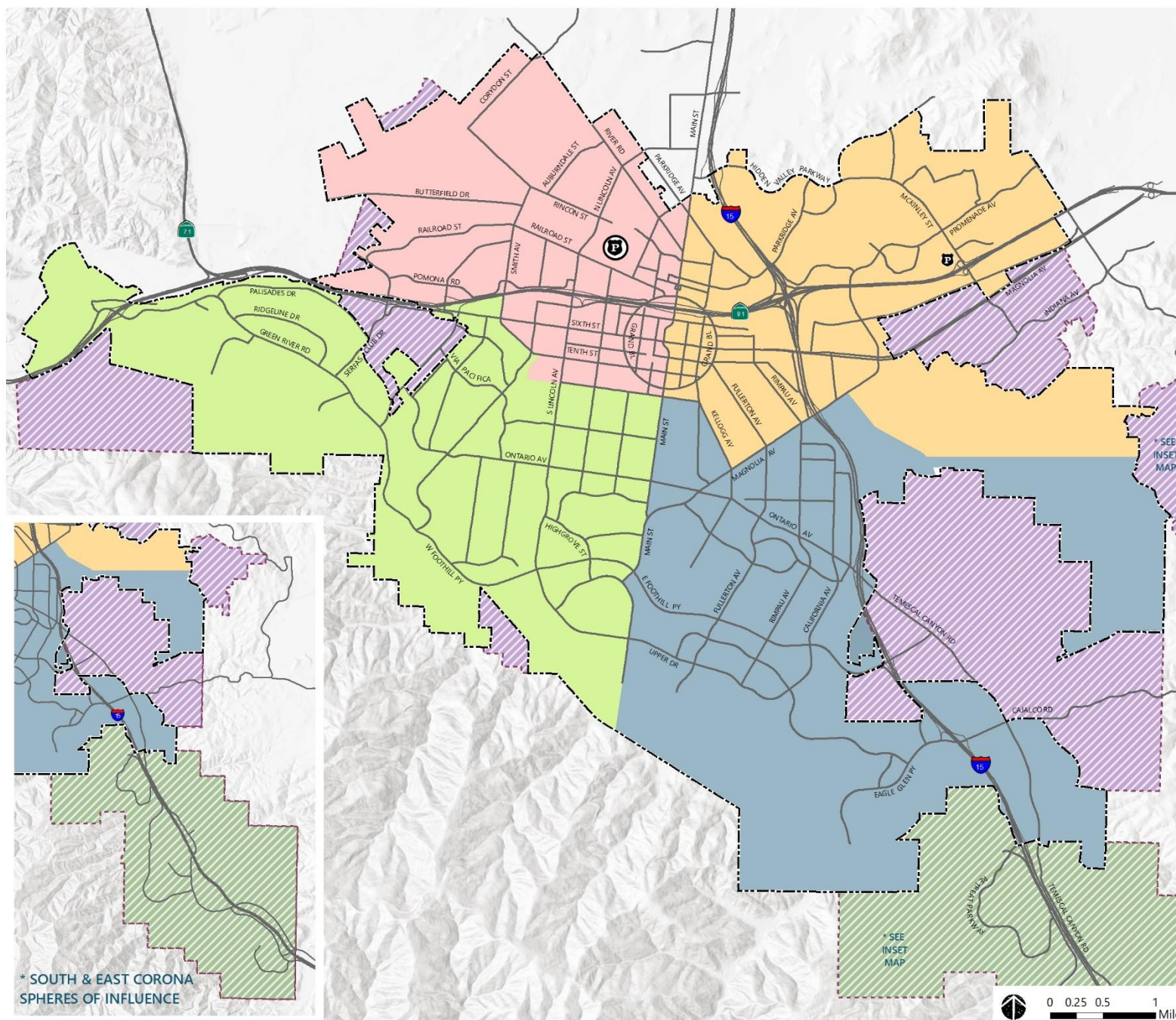
 City Boundary

 Sphere of Influence Areas

Notes:

The Coronita, El Cerrito, Home Gardens areas are serviced by the Jurupa Valley Sheriff's Office. Temescal Valley area is serviced by the Lake Elsinore Sheriff Station.

Source:
City of Corona, 2017
Riverside County, 2017



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GOAL PS-5

Ensure that there is an adequate service level of law enforcement services provided for all residents, visitors, and businesses throughout the City of Corona.

Policies

- PS-5.1** Ensure that police staffing, facilities, and equipment are expanded commensurably to serve the needs of the City's growing population, business community, and visitor population.
- PS-5.2** Identify and provide sites for police facility location(s) or substations in different locations based on community need, phasing, and timing; periodically assess the needs for establishing or relocating substations.
- PS-5.3** Assess the impacts of incremental increases in community development and resulting impacts on traffic congestion, municipal infrastructure capacity, and emergency response times. Ensure through the design review process that proposed projects provide mitigation to maintain law enforcement services at acceptable, safe levels.
- PS-5.4** Periodically evaluate population growth, development characteristics, level of service, and incidence of crime in the City of Corona to ensure that an adequate level of police service is maintained.
- PS-5.5** Require new and expanded development projects or those in which change operations to contribute an appropriate amount of impact fees based on their proportional impact and demand for police services.
- PS-5.6** Cooperate with all Riverside County law enforcement agencies and other public safety providers to provide backup police assistance and mutual aid in emergency situations.
- PS-5.7** Conduct periodic police related emergency management exercises with City personnel and surrounding jurisdictions to maintain readiness for emergency situations should they arise.
- PS-5.8** Strive to meet police response times for Priority 1 calls throughout the community consistent with the departmental strategic plan and level of service objectives.
- PS-5.9** Continue to work the Corona-Norco Unified School District to provide services that make school environments safe and welcoming places for learning and personal enrichment and growth for students.

GOAL PS-6

Ensure that police services are provided in a manner that reflects and is sensitive to the characteristics and needs of resident population, visitors, and business community.

Policies

- PS-6.1** Continue to coordinate through a regularly updated City Service Delivery Plan, the provision of police and fire services with all other public safety and responsiveness programs in order to meet community needs.
- PS-6.2** Encourage, facilitate, and participate, where appropriate, in communications between police service providers and Corona residents to address issues of responsiveness and sensitivity that may arise.
- PS-6.3** Review with the public safety service provider's problems of responsiveness and sensitivity and discuss means of resolution if and when there are a high frequency and repetition of complaints.
- PS-6.4** Encourage, facilitate, and participate in the training of police personnel to be responsive and sensitive to the needs of all of the City of Corona's residents, while maintaining a high level of service and protection.
- PS-6.5** Aggressively pursue conformance with the City's nondiscriminatory hiring policies by all public safety providers.
- PS-6.6** Interact and extend police support to venues for youth activities of community-based groups, Parks and Recreation Department, and other groups to help reduce youth-generated crime in the City.

GOAL PS-7

Encourage the use of land use and development configuration and site design standards within residential and other developments to minimize crime and improve the safety for residents, visitors, and employees.

Policies

- PS-7.1** Require larger developments to incorporate site design features that help ensure maximum visibility and security for entrances, pathways, streets and sidewalks, corridors, public and private open space, and parking lots and structures.
- PS-7.2** Require the incorporation of appropriate lighting that provides adequate exterior illumination around commercial, business park, public spaces, parking lots, and multifamily structures.

- PS-7.3** Work with traffic engineers to develop methods through design, enforcement, and engineering to reduce the volume and severity of vehicle, pedestrian, and bicycling accidents citywide and around sensitive land uses such as schools, apartments, and other highly traveled uses.
- PS-7.4** Enhance public awareness and participation in crime prevention by encouraging changes to be made through crime prevention by design (vegetation selection and maintenance, motion sensors, lighting, etc.) and establishing and participating with police in neighborhood safety and crime prevention programs (e.g. neighborhood watch).
- PS-7.5** Require large-scale retail developments to incorporate video surveillance security systems within their facilities and grounds to monitor open public spaces and, where appropriate and feasible, provide office space for police facilities.
- PS-7.6** Provide opportunities for police department review and input regarding appropriate methods to mitigate the impacts of land use permits that have functions and characteristics that may impose a higher than normal level of security and police protection.
- PS-7.7** Provide appropriate security measures around sensitive essential public facilities, such as water, reclaimed water, radio towers, and other facilities required for use for public health and safety purposes.



FIRE HAZARDS

The City of Corona has a complex fire environment. Hundreds of businesses in Corona use, manufacture, or store hazardous materials. It has a housing stock of approximately 50,000 housing units, mostly two- to four-story structures and multistory commercial and industrial complexes. In addition, Corona is surrounded by extensive open space—including the Cleveland National Forest, Chino Hills, Corona Hills, Gavilan Hills, and Temescal Valley—all susceptible to wildfire. The juxtaposition of wildland, urban, and wildland-urban interface areas underscores Corona's challenging fire environment. The general plan provides an overall framework to address this fire environment.

Planning Context

The context for fire planning and suppression in California has evolved over the years. City fire departments not only address structural fires but have evolved into emergency medical service providers (accounting for at least two-thirds of all calls). Moreover, urban fires have become more dangerous due to the mix of hazardous materials and toxic substances used/stored in business operations. Cyclical drought in southern California followed by seasonally wet years have also resulted in a dramatic increase in vegetation growth and dying, resulting in an increasing frequency of wildfires. This has become more of a threat as urban development has encroached into open space areas in many communities, expanding the wildland-urban interface that must be protected.

Concurrent with the above changes, the legal context affecting fire operations has become more complex over time. State laws have required that communities increasingly focus on prevention—be it the provision and upgrade of water infrastructure, update of building and land development codes, planning and maintenance of evacuation routes, and a myriad of other issues. The wave of wildfires over the last decade has resulted in new state laws that require cities with very high fire hazard severity zones to submit safety elements to state agencies for review. And yet the funding mechanisms have remained essentially the same over time.

This safety element, including the supplemental Technical Background Report and the fire safety checklist provided to CAL FIRE, is intended to respond to these challenges.

Corona Fire Services

Established in 1896, Corona Fire Department has grown from a volunteer operation to a full-service organization. Corona Fire now provides 24-7 services to a 75-square-mile service area, which includes the sphere of influence. In addition, Corona Fire serves a vast area beyond the City's "planning area" that extends into the county. Multiple agency efforts are coordinated with county, state, and federal agencies. Corona Fire's mission is to prevent or minimize the loss of life, damage to the environment and loss of property from the adverse effects of fire, medical emergencies, and hazardous conditions. This is achieved by responding with properly staffed, well-equipped, expertly trained, and healthy firefighters within response time standards.

Corona Fire is referred to as an “all risk” fire department, responding to a wide range of fires, medical emergencies, and hazardous conditions in the community. Each year, Corona Fire responds to more than 13,000 calls for structural fires, freeway and roadway accidents, wildland fires, hazardous material incidents, search and rescue, and emergency medical services, among others. Key department functions include:

- » **Fire Prevention.** *The division is responsible for reviewing development site plan and site construction, occupancy inspections, weed abatement, investigating complaints and suspicious fires, and hazardous materials coordination. The Division conducts youth fire setter intervention and fire safety education. In addition, staff assigned to fire stations conduct inspections on occupancy uses.*
- » **Fire Operations.** *The department responds to fires, medical emergencies, and hazardous conditions and provides advanced and basic life support. Specialized teams include search and rescue, hazardous materials response, technical rescue, and tactical emergency medical support. The training division coordinates and provides continuous education and advanced training to operations personnel.*
- » **Emergency Medical Services.** *The division coordinates emergency medical response and EMS public education. The division is responsible for continuous program quality improvement, and skills and license maintenance of department EMT and paramedic personnel. It also coordinates with hospital emergency departments, health care providers, and the Riverside County EMS Agency.*
- » **Emergency Management.** *This function is charged with creating the framework within which communities reduce vulnerability to hazards and cope with disasters. It is responsible for coordinating emergency planning, preparedness, risk reduction, response, and recovery. Emergency communications, facilities, and apparatus are all handled by other departments within the City.*



Fire Station 6, in south Corona, is one of its seven fire station locations

Corona Fire Response Zones

CAL FIRE is mandated by state law to identify fire hazard severity zones for all communities in California based on fuels, terrain, weather, and other relevant factors. CAL FIRE has mapped three hazard ranges—moderate, high, and very high—in the City of Corona. Based on historical frequency of wildfires and local knowledge, the City has accepted these determinations by adopting the fire hazard severity zones. Figure PS-10 shows the location of major wildfires that encroached into Corona’s planning area. Figure PS-11 illustrates the wildfire hazard zones and the agency with primary responsibility for fire prevention and suppression services.

Corona deploys resources from seven fire stations in the community. Corona Fire also provides services, through a contract with Riverside County, to the unincorporated communities of Coronita, Home Gardens, El Cerrito, and Temescal Valley. Under this contract, Corona Fire provides backup services to Home Gardens, secondary to the services provided by County Station #13 in Home Gardens. The County, CAL FIRE, and US Forest Service collaborate to serve the local, state, and federal responsibility areas. Figure PS-12 shows the fire response zones in Corona and its sphere.



Canyon 1 Fire in Corona, September 2017

Corona Fire also maintains mutual aid agreements with almost a dozen public agencies (e.g., local, state, and federal) for mutual threat, fire suppression, active shooter tactical response, fire suppression, hazmat, and other emergencies. Corona Fire also participates in the SOLAR cooperative plan, which encompasses all agencies with fire protection responsibility where four counties join, roughly at the wildland-interface areas along state routes 91, 71, 55, 57, and 241. SOLAR is a common platform for mapping, communications, training, predesignation of facilities, and dispatch centers.

Legend

Number of Wildfires

- 1 - 2
- 3 - 4
- 5 - 6
- 7 - 8

City Boundary

Sphere of Influence Areas

Source:
Fire Perimeters Version 16_1, CalFire, 2017

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**Figure PS-11
Wildfire Hazard
Severity Zones**

Fire Hazard Zone

- Moderate
- High
- Very High

Responsibility Areas

- Federal Responsibility Area
- Local Responsibility Area
- State Responsibility Area
- City Boundary
- Sphere of Influence Areas

Note: Zones based on factors such as fuel (material that can burn), slope and fire weather.

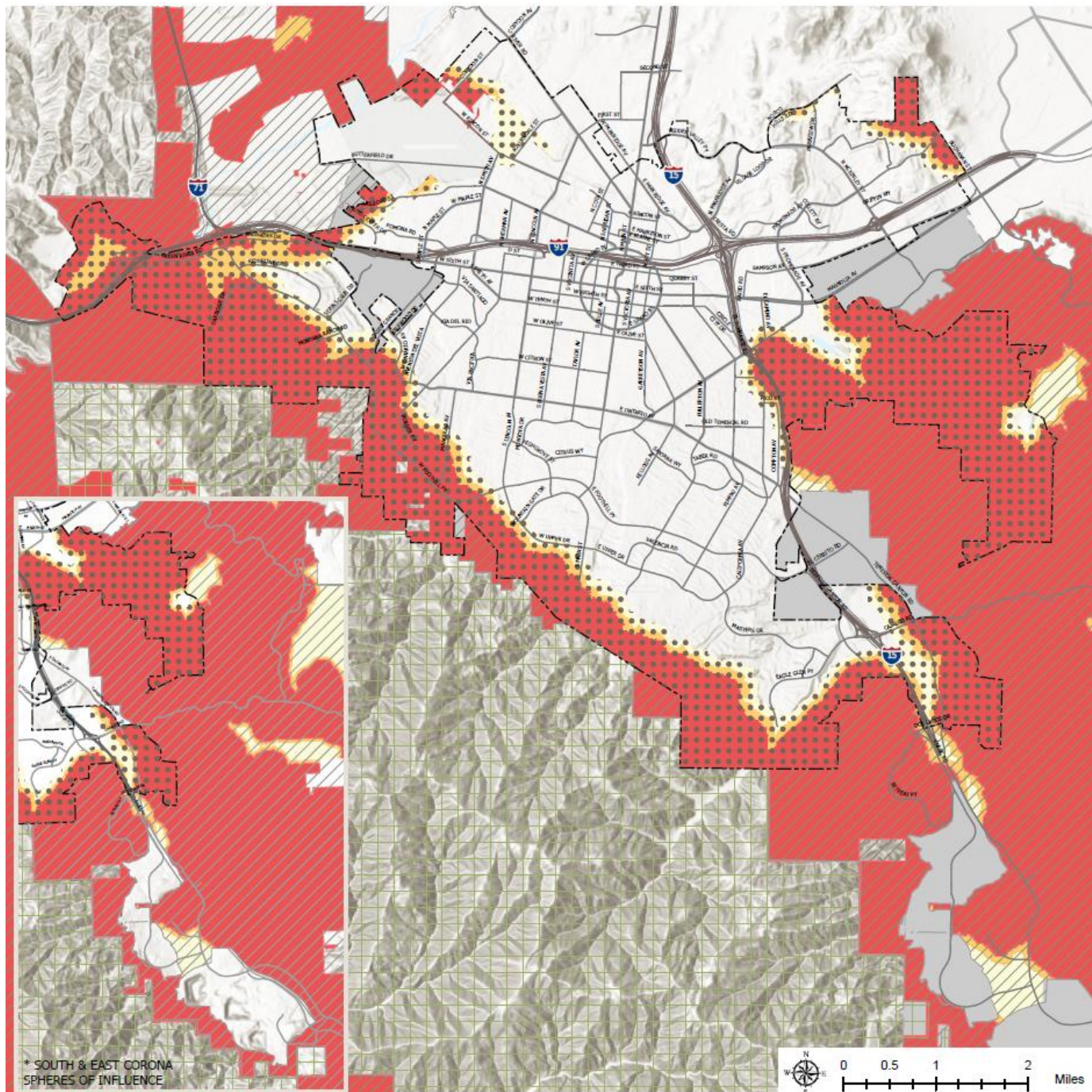
Local Responsibility Area (LRA):
Local agencies have the primary financial responsibility for the prevention and suppression of wildland fires.

State Responsibility Area (SRA):
The State of California has the primary financial responsibility for the prevention and suppression of wildland fires.

Federal Responsibility Area:
Federal Government has the primary financial responsibility for the prevention and suppression of wildland fires.



City of Corona
Geographic Information Services
Created on: October 2025

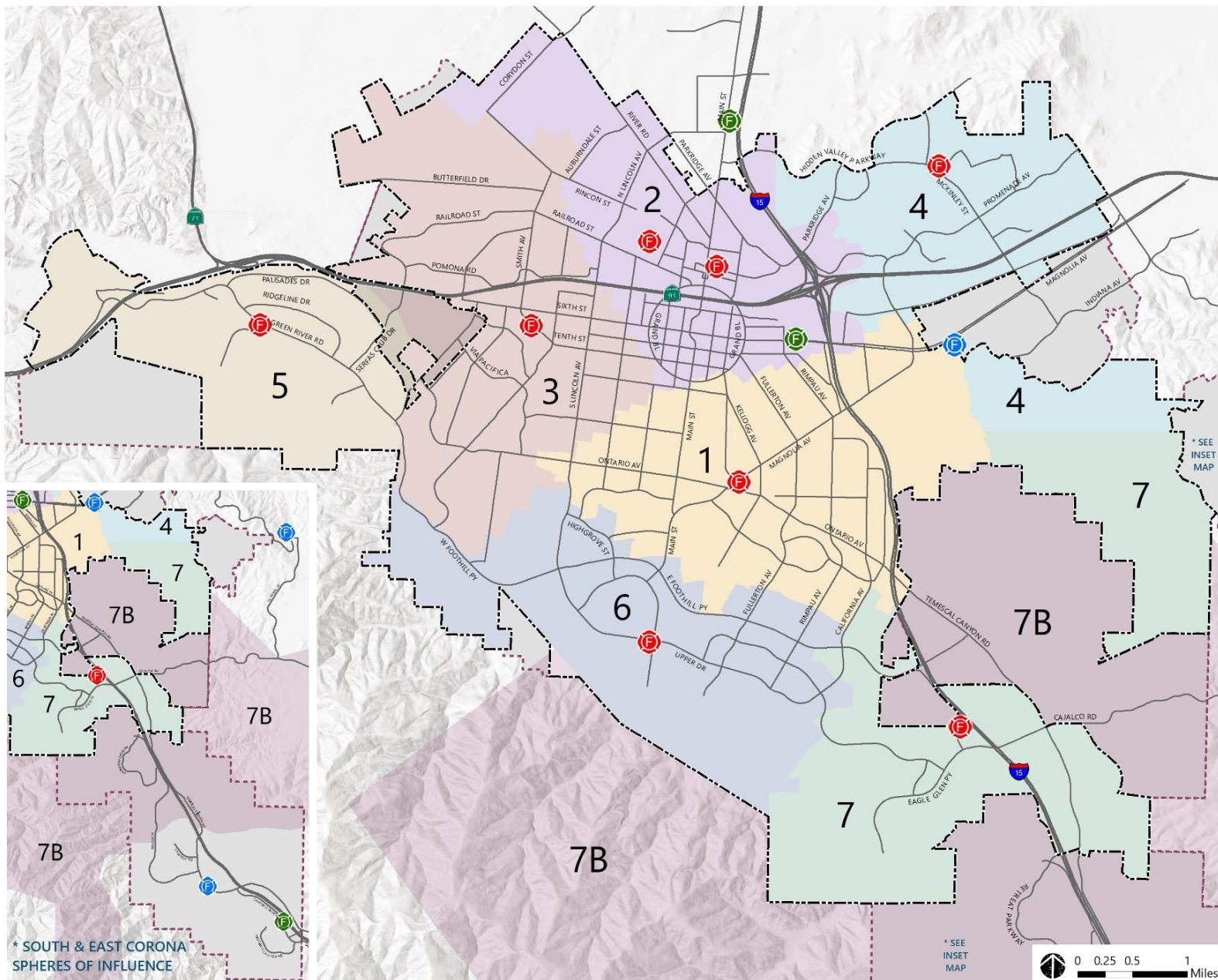


* SOUTH & EAST CORONA
SPHERES OF INFLUENCE

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**Figure PS-12
Fire Response Zones**



Legend

- Fire Station**
- City of Corona
 - Riverside County (Sphere)
 - Other Agency (State & Federal)
- Response Zones | Stations**
- Fire Station # 1
540 Magnolia Ave
 - Fire Station # 2
222 E Harrison St
 - Fire Station # 3
790 S Smith Ave
 - Fire Station # 4
915 N McKinley St
 - Fire Station # 5
1200 Canyon Crest Dr
 - Fire Station # 6
110 W Upper St
 - Fire Station # 7
3777 Bedford Canyon Rd
 - 7B - Disadvantaged Unincorporated Community (DUC)
- City Boundary**
- Sphere of Influence Areas**

Notes:
Corona Fire provides secondary back-up to areas outside its response zones.

Source:
City of Corona Fire Department, 2017

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GOAL PS-8

Ensure that there is an adequate service level of fire protection and suppression services provided for all residents, visitors, and businesses throughout the City of Corona to meet community expectations and budgetary resources for safety.

Policies

- PS-8.1** Provide needed fire stations and maintain them in good condition to enable timely and effective response to emergencies in keeping with city standards, community service expectations, and city financial resources.
- PS-8.2** Ensure that fire staff at all levels are sufficient in number and appropriately trained to effectively plan and respond to all types of fire and related emergencies in the community.
- PS-8.3** Maintain mutual aid, automatic aid, and other multi-agency cooperative agreements to ensure that urban fire, wildfire, tactical response, hazmat, and other services are available at all times.
- PS-8.4** Regular maintain, upgrade, and replace fire apparatus and support vehicles and needed equipment to be prepared and effectively respond to fire, traffic, medical, and related emergencies.
- PS-8.5** Conduct periodic fire-related exercises with City public safety personnel and those of nearby jurisdictions, and the state to remain prepared for situations requiring multi-jurisdictional coordinated response.
- PS-8.6** Participate in and conduct regular training of all fire and related personnel to ensure that staff are prepared to address emergency medical, fire, and other related emergencies in the community.
- PS-8.7** Adhere to and periodically update fire department strategic plans, policies and procedures, and other internal standards to continuously meet service level requirements and priorities, including department response times.
- PS-8.8** Ensure that revenues are collected from new development, existing developments, and other land uses in an amount that is commensurate with their respective impact on overall city fire operations.
- PS-8.9** Continue to monitor and adhere to the latest changes in state legislation and guidelines with respect to fire planning, prevention, and suppression.

GOAL PS-9

Through fire prevention and educational efforts, promote participation, voluntary compliance, and community awareness of fire safety issues in order to reduce the incidence and severity of fire and related emergencies and loss.

Policies

- PS-9.1** Continue to review and adopt the most recent edition of the California Building Standards Code (Title 24), including local amendments, to ensure the use of the latest technology and building standards in the city.
- PS-9.2** Continue to conduct all existing occupancy inspections, including those that are state mandated within the appropriate time frame for compliance with fire safety regulations and providing education to business owners.
- PS-9.3** Ensure that roadway, bridge, and driveway standards are adequate and appropriately maintained to allow safe access to premises where emergencies take place and safe evacuations wherever needed.
- PS-9.4** Maintain safe and accessible evacuation routes throughout the community; take precautions and ensure backup or mitigations for routes crossing high hazard areas (e.g., flood, seismic, high fire, etc.).
- PS-9.5** Work cooperatively with city departments, community groups, and individual homeowners to ensure that vegetation management is being maintained in the designated fuel modification areas.
- PS-9.6** Work cooperatively with CAL FIRE, US Forest Service, Department of Corrections, and other agency stakeholder to advocate for the installation and maintenance of fire breaks in wildland areas surrounding Corona.
- PS-9.7** Encourage and provide fire safety education and support programs for residents of all ages to promote participation, fire prevention, voluntary compliance, and community awareness/preparedness.
- PS-9.8** Work with youth in the community and local school district to tailor programs that encourage safe practices and reduce the incidence of fire and associated damages to property and personal injury.
- PS-9.9** Conduct fire investigations as needed on residential, commercial, industrial structures and other land uses to provide protection to the community and gather information for possible trending issues.

GOAL PS-10

Reduce fire risk to life and property through effective land use planning and compliance with federal, state, local laws, ordinances, and standards.

Policies

- PS-10.1** Locate, when feasible, new essential public facilities outside of high fire risk areas; if not feasible, require construction and other methods to harden and minimize damage for existing/planned facilities in such areas.
- PS-10.2** Require all improved and new homes, structures, and facilities in the very high fire hazard severity zones to adhere to additional fire safe design standards consistent with state law and local practice.
- PS-10.3** Require all improved and new developments to be thoroughly reviewed for their impact on safety and the provision of fire protection services as part of the development review process.
- PS-10.4** Require new and rehabilitated homes and structures to meet or exceed City fire prevention standards and state law, including building access, construction design, sprinklers, and others as required by Corona Fire.
- PS-10.5** Require all new commercial, industrial, institutional, multiple-unit housing, mixed-use, and one- and two-family dwelling developments to install fire protection systems and encourage the use of automatic sprinkler systems where not required by local codes and ordinances.
- PS-10.6** Require fuel modification plans and vegetation clearance standards for development in VHFHSZs to protect structures from wildfire, protect wildlands from structure fires, and provide safe access routes for the community and firefighters within the project boundary, which may be extended pursuant to required findings when in accordance with state law, local ordinance, rule or regulation and no feasible mitigation measures are possible.
- PS-10.7** Condition approval of parcel maps and tentative maps in VHFHSZs based on meeting or exceeding the SRA Fire Safe Regulations and the fire hazard reduction around buildings and structures regulations within the project boundary, which may be extended pursuant to required findings when in accordance with state law, local ordinance, rule or regulation and no feasible mitigation measures are possible.
- PS-10.8** Coordinate with the Department of Water and Power to ensure that adequate water supply and flows are available for firefighting; where inadequate, ensure provision of off-site water supply and transport.
- PS-10.9** Continue to require visible premise identification and signage per Corona's Premise Identification Guideline that meet or exceed SRA and CFC requirements.

EMERGENCY MANAGEMENT

Emergency management is the function charged with creating the framework within which communities reduce vulnerability to hazards and cope with disasters. The California Emergency Services Act requires cities to manage and coordinate emergency response and recovery activities within their jurisdiction. Emergency management functions are coordinated through the Emergency Management Division under Corona Fire Department and adhere to the Standardized Emergency Management System (SEMS) and the National Incident Management System (NIMS).

Defining SEMS and NIMS

The Standardized Emergency Management System (SEMS) is a statewide California system that police officers, firefighters, and other emergency and disaster responders use in disaster events. SEMS is the cornerstone of California's emergency response system and the fundamental structure for the response phase of emergency management. The system unifies all elements of California's emergency management community into a single integrated system and standardizes key elements. Under the California Emergency Services Act 2015, State agencies are required to use SEMS, and local governments must use SEMS to be eligible for reimbursement of response-related costs under the state's disaster assistance programs.

SEMS incorporates a number of interrelated protocols for communication and coordination to ensure the effective delivery of services. These include:

- » **Incident Command System (ICS).** *A field-level emergency response system based on management by objectives.*
- » **Multi/interagency coordination.** *Affected agencies working together to coordinate allocations of resources and emergency response activities.*
- » **Mutual aid.** *A system for obtaining additional emergency resources from jurisdictions not affected by the immediate emergency.*
- » **Operational Area Concept.** *County and its subdivisions to coordinate damage information, resource requests, and emergency response.*

As a complement, the National Incident Management System (NIMS) is a comprehensive nationwide systematic approach to incident management. It guides all levels of government, nongovernmental organizations, and the private sector to work together to prevent, protect against, mitigate, respond to, and recover from incidents. NIMS provides stakeholders across the whole community with the shared vocabulary, systems, and processes to successfully deliver the capabilities described in the National Preparedness System. NIMS defines operational systems, including the Incident Command System, Emergency Operations Center structures, and Multiagency Coordination Groups that guide how personnel work together during incidents. NIMS applies to all incidents, from traffic accidents to major community-wide disasters.

Emergency Management Functions

Emergency management functions protect communities by coordinating and integrating all activities necessary to build, sustain, and improve the capability to mitigate against, prepare for, respond to, and recover from threatened or actual natural disasters, acts of terrorism, or other man-made disasters. This is achieved by implementing the four phases of emergency management: prevention/mitigation, preparedness, response, and recovery as described below and shown in the graphic.



Four Phases of the City of Corona's Emergency Management System

- » **Mitigation** refers to varied preemptive measures designed to eliminate or reduce the probability of disaster occurrence or effects of unavoidable disasters. Mitigation measures include building codes, vulnerability analyses updates, zoning and land use management, building use regulations and safety codes, preventive health care, and public education. The City's Local Hazard Mitigation Plan contains the city's adopted mitigation measures.
- » **Preparedness** refers to readiness to respond to any emergency through programs that strengthen governments, organizations, and communities. Measures include preparedness plans, emergency exercises/training, warning systems, emergency communications systems, evacuation plans, resource inventories, emergency contact lists, mutual aid agreements, and public information/education. The City's Emergency Operations Plan contains the City's approved procedures.
- » **Response** refers to the provision of immediate assistance to maintain life, improve health, and support the morale of the affected population. The focus in the response phase is on meeting the basic needs of the people until more permanent and sustainable solutions can be found. Many activities essential during the response phase are conducted in tandem with standard emergency response procedures of the Corona Police and Fire Departments.
- » **Recovery** refers to the ability of an agency or community to undertake a growing number of activities aimed at restoring their lives and the infrastructure that supports them. Recovery measures, short and long term, include returning vital life-support systems to minimum operating standards, temporary housing, public information, health and safety education, reconstruction, counseling programs, and economic impact studies. Information resources and services include data collection related to rebuilding and documentation of lessons learned.

Emergency Operation Planning

The City of Corona has prepared an emergency operations plan to ensure the most effective allocation of resources for the maximum benefit and protection of the civilian population in time of emergency. The operational concepts reflected in the plan focus on the City's planned response to extraordinary emergency situations associated with natural disasters, technological incidents, and national security emergencies. In addition, the City's local hazard mitigation plan is designed to identify local hazards and provide mitigation measures to address these hazards.

The objective of the emergency operations plan is to incorporate and coordinate all available City resources into an efficient organization capable of responding to any emergency. While no plan can completely prevent death and destruction, good plans carried out by knowledgeable and well-trained personnel will minimize losses. This plan establishes the emergency organization and assigns tasks and general procedures. It provides for coordination of planning efforts of the various emergency staff and service elements using the Standardized Emergency Management System and National Incident Management System with all levels of government.

Title II of the Americans with Disabilities Act mandates that public entities, such as the City of Corona and all municipalities, conduct operations in a manner that its services, programs, and activities, when viewed in their entirety, are readily accessible to and usable by individuals with disabilities. The City intends to provide programs and services to all residents, regardless of their individual abilities, by integrating access into all aspects of emergency services, including alert and warning/public information, evacuation and transportation, care and shelter, and specialized resources.

The Corona Disaster Council, in accordance with § 2.52.050 of the Corona Municipal Code, is responsible for ensuring that the emergency operations plan remains current and effective. The Corona Fire Department Emergency Services Division is responsible for reviewing the entire emergency plan on an annual basis, coordinating revisions to the plan, and maintaining records of all revisions. The plan is available to the public for review. Corona Fire also prepares and implements the hazard mitigation plan and ensures submittal to the Federal Emergency Management Agency every five years.

To ensure the effectiveness of emergency planning and hazard mitigation, the Corona Fire Department works with an array of community partners. These include utility service providers (water, power, and sanitation), schools, community organizations, residents, and other local entities. Mutual and automatic aid agreements are also maintained with numerous surrounding local, state, and federal agencies to allow for appropriate backup services in case of an emergency, disaster, or other similar event.

The following presents goals and policies pertaining to emergency management within Corona and the planning area. By implementing the following goals and policies, the City intends to become more resilient to local emergencies and disasters.

GOAL PS-11

Effective emergency response to disasters that limits the loss of life, curtails property damage and social dislocation, enhances emergency preparedness through community education and self-help programs, and minimizes damages and injuries.

- PS-11.1** Adhere to the Standard Emergency Management System (SEMS) and the National Incident Management System (NIMS) to coordinate effective response to emergencies and disasters.
- PS-11.2** Maintain emergency and hazard mitigation plans; update and define roles of city departments and other partnering agencies in the event of an emergency or disaster, ensuring interagency coordination and collaboration with the Operational Area (SEMS).
- PS-11.3** Conduct periodic emergency management exercises with city personnel and nearby jurisdictions to remain prepared for situations requiring multi-jurisdictional coordinated response.
- PS-11.4** Maintain Structure Protection Plans and other pre-planning activities and plans to remain prepared for emergencies throughout the community.
- PS-11.5** Ensure that the Emergency Operations Plan and Standard Operating Procedures provide for efficient and orderly notification and evacuation on a citywide basis. Ensure they address accessibility issues and mass notification capabilities utilizing our city, county, state, and federal communication systems.
- PS-11.6** Improve continuity of operations capabilities to include the development of a City of Corona Continuity of Operations Plan, in addition to enhancing the Emergency Operation Center (EOC) readiness and the EOC responder training and exercises, and continuously testing and improving upon the effectiveness of the Emergency Operation Plan.
- PS-11.7** Sponsor and support the public education programs and outreach efforts referencing community hazards, emergency preparedness, and response protocols and procedures. Target and partner with community groups, schools, religious institutions, and business associations (NIMS).
- PS-11.8** Facilitate planning efforts to ensure expeditious and coordinated recovery processes following any serious emergency/disaster.
- PS-11.9** Ensure all local, state, and federal mandates are adhered to should the City proclaim a local emergency and request any state and/or federal funding.
- PS-11.10** Participate in the review and update of the Riverside County Operational Area Multi-Jurisdictional Local Hazard Mitigation Plan every five years in coordination with all participating jurisdictions and Riverside County Emergency Management Department; implement goals and objectives therein to reduce risks from hazards and guide decision-making.

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Noise

INTRODUCTION

Noise and vibration are a constant presence in the everyday life of a modern suburban community. Although a certain level of noise and vibration is considered acceptable, excessive noise or vibration interferes with the quality of life in residential neighborhoods; detracts from commerce; and adversely affects sensitive areas or land uses, such as schools and medical settings. Corona, like many other suburban cities, is affected by the noise environment seeks to limit its impact where possible.

Consistent with its vision, the City of Corona's efforts to protect residents and business from excessive noise are guided by the following statement.

Corona is committed to protecting residents, businesses, and visitors from unacceptable levels of noise and vibration that detract from the quality of life. The City will seek to ensure that neighborhoods offer a quiet and peaceful environment, that commercial and industrial sectors operate within acceptable noise levels appropriate for their environment, and that sensitive land uses are protected from noise sources and levels that detract from quality of life.



The noise element strives to preserve the quality of life by protecting the community from the obtrusive impacts of noise- and vibration-generating uses such as traffic, construction, airplanes, and industrial uses, as well as other sources within Corona.

Scope of Element

The authority for general plans to address noise is codified in the California Government Code § 65302(f), which requires that a general plan include: A noise element that shall identify and appraise noise problems in the community. The noise element shall analyze and quantify, to the extent practicable, as determined by the legislative body, current and projected noise levels for all of the following sources:

- » Highways and freeways.
- » Primary arterials and major local streets.
- » Passenger and freight railroad operations and ground rapid transit systems.
- » Commercial, general aviation, and helicopter operations; aircraft overflights; and all other facilities and maintenance functions related to airport operation.
- » Local industrial plants, including but not limited to railroad classification yards.
- » Other ground stationary noise sources, including military installations, identified by local agencies as contributing to the community noise environment.

The intent of the noise element is to establish a pattern of land uses that minimizes the exposure of community residents to excessive noise. This includes maintaining the areas deemed acceptable in terms of noise exposure and requiring appropriate land use controls in areas exposed to excessive noise. This noise element also addresses the issue of vibration and its impact on sensitive land uses.

Related Plans

Several federal, state, and local agencies have adopted legislation and plans intended to minimize exposure of people to sources of loud noise. The noise element is a guideline for compliance with these standards, which include:

- » **Transportation-Related Standards.** The City must abide by a number of federal and state regulations related to transportation noise, specifically airports and transportation projects. These are articulated by the federal aviation administration, federal transit administration, federal railroad administration, and Caltrans.
- » **Housing and Development.** The US Department of Housing and Urban Development, California Administrative Code, Title 24 of the Health and Safety Code, and other portions of state law address noise standards in residential developments and other nontransportation land uses.
- » **Local Standards.** The Corona Municipal Code has set noise performance standards for transportation and stationary noise sources. Transportation noise sources include freeways, airports, and railroads. Stationary noise sources include industrial and mechanical equipment. The code also has vibration performance standards.

The next section provides context for each noise hazard in Corona, followed by goals and policies to achieve the general plan vision.

NOISE CONTEXT

Noise and vibration surround us; they are a constant presence in everyday urban life. To some, noise is welcome when it occurs in a playground, a business district, or other social setting. In other cases, excessive noise can interfere with community or personal quality of life and affect physical health, psychological stability, social cohesion, property values, and economic productivity. The purpose of the noise element in a general plan is to ensure that a community limits the exposure to excessive noise and vibration levels in sensitive areas and at sensitive times of day.

Noise is often defined as annoying or unwanted sound. Health studies have shown that excessive noise can cause adverse psychological and physiological effects on humans. Though sound levels can be easily measured, the variability in subjective and physical responses to sound complicates the analysis of its impact on people. The ear, the hearing mechanism of humans and most animals, receives these sound pressure waves and converts them to neurological impulses, which are transmitted to the brain for interpretation. The interpretation by the auditory system and the brain depends on the characteristics of the sound and on the characteristics of the person hearing it.

Another topic related to noise is vibration. Although less frequent and often accompanied by noise, vibration can also be disturbing. Vibration is an oscillating motion that is transmitted in waves through the earth or solid objects. Groundborne vibration can be due to various explosions, construction activities, or railway and transit movement. Especially for local planning areas where sensitive uses exist or are planned, OPR recommends that groundborne vibration be included in the noise element. This ensures greater consistency with the CEQA Environmental Review Checklist (Cal. Code Regs., Title 14, § 15000 et seq., Appendix G).



Surface mining operations meet vibration standards as conditions of their permits.

Noise and Vibration Terminology

The concept and application of noise and vibration to comprehensive planning and development are difficult to understand without standard definitions that are used in the field of noise and vibration as well as in this section.

Noise and Vibration Terms

Sound: A disturbance created by a vibrating object, which, when transmitted by pressure waves through a medium such as air, is capable of being detected by the human ear or a microphone.

Noise: Sound that is loud, unpleasant, unexpected, or otherwise undesirable. This typically refers to the volume of noise and whether it interferes with other activities.

Ambient Noise: The composite of noise from all sources near and far. The ambient noise level constitutes the normal or existing level of environmental noise at a given location.

Intrusive Noise: Noise that intrudes over ambient noise at a given location. The relative intrusiveness of a sound depends on its amplitude, duration, frequency, and time of occurrence; tonal or informational content; and the prevailing noise level.

Decibel (dB): A unitless measure of sound on a logarithmic scale. Decibels may also be “A-weighted” (dBA), which de-emphasizes the very low and very high frequencies similar to the human ear and is correlated with subjective reactions to noise.

Leq: Equivalent energy level. The maximum root-mean-square noise level during a measurement period. Leq is typically computed over 1-, 8-, and 24-hour sample periods. Leq can also be measured as equivalent continuous noise, which is the mean of the noise level, energy averaged over time.

CNEL: Community Noise Equivalent Level. The energy-average of the A-weighted sound levels during a 24-hour period, with 5 dB added from 7:00 p.m. to 10:00 p.m., and 10 dB added from 10:00 p.m. to 7:00 a.m.

Note: For general community/environmental noise, CNEL and Ldn values rarely differ by more than 1 dB. As a matter of practice, Ldn and CNEL values are equivalent and generally interchangeable.

Ldn: Day-Night Average Level. The average equivalent A-weighted sound level during a 24-hour period, with 10 decibels added from 10 p.m. to 7 a.m.

For general community/environmental noise, CNEL and Ldn values rarely differ by more than 1 dB. As a matter of practice, Ldn and CNEL values are equivalent and generally interchangeable.

Noise Contours: Lines drawn about a noise source indicating the distance to various levels of noise exposure.

Vibration: Vibration is an oscillating motion in the earth. Like noise, vibration is transmitted in waves, but in this case through the earth or solid objects. It is generally felt rather than heard.

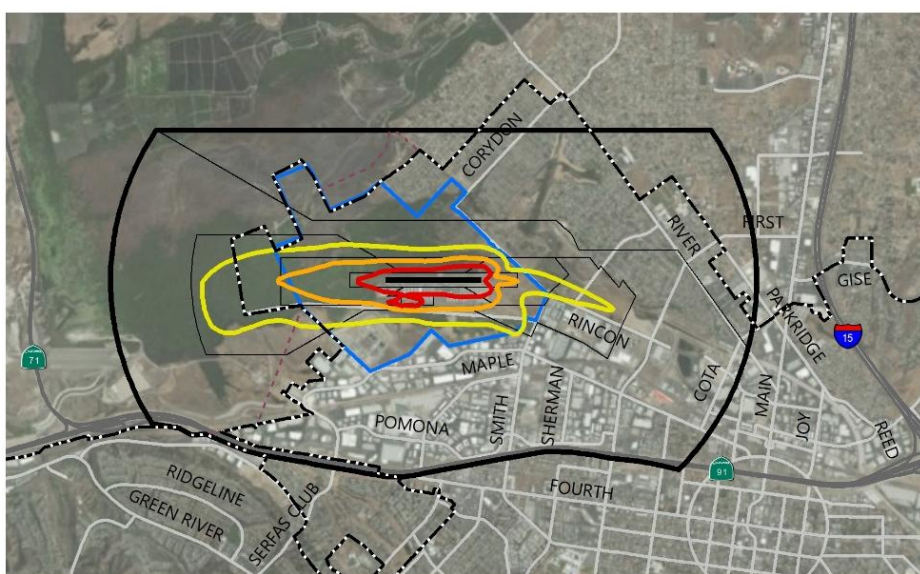
Peak Particle Velocity (PPV). The peak rate of speed at which soil particles move (e.g., inches per second) due to ground vibration.

TRANSPORTATION NOISE

In Corona, the primary sources of noise and vibration are related to the prevalence of its transportation infrastructure throughout the community. In addition, as the community is framed by surrounding hills and canyons, Corona's natural topography also increases the degree to which noise and vibration are felt.

Aircraft

The Corona Municipal Airport is a general aviation airport that experiences up to 50,000 annual operations per year. The majority of flights are for recreational purposes only. Because the airport generally serves small aircraft and is in the Prado Flood Control Basin, a half mile from the nearest residential neighborhoods, it is not a substantial source of noise, and noise from the airport does not affect much of the city. As shown in Figure N-2, the noise contours for the airport extend largely within open space areas within the Prado Basin and surrounding industrial uses.



Noise Compatibility Contours

- 55 CNEL
- 60 CNEL
- 65 CNEL

■ Airport Property

■ Corona Municipal Airport Influence Area Boundary

Figure N-1 Corona Municipal Airport Noise Contours

The California Code of Regulations Title 21, Subchapter 6, Airport Noise Standards, establishes 65 dBA CNEL as the acceptable level of aircraft noise for persons living in the vicinity of airports. Noise-sensitive land uses in locations where the aircraft exterior noise level exceeds 65 dBA CNEL are generally incompatible, unless an aviation easement has been acquired or the residence is a high-rise apartment or condominium that achieves an interior CNEL of 45 dBA or less in all habitable rooms. The Corona Municipal Code has a similar noise standard in the airport influence area.

Freeways and Arterials

The major sources of noise and vibration in the community are freeways. Both the SR-91 and I-15 bisect the community and are two of the most heavily traveled freeways in California. Hundreds of thousands of trucks and autos traverse these freeways. Corona has highly used arterial roadways that carry a significant volume of vehicles—Ontario Avenue, Magnolia Avenue, Sixth Street, Main Street, and other arterials. Vibration levels are higher and more noticeable along freeways and local truck routes due to the volume of heavy trucks using these routes.

Figure N-2, Existing Transportation Noise Levels, and Figure N-3, Future Transportation Noise Levels, show noise contours from major transportation infrastructure. Noise modeling did not take into account sound walls or other shielding features that would attenuate traffic noise, and thus provides a conservative estimate of the areas actually adversely affected by noise. Generally, the area within the 60 CNEL contour is where residential, lodging, noise and land use compatibility may be a concern. Areas where proposed future development could exceed standards in the land use noise compatibility matrix are required to conduct a detailed acoustical study to determine design features or mitigation to reduce noise and vibration to acceptable levels.

Railroad Lines

The Burlington Northern Santa Fe Railroad (BNSF) operates rail lines that traverse Corona carrying freight trains. This line is also shared by both the Metrolink Commuter Rail and Amtrak Passenger Rail. Train noise is a significant source of noise due to its magnitude and the associated vibration effects. Train noise incorporates the sounds of the locomotive engine, wheel-on-rail noise, and whistles near crossings. About 50 freight trains and 25 Metrolink and Amtrak trains use this rail corridor daily. The number of trains passing through Corona is forecast to double by the year 2040.

Railroad lines typically produce noise levels in excess of 65 CNEL, which is the maximum exterior noise level allowed in areas with sensitive uses, such as housing, in areas nearest the railroad tracks. The 65 dBA CNEL rail noise contour extends 600 feet in both directions from the mainline and 750 feet within ¼ mile of crossings (due to horn sounding) under existing conditions and is projected to extend 1,050 feet from the rail line at buildout of the general plan. While the railroad is generally located in industrial zones, main lines also run adjacent to some residential areas.

Stationary sources of noise include common building or home mechanical equipment, such as air conditioners, ventilation systems, or pool pumps, and industrial facilities, such as manufacturing plants, power plants, or processing plants. Industry in Corona and near the Corona city limits also includes a wide variety of noise sources, such as light manufacturing, truck transportation-related businesses, and heavy manufacturing. Surface mining operations in eastern Corona also produce significant noise. Mining operations, which are one of the largest stationary sources of noise, are regulated pursuant to development agreement and local mining permit.

**Figure N-2
Existing
Transportation Noise**

Legend

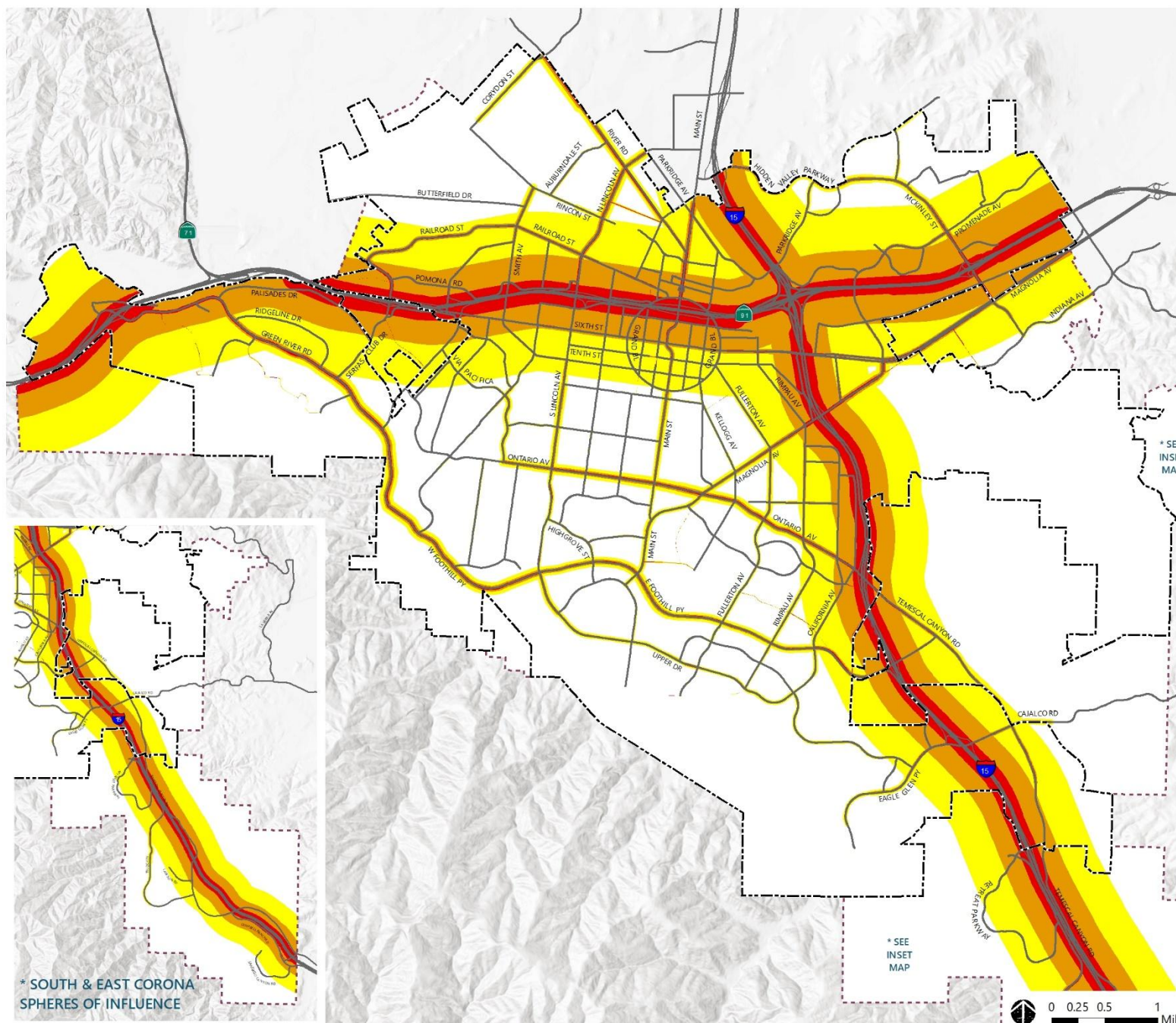
70 CNEL

65 CNEL

60 CNEL

City Boundary

Sphere of Influence Areas



Source:
PlaceWorks 2018

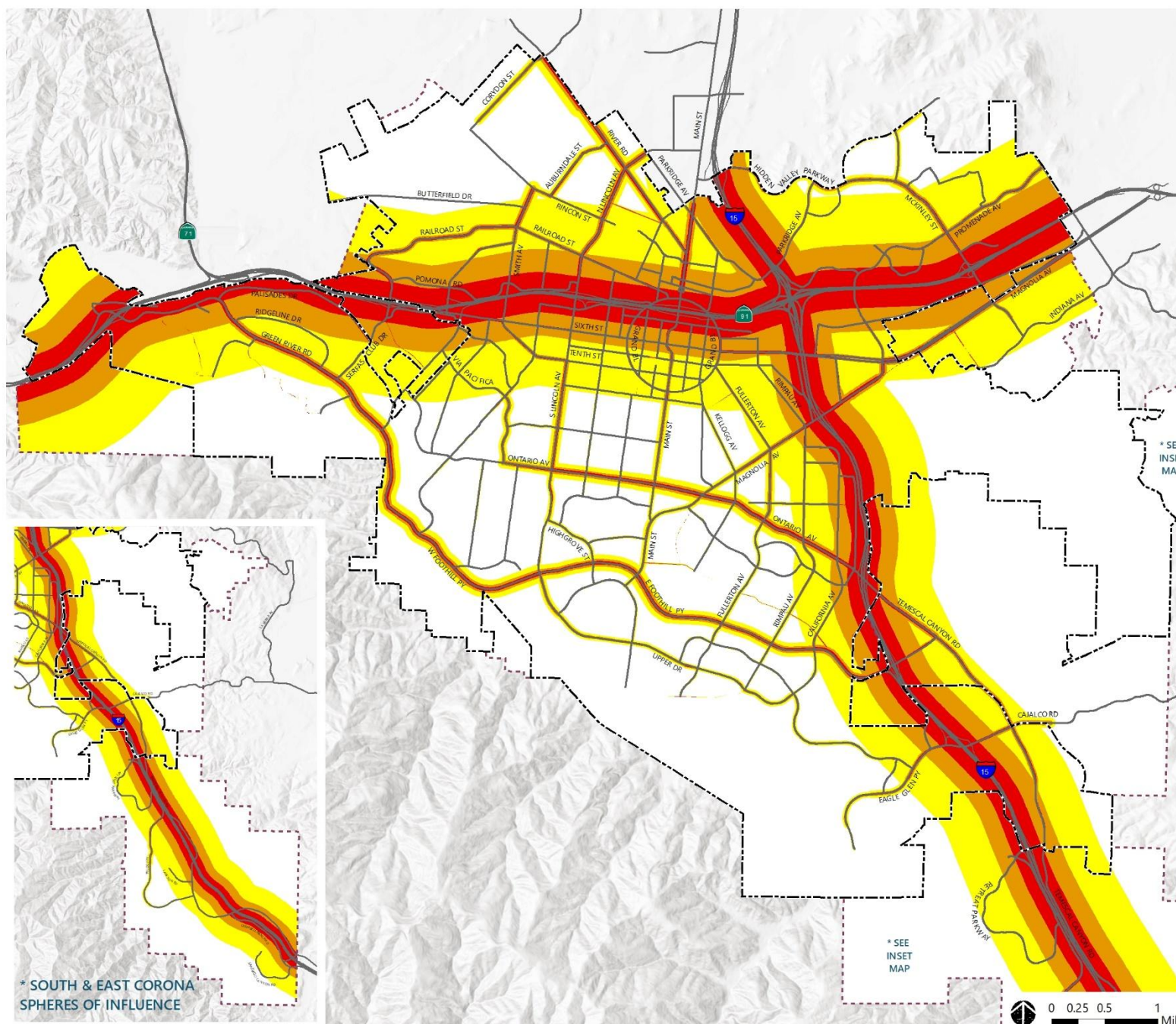
NOISE

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**Figure N-3
Future Transportation
Noise Levels**

Legend

- 70 CNEL
- 65 CNEL
- 60 CNEL
- City Boundary
- Sphere of Influence Areas



Source:
PlaceWorks 2018

NOISE

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Minimizing Transportation-Related Noise

Transportation is the largest contributor to the noise environment in Corona. The most efficient and effective means of controlling noise from transportation systems is to reduce noise at the source. However, the City has no direct control over noise produced by trucks, cars, and trains because state and federal regulations preempt local laws. Therefore, City noise policy focuses on reducing the impacts on people from transportation noise along freeways, roadways, and rail corridors or incorporating measures that either prevent or mitigate those impacts.

Site Planning and Building Design

While transportation noise is the most frequently cited source of noise, much can be done at the building design level to mitigate impacts. Site planning, landscaping, topography and the design and construction of noise barriers are the most common and effective method of alleviating noise impacts. Setbacks and buffers can also reduce noise levels. Noise-attenuating barriers can and will be incorporated into new development projects to reduce noise exposure where needed. The effectiveness of the barrier depends upon: 1) the relative height and materials of the barrier; 2) the noise source; 3) the affected area; and 4) the horizontal distance between the barrier and the affected area. Notable reductions in tire noise have been achieved with implementation of special paving materials, such as rubberized asphalt or open-grade asphalt concrete overlays. Although this noise reduction would be sufficient to avoid the predicted noise increase due to traffic in some cases, the potential up-front and ongoing maintenance costs are such that the cost versus benefits ratio may not be feasible and reasonable.

Freeway Noise Attenuation Strategies

Freeway noise associated with traffic along the SR-91 and I-15 has been mitigated in certain areas with sound walls along both sides of freeways. The SR-15 upgrade project includes elements to shield freeway noise, particularly along areas of the freeways adjoining residential areas. Where needed, the City will continue to pursue mitigation with Caltrans for remaining areas not addressed by freeway enhancement projects. Future improvements to the freeway, including the SR-71 flyover, may also require noise mitigation measures to protect residents from excessive noise from the freeways.

Railroad Noise Mitigation

Mitigating rail noise represents one of the key noise reduction challenges in Corona. Eliminating all at-grade crossings for existing railways would significantly reduce noise impacts and address road/rail traffic conflicts, particularly along highly traveled routes. However, this solution involves costs that are likely beyond the collective resources of the City, federal agencies, and railroad owners/operators. Until such financial resources are secured, City efforts will focus on minimizing excessive noise levels associated with train horns (e.g., Quiet Zones), prioritizing grade separations, and implementing other noise reduction programs to reduce adverse impacts of noise.

The following goals and policies are intended to reduce noise impacts where possible and maintain a reasonable quiet environment for people to live and work in Corona.

GOAL N-1

Protect residents, visitors, and noise-sensitive land uses from the adverse human health and environmental impacts created by excessive noise levels from transportation sources by requiring proactive mitigation.

Policies

- N-1.1** Reduce noise impacts from transportation noise sources through the design and daily operation of arterial road improvements, enforcement of state motor vehicle noise standards, and other measures consistent with funding capabilities.
- Require site design features and structural building enhancements in the development of residential and other “noise sensitive” land uses that are to be located adjacent to major roads or railroads.
 - Encourage enforcement of state motor vehicle noise standards through coordination with the California Highway Patrol and the Corona Police Department.
 - Ensure that the Zoning Ordinance, Circulation Element, and Land Use Element of the General Plan fully integrate the policies adopted as part of the Noise Element.
- N-1.2** Minimize the rise of vehicle noise from roadways through route location, sensitive roadway design, regulation of traffic volumes and speeds, and working with Caltrans in highway improvements.
- N-1.3** Encourage Caltrans to install and maintain mitigation (e.g., noise walls) and/or landscaping elements along highways that are adjacent to existing residential subdivisions or other noise-sensitive areas in order to reduce adverse noise impacts.
- N-1.4** Require municipal vehicles and noise-generating mechanical equipment purchased or used by the City to comply with noise performance standards consistent with the latest available noise reduction technology to the extent practicable and cost-effective.
- N-1.5** Require new nonresidential development that attracts noise-generating vehicles (e.g., high volumes of traffic, trucking) to design and configure onsite ingress and egress points to divert traffic away from “noise sensitive” land uses, to the greatest extent practicable.

NOISE AND LAND USE PLANNING

Primary noise sources in the city will not go away. To limit exposure to intrusive noise levels, the federal government, the State of California, and local governments have established standards and ordinances to define acceptable noise levels for certain land uses. As part of the 2004 General Plan, the City adopted exterior land use/noise compatibility guidelines for evaluating land use planning proposals (Table N-1).

Table N-1 Noise Levels and Land Use Compatibility Guidelines

Land Use Categories		Community Noise Equivalent Level (CNEL)						
Categories	Uses	<55	60	65	70	75	80	>
Residential	Single Family, Duplex	A	A	B	B	D	D	D
	Multiple Family	A	A	B	B	C	D	D
	Hotel, Motel Lodging	A	A	B	C	C	D	D
Commercial Regional, District	Commercial Retail, Bank, Restaurant, Movie Theatre	A	A	B	B	C	C	D
Commercial Regional, Village District, Special	Commercial Retail, Bank, Restaurant, Movie Theatre	A	A	A	A	B	B	C
Commercial Office, Institution	Office Building, R&D, Professional Offices, City Office Building	A	A	A	B	B	C	D
Rec. Institutional Civic Center	Amphitheatre, Concert Auditorium, Meeting Hall	B	B	C	C	D	D	D
Commercial Recreation	Amusement Park, Miniature Golf, Sports Club, Equestrian Center	A	A	A	B	B	D	D
Commercial, General, Special, Industrial, and Institutional	Auto Service Station, Auto Dealer, Manufacturing, Warehousing, Wholesale, Utilities	A	A	A	A	B	B	B
Institutional General	Hospital, Church, Library, Schools' Classroom	A	A	B	C	C	D	D
Open Space	Local, Community, and Regional Parks	A	A	A	B	C	D	D
Open Space	Golf Course, Cemetery, Nature Centers Wildlife Reserves and Habitat	A	A	A	A	B	C	C

Zone A: Clearly Compatible: Specified land use is satisfactory, based on the assumption that any buildings involved are of conventional construction without any special noise insulation requirements.

Zone B: Normally Compatible: New construction should be undertaken only after detailed analysis of the noise reduction requirements and needed noise insulation features are determined. Conventional construction, with closed windows and fresh air supply or air conditioning, will normally suffice.

Zone C: Normally Incompatible: New construction or development should generally be discouraged. If new construction or development does proceed, a detailed analysis of noise reduction requirements must be made and needed noise insulation features included in the design.

Zone D: Clearly Incompatible: New development should generally not be undertaken.

GOAL N-2

Prevent and mitigate the adverse impacts of excessive ambient noise exposure, including vibration on residents, employees, visitors, and “noise sensitive” land uses.

Policies

- N-2.1** Consider noise and vibration levels in land use planning decisions to prevent future noise and vibration and land use incompatibilities. Considerations may include, but not necessarily be limited to, standards that specify acceptable noise limits for various land uses, noise reduction features, acoustical design in new construction, and enforcement of the California Standards Building Code provisions for indoor and outdoor noise levels.
- N-2.2** Require that in areas where existing or future ambient noise levels exceed an exterior noise level of 65 dBA CNEL, all development of new housing, health care facilities, schools, libraries, religious facilities, and other “noise sensitive” uses shall include site design, building enhancements, buffering, and/or mitigation to reduce noise exposure to within acceptable limits.
- N-2.3** Require new industrial and new commercial land uses or the major expansion of such uses to demonstrate that ambient noise levels will not exceed an exterior noise level of 65 dBA CNEL on areas containing “noise sensitive” land uses as depicted in Table N-1, N-2, and N-3.
- N-2.4** Require development in all areas where the existing or future ambient noise level exceeds 65 dBA CNEL to conduct an acoustical analysis and incorporate special design measures in their construction to reduce interior noise levels to the 45 dBA CNEL level as depicted on Table N-1, N-2, and N-3.
- N-2.5** Encourage existing “noise sensitive uses,” including schools, libraries, health care facilities, and residential uses, in areas where existing or future noise levels exceed 65 dBA CNEL to incorporate fences, walls, landscaping, and/or other noise buffers and barriers, where appropriate and feasible.
- N-2.6** Require development that generates increased traffic and substantial increases in ambient noise levels adjacent to noise sensitive land uses to provide appropriate mitigation measures in accordance with the acceptable limits of the City Noise Ordinance.
- N-2.7** Require construction activities that occur in close proximity to existing “noise sensitive” uses, including schools, libraries, health care facilities, and residential uses, to limit the hours and days of operation in accordance with the City Noise Ordinance.

SPECIFIC LAND USE STANDARDS

In addition to land use compatibility standards, the Corona Municipal Code sets forth interior and exterior noise limits for individual land uses (Table N-2) and performance standards for industrial and commercial land uses as well (Table N-3)

Table N-2 Interior and Exterior Noise Standards

Land Use Categories		Average CNEL	
Categories	Uses	Interior ¹	Exterior ²
Residential	Single Family, Duplex, Multiple Family	45 ³	65
	Mobile Home	NA	65 ⁴
Commercial; Industrial; and Institutional	Hotel, Motel, Transient Lodging	45	65 ⁵
	Commercial Retail, Bank, Restaurant; Sports Club	55	NA
	Office Building, Research and Develop. Professional Offices, City Offices	50	NA
	Amphitheatre, Concert Hall Auditorium, Meeting Hall	45	NA
	Gymnasium (Multipurpose)	50	NA
	Manufacturing, Warehousing, Wholesale, Utilities	65	NA
	Movie Theatres	45	NA
Institutional	Hospital, Schools' classroom	45	65
	Church, Library	45	NA
	Parks	NA	65

Notes:

1. Indoor environment excluding bathrooms, toilets, closets, corridors.

2. Outdoor environment limited to: private yard of single family, multi-family private patio or balcony that is served by a means of exit from inside, mobile home park, hospital patio, park's picnic area, school's playground, and hotel and motel recreation area.

3. Noise level requirement with closed windows. Mechanical ventilating system or other means of natural ventilation shall be provided as of Chapter 12, Section 1205 of UBC.

4. Exterior noise level should be such that interior noise level will not exceed 45 CNEL.

5. Except those areas affected by aircraft noise.

Table N-3 Stationary Noise Sources: Performance Standards

Land Use Categories	Exterior Noise		Interior Noise	
	7am–10pm	10 pm–7am	7am–10pm	10 pm–7am
Residential Land Uses	55 dBA	50 dBA	45 dBA	35 dBA
Other Sensitive Land Uses	55 dBA	50 dBA	45 dBA	35 dBA
Commercial Uses	65 dBA	60 dBA	N/A	N/A
Industrial, Manufacturing, Agricultural	75 dBA	70 dBA	N/A	N/A

See Municipal Code for exceptions and detailed clarifications

GOAL N-3

Discourage the spillover or encroachment of unacceptable noise levels from mixed use, commercial, and industrial land uses on to noise sensitive land uses.

Policies

- N-3.1** Provide for the reduction in noise impacts from commercial and industrial operations as controlled and enforced through the City Noise Ordinance.
- N-3.2** Incorporate noise reducing designs into new or remodeled commercial and industrial projects. Measures should include, but not be limited, to:
- Sound barriers in front of HVAC units and other similar outdoor mechanical equipment.
 - Increase setbacks and buffering of parking areas and primary on-site access drives from adjacent residential areas and other sensitive uses to the maximum extent feasible with walls, fences, berms, and/or adequate landscaping.
 - Require vehicle access to commercial or industrial land uses abutting existing or planned residential areas be located at the maximum practical distance from residential areas.
 - Orient loading and unloading ramps and drop off zones away from noise sensitive land uses.
- N-3.3** Require the design of residential and nonresidential parking structures used on-site and adjacent to noise sensitive land uses incorporate noise reducing features to minimize vehicular noise from encroaching outside the structure.
- N-3.4** Require that restaurants/bars implement operational measures to control the activities of their patrons on-site and within a reasonable distance from the establishment in order to minimize potential noise-related impacts on adjacent residential neighborhoods.
- N-3.5** Require mixed-use structures incorporating commercial or institutional and residential uses, or industrial uses adjacent to noise and vibration sensitive uses minimize, through design and construction technology, the transfer or transmission of noise and vibration from the commercial, institutional, or industrial use to the residential land use.
- N-3.6** Require nighttime land uses having amplified noise devices to be located in areas of the city that are not directly adjacent to existing and planned "noise-sensitive" land uses.

GOAL N-4

Minimize noise impacts created by railroad transit and airport operations and flight patterns on residential areas and other “noise sensitive” land use areas.

Policies

- N-4.1** Work closely with the Burlington Northern Santa Fe Railroad operators to install and maintain noise mitigation features where operations impact existing and planned residential areas or other “noise-sensitive” areas.
- N-4.2** Support the establishment of train operation restrictions (Quiet Zones) to reduce the noise levels of blaring horns in residential areas and adverse impacts on other “noise-sensitive” areas.
- N-4.3** Require that development of new housing, health care facilities, schools, libraries, religious facilities, and other “noise sensitive” land uses near the railroad line include buffering and/or construction mitigation measures to reduce noise exposure to levels within acceptable limits.
- N-4.4** Restrict development of land uses within the 65 dBA CNEL contour of the Corona Municipal Airport to industrial, agricultural, or other open space activities; require that all development in the vicinity of the Airport comply with the noise standards in the Airport Master Plan.
- N-4.5** Work closely with the Corona Municipal Airport and operators on-site to ensure that the airport’s operations do not exceed noise levels specified in the municipal code, generate adverse noise conditions in the City of Corona that are not allowed in the Airport Master Plan, nor exceed noise levels in the countywide airport land use compatibility policies.

NOISE

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Healthy Community

INTRODUCTION

Since comprehensive general plans were first required by the California Legislature, these plans have focused on the physical aspects of a city—its land uses, infrastructure, transportation, housing, and other topics that address the “built” environment of a city. In recent years, however, we have come to realize that residents’ health and well-being are essential for them to enjoy the amenities provided in a community. Moreover, resident health is directly linked to the design of the built environment and the degree to which it encourages or impedes the ability of residents to live healthier lives.

Recognizing the importance of a healthy community and the benefits it offers, the City is committed to promoting a healthier community by improving its built environment and supporting public and private programs to improve the health and well-being of residents. These objectives are guided by the following statement:

Corona strives to become a healthier community that enables residents, employees, and visitors to live healthy lives and achieve their full potential. The City is committed to maintaining a built environment that is clean and healthful; providing a mix and distribution of land uses that support the many functions, services, and jobs within the community; providing safe and healthful neighborhoods and quality housing for residents; ensuring the provision of public facilities and services that contribute to quality of life; and seeking public involvement in bettering the health of the community.



Corona is approving new medical facilities to better serve the community.

Scope of Element

Government Code § 65302 requires that general plans include goals, policies, and objectives that further community health and environmental justice. However, state law does not require the preparation of a separate healthy community element. Rather, Government Code § 65303 permits cities to formulate other elements that, in the “judgment of the planning agency,” relate to a city’s physical development. These “permissive” elements are as legally binding as any of the mandatory elements.

Senate Bill 1000, the Planning for Healthy Communities Act, mandates that cities adopt an environmental justice (EJ) element or integrate EJ policies, objectives, and goals into other elements in their general plans after January 1, 2018. This includes reducing pollution exposure; improving air quality; and promoting public facilities, food access, safe and sanitary homes, and physical activity.

In light of these requirements, this element addresses the identification of objectives and policies:

- » To reduce the unique or compounded health risks in all neighborhoods, including disadvantaged communities.
- » To promote civil engagement in the public decision-making process, including the development and implementation of programs.
- » To prioritize improvements and programs that address the needs throughout the community, including disadvantaged communities.

Related Plans

Though Corona’s healthy community element is designed to specifically address local issues of importance to the community, its goals and policies are consistent with and build on other planning efforts undertaken at the county, state, and federal levels of government. These larger efforts include:

- » **Federal Healthy Community Plans.** The federal Healthy People 2020 program and the National Prevention Strategy and Action Plan are both designed to raise awareness of the importance of public health and the roles that local government can play in improving it through infrastructure, programs, and services.
- » **California Health in All Policies.** The City’s healthy community element is consistent with the State’s “Health-in-All-Policies” approach, which seeks to ensure that decision-makers consider the impact of resident health and wellness when designing and implementing policies, programs, and services.
- » **Riverside County Health Improvement Plan.** Corona’s general plan is consistent with County priorities to improve community health and safety in the physical environment, promote healthy behaviors among residents, connect and invest in people, and improve overall access to quality health care.

The next sections provide the overall context for health planning, followed by goals and policies to achieve the general plan vision.

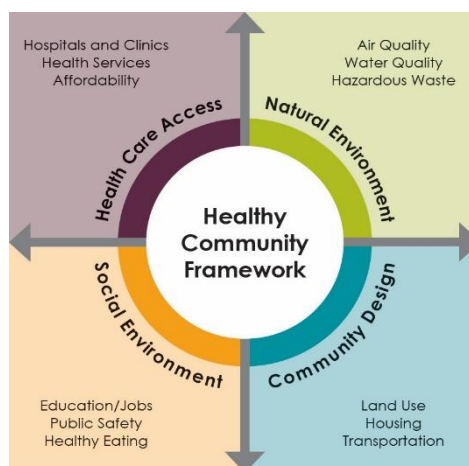
HEALTH AND ENVIRONMENTAL JUSTICE

Corona, like many cities across California, faces the challenge of how to improve community health. According to the General Plan Technical Background Report, many of the health issues in Corona mirror those in Riverside County and California. Unhealthy conditions include lack of exercise, alcohol consumption, current use of tobacco products, and lack of sleep all affect residents. These conditions raise the question of what a healthy community is and how the Corona General Plan can offer proactive policies to improve resident health.

What Is a Healthy Community?

In response to the health issues in many communities, urban planners and public health officials are exploring how to apply and integrate principles of health into their communities in meaningful ways. This includes aspects such as:

- » **Natural Environment**—where clean air, clean water, and soil free from hazards provide a healthful environment for all residents.
- » **Community Design**—where the type, location, and quality of land uses, transportation, parks, and housing support health.
- » **Social Environment**—where homes, schools, workplaces, and neighborhoods provide conditions that support health and wellness.
- » **Health Care Access**—where quality health services and facilities are affordable, accessible, and culturally appropriate.



Healthy Community Framework

A healthy community is one that offers a positive physical, social, economic, and natural environment that supports the health and well-being of all its members and enables all people to live to their full potential.

In 2011, the City of Corona took a first step by adopting Resolution 2011-075, "A Resolution of the City Council of Corona, California, supporting the League of California Cities' Healthy Eating and Active Living Cities Campaign." This resolution committed the City to pursuing two strategies to improve community health and well-being: 1) supporting a built environment that encourages an active lifestyle; and 2) increasing access to healthy food choices for its residents.

Since the adoption of the HEAL resolution, the field of healthy communities has expanded in depth. Although "healthy communities" covers many different topics, this element is designed to cover the topics covered by Senate Bill 1000, the Healthy Communities Act of 2018. This includes reducing pollution exposure; improving air quality; promoting public facilities, food access, safe and sanitary homes, and physical activity; and encouraging civil engagement in the identification, development, and implementation of policies and programs to further health and wellness.

CIVIC ENGAGEMENT

Environmental justice is defined as the fair treatment of all people with respect to the development, adoption, implementation, and enforcement of environmental laws, regulations, and policies. Creating a healthy community that furthers these ends is best achieved when a broad spectrum of stakeholders (residents, businesses, and so forth) participates in the process outlined. In order to achieve this objective, all community members should have the opportunity to provide meaningful input into decisions that affect the environment that affects their health and wellbeing.

There are many ways to promote inclusive and meaningful participation by all groups—by ensuring that meetings are accessible in terms of language, time, and location; by addressing the public’s concerns or grievances soon after they arise; and by using facilitation methods that encourage all participants’ contributions. Continued engagement after a policy decision may be needed to ensure that land use decisions, specific projects, and programs achieve the environmental justice objectives initially envisioned. The following goal and policies are intended to further these objectives.

GOAL HC-1

Meaningful opportunities for participation in the development, adoption, implementation, and enforcement of environmental laws, regulations, and policies that affect the health and well-being of individuals and a community.

Policies

- HC-1.1** Ensure that affected residents and stakeholders have the opportunity to fully participate in the land use, policy, and program decisions that impact their health and well-being.
- HC-1.2** Schedule public meetings and/or workshops on key issues affecting the public at times and locations convenient to community members and other stakeholders to encourage participation in decision-making.
- HC-1.3** Utilize a variety of communication techniques and social media tools, including culturally appropriate approaches to public participation and involvement, to convey information to and receive it from the public.
- HC-1.4** Raise the public’s and decision-makers’ awareness of the importance of a healthy environment, the issues affecting a healthy environment, and the goals of environmental justice.
- HC-1.5** Consider the potential impacts of decisions related to land use, food access, active living, safe and sanitary housing, public facilities and services, and other factors that may affect the health of Corona.

REDUCTION IN POLLUTION EXPOSURE

Like many cities in Southern California, Corona has a variety of pollution sources. Commercial and industrial enterprises generate hazardous waste, solid and liquid waste, and other pollutants. Vehicles on the roadways and freeways produce air pollutants. These sources are described in the Public Safety Element. While it is not feasible to eliminate all sources of pollution, the following are opportunities to reduce pollution exposure and improve air quality in Corona.

Land Use Compatibility

Reducing pollution exposure typically involves a key land use concept—compatibility. Incompatible land uses may create a wide variety of health, safety, and welfare issues. Sensitive land uses (residential, schools, medical facilities, daycare, etc.) can be affected by land uses that generate noise, air emissions, dust, and hazardous materials. Incompatible uses near sensitive land uses may also suffer negative consequences in the form of higher mitigation costs or the curtailment of economic activities. Separating commercial and industrial uses from sensitive uses and requiring appropriate buffers and setbacks where such uses abut a residential zone can reduce pollution exposure. City land use plans, environmental reviews of projects, and enforcement actions are designed to ensure that adjacent land uses remain compatible.

Transportation, Air Quality, and Noise

The primary source of pollution in Corona is air emissions from vehicles that pass through the city. The I-15 and SR-91 carry significant volumes of vehicles, the vast majority from outside the city. To avoid freeway congestion, commuters often cut through Corona during the morning and evening commute hours. The high volume of vehicles exposes residents to congestion, noise, and air pollution. The City has attempted to control noise and air pollution impacts by limiting trucks to specified routes, encouraging rail transit, and making other infrastructure improvements. The City also uses projects' environmental reviews and infrastructure design (e.g., noise absorbing pavement) to reduce the impacts of the transportation system.

Water Pollution

Corona is underlain by three groundwater basins that provide water for public use. Groundwater from these three basins has a similar chemistry, primarily a sodium and calcium-bicarbonate water type. The Middle Santa Ana River subbasin is noted for elevated concentrations of perchlorate, nitrate, and salt in the groundwater due to historical agricultural and industrial uses. In addition, portions of the Santa Ana River and Temescal Creek are impaired with various pollutants. The City takes a multifaceted approach to address water contaminants: 1) working with the State Water Resources Control Board to restore the beneficial uses of the waterways; 2) controlling sources of pollutants as required by the City's NPDES permits; and 3) implementing state-of-the-art treatment processes to clean up pollutants in the groundwater.

The following goal and policies are implemented to reduce the exposure to pollution and improve air and water quality in Corona.

GOAL HC-2

Protection of residents, business, and visitors from exposure to pollution and improvement of air quality for the community.

Policies

- HC-2.1** Require that proposals for new sensitive land uses and/or industrial and commercial uses incorporate the adequate use of setbacks, barriers, landscaping, or other design measures as necessary to minimize air quality impacts and achieve appropriate health standards.
- HC-2.2** Designate and maintain truck routes that are sufficient to serve the needs of industry and commerce while avoiding residential areas, schools, or other sensitive land uses so as to minimize exposure to the noise, air pollution, and vibration associated with trucks.
- HC-2.3** Prioritize local and regional efforts, in cooperation with regional agencies, to remediate or treat contaminated surface water, groundwater, or soils to state and federal standards, and ensure that drinking water is safe and healthful to meet all local, state, and federal health standards.
- HC-2.4** Ensure that individuals, neighborhoods, and businesses clearly understand the potential for adverse pollution, noise, odor, vibration, and lighting and glare, and the effects of toxic materials or emissions when generating uses are proposed near them.
- HC-2.5** Require the preparation of air quality, noise, and vibration technical studies to determine the impact of proposed new development on adjacent and surrounding land uses and to identify the appropriate measures required to mitigate such impacts.
- HC-2.6** Apply and enforce performance standards with respect to fire and explosion hazards, radio frequency or electrical disturbance, noise and vibration, dust, smoke, glare, underground storage tanks, or other potential sources of exposure to pollution.
- HC-2.7** Keep up to date on new and amended regulations issued by state and federal regulatory agencies with respect to air, water, and other pollutants and permissible exposure; revise local ordinances and development requirements as needed to reduce exposure to pollution.

PROMOTING FOOD ACCESS

Having healthy food choices available and easily accessible to residents in retail settings (e.g., grocers, restaurants, and other venues) allows people to make healthier food choices. Compared to Riverside County, Corona has a high number of grocers per capita. Corona has more than two dozen larger chain grocery stores, ethnic grocers, and fruit and vegetable markets. Grocery stores are within one mile of most residential areas. More than 90 percent of the large grocery stores accept Women, Infants, and Children coupons, and most grocery outlets accept Cal-Fresh vouchers for food. Corona-Norco Unified School District also offers low-cost or free meals to students.



Corona Peace Garden

State legislation was enacted to allow cottage food industries, micro-kitchens, and community gardening to be operated from residences as small independent businesses. The City has adopted ordinances in compliance with state law or automatically implements the law in accordance with regulations adopted by Riverside County. Additionally, the City encourages community gardens and authorizes certified farmers markets. The City's Agricultural zone and Rural Residential zones also allow farms or ranches for tree, field, or row crops or similar agricultural enterprises.

Food availability in Corona is excellent, and the following goal and policies address the continued promotion of access to healthy foods.

GOAL HC-3

Ensure that adequate opportunities to access a wide variety of food outlets are available to all neighborhoods to the extent feasible.

HEALTHY COMMUNITY

Policies

- HC-3.1** Allow for limited agricultural uses, including community gardens, in areas of the city that are consistent with land use, zoning, and permitting requirements.
- HC-3.2** Support the startup and operation of farmers/certified farmers markets, cottage home industries, and microenterprise kitchens in accordance with adherence to local, county, and state regulations.
- HC-3.3** Support the school district's free and reduced lunch program in City-operated facilities that administer educational programs, to the extent feasible.
- HC-3.4** Support nonprofit organizations and food banks that distribute food to needy residents at authorized locations subject to compliance with any local, county, or state permit.
- HC-3.5** Support public and private agency efforts to meet the nutritional needs of older adults, especially the isolated or ill, by improving access to nutritional food in the city.
- HC-3.6** Consider the potential social impact of allowing potential overconcentrations of retail alcohol sales in proximity to residential neighborhoods and parks.
- HC-3.7** Encourage responsible tobacco retailing and discourage violations of tobacco-related laws that prohibit the sale or provision of tobacco and nicotine products to minors.



Corona has a wide variety of grocery stores offering healthy food.

SAFE AND SANITARY HOUSING

Safe and habitable housing has a clear affect on an individual's health and well-being. When housing falls into disrepair or has pests, moisture, inadequate ventilation, and/or chemicals, the home can become an unhealthy or dangerous environment. Substandard housing can also cause or exacerbate health problems, posing risks to children, seniors, and people with chronic illnesses. As residents spend approximately 70 percent of their time in a residence, it is important to reduce exposure to pollutants, allergens, and risk of injuries through the design and maintenance of housing.

The quality and design of housing largely depends on the City's building standards in place at the time of construction. Developing research and practice has shown, however, that many building products and conditions, some of which were thought safe, have a negative affect on residents' health. For instance, lead paint and asbestos, which is prevalent in older housing, can cause respiratory problems. Housing with poor ventilation can lead to uncomfortable indoor temperatures, excessive moisture, and mold. In certain areas of California, radon gas and methane are also concerning.

Expectations for safe and sanitary housing have been extended beyond traditional concerns with the physical condition of the home and surrounding environment. "Aging in place" refers to aging residents choosing to stay in their own home as long as possible with modifications to the home or supportive services as needed. Housing instability—which is typically associated with paying too much for housing, overcrowding, or having to move frequently—has also been shown to impact health. Finally, fair housing concerns have been raised as an environmental justice issue.

Smoking has become a more recognized health concern in multifamily housing. In addition to costs for cleanup, second-hand smoke is a significant health concern, especially for seniors, children, and individuals with compromised immune systems. Older apartments are most susceptible to smoke drifting into adjacent units. In Corona, at least 10 apartment projects, including affordable and market rate, offer smoke-free living. CORE, a national affordable housing developer with projects in Corona, has been transitioning its entire portfolio of affordable units to smoke-free.

Solutions to ensuring safe and sanitary housing should address the physical condition of housing and surrounding property, the construction materials used, and how the home is used and maintained. Energy efficiency, improved ventilation, moisture reduction, and other green building standards have been demonstrated to improve respiratory and general health. Substantial housing rehabilitation can improve residents' health, reducing their health care costs. Effective property maintenance laws can help prevent or remove unsafe and unsightly conditions.

Landlords, property managers, residents, builders, and the City can all play a supportive role in ensuring that existing and new housing provides a safe, sanitary, and healthful environment for current and future residents of all ages and health conditions. The following goal and policies are directed to that end.

GOAL HC-4

Ample opportunities for housing that is safe, sanitary, and healthful for residents of all ages, abilities, and incomes.

Policies

- HC-4.1** Continue to establish and enforce City building and property regulations that ensure the sound maintenance, condition, safety, and appearance of residential structures and properties.
- HC-4.2** Encourage opportunities for retrofitting housing, improving access to housing, or developing accessory units that improve the ability of aging residents or disabled people to reside in their homes as long as possible.
- HC-4.3** Require that proposals for new housing in areas subject to unhealthful air quality incorporate setbacks, barriers, landscaping, ventilation systems, and other measures to protect residents.
- HC-4.4** Encourage the rehabilitation of substandard housing (electrical, plumbing, life safety, etc.) and/or remediation of health conditions (lead, mold, asbestos, etc.) to ensure a safe and healthful environment for occupants.
- HC-4.5** Encourage smoke- and vape-free workplaces, multifamily housing, schools, parks and recreational facilities, and other outdoor gathering places to reduce exposure to second-hand smoke and other chemicals.
- HC-4.6** Support housing construction practices, where initiated by developers, that are free from asbestos, volatile organic compounds, and other chemicals known to be hazards.



Corona's housing rehabilitation program assists homeowners in replacing roofing, painting and lead abatement, and other home improvements.

PUBLIC FACILITIES

Quality of life in Corona is partly defined by the public facilities and services available to residents (e.g., public improvements, public services, and community amenities). Common examples include parks, community facilities, libraries, and health care facilities and the equitable access to such facilities. The City of Corona strives to ensure that a reasonable and equivalent level of public facilities and services are available throughout the city. This is often accomplished by a combination of developer agreements, impact fees, prioritization of improvements, and land use policy.

However, ensuring that all neighborhoods have the same type and number of all public facilities and services is not always possible. For instance, homes near land zoned for shopping districts will have better access to goods and services. Homes situated in the foothills will have less access to urban parks and libraries but greater access to trails. In other cases, certain neighborhoods have homeowner associations that provide facilities for residents living within the neighborhood who contribute HOA fees for services. These differences may make it impractical to handle each area in the same way.



Many Corona neighborhoods have recreational centers located in parks.

While it is not feasible to provide the exact same type of amenities in each neighborhood, the City strives to address the needs of a neighborhood in an equivalent manner (e.g., recreational facilities that are different in type but have the same value and function) based on the particular opportunities and constraints present in each neighborhood. In this way, residents and businesses can have access to a range of public facilities and services needed for quality of life.

The following goal and policies are intended to encourage the appropriate and feasible distribution of public facilities/services and access to them.

GOAL HC-5

Promote access to a wide range of public facilities and services that will maintain quality of life and promote equity in Corona.

Policies

- HC-5.1** Locate and distribute, where feasible, a generally equivalent type and amount of public facilities, services, and amenities (parks, schools, police and fire services, etc.) to all areas throughout Corona. Seek to improve facilities, services, and amenities in areas deemed deficient.
- HC-5.2** Assess the development impact fees required for new developments as necessary to ensure that appropriate levels of public facilities, services, and amenities are provided and that the demand from such development does not detract from current areas.
- HC-5.3** Where equivalent public facilities, services, and amenities are not available or feasible, encourage and/or require public transit providers to establish and maintain routes that allow access from underserved areas to appropriate public facilities, services, and amenities.
- HC-5.4** Establish agreements with partner agencies to provide public facilities, services, and amenities within the city. This includes public education, health services, flood protection, energy, technology and communications services, and other services as appropriate.

PROMOTING PHYSICAL ACTIVITY

The built environment plays a large role in determining whether communities have opportunities for physical activity. It is well established that the more convenient opportunities are to walk, bicycle, or participate in physical activities, the more likely that individuals will be physically active. Safe access to well-maintained parks, trails, and recreation facilities can all significantly increase the levels of physical activity. This in turn can be expected to have a positive impact on improving residents’ health.

Corona has strived to build and maintain parks with a diverse range of amenities. As described earlier in this general plan, the City has at least three dozen parks, gyms, and recreational facilities, and offers a wide variety of affordable recreational programs. Pedestrian and bicycle trails are maintained throughout the community, including hillsides, to encourage bicycling, walking, and hiking. Improvement of the Santa Ana River Trail will also provide a valued regional amenity for residents.

GOAL HC-6

Safe, accessible, convenient, and affordable opportunities that promote and encourage residents to be physically active.

Policies

- HC-6.1** Ensure that parks, open space, and recreation facilities are accessible, to the extent feasible and appropriate, and allow residents of different neighborhoods to access them; prioritize new facilities in areas of Corona that are deficient in such amenities.
- HC-6.2** Partner with local school districts and nonprofit organizations to improve access to parks and recreational facilities through access to school grounds and other facilities for use after school hours; prioritize agreements for services in areas of Corona that are deficient.
- HC-6.3** Work with the two school districts in the city to ensure that all schools have safe and walkable routes to school, thus encouraging children to be more physically active.
- HC-6.4** Prioritize the development and maintenance of safe walking and bicycling routes throughout the city to encourage residents to be physically active; prioritize areas deficient in coverage or that require safety improvements.
- HC-6.5** Identify and eliminate, where feasible, barriers to outdoor physical activity, such as damaged, incomplete, blocked, or littered sidewalks and bike paths; lack of safe street crossings and direct connections; speeding; insufficient lighting; crime; and lack of landscaping and trees along streets.



Corona is retrofitting Lincoln Park to include a state-of-the art accessible playground.

HEALTHY COMMUNITY

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Environmental Resources

INTRODUCTION

Environmental resources refer to the lands, minerals and fossil fuels, wildlife, plants and trees, trails, air, water, groundwater, and other resources from the Earth. Some resources are managed, such as groundwater water pumped from wells. Other resources are meant to flourish through conservation, such as habitat for birds and wildlife. Some resources, such as minerals, are processed to generate fuel or pave roads. Regardless of the source, these resources are to be conserved and protected so that future generations of Corona residents can continue enjoying a high quality of life.

The wise use and conservation of environmental resources to meet the needs of the community, both today and in the future, is an important part of sustainability. The following statement represents the City's commitment to protecting its resources.

The City is committed to enhancing, maintaining, and protecting its environmental resources for the benefit of current and future generations. Corona will be a vibrant city in which natural habitats are maintained and available as an educational and visual amenity and for the sake of the natural environment and the flora and fauna that flourish there. Consumable natural resources, such as water and mineral resources, will be maintained and used in a responsible manner that balances environmental impacts and the needs of the community. Air quality will also be protected to the extent feasible to support the health and well-being of the community.



View from Temescal Wash in springtime

ENVIRONMENTAL RESOURCES

Scope of Element

Government Code Section 65302(d) requires general plans to address the conservation, development, and use of natural resources, including water, forests, rivers, agriculture, and other resources. It also requires addressing the preservation and conservation of open-space lands, including those for the production of resources, the protection of biotic resources, and for recreational purposes, among others.

This element addresses the following resources:

- » **Water resources**, including the sustainable management of water basins, the quality of water resources, and areas required for water recharge.
- » **Biological resources**, including open spaces that provide habitat (rivers, streams, wildlands, and associated preservation areas) for plant and wildlife species.
- » **Agricultural and mineral resources**, which provide opportunities for the production of food and for the production of aggregate and industrial minerals.
- » **Air resources**, including the quality of air with respect to reducing criteria pollutants, toxic air contaminants and greenhouse gases.

This element provides an inventory of environmental resources and a series of policies and programs to utilize and conserve those resources for the benefit of the community.

Related Plans

The Environmental Resources Element is related to other elements of the general plan, particularly the land use element, which governs the built environment and the land aside for natural open spaces. It is also related to the infrastructure services element, which governs the use of water resources. Related plans include the following:

- » **Water Master Plans.** The City prepares and periodically updates water master plans that affect its water resources—the urban water management plan, groundwater recharge plans, and reclaimed water master plan, among others.
- » **Habitat Conservation Plans (HCP).** The City participates in regional habitat conservation plans to protect its biological resources—the Western Riverside Multispecies HCP and the Stephen Kangaroo Rat HCP, among others.
- » **Air Quality Management Plans.** To further air quality goals, the City is also subject to the South Coast Air Quality Management Plan, associated rules and regulations enacted therein, and other state and federal standards.
- » **Corona Municipal Code.** The City abides by many state and federal environmental resource laws—clean water laws, surface mining regulations, resource agency laws regarding biological resources, and others.

The following sections provide context for each topic addressed in this element, followed by goals and policies to achieve the general plan vision.

WATER RESOURCES

Water is a valuable resource that Corona residents depend on. Water is also used for irrigation and commercial and industrial businesses' production and services. Because the City maintains a water utility and is responsible for providing quality drinking water, managing the City's groundwater resources and ensuring a supply of quality drinking water are essential to achieving the City's mission.

Surface Waters, Washes and Wetlands

Corona and its sphere are crossed by more than 50 ephemeral streams that feed into two major watercourses. The Santa Ana River makes its way through the Santa Ana Mountains and flows onto the Orange County coastal plain. The Santa Ana River is the "receiving water" of Corona's urban, industrial, and agricultural runoff. Temescal Creek is an intermittent stream that flows from the Santa Ana Mountains and Gavilan Hills and meanders southward through Temescal Canyon as a broad, unimproved bank. Corona is also crossed by washes, including Temescal Wash—the most significant of these watercourses—Bedford Canyon Wash, Joseph Canyon Wash, and Main Street and Mabey Canyon Washes, both of which are concrete channels in the city.

Corona's wetland and riparian areas are limited largely to Temescal Creek. However, the Prado Basin and the area directly on its southern edge form one of the largest man-made wetlands in California. Wetlands perform ecological functions that are vital to the environment. They provide a natural means of flood control, reducing damage protection due to flood peaks and thereby protecting against loss. Wetlands improve water quality by intercepting and filtering waterborne sediments, excess nutrients, heavy metals, and other pollutants. In the Prado Basin, the wetlands are also sources of food, shelter, breeding, spawning, nesting, and wintering habitats for wildlife. These include migratory birds and threatened and endangered species.

Groundwater

Corona and its SOI areas are located within the central portion of the Santa Ana Watershed and overlie the Temescal, Bedford, and Coldwater groundwater basins. Many reaches of the Santa Ana River are recharge areas for aquifers. Groundwater in Corona is recharged primarily through the percolation of rainfall on the valley floor and from infiltration of stream flow from tributaries exiting adjacent hills. The Bedford and Coldwater subbasins in southern Temescal Canyon also provide groundwater resources. Corona has historically relied on local groundwater for approximately one-half of its total water supply, and this reliance will continue into the future. With adoption of the Groundwater Management Sustainability Act, water providers must implement actions to ensure the long-term health of groundwater resources. None of the three basins providing groundwater supply to the City are adjudicated, and the Temescal basin is in a moderate overdraft condition. The City's groundwater management and recharge plans assist with operating the Temescal, Bedford, and Coldwater basins in a sustainable manner and increasing reliability of the water supply.

ENVIRONMENTAL RESOURCES

Surface Water Quality

Protecting surface water quality is required under the Clean Water Act and California Porter Cologne Water Quality Act. Corona falls under the jurisdiction of the Santa Ana Regional Water Quality Control Board. Its Basin Plan designates beneficial uses for surface and ground waters and requires implementation of measures designed to protect and restore the beneficial uses of the waterways and conform to the state's antidegradation policy. Temescal Creek and the Santa Ana River are impaired waterways, and maximum pollutant loads have been established for each.

The Federal Water Pollution Control Act prohibits the discharge of any pollutant to navigable waters from a point source unless the discharge is authorized by a National Pollutant Discharge Elimination System (NPDES) permit. Total maximum daily loads of pollutants are controlled through permits that are required for entities that discharge to the waterway. The Santa Ana Regional Water Quality Control Board has issued a stormwater permit to Riverside County, its incorporated cities, and the County Flood Control District. Under this permit, the City implements a drainage area management plan and local implementation plan that control discharges to acceptable limits.

Groundwater Quality

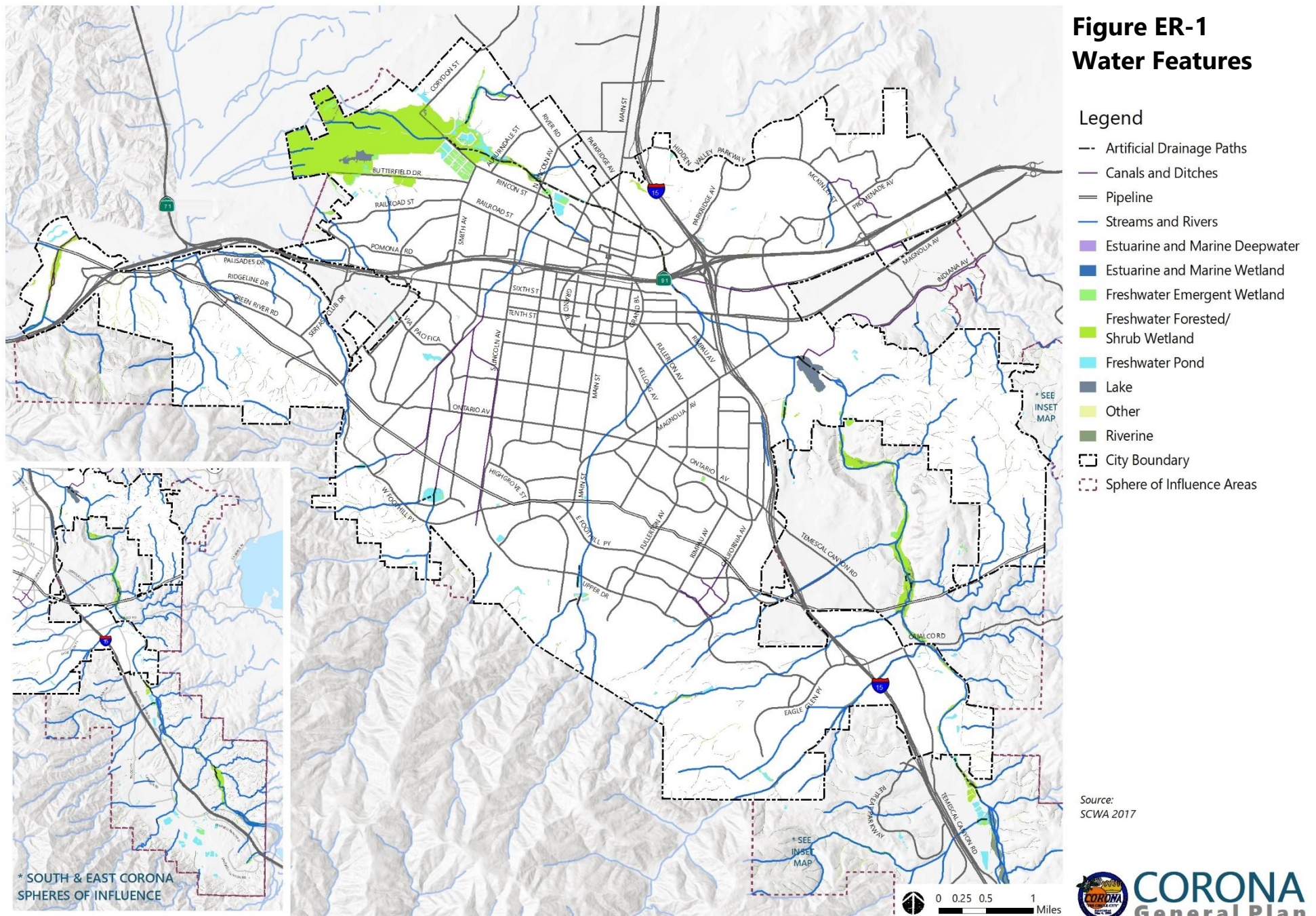
Corona is within the Bedford, Coldwater, and Temescal basin management zones of the Middle Santa Ana River subbasin. Groundwater from the three basins has similar inorganic chemistry, primarily a sodium and calcium-bicarbonate water type. Variability of water type between basins is due to variations in the geology surrounding them. However, groundwater from the Middle Santa Ana River subbasin has elevated concentrations of inorganic constituents, perchlorate, nitrate, and salt. The City employs a mix of groundwater desalters, treatment plants, and blending stations for reducing and managing contaminants in the groundwater. The State Water Board also adopted a plan for managing total dissolved solids and nitrogen to address historical sources of water contamination and protect beneficial uses of waters.

Water Conservation

Given periodic seasonal or prolonged drought conditions in Southern California, the City strives to conserve its limited water resources. The City of Corona's water conservation ordinances and contingency plans provide guidance and authority to address existing and future water shortages. Their water shortage contingency planning outlines objective water conservation reduction targets, five stages of water conservation, and the mandatory restrictions associated with each stage. To encourage water conservation techniques, the City provides materials to educate businesses, residents, and other users on ways to responsibly conserve water resources. The Corona California Friendly Demonstration Garden at City Hall highlights low water using plants, alternatives to turf grass, and California native plants. In addition, the City periodically provides turf removal classes and California friendly landscape training.

Figure ER-1, Water Features, and Figure ER-2, Hydrology, illustrate the location of major water features and groundwater management zones in Corona.

**Figure ER-1
Water Features**



ENVIRONMENTAL RESOURCES

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**Figure ER-2
Hydrology**

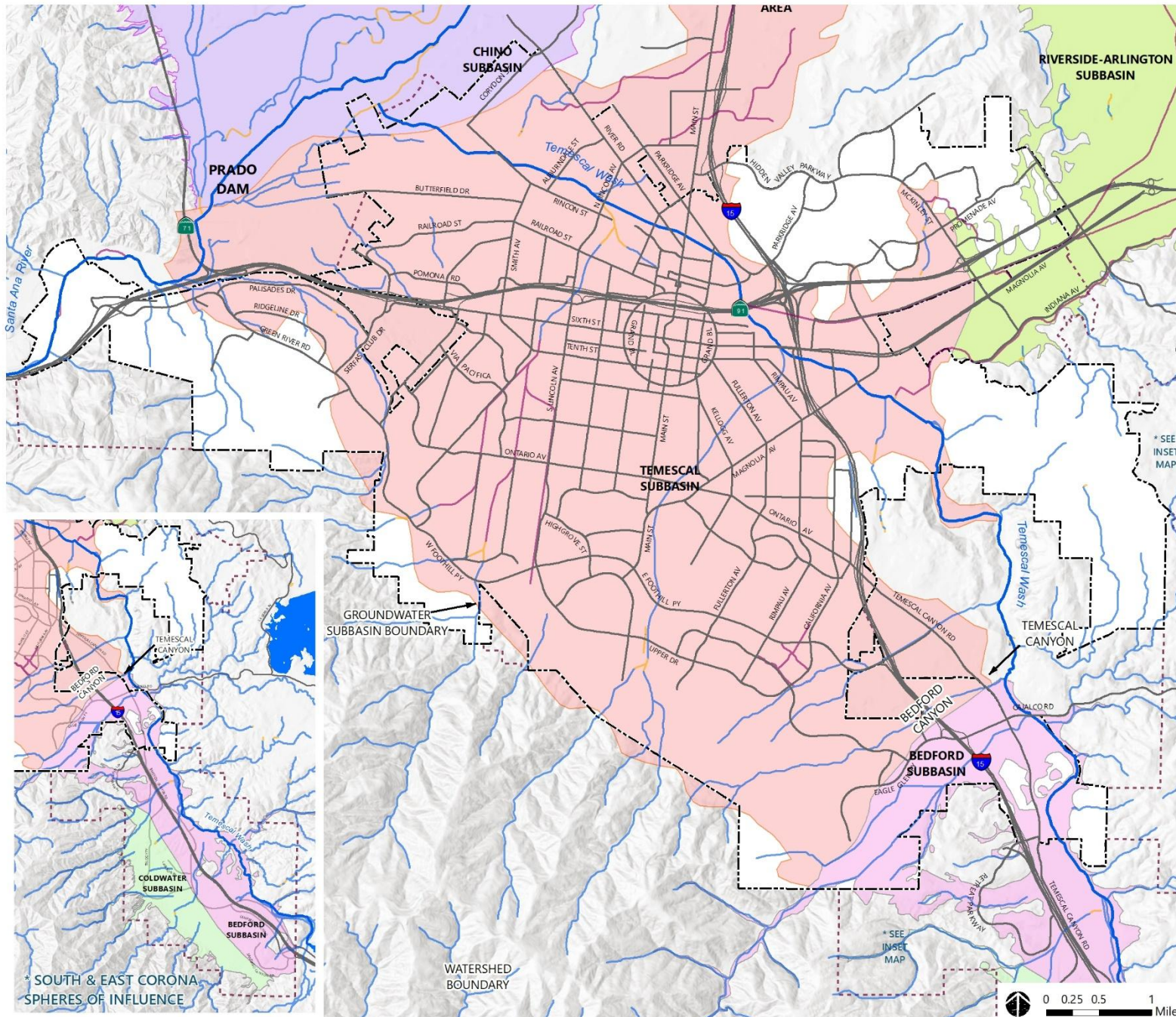
Legend

Water Features

- Artificial Drainage Paths
- Canals and Ditches
- Streams and Rivers
- Lake

Groundwater Basins

- Bedford Subbasin
- Coldwater Subbasin
- Chino Subbasin
- Riverside-Arlington Subbasin
- Temescal Valley Subbasin
- City Boundary
- Sphere of Influence Areas



Source:
California Department of Water Resources
(CDWR). 2016, Bulletin 118 Groundwater Basins
Interim Update; United States Geological Survey
(USGS) National Hydrography Database, 2017.

ENVIRONMENTAL RESOURCES

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GOAL ER-1

Enhancement, protection, and management of the quality and quantity of hydrologic resources in Corona to ensure its long-term quality and sustainability.

Policies

- ER-1.1** Continually monitor the implementation and enforcement of water quality regulations by appropriate County, state, and federal agencies to prevent additional pollution of the City's hydrologic resources, including aquatic environments, underground water basins, and surface waters.
- ER-1.2** Require all public and private grading and construction activities to minimize adverse impacts on the City's water resources through the use of best management practices, as established and updated from time to time by the City of Corona.
- ER-1.3** Implement standard conditions of approval on development and related projects that require appropriate mitigation strategies if soil or groundwater contamination is encountered during project grading and construction.
- ER-1.4** Prohibit the discharge of toxins, debris, refuse, and other contaminants into watercourses, other drainages, water bodies, and groundwater basins. Work with appropriate entities to ensure the cleanup of contamination of existing water resources.
- ER-1.5** Support the Santa Ana Watershed Project Authority to advance efforts to achieve a watershed that is sustainable, drought-proof, salt-balanced, and capable of providing water resources for multiple benefits for current and future populations.
- ER-1.6** Provide active leadership in the regional coordination of water resource management and sustainability efforts affecting Riverside County and continue to monitor and participate in, as appropriate, regional activities to ensure a long-term reliable and sustainable supply of water.
- ER-1.7** Support efforts to create additional water storage and facilities where needed, in cooperation with federal, state, and local water authorities. Additionally, support and/or engage in water banking in conjunction with these agencies where appropriate and as needed.

GOAL ER-2

Sustainable use of finite water resources for the long-term use of residents, the business community, and visitors of Corona.

Policies

- ER-2.1** Sustain the quantity and quality of surface water and groundwater resources within the City of Corona and its sphere of influence for present and future uses.
- ER-2.2** Balance consideration of water supply requirements between urban, agricultural, and environmental needs so that sufficient supply is available to meet each of these different demands.
- ER-2.3** Implement water conservation through a wide range of regulations, public and business education, fiscal techniques, and implementing programs.
- ER-2.4** Require the use of water conservation features and materials in the design and construction of all public buildings, projects, and site development while encouraging their use citywide.
- ER-2.5** Require the use of reclaimed water in outdoor common areas and landscape treatments for homeowners’ associations, public facilities, commercial and industrial uses where feasible.
- ER-2.6** Provide ample opportunities to educate the public and businesses about the importance of water conservation, and the devices available for conservation purposes.
- ER-2.7** Promote resources that offer incentives for property owners and businesses to install and upgrade water efficient fixtures in their buildings, equipment, and landscaping devices.
- ER-2.8** Provide active leadership in the regional coordination of water resource management and sustainability efforts affecting Riverside County and continue to monitor and participate in, as appropriate, regional activities to ensure a long-term reliable and sustainable supply of water.
- ER-2.9** Support efforts to create additional water storage where needed, in cooperation with federal, state, and local water authorities. Additionally, support and/or engage in water banking in conjunction with these agencies where appropriate and as needed.

GOAL ER-3

Long-term groundwater sustainability of the local water supply for domestic, commercial, industrial, agricultural, environmental protection, and other purposes.

Policies

- ER-3.1 In cooperation with RCFCWCD, participate in development, maintenance, and implementation of facilities and programs to recharge City aquifers underlying the City and SOI.
- ER-3.2 Incorporate natural drainage systems (vegetated swales, small ponds, etc.) into developments, where appropriate and feasible, that offer opportunities for groundwater recharge.
- ER-3.3 Retain stormwater and runoff at or near the site of generation for percolation into the aquifer to conserve it for future uses and to mitigate adjacent flooding.
- ER-3.4 Use natural approaches to managing streams (nonchannelization strategies, soft-bottom streams, native vegetation, etc.), to the maximum extent possible, where groundwater recharge is likely to occur.
- ER-3.5 Cooperate with groundwater sustainability members to jointly pursue projects that will contribute to the long-term sustainability (recharge and safe yield) of the basins underlying Corona and SOI areas.
- ER-3.6 Manage the City's reliance on imported water supplies, to the extent feasible and practical, through an enhanced focus on water conservation, groundwater recharge, and reclaimed water use.

GOAL ER-4

Proper management of floodplain and riparian areas for their importance to wildlife habitat, unique and sensitive plant life, water recharge, and public health and safety.

Policies

- ER-4.1 Require urban uses to have a sufficient distance from a floodway boundary to ensure adequate protection of life, property, and habitat values.
- ER-4.2 Avoid altering floodways or channelization wherever possible; however, limit alterations to those that meet the following criteria:
- Alterations necessary for the protection of public health and safety only after all other options are exhausted
 - Alterations essential to public service projects where no other feasible construction method or alternative project location exists
 - Projects where the primary function is the improvement of fish and wildlife habitats

ENVIRONMENTAL RESOURCES

- ER-4.3

Design alterations and improvements to floodways so that they avoid adverse environmental effects to the maximum extent feasible, considering the following environmental factors:
 - Stream scour
 - Erosion protection and sedimentation
 - Wildlife habitat and linkages
 - Groundwater recharge capability
 - Adjacent property
 - Natural designs (e.g., soft riparian bottoms and gentle bank slopes, and landscaping with native plants)
- ER-4.4

Preserve and enhance existing native riparian habitat and prevent obstruction of natural watercourses to the extent feasible in new private and public developments or implement on-site replacement as mitigation.
- ER-4.5

Allow variances from city development standards on land area restricted from development due to its retention as a natural floodway, floodplain, or watercourse to encourage the preservation of natural watercourses without creating undue hardship on property owners.

GOAL ER-5

Preservation and protection of natural and man-made wetlands from development impacts for their importance to wildlife habitat, unique and sensitive plant life, water recharge, and scenic value.

Policies

- ER-5.1

Prohibit encroachment of development into wetlands; provide buffer zones, setbacks, or other effective techniques in project siting and design to minimize direct and indirect effects to wetland habitats.
- ER-5.2

During the development review process, ensure compliance with the Clean Water Act’s Section 404 in terms of wetlands mitigation policies and policies concerning fill material in jurisdictional wetlands.
- ER-5.3

Ensure compliance with habitat mitigation plans accepted by the applicable state and federal regulatory agencies that meet established ratios for wetland enhancement/restoration and on-/off-site compensation for the loss of wetland functions and values.
- ER-5.4

Consider wetlands for use as natural water treatment areas that will result in improvement of water quality.
- ER-5.5

Prohibit the planting of invasive, nonnative species in areas that would encroach and affect watercourses, their banks, and riparian areas.

BIOLOGICAL RESOURCES

While most of the City is highly urbanized, the Temescal Mountains host a diverse array of plant species in distinctive natural plant communities. Open space areas that surround the City—including Chino Hills State Park, Cleveland National Forest, Lake Mathews Estelle Mountain Reserve, and Prado Basin—support a variety of plants and animals native to California. The combination of terrain, drainages and creeks, and other natural features provide opportunities for habitat and wildlife species.

Vegetation and Aquatic Resources

The City's ephemeral washes and other water features contain associated vegetation. Primary washes include Temescal Canyon Wash, Bedford Canyon Wash, Joseph Canyon Wash, Main Street Wash, and Mabey Canyon Wash. Except for Temescal Canyon Wash, most drainages are confined within concrete channels. Temescal Canyon Wash runs from Lake Elsinore through El Cerrito before flowing through the City and draining to the Santa Ana River. In unchanneled segments of Temescal Canyon Wash, substantial riparian vegetation provides habitat for small mammals, amphibians, and birds.

Corona's location near Prado Dam and the Santa Ana River and Temescal Creek makes it proximate to significant wetlands. The vast drainage area behind the Prado Dam is one of the largest man-made wetlands in southern California. Water that flows from the dam and through the Santa Ana River also creates a freshwater forested/shrub wetland. This area is home to numerous wildlife species, including those with special status. Freshwater forested/shrub wetland also extends along Temescal Creek as it meanders through Dos Lagos and Temescal Canyon. Minor patches of wetland resources are dotted in small pieces throughout Corona.

While largely urbanized, Corona contains significant expanses of vegetation along its periphery and within its sphere of influence areas. Natural vegetation communities in the City primarily consist of coastal sage scrub, grassland, and chaparral. Riparian scrub, woodland, forest with interspersed meadows and marshes, and grassland exist on the edges of the City and sphere of influence. Native plant communities include coastal sage scrub, southern willow scrub, and coast live oak. Areas like Eagle Valley are dominated by agricultural land, predominantly grazing. Scrub and Montane coniferous forest can be found in portions of the sphere of influence as well.

Nonnative vegetation includes grassland and other ruderal plant communities. Tamarisk and giant reed infestations have affected local waterways and places where water collects. Rated "High" on the California Invasive Plant Council list, these two species cause severe ecological impacts on native plant species. Tamarisk and giant reed are heavy water users, provide little nest or foraging habitat, are difficult to control, and can grow into dense monocultures that block access to water for larger wildlife. Infestations can take over areas, outcompete native plants, and reduce habitat quality. The Santa Ana River-Orange County Weed Management Area is a coalition that helps prevent and control the spread of invasive weeds on both private and public lands.

Sensitive Biological Resources

Sensitive biological resources are natural habitats and wildlife species in decline, including those that have been afforded special protections or recognition by federal, state, or local conservation agencies. Corona and its SOI have many biological resources, although most have been found or could be present in undeveloped areas of the sphere and not necessarily within the city itself. These resources include: 12 sensitive natural communities, 5 designated critical habitats for threatened or endangered species, 64 special status plant species, 59 special status wildlife species, and several wildlife movement corridors. A comprehensive discussion and mapping of resources are presented in the General Plan EIR Technical Study.

Sensitive Natural Communities

Sensitive or special status natural communities are vegetation types that have a relatively limited distribution and support concentrations of special status plants or wildlife species. Twelve sensitive natural communities are known to occur within the Corona or its SOI, listed below. All documented occurrences are along the northern border of the City or in its SOI, including portions of the Cleveland National Forest.

- | | |
|--|---|
| » California Walnut Woodland | » Southern Interior Cypress Forest |
| » Canyon Live Oak Ravine Forest | » Southern Riparian Forest |
| » Riversidian Alluvial Fan Sage Scrub | » Southern Riparian Scrub |
| » Southern California Arroyo Chub/ Santa Ana Sucker Stream | » Southern Sycamore Alder Riparian Woodland |
| » Southern Coast Live Oak Riparian Forest | » Southern Willow Scrub |
| » Southern Cottonwood Willow Riparian Forest | » Valley Needlegrass Grassland |



Riparian habitat in Hagador Canyon, which begins in Corona and extends into Cleveland National Forest

Critical Habitat

The United States Fish and Wildlife Service (USFWS) designates “critical habitat” for listed endangered or threatened species of flora and fauna. Critical habitat is essential to the survival of a federally listed species. Generally, threatened species means any species likely to become an endangered species within the foreseeable future throughout all or a significant portion of its range. Endangered species are those that may face extinction. Corona’s surrounding natural open space areas provide critical habitat for certain species.

In Corona and its SOI, several animals and plants have been designated federal endangered (FE), federal threatened (FT), and/or state endangered (SE). These species also have designated critical habitat areas in the vicinity of the City and its SOI, as identified in Figure ER-3, Designated Critical Habitat. These areas include the Prado Dam, the Santa Ana River emanating from the dam, and the southwest portion of the SOI abutting the Cleveland National Forest. Critical habitat is designated for six species:

- » *Vireo bellii pusillus* | least Bell's vireo (FE; SE)
- » *Coccyzus americanus occidentalis* | western yellow-billed cuckoo (FT; SE)
- » *Empidonax traillii extimus* | southwestern willow flycatcher (FE; SE)
- » *Catostomus santaanae* | Santa Ana sucker (FT)
- » *Poliophtila californica* | coastal California gnatcatcher (FT)
- » *Anaxyrus californicus* | arroyo toad (Cleveland National Forest adjacent to SOI; FE)

The critical habitat areas for least Bell’s vireo, western yellow-billed cuckoo, and southwestern willow flycatcher are at the northern end of the City on and around the Prado Reservoir. The Santa Ana River, which flows through the northwestern part of the city, is listed as Santa Ana sucker critical habitat. Coastal California gnatcatcher critical habitat is widely distributed in the Chino Hills State Park and the eastern foothills of the Cleveland National Forest. It is primarily adjacent to the City. Critical habitat for Branton’s milk-vetch is delineated outside the City and SOI.



Source: https://en.wikipedia.org/wiki/Yellow-billed_cuckoo;
https://commons.wikimedia.org/wiki/File:Bell%27s_Vireo.jpg

ENVIRONMENTAL RESOURCES

Special Status

"Special status species" is a universal term used in the scientific community for species that are considered sufficiently rare that they require special consideration and/or protection and should be, or have been, listed as rare, threatened, or endangered by the federal and/or state governments. Federal regulatory agencies consider special status species to be those at risk of becoming threatened, endangered, or extinct.

According to the California Natural Diversity Database and the California Native Plant Society Rare Plant Inventory, 64 special status plant species may be present in the City or SOI. Of those species, 11 have been sighted in the City of Corona or its SOI. The following special status plant species were sighted within the city limits:

- » *Abronia villosa* var. *aurita* | chaparral sand-verbena (also in SOI)
- » *California macrophylla* | round-leaved filaree
- » *Calochortus weedii* var. *intermedius* | intermediate mariposa-lily (also in SOI)
- » *Dudleya multicaulis* | many-stemmed dudleya (also in SOI)
- » *Lepidium virginicum* var. *robinsonii* | Robinson's pepper grass (also in SOI)



From left to right; many stemmed dudleya and intermediate mariposa
Courtesy: Western Riverside County Regional Conservation Authority

Special status wildlife species are those listed as threatened or endangered, proposed for listing, or candidates for listing by USFWS and CDFW, and that are considered sensitive by CDFW. The Corona Planning Area has 51 special-status wildlife species. Of these potentially occurring species, 18 have been found in the City or its SOI. These include the Crotch bumble bee, Santa Ana sucker, arroyo chub, western spadefoot, Coast Range newt, coastal whiptail, red-diamond rattlesnake, western pond turtle, coast horned lizard, southern California rufous-crowned sparrow, golden eagle, burrowing owl, Swainson's hawk, western yellow-billed cuckoo, coastal California gnatcatcher, least Bell's vireo, and Stephens' kangaroo rat.

Wildlife Corridors

Corona is surrounded by expansive natural areas, such as the Cleveland National Forest, Chino Hills State Park, Prado Basin, Lake Matthews-Gavilan Plateau, and other areas, which may be crossed by a wide variety of wildlife species. These species move between patches of suitable habitat in undisturbed landscapes and environments fragmented by development. Corona has the following types of routes where wildlife travel:

- **Wildlife corridors.** These are areas of suitable habitat that are separated by areas of unsuitable habitat such as rugged terrain, changes in vegetation, or human disturbance. Wildlife corridors are often bounded by urban land areas unsuitable for wildlife. The corridor contains suitable cover, food, and/or water to support species and facilitate movement while in the corridor.
- **Travel (movement) routes.** These are usually a landscape feature (ridgeline, canyon, or riparian corridor) within a larger habitat area that is used by animals to facilitate movement and provide access to necessary resources. The travel route is generally preferred because it provides the least amount of topographic resistance.
- » **Wildlife crossings.** These are small, narrow areas, relatively short in length, that allow wildlife to bypass an obstacle or barrier. Crossings typically are man-made and include culverts, underpasses, drainage pipes, bridges, and tunnels. Wildlife crossings often represent “choke points” along a movement corridor.

In the City, the few areas with natural characteristics that could be used by wildlife as movement or migratory corridors occur in orchards and along drainages. The most prominent features that may provide valuable habitat linkage are the Bedford Canyon Wash and Temescal Canyon Wash, which connect the Cleveland National Forest and the Lake Mathews Estelle Mountain Reserve. There are no other notable wildlife movement and migratory corridors in the city; however, there is potential value in establishing a corridor between Chino Hills State Park and Cleveland National Forest. Wildlife use underpasses west of the City to move from Chino Hills to Sierra De Oro.



From left to right; coastal western whiptail and coastal California gnatcatcher
 Courtesy: Western Riverside County Regional Conservation Authority

Conservation Efforts

There are several ongoing, coordinated planning efforts to conserve biological resources in Corona and environs. Figures on the following pages identify these conservation planning areas and conserved lands in the context of the City of Corona.

Upper Santa Ana River Habitat Conservation Plan

The Upper Santa Ana River Habitat Conservation Plan (Upper SAR HCP) is a collaborative effort among the water resource agencies of the Santa Ana River Watershed, in partnership with state and federal resource agencies and stakeholder organizations. The Upper SAR HCP will enable the water resource agencies to continue to provide and maintain a secure source of water for the residents and businesses in the watershed, and to conserve and maintain natural rivers and streams that provide habitat for a diversity of unique and rare species in the watershed. The protection of these habitats and the river systems they depend on also provides recreational opportunities for activities such as hiking, fishing, and wildlife viewing. The Upper SAR HCP will specify how species and their habitats will be protected and managed.

Western Riverside County Multiple Species Habitat Conservation Plan

The Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP) is a comprehensive, multi-jurisdictional plan that addresses biological and ecological diversity by conserving species and associated habitats, while allowing approval of development in western Riverside County. Administered by the Western Riverside County Regional Conservation Authority, the MSHCP area encompasses 1,967 square miles and addresses 146 sensitive plant and animal species and the vegetation communities they depend on. The MSHCP has 14 planning areas with conservation goals for each. Corona and its SOI lie within the Temescal Canyon Area Plan. The MSHCP serves as the habitat conservation plan in accordance with the federal Endangered Species Act (FESA) and the National Communities Conservation Plan (NCCP) under the NCCP Act of 2001.

Stephens' Kangaroo Rat Habitat Conservation Plan

Portions of Riverside County are also covered by a habitat conservation plan (HCP) for Stephens' Kangaroo Rat (SKR). The HCP covers approximately 534,000 acres within Riverside County, including an estimated 30,000 acres of occupied habitat. The plan authorizes the incidental take of up to half of the occupied habitat remaining in the HCP plan area while using development fees to implement the plan, purchase private property, and create a reserve system. The SKR HCP fee area overlaps the eastern and southern portions of Corona and its SOI. The HCP is administered by the Riverside County Habitat Conservation Agency. As a portion of the preservation area is in Corona, any corresponding HCP policies would be applicable to the City.

Figure ER-3 shows critical habitat for species in Corona. Figure ER-4, Potential Wildlife Movement Corridors, identifies areas of potential wildlife movement between open spaces in the City and SOI. Figure ER-5, Conservation Lands, and Figure ER-6, Western Riverside MSHCP, outline habitat conservation lands that directly affect Corona.

**Figure ER-3
Designated Critical
Habitat**

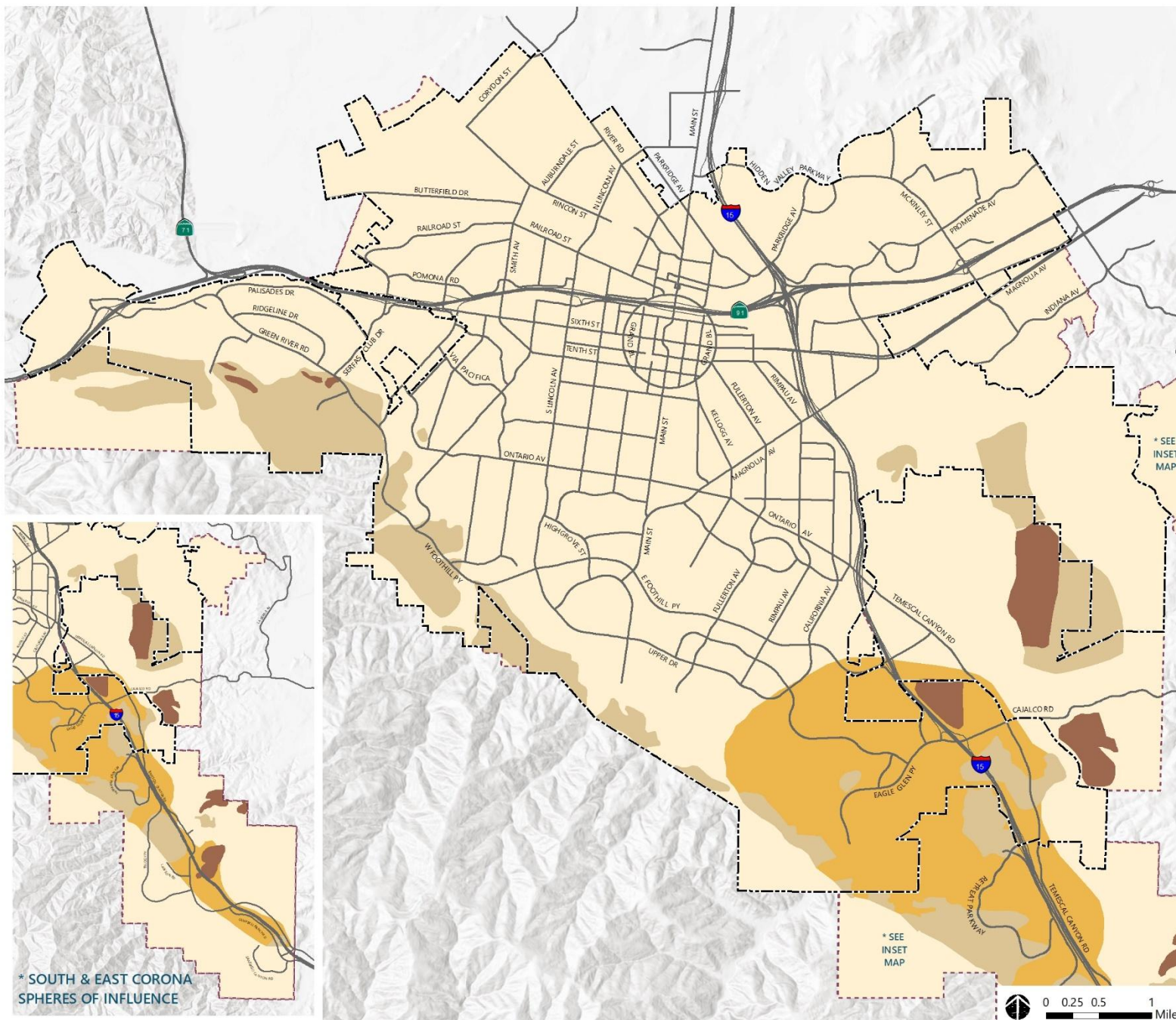
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Mineral Resource Zones

- MRZ-2a
- MRZ-3a
- MRZ-3b
- MRZ-4

City Boundary

Sphere of Influence Areas



Source:
California Department of Conservation,
Division of Mines and Geology, 2017

ENVIRONMENTAL RESOURCES

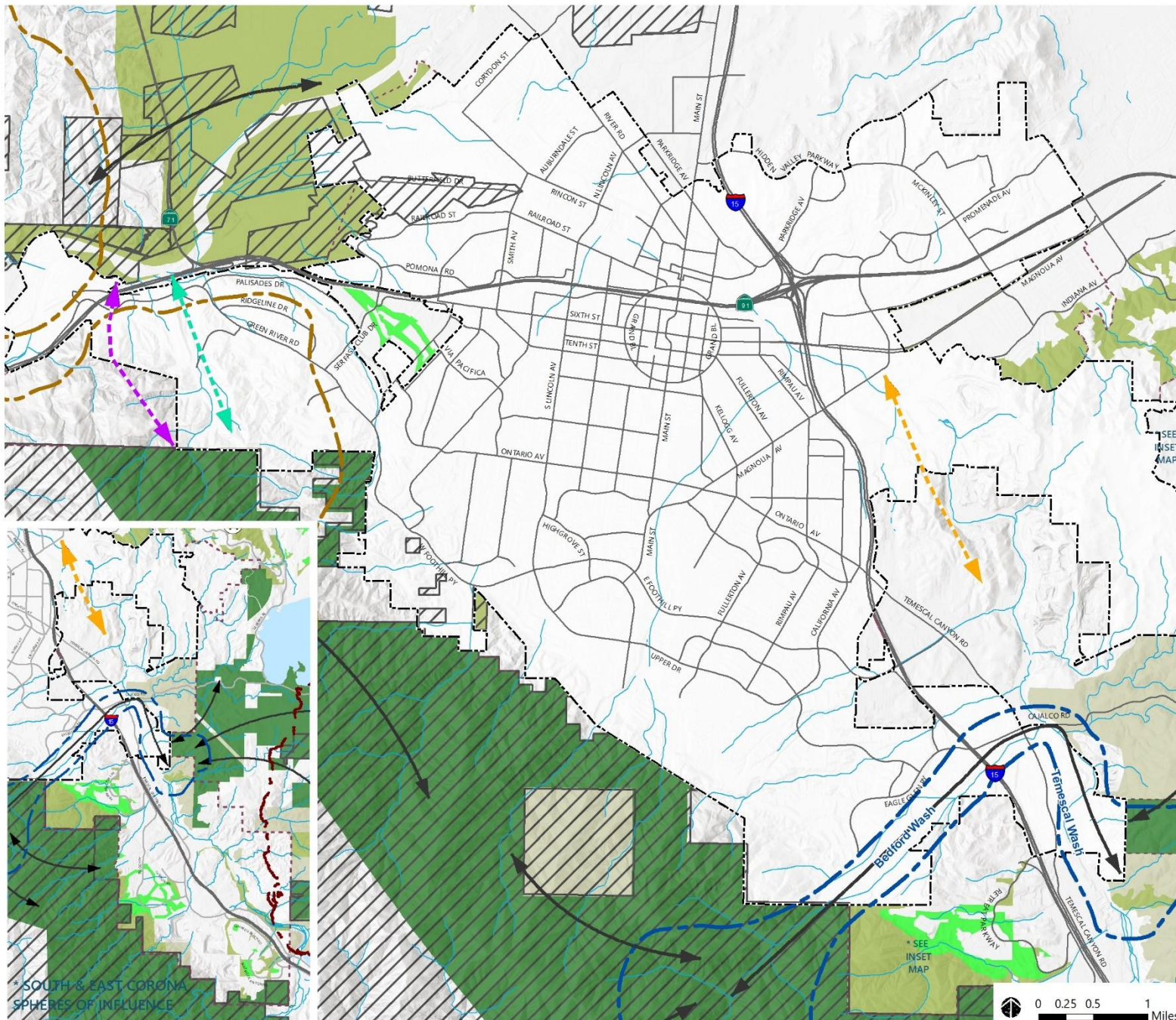
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**Figure ER-4
Potential Wildlife
Movement Corridors**

Legend

Essential Connectivity Areas Corridors

- Bedford Wash to Lake Mathews
- Estelle Mountain Reserve Corridor
- Discontiguous: CNF - Santa Ana Mountains
- Estelle Mountain - Lake Matthews
- Conservation
- Conservation Habitat
- Open Space Recreation
- Open Space
- Wildlife Movement
- MSHCP Proposed Linkage No.1
- MSHCP Proposed Linkage No.2
- MSHCP Proposed Linkage No.4
- Streams and Rivers
- City Boundary
- Sphere of Influence Areas



Source:
SCWA 2017

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Figure ER-5 Conservation Lands

Legend

- MSHCP Conserved Lands
- RCA Conserved Lands
- RCA Conservation Easements
- Public Quasi-Public Conserved Lands

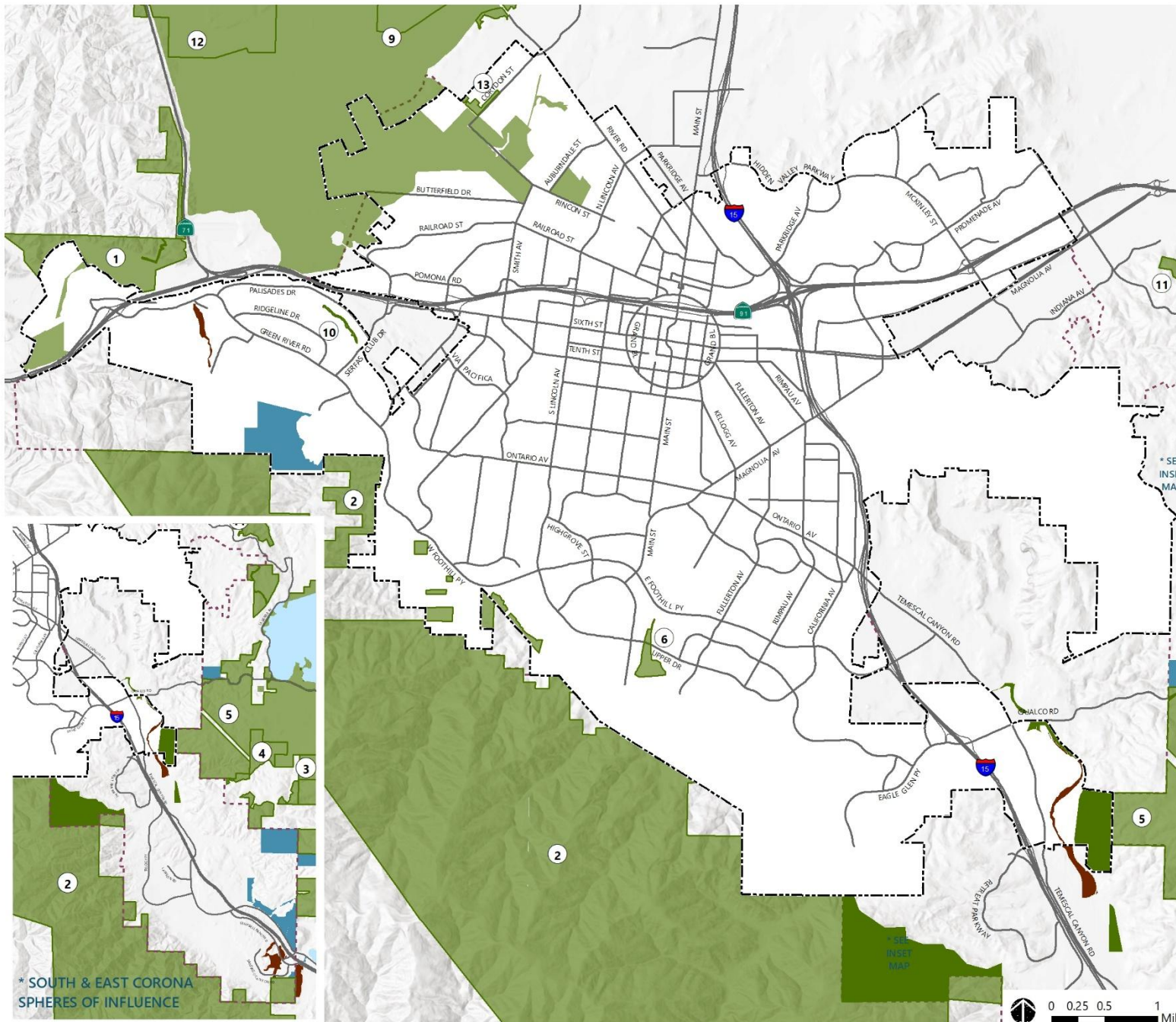
- 1 - Chino Hills State Park
- 2 - Cleveland National Forest
- 3 - El Sobrante Landfill
- 4 - El Sobrante HCP
- 5 - Lake Mathews / Estelle Mountain Reserve
- 6 - Main Street Channel
- 7 - Mockingbird Canyon Levee
- 8 - Mockingbird Canyon Reservoir
- 9 - Prado Basin Park
- 10 - RCRCD Thomas Ranch
- 11 - Riverside Land Conservancy MOU
- 12 - Santa Ana River Regional Park
- 13 - Stagecoach Park

City Boundary

Sphere of Influence Areas

Note:
MSHCP Conserved Lands are owned and managed by the Riverside-Corona Resource Conservation District (RCRCD).

Source:
Western Riverside County Regional Conservation Authority (RCA) 2017



* SOUTH & EAST CORONA
SPHERES OF INFLUENCE

ENVIRONMENTAL RESOURCES`

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Legend

-  Elsinore Area Plan
-  Lake Mathews/
Woodcrest Area Plan
-  Temescal Canyon Area Plan
-  Open Water
-  Bureau of Land Management
-  US Forest Service
-  Department of Defense
-  Local Government
-  State Lands
-  Stephens Kangaroo Rat Fee Area
-  City Boundary
-  Sphere of Influence Areas



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GOAL ER-6

Protection, enhancement, and sustaining of significant plant and wildlife species and habitat that exist in Corona and its Planning Area, for the long-term benefit of the natural environment and Corona residents and visitors.

Policies

- ER-6.1** Support the rehabilitation and enhancement of the biological diversity, and integrity of the City's natural resources through such means as vegetation restoration, control of alien plants and animals, landscape buffering, and natural watercourse channel restoration.
- ER-6.2** Preserve the wildlife and plant species and habitats listed in Tables 4-12 and 4-13 of the Technical Background Report for the General Plan and EIR and those that may be considered by the City of Corona in the future.
- ER-6.3** Ensure that new developments and circulation improvements demonstrate compliance with state and federal regulations concerning the status, location, and condition of significant and sensitive biological species and habitats and riparian and riverine corridors. Biological surveys, as required and defined by the Western Riverside County Multiple Species Habitat Conservation Plan, should identify potential impacts on biological resources and include mitigation measures to protect/replace resources in like kind.
- ER-6.4** Ensure that new developments through the development review process adhere to the Western Riverside County Multiple Species Habitat Conservation Plan, the Stephens' Kangaroo Rat Habitat Conservation Plan, and other habitat plans as appropriate to conserve biological diversity through protection of natural communities.
- ER-6.5** Preserve wildlife habitat of significant natural open space areas, including expanding habitat ranges, movement corridors, and nesting sites by adhering to and implementing the core biological linkages identified in the MSHCP for parts of the Temescal Canyon Area Plan in the City. Any proposed recreational use of those areas such as trails shall be designed to not interfere with the preservation efforts established in the MSHCP.

GOAL ER-7

Adequate protection of biological resources and increased public awareness of their value to the community.

Policies

- ER-7.1** Require that public and private construction activities be conducted in a manner to minimize adverse impacts on natural resources and biological resources in proximity to MSHCP conservation areas and adhere to the

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MSHCP Guidelines pertaining to Urban/Wildlife Interface for drainage, toxics, lighting, noise, invasive barriers, and grading [MSHCP Section 6.1.4].

- ER-7.2 Allow for publicly accessible sites that facilitate observation of natural resources in Corona and its sphere without compromising environmental quality.
- ER-7.3 Promote education programs and materials prepared by the Western Riverside County Regional Conservation Authority, Riverside-Corona Resource Conservation District, and other entities that promote awareness of biological resources conservation.

GOAL ER-8

Protection of forest and vegetation resources in the City of Corona

Policies

- ER-8.1 Cooperate with federal and state agencies to achieve the sustainable conservation of forest lands as a means of providing open space and protecting natural resources and MSHCP habitat.
- ER-8.2 Support conservation programs to reforest privately held forest lands.
- ER-8.3 Work with Riverside County to update the Vegetation Map for Corona and the SOI areas in cooperation with the California Department of Fish and Wildlife, the Natural Diversity Data Base, the United States Forest Service, and other knowledgeable agencies.
- ER-8.4 Maintain and conserve superior examples of native trees (including oak trees), natural vegetation, stands of established trees, and other features for aesthetic and water conservation purposes.
- ER-8.5 Conserve the oak tree resources in the City to the extent feasible.

GOAL ER-9

Protection of regional washes and waterways and their use for recreational and open space purposes such as trails, habitat preservation, and groundwater recharge.

Policies

- ER-9.1 Protect sensitive biological resources in the Temescal Canyon Area Plan through adherence to policies in the Western Riverside County MSHCP.
- ER-9.2 Conserve existing wetlands and wetland functions and values in the Temescal Canyon Wash, Prado Basin, and the Santa Ana River with a focus on conservation of existing riparian, woodland, coastal sage scrub, alluvial fan scrub, and open water habitats.

- ER-9.3** Conserve existing known populations of least Bell's vireo and southwestern willow flycatcher in the Temescal Canyon Area Plan, including at Prado Basin, Santa Ana River, and Temescal Canyon Wash. Maintain existing breeding habitat for these species at Prado Basin, Santa Ana River, and Temescal Wash where applicable to a particular project and location.
- ER-9.4** Conserve and manage suitable habitat for species known to exist in the Temescal Canyon Area Plan of Western Riverside County's Multiple Species Habitat Conservation Plan.
- ER-9.5** Conserve clay soils supporting sensitive plant species known to occur in the Temescal Canyon area, including Munz's onion, Palmer's grappling hook, small-flowered morning glory, long-spined spineflower, thread-leaved brodiaea, small-flowered microseris, and many-stemmed dudleya.
- ER-9.6** Conserve sandy soils co-occurring with chaparral supporting Palomar monkeyflower, known to occur in the Temescal Canyon area.
- ER-9.7** Conserve locations supporting California muhly, heart-leaved pitcher sage, Hall's monardella, and other sensitive plant species that may occur in a wide variety of habitat types within the Temescal Canyon Area Plan.
- ER-9.8** Provide for and maintain connection(s) from the Cleveland National Forest to Prado Basin and the Santa Ana River within Temescal Canyon, providing opportunities for offsite connections to Chino Hills State Park.
- ER-9.9** Conserve upland habitat adjacent to the Temescal Canyon Wash to augment existing upland habitat conservation in the Lake Matthews/Estelle Mountain Reserve areas and provide for contiguous connection of upland habitat blocks from the existing reserve to Temescal Wash. Habitat conservation should focus on blocks of existing upland habitat east of Temescal Canyon Wash connecting to Lake Matthews/Estelle Mountain Reserve.
- ER-9.10** Conserve floodplain areas supporting sensitive plant species known to occur in Temescal Canyon, including Parry's spineflower, peninsular spineflower, smooth tarplant, and Coulter's matilija poppy.
- ER-9.11** Conserve rocky soils co-occurring with coastal sage scrub, peninsular jumper, or chaparral supporting Payson's jewelflower, known to occur in the Temescal Canyon area.
- ER-9.12** Provide for and maintain a continuous linkage along the Temescal Canyon Wash from the southern boundary of the Temescal Canyon to the Santa Ana River.

AGRICULTURAL AND MINERAL RESOURCES

Corona's history has been tied to agriculture and mining since its earliest founding. Although agricultural resources have largely been replaced by residential subdivisions, the City is still known for its extensive mineral resources.

Agricultural Resources

Corona's history and development, as with most communities in southern California, are closely linked to agriculture. Much of present-day Corona was used by the citrus industry. Over the past 50 years, however, the land required for agricultural production gradually transitioned to master-planned developments. Today, Corona no longer has agricultural preserves under a Williamson Act contract within its city limits. Smaller niche agricultural land uses remain, including orchards. Additionally, several faith-based organizations in Corona are located on land zoned Agriculture because the city allows religious facilities in all zones in the city with a conditional use permit.

Corona's remaining agricultural resources can be grouped into categories developed by the Department of Conservation. Figure ER-7, *Agricultural Resources in Corona*, shows the location of remaining agricultural resources in Corona.

- **Prime Farmland.** Farmland with the best combination of physical and chemical features (soil quality, growing season, moisture supply, etc.) to support long-term agricultural production. This land has the soil quality, growing seasons, and moisture needed to produce sustained high yields.
- **Farmland of Statewide Importance.** Farmland other than Prime with a good combination of physical and chemical characteristics, but with minor shortcomings, such as greater slopes or less capacity to store moisture in soil. The land must also have been under irrigated production during the past four years.
- **Unique Farmland.** Lands consisting of lesser quality soils used to produce the state's leading agricultural crops. This land is usually irrigated but may include unirrigated orchards or vineyards in some climatic zones. The land must also have been under irrigated production during the past four years.
- **Farmland of Local Importance.** Lands that would be classified as Prime or of Statewide Importance but lack available irrigation water. Lands could be planted with dryland crops of barley, oats, and wheat. Also includes lands in production of major crops, dairy lands, or lands within agricultural zones or contracts.
- **Grazing land.** Land on which the existing vegetation is suited to the grazing of livestock. The minimum mapping unit for grazing land is 40 acres. These lands comprise the vast majority of all agricultural resources in Corona. This is the predominant type of farmland still present in the community.

Mineral Resources

Mineral extraction has been a part of Corona's history since at least 1888, when the Temescal Rock Quarry was opened to furnish rock for streets in Los Angeles and nearby towns. The most predominant mineral resources generally have consisted of clay and construction aggregates—crushed rock, sand, and gravel. Much smaller amounts of silver, lead, zinc, coal, and gypsum have also been identified. As of 2017, Corona has two active mining operations, All American Asphalt and Vulcan/Calmat. The sphere of influence has ten active mining operations under jurisdiction of the County of Riverside.

Mineral extraction and reclamation activities are regulated by the California Department of Conservation, in accordance with the Surface Mining and Reclamation Act of 1975. As part of its mandate, the State Geologist is required to identify and classify lands in every community with potential mineral resources, which may be further designated as lands of regional or statewide significance.

- **MRZ-1.** Areas where adequate information indicates that no significant mineral deposits are present, or where it is judged that little likelihood exists for their feasible production.
- **MRZ-2.** Areas where adequate information indicates that significant mineral deposits are present or where it is judged that a high likelihood for their presence exists. This classification may contain additional subcategories.
- **MRZ-3.** Areas containing mineral deposits whose significance cannot be evaluated from available data. MRZ-3 areas may be classified 3a or 3b based on their potential for resources.
- **MRZ-4.** Areas where available information is inadequate for assignment to any other zone. Unlike MRZ-1, minerals may be present, but information is not available to make a determination.

The City is primarily underlain by MRZ-2 lands, which are known to contain valuable mineral resources, specifically construction aggregate and industrial minerals. While much of that area has already been developed, extensive resources still exist in the Gavilan Hills and in southwest Corona. Portions of Corona and its SOI are designated by the state as a "Construction Aggregate Resource Area." Figures ER-8 through ER-10 identify mineral resources in Corona and those of regional significance.

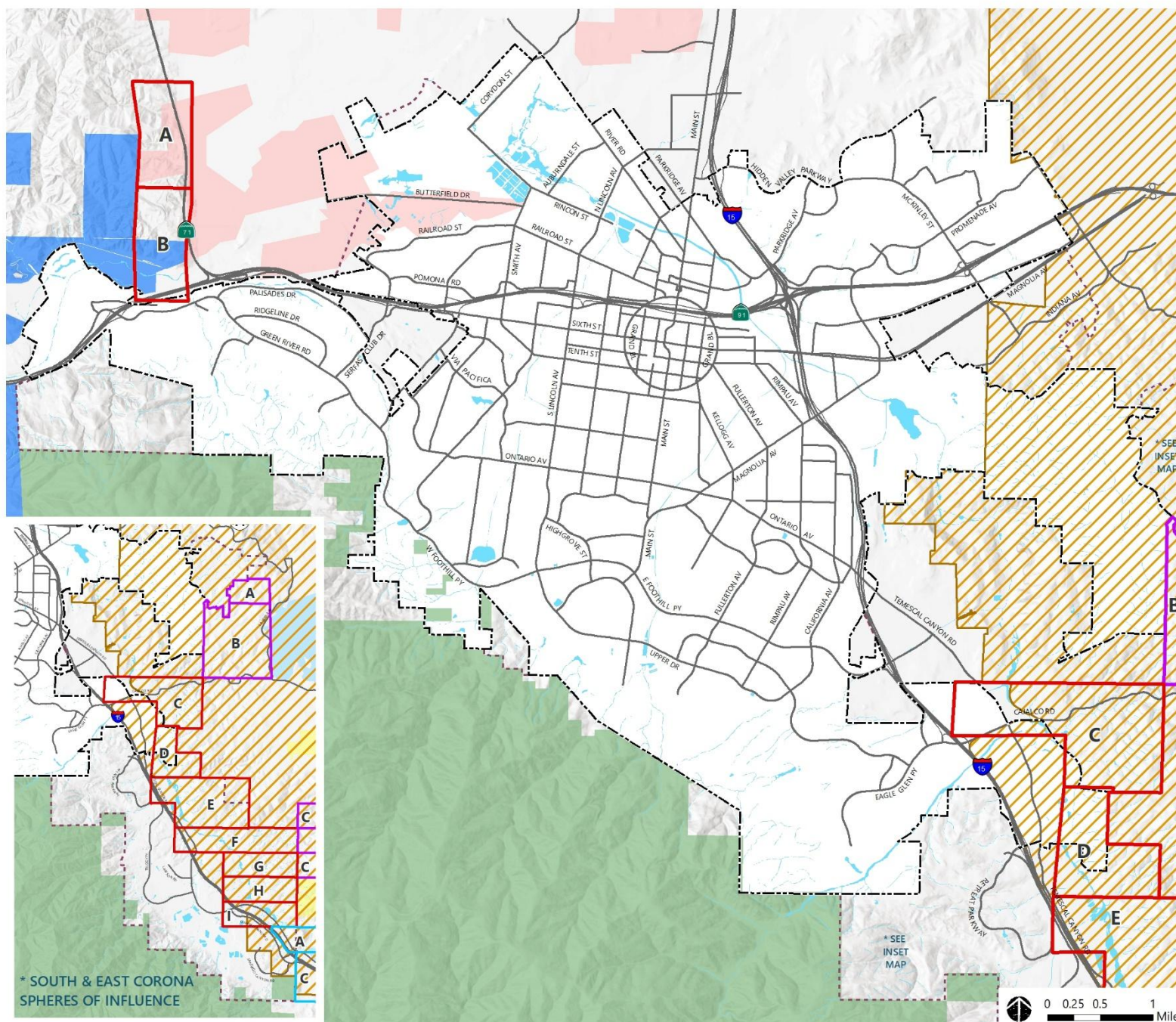
State law requires cities to address mineral recovery activities at three levels. First, cities are required to: 1) adopt and implement mining regulations in accordance with state and federal laws; 2) identify and map mineral resource zones in their general plans; and 3) establish mineral resource management policies. Policies must (a) recognize the mineral information provided by the state; (b) assist in the management of land uses incompatible with mining in areas designated as having statewide/regional mineral significance; and (3b) emphasize the conservation and development of identified mineral deposits. The following presents goals and policies related to these resources.

**Figure ER-7
Agricultural
Resources**

Legend

MSHCP Cell Groups

-  Elsinore Area Plan
-  Lake Mathews/
Woodcrest Area Plan
-  Temescal Canyon Area Plan
-  Open Water
-  Bureau of Land Management
-  US Forest Service
-  Department of Defense
-  Local Government
-  State Lands
-  Stephens Kangaroo Rat Fee Area
-  City Boundary
-  Sphere of Influence Areas

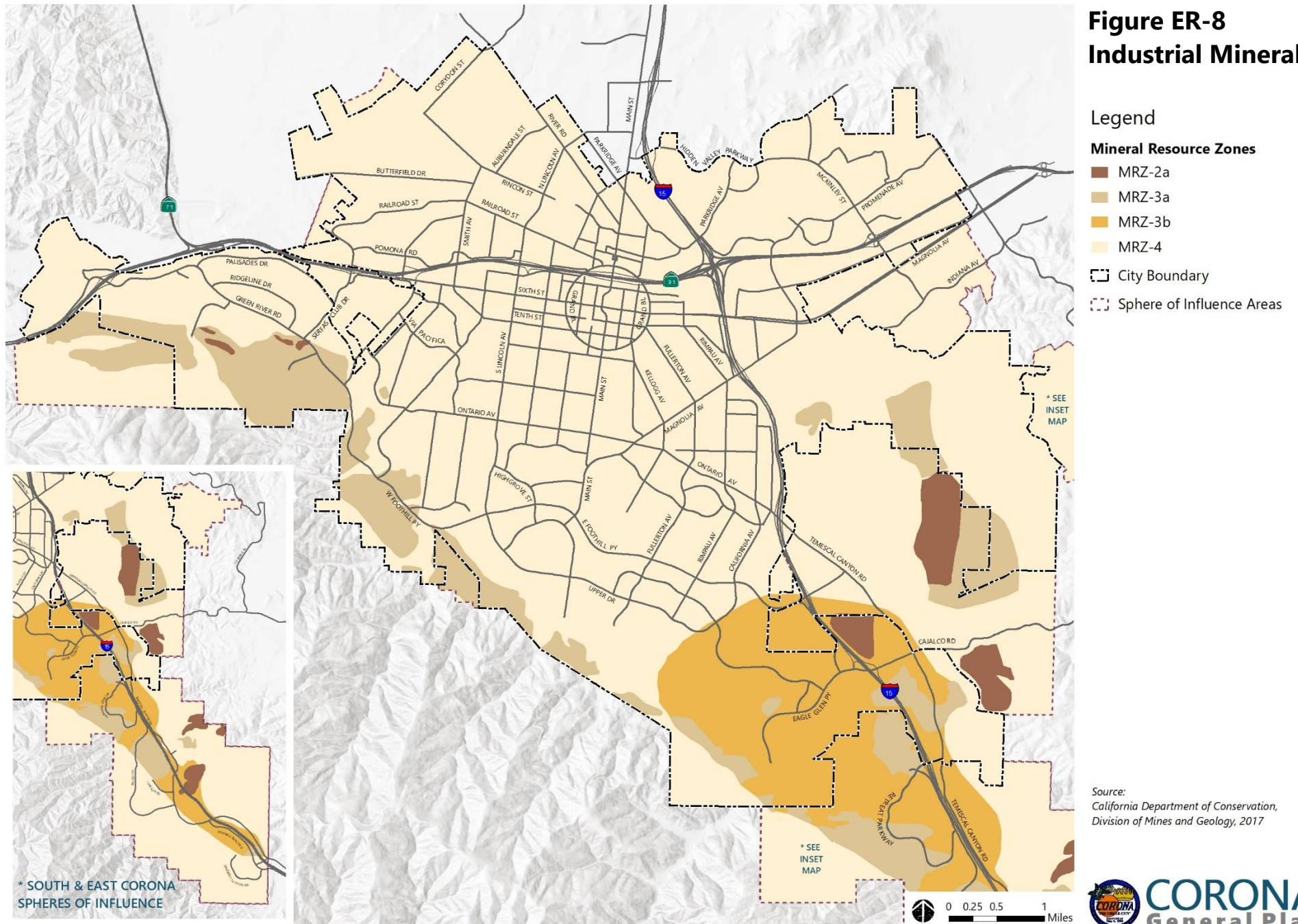


Source:
SCWA 2017

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**Figure ER-8
Industrial Minerals**



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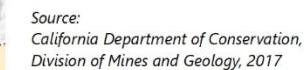
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Mineral Resource Zones

- MRZ-1
- MRZ-2
- MRZ-3

City Boundary

Sphere of Influence Areas



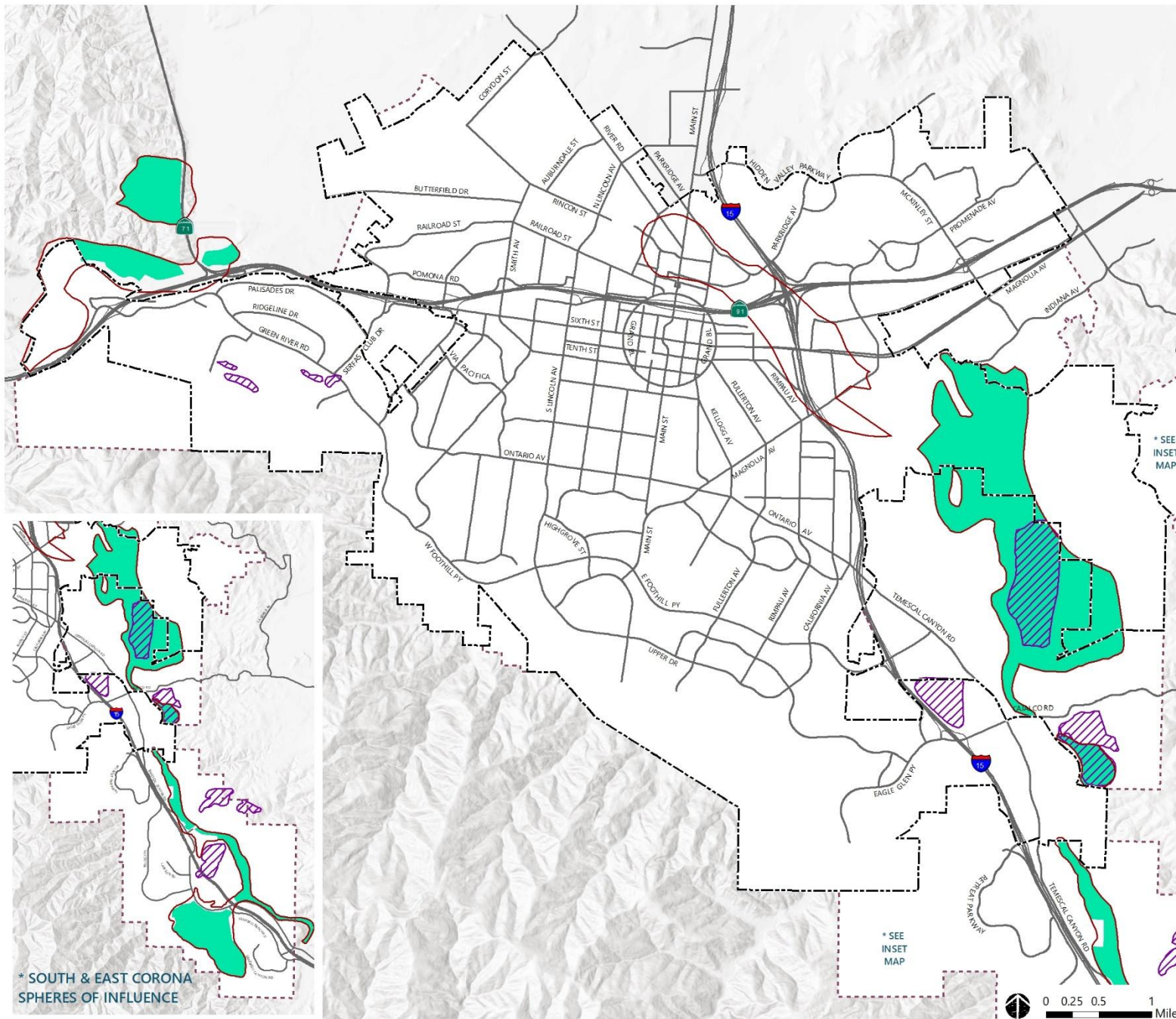
ENVIRONMENTAL RESOURCES

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**Figure ER-10
Areas of Regional
Significance**

Legend

- Classified Aggregate Minerals
- Classified Industrial Minerals
- Designated Aggregate Resources
- City Boundary
- Sphere of Influence Areas



Source:
California Department of Conservation,
Division of Mines and Geology, 2017

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GOAL ER-10

Protect significant mineral resources that have a state classification of MRZ-2 through the Department of Conservation.

Policies

- ER-10.1** Maintain the use of the city's Mineral Resource Overlay Zone in the City's Zoning Ordinance to ensure lands having a state classification of MRZ-2 through the Department of Conservation have the opportunity to be made available for mineral materials.
- ER-10.2** Allow land classified MRZ-2 and zoned with a MR Overlay to be rezoned for another land use when significant mineral deposits no longer exist, are no longer economically viable to mine, or the conditions of the approved mining permit and/or reclamation plan prohibit any additional mining in a specific area.
- ER-10.3** Adopt the making of certain findings required by Section 2764(b) of the Surface Mining and Reclamation Act for land known to have MRZ-2 resources but not protected for mineral materials by City Council resolution.
- ER-10.4** Permit through the city's Surface Mine Permit process the extraction of mineral resources or exploration of mining in resource areas identified by the MR Overlay Zone consistent with the general plan land use designation.

General Plan Designations	Compatibility
General Industry	Yes
Open Space General	Yes
Agriculture	Yes
Utility	Yes

GOAL ER-11

Accommodate mineral extraction and reclamation activities with an approved surface mine permit in the City provided such activities fully comply with all applicable, federal, state, and local regulations and permits.

Policies

- ER-11.1** All development proposals for mineral extraction—including borrow material—and all reclamation plans shall be subject to discretionary approval by the Corona Planning Commission and City Council.
- ER-11.2** Require that all mineral extraction projects and reclamation plans and projects be subject to and consistent with the requirements of the

ENVIRONMENTAL RESOURCES

California Environmental Quality Act and the Surface Mining and Reclamation Act.

- ER-11.3** Require that permits for mineral reclamation projects demonstrate compliance with State, Federal and local standards and attainment programs with respect to air quality; protection of rare, threatened, or endangered species; conservation and protection of water quality, watersheds and basins; erosion protection; and significant viewsheds, hillside, and aesthetic resources.
- ER-11.4** Provide for the restoration and reuse of the surface mining site upon completion of the extraction and production activities in a manner that is sensitive to and compatible with the character and integrity of adjacent land uses and the natural environment.
- ER-11.5** All mining operations that have a valid mining permit and reclamation plan approved by the County of Riverside or a vested mining operation per Section 2776 of the Surface Mining Reclamation Act shall be deemed valid when annexed into the City's corporate boundaries. However, any significant modifications, renewal, or extension of County-issued permits or reclamation plans shall be issued and processed by the City of Corona. Significant modifications are those that would create significant new or increased impact on the environment or adjacent land uses.
- ER-11.6** The City shall endeavor to avoid conflicts between urban uses and mineral uses. Analysis of potential conflicts shall be part of the City's planning process. Conflicting or incompatible land uses should not be allowed in mineral resource areas that are designated "MR."
- ER-11.7** New or significant expansions of surface mines shall be thoroughly evaluated through the city's surface mine permit and environmental review process to determine the potential impacts the operation may have on nearby land uses, water quantity and quality, noise and vibration, air quality, aesthetics (including buffers and screening), and traffic and that applicable mitigation measures are adopted to reduce the impacts on the environment.
- ER-11.8** Existing development, including commercial and residential, shall be protected from adverse environmental effects caused by mining by requiring appropriate conditions of mining operation approval and enforcing use permit conditions and mitigation measures.
- ER-11.9** Any proposed development, including land divisions and dwelling unit construction, located adjacent to or within 1,000 feet of the boundary of an MR Overlay Zone shall provide a suitable buffer or other design considerations based upon topographic, geologic, aesthetic, or seismic and other factors related to the property and proposed uses.

AIR RESOURCES

Corona is located in the South Coast Air Basin, a 6,600 square mile area encompassing the nondesert portions of Riverside, Los Angeles, San Bernardino, and Orange counties. Bounded by the Pacific Ocean and mountains, the South Coast Air Basin's climate is characterized by relatively cool summers, mild winters, infrequent rainfall, cool daytime breezes, comfortable humidity, and sunshine. Periods of extremely hot weather, winter storms, or Santa Ana wind conditions interrupt this pattern. At the same time, the same atmospheric processes that create the desirable climate and topography also restrict the dispersal of air pollution. As a result, air pollution and its adverse impacts on the health of the community and vitality of the local economy is a continual, key concern for all communities in the South Coast Air Basin, including Corona.

Local Air Quality

Air quality is evaluated by measuring the concentrations of the regulated pollutants and comparing these with national and state air quality standards. The South Coast Air Quality Management District (SCAQMD) monitors air quality through a network of monitoring stations. The South Coast Air Basin is a "nonattainment" area for federal and state air quality standards for ozone and state standards for particulate matter. At the monitoring station nearest to Corona, ozone levels have consistently exceeded state and federal standards. Particulate levels have also exceeded the state standards every year at a relatively consistent level.

Of particular concern are toxic air contaminants, which are air pollutants that can cause or contribute to an increase in mortality or in serious illness. The SCAQMD produces sophisticated models to assist in identifying the cancer risk from TACs. As is the case regionally, the highest cancer risk in Corona is due to vehicle emissions. The cancer risk is highest along both sides of the SR-91, between SR-71 and I-15. According to the SCAQMD, this corridor has an excess cancer risk of 1,034 in one million. The lowest risk is in southwest Corona near the Cleveland National Forest (221 in one million).

Primary Sources of Air Pollution

Transportation sources (e.g., vehicles, trucks, and trains) are the greatest source of regional emissions throughout the South Coast Air Basin as well as within Corona. Exhaust emissions from on-road motor vehicles are the primary source of reactive organic gases, nitrogen oxides, and carbon monoxide, and road dust made airborne by traveling vehicles is a primary source of particulate matter. Many of the transportation-related pollutants are respiratory irritants and thus are major contributing factors to respiratory symptoms, impaired lung function, and asthma.

Area-wide and stationary sources make up the remainder of the emissions and pollutants in Corona. Sources include industrial/manufacturing uses, auto repair businesses, dry cleaners, and other businesses that regularly use chemical solvents. Many of these land uses are concentrated in northern Corona in the industrial district, along both sides of the I-15 south of the SR-91, and east of the I-15 where mineral extraction operations are concentrated. Common sources of coarse particulate matter (PM₁₀) include road dust, construction activity, grading, and fireplaces.

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Sensitive Receptors

Some land uses are considered more sensitive to air pollution than others due to the types of population groups or activities involved. For example, sensitive population groups include children, the elderly, the acutely ill, and the chronically ill, especially those with cardiorespiratory diseases. Young children can be significantly impacted from exposure to air pollutants because their lungs are still developing. Other population groups, such as adults with existing health concerns, may also be more severely impacted by air pollution, which can exacerbate existing health conditions.

Residential areas are also considered sensitive to air pollution because residents (including children and the elderly) tend to be at home for extended periods of time, resulting in sustained exposure to any pollutants present. Other sensitive receptors include retirement facilities, hospitals, and schools. Recreational land uses are moderately sensitive to air pollution since exercise places a high demand on respiratory functions. Industrial, commercial, retail, and office areas are considered the least sensitive to air pollution. Exposure periods are relatively short and intermittent for workers who stay indoors.

Land Use Planning and Air Quality

The land use pattern affects the amount of air pollutants generated by communities. Land uses that are segregated within a city increase the number of motor vehicle trips and associated air pollutant emissions because they offer fewer opportunities to walk, ride bicycles, and use public transportation between homes and work/shopping. This is compounded in communities such as Corona, where low densities increase the distance between uses, and public transit routes and vehicles are limited. Higher density cities often mix residential uses with, or near, commercial, business, and employment uses, thus reducing people's reliance on motor vehicle use or reducing the distance of vehicle trips. Communities that are jobs-rich or housing-rich also increase the potential for emissions because employees or residents have to commute long distances.

Greenhouse Gas Reduction

Corona is committed to providing a more livable, equitable, and economically vibrant community through the reduction of greenhouse gas (GHG) emissions. The City's Climate Action Plan (CAP), updated along with the general plan, is the City's strategic plan to reduce community-wide GHG emissions consistent with the State's reduction goals in AB32 (2006) and SB 32 (2016). The CAP includes an inventory of GHG emissions in the 2008 baseline year and 2016, emissions forecasts, reduction targets, strategies to reduce emissions consistent with the targets, and an implementation program that supports community-wide strategies and project level consistency analysis.

Through the CAP, the City has established goals and policies that incorporate environmental responsibility into the management of its community operations. The CAP addresses climate change by providing strategies, programs, and projects that reduce GHG emissions and adapt to changing climate conditions and build resiliency. Strategies in the CAP address GHG emissions from the energy, water, transportation, solid waste, and off-road equipment sectors. By using energy more efficiently, harnessing renewable energy to power buildings, reducing and recycling waste, and

enhancing access to sustainable transportation modes, the City will keep dollars in the local economy, create jobs, and improve the community's quality of life.

The City's 2016 GHG emission inventory indicated that the City emitted approximately 1.1 MMT CO₂e, which is about 35 percent less than its 2008 levels of emissions. The largest portion of emissions in the 2016 inventory came from the transportation sector which was 46 percent of the City's total GHG emissions. Commercial and residential energy (both electricity and natural gas) uses were the second and third largest contributor of GHG emissions with 31 percent and 16 percent of total emissions. Solid waste accounted for 5 percent of total GHG emissions in 2016. Water- and wastewater-related GHG emissions accounted for 3 percent of total GHG emissions.

A variety of General Plan topics are interrelated with GHG and climate change. While the City has prepared a Climate Action Plan, policies encouraging activities that reduce GHG emissions are throughout the General Plan.

This chapter directly addresses the reduction of GHG emissions and its contribution to the quality of air within Corona and its Planning Area.

The Land Use Element contains policies that encourage sustainable development practices (e.g., mixed uses, transit-oriented development, etc.) and environmentally friendly building design, materials, and construction practices.

The Infrastructure and Utilities Element contains policies that address ways to reduce the number of vehicles miles traveled (e.g., public transit, active transportation, etc.) and the types of fossil fuels used in Corona, which results in reductions in GHG emissions.

To meet its GHG reduction goals will require that the City achieve reductions across multiple sectors, requiring a coordinated approach by City departments, government agencies partners, and community partners. Therefore, the General Plan includes goals and policies that direct, facilitate, and support GHG emissions reductions throughout all of its elements. The CAP serves as the City's strategic implementation program.

GOAL ER-12

Improvement in air quality within the Corona Planning Area by controlling point sources, reducing vehicle trips, implementing efficient land use planning and construction practices, and energy conservation.

Policies

Controlling point sources

- ER-12.1 Promote and encourage alternate employment work schedules for public- and private-sector businesses to achieve a reduction of employee-related motor vehicle emissions in accordance with SCAQMD Rule 2202.
- ER-12.2 Continue to cooperate with the SCAQMD and other local authorities in the air basin, in implementing air emission reduction programs and techniques.

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- ER-12.3 Establish and strictly enforce controls on land use activities that contain operations or materials that individually or cumulatively add significantly to the degradation of air quality in Corona.
- ER-12.4 Continue to expand the City-owned fleet of vehicles to alternative fuels, such as methanol or other clean-burning energy sources, as technology becomes feasible and cost-effective.

Increase Transit and Bicycling

- ER-12.5 Increase public transit ridership by periodically adjusting local routes, where feasible, and working with regional transit providers serving Corona and its Planning Area.
- ER-12.6 Support major commercial centers and employment center projects, having 100 or more employees, to incorporate transit amenities, access points, and van and carpool parking as part of the project.
- ER-12.7 Increase the number of Park and Ride locations within the Planning Area to encourage carpooling and vanpooling.
- ER-12.8 Require new commercial and industrial development and redevelopment projects of sufficient scale and number of employees to provide adequate facilities for bicycles, such as bicycle racks located close to the front entranceways of buildings and shower facilities with lockers.
- ER-12.9 Continue to incorporate bicycle lanes in all new and upgrade roadway projects in order to encourage commuter bicycle trips. Also, improve existing bicycle lanes for greater user safety.

Land Use Planning

- ER-12.10 Support mixed-use commercial-residential development and continue to target residential development within and near existing planned activity centers and transportation corridors to improve the City's current jobs-housing ratio and reduce the number of vehicle trips.
- ER-12.11 Require that large-scale master-planned residential communities incorporate pedestrian and cycling paths/trails that link with adjacent neighborhoods, schools, areas of shopping and employment, community centers, other places of activity, and transit access points.
- ER-12.12 Provide effective utility of pedestrian and cycling paths/trails and place strong limitations on intrusions into these rights-of-way used for pedestrian and bicycling.
- ER-12.13 Reduce particulate emissions from paved and unpaved roads, parking lots, and road and building construction through the implementation of best practices as deemed feasible by the City of Corona.

- ER-12.14** Reduce energy consumed by commercial and residential uses by requiring the use and installation of energy conservation features in all new construction projects and wherever feasible, retrofitting existing and redevelopment projects.

GOAL ER-13

Reduce greenhouse gas (GHG) emissions from City operations and community-wide sources 15% below 2008 levels by 2020, 49% below 2008 levels by 2030, and 66% below 2008 levels by 2040.

Policies

- ER-13.1** Maintain and periodically update a comprehensive Climate Action Plan that detail the City's strategies to reduce GHG emissions and to ensure ongoing and sustained reduction of GHG emissions from all sectors to meet 2020, 2030, and 2040 reduction targets.
- ER-13.2** Encourage the maximum feasible energy efficiency in site design, building orientation, landscaping, and utilities/infrastructure for all development and redevelopment projects (residential, commercial, industrial, and public agency) to support GHG emissions reductions.
- ER-13.3** Evaluate opportunities to reduce energy use and the urban heat island effect through site and building design, materials, and landscaping, such as reflective roofs or pavement, vegetated roofs, pervious pavement, shade trees, and revegetation of paved areas.
- ER-13.4** Support the increase of clean energy supply to existing and new development and municipal facilities through means to include, but not be limited to onsite or other local renewable energy sources for new and existing buildings and infrastructure.
- ER-13.5** Increase use of clean fuel and electric vehicles in the city through the support of the installation of electric vehicle infrastructure; explore opportunities to incentivize and/or facilitate installation of electric vehicle charging stations at convenient locations in Corona.
- ER-13.6** Reduce solid waste sent to the landfills and associated community-wide GHG emissions by ensuring all properties have access to curbside solid waste, recycled materials, and green/organic waste programs; target special programs for construction debris, household hazardous waste, etc.
- ER-13.7** Support a wide variety of transportation related measures (e.g., active transportation, increased bus and rail transit, transportation system and demand management, etc.) as articulated in the Circulation Element to reduce the number of vehicle miles traveled in Corona.

ENVIRONMENTAL RESOURCES

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